Steve's DigiCams

The consumer's best source of digital camera information and news

Digicam Dictionary

This (always changing) document can help those new to the world of digicams understand some of the abbreviations and terms used when describing digital cameras and the computer-based digital darkroom.

These terms can be particularly confusing because you are dealing with digital cameras, photography and computer technology at the same time.

Want to print our dictionary?
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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

3x, 5x, 10x - Denotes the focal length ratio of a zoom lens - this is an optical, not digital zoom.
See also "Digital Zoom" below.

A/D Converter - A device that converts analog information (a photograph or video frame) into a series of numbers that a computer can store and manipulate. All digicams use an A/D converter, the higher the bit rate the better the output. Modern hi-res digicams employ a 12-bit or 14-bit A/D to increase the dynamic range (range of light from highlight to shadow).

AA - In the digicam world this refers to the most common power source, the AA-size battery. See also "NiCd" and "NiMH"
and check here: NiMH Batteries/Chargers

AA Filter - Most digital SLR cameras employ a Low Pass Filter (LPF) or Anti-Aliasing (AA) filter in front of the imager to help eliminate color aliasing (moire) problems.

AC Power - Running your digicam off the wall outlet power rather than by battery power. Usually means purchasing optional AC power adapter.

Add-On Lens - Some lenses have filter threads on the front edge that allow you to mount an auxiliary wide angle or telephoto lens in addition to the standard lens.

AE - Auto Exposure, a system for automatically setting the proper exposure according to the existing light conditions. There are three types of AE systems:

1. **Programmed** where the camera picks the best shutter speed and aperture automatically
2. **Aperture Priority**, the user chooses an aperture value and the shutter speed is automatically determined by lighting conditions
3. **Shutter Priority**, the user chooses a shutter speed and the aperture is automatically determined by lighting conditions

AE Lock - The ability to hold the current exposure settings and allow you to point the camera elsewhere before capturing the image. This is usually accomplished by half-pressing the shutter button and keeping it at that position until you're ready to capture the image.

AF - Auto Focus. A system that automatically focuses the camera lens.

Aliasing - An effect caused by sampling an image (or signal) at too low a rate. It makes rapid change (high texture) areas of an image appear as a slow change in the sample image. Once aliasing occurs, there is no way to accurately reproduce the original image from the sampled image.

Algorithm - A mathematical routine that solves a problem or equation. In imaging, the term is usually used to describe the set of routines that make up a compression or color management program.

Angle of View - The angle of view is calculated by the focal length of the lens and the size of the image sensor. Consumer digicam focal lengths are usually stated in terms of their 35mm film equivalents. For digital SLR cameras with interchangeable lenses it's more difficult as different cameras have different size sensors. Use this online lens calculator to view the angle of view of a lens on any of today's popular dSLR cameras.

Anti-aliasing - The process of reducing stair-stepping by smoothing edges where

individual pixels are visible.

Aperture - The lens opening formed by the iris diaphragm inside the lens.

Aperture Priority AE - Exposure is calculated based on the aperture value chosen by the photographer. This allows for depth of field (DOF: Range of focus) control - large aperture = shallow DOF and a small aperture = deep DOF.

Archive - A collection of data in long-term storage.

Artifact(ing) - Misinterpreted information from a JPEG or compressed image. Color faults or line faults that visibly impact the image negatively.

Aspect Ratio - The ratio of horizontal to vertical dimensions of an image. (35mm slide frame is 3:2, TV 4:3, HDTV 16:9, 4X5 film 5:4)

Aspherical Lens - A lens whose edges have been flattened so that it is not a perfect sphere, produces a superior image.

Automatic Exposure - The camera automatically adjusts the aperture or shutter speed or both for the proper exposure.

Autofocus - The camera lens focuses automatically, usually when the shutter release is half-pressed.

AVI - Movie clip in Windows' AVI format. See "Movie clip"

AWB - Automatic White Balance. A system for automatically setting the white balance in today's digital cameras. See also "White Balance"

B&W - Term used to mean black and white

Back Lit - The subject is heavily lit from behind which generally causes it to be underexposed unless you use critical spot metering.

Backlight - The illumination for a color LCD display. Early color LCD used high voltage fluorescent lamps, newer LCDs now use white LEDs which are much more energy efficient.

Banding - An artifact of color gradation in computer imaging, when graduated colors break into larger blocks of a single color, reducing the "smooth" look of a proper gradation.

Barrel Distortion - A common geometric lens distortion causing an acquired image to pucker toward the center and be "rounded" along the outer edges.

Bit - The smallest unit of memory; a contraction from 'binary' and 'digit'. Binary digits are 0 and 1, also known as ons and offs.

Bit Depth - This refers to the color or gray scale of an individual pixel. A pixel with 8 bits per color gives a 24 bit image. (8 Bits X 3 colors is 24 bits.) 24 bit color resolution is 16.7 million colors.

Bitmap - The method of storing information that maps an image pixel, bit by bit. There are many bitmapped file formats, .bmp, .pcx, .pict, tiff, .tif, .gif, and so on. Most image files are bit mapped. This type of file gives you the 'jaggies', when examined closely you

can see the line of pixels that create the edges.

Bleed - Printing term referring to an image or linked area that extends to the edge of the printed piece.

Blooming - A visual effect caused by overexposing a CCD to too much light, This "digital overexposure" can cause distortions of the subject and/or color.

Blue Tooth - The new wireless standard for connecting cameras, PDAs, laptops, computers and cell phones. Uses very high frequency radio waves. Blue Tooth devices when in-range (less than 30 feet) of each other easily establish a connection.

BMP - BitMapped graphic file format popular with Windows computers. This is an uncompressed file format like TIFF.

Borderless - Means a photo print with no border around it. Old term for this was full-bleed printing.

Bracketing - see Exposure Bracketing

Brightness - The value of a pixel in an electronic image, representing its lightness value from black to white. Usually defined as brightness levels ranging in value from 0 (black) to 255 (white).

Buffer - A temporary storage area usually held in RAM. The purpose of a buffer is to act as a temporary holding area for data that will allow the CPU to manipulate data before transferring it to a device. Also see DRAM Buffer

Bulb - This is a long time exposure setting - shutter stays open for as long as you keep the shutter release button held down. Time exposure mode. Similar to bulb mode, only the photographer presses the shutter release once to open the shutter and once again to close it. Largely superseded by bulb mode on most cameras, for some reason. Odd, as I think T mode is more convenient to use than bulb, and no harder to implement on automated cameras. However, some cameras have a similar function with their electronic shutter releases, even though it isn't called T mode. For example, Canon cameras which support the RC-1 infrared remote work like this in bulb mode. One press of the RC-1 shutter release opens the shutter; another press closes it.

Burst Mode - The ability to rapidly capture images as long as the shutter button is held down.Also called Continuous frame capture.

Byte - An ensemble of eight bits of memory in a computer.

Calibration - The act of adjusting the color of one device relative to another, such as a monitor to a printer, or a scanner to a film recorder. Or, it may be the process of adjusting the color of one device to some established standard.

Card Reader - A device that you insert flash memory cards into to transfer the data to the computer. Much faster than the serial port! See also "PCMCIA" and "PC Card" and check here: Flash Memory Cards/Readers

CCD - Charged Coupled Device, a light sensitive chip used for image gathering. In their normal condition these are grey scale devices. To create color a color pattern is laid down on the sensor pixels, using a RGBG color mask (Red, Green, Blue, and Green) The extra Green is used to create contrast in the image. The CCD Pixels gather the

color from the light and pass it to the shift register for storage. CCDs are analog sensors, the digitizing happens when the electrons are passed through the A to D converter. The A to D converter converts the analog signal to a digital file or signal. See also "CMOS" below

CD - CompactDisc - read only storage media capable of holding 650MB of digital data.

- **CDR** - CompactDisc Recordable - a CD that you can write to once that can not be erased but can be read many times, holds 650~700MB of digital data.

- **CDRW** - CompactDisc ReWriteable - the newest kind of CD-R that can be erased and re-used many times, holds about 450MB of data.

Center-Weighted - A term used to describe an auto exposure system that uses the center portion of the image to adjust the overall exposure value. See also "Spot Metering" and "Matrix metering"

CF - see CompactFlash and check here: Flash Memory Cards/Readers

Channel - One piece of information stored with an image. True color images, for instance, have three channels-red, green and blue.

Chroma - The color of an image element (pixel). Chroma is made up of saturation + hue values, but separate from the luminance value.

Chromatic Aberration - Also known as the "purple fringe effect." It is common in two Megapixel and higher resolution digital cameras (especially those with long telephoto zoom lenses) when a dark area is surrounded by a highlight. Along the edge between dark and light you will see a line or two of purple or violet colored pixels that shouldn't be there.

CIFF - Camera Image File Format, an agreed method of digicam image storage used by many camera makers.

CMOS - Complementary Metal Oxide Semiconductor - Another imaging system used by digicams. It is not as popular as CCD but the future promises us even better digicams based on CMOS sensors due to the lower amount of power consumption versus the typical CCD device.

CMS - Color Management System. A software program (or a software and hardware combination) designed to ensure color matching and calibration between video or computer monitors and any form of hard copy output.

CMYK - Cyan, Magenta, Yellow, blacK; These are the printer colors used to create color prints. Most color printers, Ink-Jet, Laser, Dye-Sublimation and Thermal printers use these as their printer colors. (This is one of the color management problems for computers. Converting RGB files to CMYK files cause's color shifts.) When used by a printer the CMYK is also known as a reflective color since it is printed on paper, or reflective films.

Codec - Compresses information so that it can be sent across a network faster, and decompresses information received via the network.

Color Balance - The accuracy with which the colors captured in the image match the original scene.

Color Cast - An unwanted tint of one color in an image caused by a disproportionate amount of cyan, magenta, and yellow. This can occur due to an input or output device.

Color Copier - Color printing device using electrostatic and CMYK Pigments.

Color Correction - The process of correcting or enhancing the color of an image.

Color Depth - Digital images can approximate color realism, but how they do so is referred to as color depth, pixel-depth, or bit depth. Modern computer displays use 24-bit True Color. It's called this because it displays 16 million colors, about the same number as the human eye can discern.

Color Space - Digital cameras use known color profiles to generate their images. The most common is sRGB or AdobeRGB and this information along with the camera and exposure data is stored in Exif header of the JPEG file. This color space information ensures that graphic programs and printers have a reference to the color profile the camera used at the time of exposure.
see ICC Profile for more information.

CompactFlash - The most common type of digicam flash memory storage. It is removable, small and available in sizes from 4MB up to 1GB.

> **CF Type I** the original 5mm high card
> **CF Type II** cards and devices that are 9mm high.

Type I devices are all solid state but Type II devices include the new IBM Microdrive, a miniature, rotating hard drive.
and check here: Flash Memory Cards/Readers

COM port - Your computer has serial communication ports which support the RS-232 standard of communication. This is the most common interface used to transfer data from a digicam to the computer.

Compression - A digital photograph creates an image file that is huge, a low-resolution 640x480 image has 307,200 pixels. If each pixel uses 24 bits (3 bytes) for true color, a single image takes up about a megabyte of storage space. To make image files smaller almost every digital camera uses some form of compression. See the "JPG" entry below.

Continuous Autofocus - (Continuous-AF) The autofocus system is full-time and works even before the shutter release is pressed.

Continuous Tone - An image where brightness appears consistent and uninterrupted. Each pixel in a continuous tone image file uses at least one byte each for its red, green, and blue values. This permits 256 density levels per color or more than 16 million mixture colors.

Contrast - A measure of rate of change of brightness in an image.

CRW - The raw CCD file format used by Canon digicams. Abbreviated from CanonRaW.

Dark Frame - A noise reduction process whereby a camera takes a second exposure of a black frame after the camera takes a long exposure (1/2-second or longer) image. The image "noise" is easily identified in the black frame shot and is then electronically removed from the actual image. This helps reduce the amount of hot pixels that normally show up in long exposure shots from digital cameras.

DC - Direct Current. Battery power as in 9v DC battery

Decompression - The process by which the full data content of a compressed file is restored.

Dedicated Flash - Describes an electronic flash that is made to be used only with a specific model of camera. Canon, Nikon, Olympus and other cameras have specific electrical contacts in the hot shoe to pass TTL-metering and AF range data to/from the flash unit. You can not use a dedicated Canon flash on a Nikon camera for example.

Densitometer - A tool used to measure the amount of light that is reflected or transmitted by an object.

Depth of Field - depth of field (DOF) Range of sharp focus. Controlled by the aperture opening of the lens. A large aperture yields shallow DOF. Smaller apertures yield deeper DOF.
Want to learn more - click here

Diffusion Dithering - A method of dithering that randomly distributes pixels instead of using a set pattern.

Digital Film - Term used to describe solid state flash memory cards.

Digital Zoom - A digital magnification of the center 50% of an image. Digital zooms by nature generate less than sharp images because the new "zoomed" image has been interpolated.

Digitization - The process of converting analog information into digital format for use by a computer.

Diopter Adjustment - Adjusts the optical viewfinder's magnification factor to suit the eyesight of the user. Look for a knob or dial next to or beneath the viewfinder's eyepiece. Not all cameras have this feature.

Dithering - A method for simulating many colors or shades of gray with only a few. A limited number of same-colored pixels located close together is seen as a new color.

DOF - Abbreviation for Depth of Field (see above).

Download - Transfer image data from the camera to the computer using a cable attached to either the serial port (slow) or USB port (faster.)

DPI - Dots per Inch. A measurement value used to describe either the resolution of a display screen or the output resolution of a printer.

DPOF - Digital Print Order Format. Allows you to embed printing information on your memory card. Select the pictures to be printed and how many prints to make. Some photo printers with card slots will use this info at print time. Mostly used by commercial

photo finishers or those Kodak kiosks you find in the mall.

DRAM - Dynamic Random Access Memory. A type of memory that is volatile - it is lost when the power is turned off.

DRAM Buffer - All digicams have a certain amount of fixed memory in them to facilitate image processing before the finished picture is stored to the flash memory card. Cameras that have a burst mode have much larger DRAM buffers, often 32MB or larger. This also makes them more expensive.

DSLR - Digital SLR camera. Interchangeable lens digital camera. Manufacturers include Canon, Fuji, Kodak, Nikon, Olympus, Pentax and Sigma. See our DSLR Camera Reviews listing.

DVD - "Digital Versatile Disc"
DVD is DVD-Video recorded on a DVD-R or DVD-RW disc, which contains superior quality video (MPEG-2) and audio. Typically, a DVD can hold more than one hour of video.

> DVD Video Parameter Settings
> Frame Size: 720x480 (NTSC) or 720x576 (PAL)
> Frame Rate: 29.97 frames/second (NTSC) or 25 frames/second (PAL)
> Video Data Rate: 4~8 Mbps CBR or VBR (Constant/Variable Bit Rate)
> Audio Settings: Stereo, 48 kHz and 192~384 kbps MPEG audio

Dye Sub - Dye Sublimation is a printing process where the color dyes are thermally transferred to the printing media. Dye sub printers use the CMYK (cyan, magenta, yellow, black) color format and have either three ribbons (cyan, magenta and yellow) or high-end printers have four CMY plus a blacK. The paper is run in and out of the printer four times, once for each color and then a fourth time when a protective overcoat is applied. Dye sub is continuous tone printing, it prints tiny square dots each of which is denser in the center and lighter on the edges. These dots can be varied from almost no dot at all to an almost completely solid dot. The dyes are transparent so different colored dots can be printed on top of each other to form any one of 16-million colors. This is known as the subtractive color process. Dye sub prints rival conventional photographs in both their color gamut and longevity with water and UV resistant qualities.

> For the sake of accuracy we must state that most printers today that claim to be dye sub type printers are actually dye diffusion. The complete technical name for this process is Dye Diffusion Thermal or "D2T" printing. To achieve true sublimation printing requires a laser to vaporize the dye material. The common 4x6" dye sub or the bigger ones that do up to 8x10" prints like the Olympus P-400 or Kodak Pro 8500 heat the dye material with a thermal printhead and use pressure rollers to push the ribbon into contact with the paper and then diffusion occurs.

Dynamic Range - A measurement of the accuracy of an image in color or gray level. More bits of dynamic range results in finer gradations being preserved.

EPP - Enhanced Parallel Port - the newer hi-speed, bidirectional printer port on modern computers. Some older digicams and scanners use the EPP port to transfer data.

ERI-JPEG - Extended Range Imaging Technology, a new file format used in Kodak professional digital cameras. This proprietary technology offers an innovative image file format similar to a JPEG, but with the dynamic range and color gamut information of raw DCR camera files. Extended Range Imaging Technology files allow you to easily open, edit, and print JPEG files within your JPEG workflow. Your JPEG files are captured directly in the camera. With ERI, you'll have the extensive editing, color balance, and color compensation capabilities of RAW digital negatives for applying to your JPEG files.

E-TTL - Canon's Evaluative-TTL exposure system that uses a brief pre-flash before the main flash to calculate the exposure index.

EV - Exposure Value, a very complex thing but in the digicam world it usually means the ability to override the auto exposure system to lighten or darken an image.

EVF - Electronic ViewFinder, a small color LCD with a magnified lens that functions as an eye level viewfinder. Usually found on video camcorders but they have been showing up on super-zoom digicams where optical viewfinders are impractical. (Canon Pro90, Fuji 2800Z, Olympus C-2100, Nikon Coolpix 5700).

EXIF - EXIF (Exchangeable Image File format) refers to the embedded camera and exposure information that a digital camera puts in the header of the JPG files it creates. Many graphic programs (Photoshop, ThumbsPlus, Qimage Pro, CameraAid) can read and display this information.

Exif Print - Exif Print (Exif 2.2) is a new worldwide printer independent standard. Under Exif 2.2, the digital still camera can record data tags for specific camera settings and functions such as whether the flash was on or off, if the camera was in landscape, portrait or night scene mode, etc. Referencing some or all of this information, an Exif Print compatible application can process digital camera images intelligently based on specific camera settings and the shooting environment.
See the Exif Print-CIPA web page for more info.

Exposure - The amount of light that reaches the image sensor and is controlled by a combination of the lens aperture and shutter speed.

Exposure Bracketing - the camera automatically takes a series of 3 or 5 pictures and slightly varies the EV for each frame. This insures that at least one of the pictures will be as close to perfectly exposed as possible.

Exposure Compensation - Lighten or darken the image by overriding the exposure system. Also known as EV Compensation.

f-stop - A numerical designation that indicates the size of the aperture. It is inversely proportional as a smaller number like F2.8 is a large opening and a large number like F16 is a relatively small opening.

FDD - Floppy disk drive, the most common being a 1.44MB 3-1/2" drive like those used in today's PC computers.

File - A collection of information, such as text, data, or images saved on a disk or hard

drive.

File Format - A type of program or data file. Some common image file formats include TIFF, JPEG, and BMP.

Fill Flash - Using the flash to lighten shadow areas or just to provide more overall illumination in situations where you normally wouldn't use the flash. Outdoors in bright light you get very stark shadows underneath of people's noses, chins and etc. Toggle the flash setting to "forced on" or "fill" and the flash will now fire on every shot. It also gives your human subjects that special little sparkle in their eyes.

FireWire - Also known as "iLink" and officially designated as the IEEE 1394 protocol. A high-speed data interface now being used on digital camcorders and some high-end digital still cameras.

Firmware - An often-used micro program or instruction set stored in ROM. Usually refers to the ROM-based software that controls a unit. Firmware is found in all computer based products from Cameras to Digital Peripherals.

Fixed Aperture - Normally when a zoom lens goes from wide angle to telephoto the aperture changes. If the camera has an option to fix the aperture value then it remains constant regardless of focal length.

Fixed Focal Length - A term that describes a non-zoom lens, it is fixed at a given focal length and is not variable.

Fixed Focus - A lens that is preset to a given focus distance, it has no autofocus mechanism, set to give the camera the maximum depth of field

Flash - A built-in flash supplies auxiliary light to supplement natural or available lighting conditions often resulting in better color, better exposure, and improved picture sharpness.

Flash Memory - This is the "film" for digital cameras, it can be erased and reused many times. It is non volatile memory, data is preserved even when it is not under power. They are several major types used in digital cameras; CompactFlash, SmartMedia and Memory Stick.

Flash Memory Reader - See Card Readers
see: Flash Memory Cards/Readers.

Flashpath - A device that allows a SmartMedia card to be inserted into a regular floppy diskette drive and its data transferred to the computer. There is also now a Flashpath device for Memory Stick cards too.

Flat Bed Scanner - An optical scanner in which the original image remains stationary while the sensors (usually a CCD linear array) passes over or under it. The scanned material is held flat and scanned using a reflective process.

Floppy Disk Adapter - A device that resembles a 3-1/2" floppy diskette and allows a SmartMedia cards or Sony Memory Stick modules to be read in a standard 1.44MB floppy disk drive.
and check here: Flash Memory Cards/Readers

Focal Length - A lens' angle of view, most commonly indicated as wide angle, normal

or telephoto. Usually compared to a 35mm camera's lenses as in "the camera has a wide angle lens equivalent to a 38mm lens on a 35mm camera." See also "Zoom Lens"

Focus Assist - Some cameras employ a visible or invisible (infrared) lamp to illuminate the subject so the autofocus can work in low light or total darkness.

Focus Lock - Pre-focusing the camera and then moving it to re-compose the image before capturing it. Accomplished by half-pressing the shutter button and keeping it held at that position while moving the camera to another point before pressing it all the way to capture the image.

FPX - FlashPiX - Trade name for a new multi-resolution image file format jointly developed and introduced in June 1996 by Kodak, HP, Microsoft and Live Picture.

Frame - One of the still pictures that make up a video.

Frame rate - The number of frames that are shown or sent each second. Live action relates to a frame rate of 30 frames per second.

Full Bleed - Printing term used when an image or inked area extends to the edge of all four sides of the printed piece. Better known as "borderless" in today's world of inkjet photo printers.

Gamma - A measure of the amount of contrast found in an image according to the properties of a gradation curve. High contrast has high gamma and low contrast low gamma.

Gamma Correction - In reference to displaying an image accurately on a computer screen, Gamma correction controls the overall brightness of an image. Images which are not properly corrected can look either bleached out, or too dark. For more info on gamma, go here

Gamut - The range of colors that are available in an image or output process. It is generally used in describing the capabilities of a printer to reproduce colors faithfully and vibrantly - i.e. "The xxxxx printer has a wide color gamut."

GIF - A graphic file format used mainly for Web graphic or small animated files. Not good for photos as it only contains a maximum of 256 colors.

Gigabyte (GB) - A measure of computer memory or disk space consisting of about one thousand million bytes (a thousand megabytes). The actual value is 1,073,741,824 bytes (1024 megabytes).

Gradation - A smooth transition between black and white, one color and another, color and no color.

Gray Level - The brightness of a pixel. The value associated with a pixel representing it's lightness from black to white. Usually defined as a value from 0 to 255, with 0 being black and 255 being white.

Gray Scale - A term used to describe an image containing shades of gray rather than color. Most commonly referred to as a black and white photo.

Guide Number - The output power rating of a electronic flash unit.

HAD CCD - Sony's latest CCD imager, HAD = Hole Accumulation Diode

Halftone Image - An image reproduced through a special screen made up of dots of various sizes to simulate shades of gray in a photograph. Typically used for newspaper or magazine reproduction of images but it is also how today's inkjet printers work. Halftoning or dithering are the methods used to produce a smooth gradation of color versus distinct bands of color or moirè patterns.

HD - Hard drive (aka HDD), the internal, large-capacity data storage unit in today's PC computers.

HDTV - High Definition Television. New video "standard" that will resolve 1,125 lines in the United States instead of the traditional 525 lines of the NTSC standard.

Histogram - A bar graph analysis tool that can be used to identify contrast and dynamic range of an image. Histograms are found in the more advanced digicams and software programs (graphic editors) used to manipulate digital images. The histogram shows a scale of 0 - 255 (left to right) with 0 being black and 255 being white.

Hot Shoe - A flash connector generally found on the top of the camera that lets you attach a flash unit and trigger it in sync with the shutter.

Hologram Laser AF - Sony introduced a new laser-assisted auto focus system on the Cyber-shot DCS-F707 that uses a safe Class 1 laser to paint a grid on the subject that makes the auto focus fast and accurate. Also found on the DSC-F717, F828 and V1 cameras.

Hue - A term used to describe the entire range of colors of the spectrum; hue is the component that determines just what color you are using. In gradients, when you use a color model in which hue is a component, you can create rainbow effects.

ICC Profile - The International Color Consortium, a group that sets standard guidelines for color management in the imaging world. Click here to read their FAQs about color management and ICC profiles and the like. Most printers, monitors and scanners as well as digital cameras, usually come with a driver disc for Windows and Mac systems that includes ICC profiles for the particular device. Color profiles simply let one piece of hardware or software "know" how another device or image created its colors and how they should be interpreted or reproduced.

IEEE-1284 - This is the high-speed bidirectional parallel port specification used on Windows PCs mostly for printers.

IEEE-1394 - Better known as "FireWire" - it's a high-speed input/output bus used by digital video devices, film/flatbed scanners, high-end digital still cameras & PCs.

iLink - Sony's term for IEE-1394 FireWire data port found on their camcorders.

Image Processing - Capturing and manipulating images in order to enhance or extract information.

Image Resolution - The number of pixels per unit length of image. For example, pixels per inch, pixels per millimeter, or pixels wide.

Image Sensor - A traditional camera exposes a piece of light-sensitive film, digital cameras use an electronic image sensor to gather the image data. See "CCD" and

"CMOS" as well as "Interlaced" and "Progressive Scan"

Image Stabilization - An optical or digital system for removing or reducing camera movement in telephoto zoom lenses. Usually found only on extremely long focal length lenses such as the 10X lens on Sony Mavicas and Olympus C-2100UZ, E-100RS. Can also be found on Panasonic FZ1/FZ2/FZ10's 12X Leica zoom lenns.

InfoLITHIUM - Sony's "smart" lithium rechargeable battery pack. It has a chip inside that tells the camera how long (in minutes) it will last at the current discharge rate.

Inkjet - A type of printer that sprays dots of ink onto paper to create the image. Modern inkjet printers now have resolutions of up to 2880dpi and create true photo-quality prints.

Interlaced - Term used to describe an image sensor that gathers its data by first processing the odd lines and then the even lines. See also "Progressive Scan" for the other (preferred) method.

Interpolated - Software programs can enlarge image resolution beyond the actual resolution by adding extra pixels using complex mathematic calculations. See "Resolution" below

Intervalometer - Fancy term for Time-Lapse. Capture an image or series of images at preset intervals automatically.

Interval Recording - Capturing a series of images at preset intervals. Also called time-lapse.

IR - InfraRed (aka IrDA) uses an invisible (to humans) beam of light to either wirelessly control a device or as a method of transferring data from camera to computer (or printer) without cables. Some cameras also employ infrared in the auto focusing system.

ISO - The speed or specific light-sensitivity of a camera is rated by ISO numbers such as 100, 400, etc. The higher the number, the more sensitive it is to light. As with film, the higher speeds usually induce more electronic noise so the image gets grainier. ISO is the abbreviation for International Standards Organization. (In the good old days it was known as the "ASA film speed.")

"Jaggies" - Slang term for the stair-stepped appearance of a curved or angled line in digital imaging. The smaller the pixels, and the greater their number the less apparent the "jaggies". Also known as pixelization.

JFIF - A specific type of the JPG file format. Also known as EXIF

JPEG - Joint Photographic Experts Group - The name of the committee that designed the standard image compression algorithm. JPEG is designed for compressing either full-color or grey-scale digital images of "natural", real-world scenes. It does not work so well on non-realistic images, such as cartoons or line drawings. JPEG does not handle compression of black-and-white (1 bit-per-pixel) images or moving pictures. See "JPG" below.

JPEG2000 - The new JPEG compression standard that will be used in digital cameras and software starting in 2002 (maybe?). It will feature higher compression but with less image quality loss.

JPG - The most common type of compressed image file format used in digicams. It is a "lossy" type of storage because even in its highest quality mode there is compression used to minimize its size.
See the official JPEG home page for even more details

KB - Can be used to mean either a keyboard for a computer or more commonly "KB" means a kilobyte of data.

Landscape Mode - Holding the camera in its normal horizontal orientation to capture the image. See Portrait Mode.

LCD - Liquid Crystal Display. Two types: (1) a TFT high-resolution color display device like a tiny TV set. (2) A monochrome (B&W) information display using black alphanumeric characters on a gray/green background.

LED - Light Emitting Diode. All those wonderful little red, green and yellow indicator lights used on cameras, power supplies and most electronic devices.

Li-ion - Some digicams are packaged with a lithium rechargeable battery pack. Lithium batteries are lighter but more costly than NiMH or NiCd type of rechargeable cells. Lithium cells can be recharged regardless of their state of discharge, they're lighter in weight and maintain a charge better in colder temperatures. Li-ion also holds a charge longer when idle.

Lossless - Storing the image in a non-compressed format, see TIFF.

Low Pass Filter - Most digital SLR cameras employ a Low Pass Filter (LPF) or Anti-Aliasing (AA) filter in front of the imager to help eliminate color aliasing (moire) problems.

Mac - Refers to the Macintosh type of computers

Macro - The ability of a lens to focus very close (less than 8") for taking pictures of small objects at a 1:1 ratio.

mAh - A rating used in the consumption of power of an electronic device such as an LCD or the storage capability of a device like an NiMH or Nicad rechargeable battery (i. e. 1600mAh cell). It stands for milliAmperehour.

Matrix metering - In most digicams there is a matrix metering option which uses 256 areas of the frame to calculate the best overall exposure value.
see also: "Spot metering" and "Center-weighted"

MB - MegaByte, memory term meaning 1024 KiloBytes. Used to denote the size of a flash memory card such as 4MB, 8MB etc. (MB [megabyte] is often confused with Mb [megabit], there's 8 bits in a byte so 256Mb = 32MB.)

MD - MiniDisc - Digital recording media like a small floppy disc. This is common for audio data and has been used on several digicams sold in Japan and Europe but not in the U.S. yet.

Megapixel - CCD resolution of one million pixels. Digicams are commonly rated by Megapixels. You multiply the horizontal resolution by the vertical resolution to get the total pixel count:

1280 x 960 pixels = 1 Megapixel
1600 x 1200 pixels = 2 Megapixels
2048 x 1536 pixels = 3 Megapixels
2272 x 1704 pixels = 4 Megapixels
2560 x 1920 pixels = 5 Megapixels ... and so on

Memory Stick - A flash memory card standard from Sony. They resemble a stick of gum and currently (09/02) come in sizes from 4MB up to 128MB.
also see: Flash Memory Cards/Readers

Memory Stick Pro - The year 2003 upgrade to Sony's Memory Stick flash cards. The new MS Pro cards are available in 256MB, 512MB and 1GB capacities and offer faster read/write times. All of Sony's digicams made in 2003 or after can use MS Pro cards.

Metering - Used to calculate the exposure from the existing light conditions. See: "Matrix Metering," "Spot metering" and "Center-weighted"

Microdrive - IBM/Hitachi miniature hard disk drive for digital cameras and PDA devices. Packaged in a CompactFlash Type II housing and available in 170MB, 340MB, 512MB, 1GB, 2GB, 4GB capacities. See my Microdrive user review

miniCD - The small diameter (3-inch) CD discs. miniCD-R and miniCD-R/W discs are used in the Sony Mavica "CD" series (CD200, CD250, CD300, CD400 and CD1000) digicams. Their maximum capacity is ~165MB

mm - millimeter, measurement to denote the focal length of a lens (i.e. 50mm)

MMC - MultiMedia Card, a flash memory card used in some digicams and MP3 players. It is identical in size and shape to the Secure Digital (SD) flash cards.
and check here: Flash Memory Cards/Readers

Moirè - A visible pattern that occurs when one or more halftone screens are misregistered in a color image. Often produces a colored checkerboard or rainbow pattern.

MOV - Apple QuickTime MOVie file format. See "Movie clip"

Movie clip - A sequence of motion captured in AVI, MOV or MPEG format. Some digital cameras can capture short movie sequences, some can also record the sound.

Motion JPEG - A video sequence composed of a sequence of JPEG compressed images. Abbreviated to MPEG (see MEG below).

MP - Abbreviation for MegaPixel, i.e. 1.5MP or 1.5MPixel

MPEG - Motion JPEG movie file. See "Movie clip"
The digital video compression standard agreed upon by the Motion Picture Expert Group, from the motion picture-computer industry.

MPEG-EX - Motion JPEG movie file created by Sony cameras. This was the first motion video recording sequence mode that was limited in length only by the amount of available storage space.

MPEG-HQX - Motion JPEG movie file created by year 2002 Sony cameras that incorporates the MPEG-HQ (high quality, full-screen) and the unlimited recording capability of MPEG-EX in 320x240 resolution.

MPEG-VX - Motion JPEG movie file created by year 2003 Sony digicams. It is VGA resolution (640x480) at 16fps with audio and the length is limited only by available storage space. VX Fine is 30fps, very high quality.

Multi-Pattern Metering - Exposure is determined by reading many different zones in the frame. This yields a more optimum exposure than those cameras using only a central zone metering system.

Multi-Point Focusing - The autofocus systems uses SEVERAL different portions of the image to determine the proper focus.

Multi Zone Focusing - Many digital cameras now offer multi zone focusing. The camera will automatically determine which zone (center, left, right, upper, lower) to use to perform the auto focusing. You no longer have to make sure that your subject is dead-center to be properly focused.

NEF - Raw image data file format used by the Nikon digital SLR (D1x, D100, etc) and some Coolpix digicams. NEF means Nikon Electronic Format.

NiCd - Nickel Cadmium (aka Nicad), a type of rechargeable battery. Nicad was the original type of rechargeable battery and has been pretty much replaced by the NiMH type.

NiMH - Nickel-Metal Hydride, a type of rechargeable battery. NiMH is the more modern type of rechargeable battery and has been touted as having no memory effect as is common with Nicad type batteries when they are charged before they have been fully discharged. NiMH may also be called NiHy by some folks.
and check here: NiMH Batteries/Chargers

Noise - Pixels in your digital image that were misinterpreted. Usually occurs when you shoot a long exposure (beyond 1/2-second) or when you use the higher ISO values from 400 or above. It appears as random groups of red, green or blue pixels.

Noise Reduction - Some cameras that offer long shutter speeds (exceeding 1 second) usually have a noise reduction (NR) feature that is either automatic or can be enabled in the menu. This is to help eliminate random "hot" pixels and other image noise.

NTSC - Term used to describe the 60 field video output (television) standard used in the U.S. and Japan. See also "PAL" and "Video Out"

OEM - Original Equipment Manufacturer. Means that the piece of equipment is made by one company but labeled for and sold by another company.

OLED - Organic Light Emitting Diode - Newly developed display technology that could replace LCD. OLED does not require a backlight like LCD displays and therefore is more energy efficient which is important to battery-operated portable devices. It also offers increased contrast and a better viewing angle which means it can be more easily viewed in bright (sunlight) conditions.

Optical Viewfinder - An eye level viewfinder that is used to compose the photograph.

Optical Zoom - Means that the camera has a real multi-focal length lens, this is not the same as a "Digital Zoom" which magnifies the center portion of the picture.

ORF - Olympus RAW format. The unprocessed image format created by Olympus E10, E20 and C-5050 Zoom cameras.

Orientation Sensor - A special sensor in some cameras that "knows" when your turn the camera in portrait orientation to take a vertical shot and "tells" the camera to display it that way later when viewed on the TV screen during playback.

Overexposure - An image that appears too light. All the highlights and colors are totally lost and usually unrecoverable even by software.

PAL - The 50 field video format used primarily in Europe and other places outside of the U.S. and Japan. See also "NTSC" and "Video Out"

Palette - A thumbnail of all available colors to a computer or devices. The palette allows the user to chose which colors are available for the computer to display. The more colors the larger the data and the more processing time required to display your images. If the system uses 24-bit color, then over 16.7 million colors are included in the palette.

Panorama - Capturing a series of images to create a picture wider than what you could capture in a single image. Requires special "stitching" software to combine and blend the images into one finished image.

Parallax - An effect seen in closeup photography where the viewfinder does not see the same as the lens due to the offset of the viewfinder and the lens. This is a non-issue if using the LCD as a viewfinder or if your camera is a SLR type.

PC - In camera terms it denotes a type of flash synch connector, popular on most film cameras.

PC - In computer terms it means a Personal Computer as in IBM-PC

PC Card - Refers to a credit card-sized device which can be a flash memory card, a network card, a modem or even a hard drive. Comes in two flavors: Type I/II which is a single slot height and Type III which requires a double-height card slot.

PCMCIA - The card slots found on laptop computers to use PC Cards. There are PCMCIA adapters for CompactFlash, SmartMedia, Secure Digital, MultiMediaCard and Memory Stick flash cards.

Photo CD - Kodak's professional service where they process your film and then scan the images using a very expensive drum scanner and output these images to a CD. You get several different sized resolution images of each of your film pictures, from small to very large. PhotoCD is multi-session which means more than one roll of pictures may be put on each PhotoCD disc.

PICT - A graphics file format used primarily on Macintosh computers. PICT files can contain both object-oriented and bit-mapped graphics. There are two types: PICT I and PICT II. PICT II is the current standard and supports color up to 24-bit.

PictBridge - PictBridge is a new standard for direct USB printing from digital cameras to inkjet and dye sub photo printers without the use of a computer. To get more information please go to the CIPA PictBridge web page.

PictureCD - Kodak's amateur service of putting your camera images (1,534-by-1,024) onto a CD disc. 35mm or APS camera pictures can be put on the PictureCD discs for about $8.95 - $10.95 on top of regular processing fees. One roll per PictureCD.

PIM - PRINT Image Matching - Epson's new standard of embedded color and printing information for digital cameras. Many of the camera manufacturers have joined with Epson and now embed the PIM information in the Exif header of the JPEG images created. Epson just announced at PMA 2002 the new Exif 2.2 standard incorporating their PIM info. See the Epson PIM web site.

Pixel - The individual imaging element of a CCD or the individual output point of a display device. This is what is meant by the figures 640x480, 800x600, 1024x768, 1280x960 and etc when dealing with the resolution of a particular digicam. Higher numbers are always better!!

Pixelization - The stair-stepped appearance of a curved or angled line in digital imaging. The smaller the pixels, and the greater their number, the less apparent the "pixelization" of the image. Also known as the "jaggies".

Plug-n-Play - An automated installation process used in MS Windows to connect peripherals to a computer. When new devices are plugged into the computer the computer recognizes the device and prompts the user to choose setup options and finish installation.

Polarizer - A photographic filter for eliminating glare and reflections. Just like your polarized sunglasses get rid of annoying glare, the polarizer filter does the same for your digicam. However - there are 2 types, linear and circular. Linear is for film only, it screws up most auto focus systems on digicams. Therefore be sure you use a circular polarizer filter. It can also be used to darken skies.
Want to learn more - click here

PNG - An image file format. PNG stands for Portable Network Graphics. It is a compressed file format similar to JPG.

Point and Shoot - A term used for a simple, easy to use camera with a minimum of user controls. Generally the user turns the camera on, aims it at the subject and presses the shutter button. The camera does everything automatically.

Polarizing Filter - A filter than helps eliminate light reflections by limiting the angle of light that reaches the lens. There are two types: Linear and Circular. Linear type filters should not be used with digicams as they hinder the auto focus system. The circular type filters can be rotated to adjust to the light angle needed.

PPI - Pixels Per Inch - A measurement to describe the size of a printed image. The higher the number the more detailed the print will be.

Pre-Flash - Some digicams use a low-power flash before the main flash to set the exposure and white balance. This does not allow the use of a normal photo slave strobe as it will be triggered by the pre-flash.

Programmed AE - the camera picks the best shutter speed and aperture automatically, also called "Automatic" or "Point-n-Shoot" mode.

Progressive Scan - Term used to describe an image sensor that gathers its data and

processes each scan line one after another in sequence. See also "Interlaced" for the other method.

Prosumer - Refers to more expensive semi-professional digicams costing $1,000 and up. The average digicam is made for the consumer market and costs well under $1,000.

QuickTime - A motion video standard created by Apple. They have an entire QuickTime web site to explain it. QuickTime video sequences can contain an audio track and are stored as .MOV files.

QVGA - Refers to a Quarter-VGA resolution (320 x 240) motion video sequences.

RAM - Random Access Memory . The most common type of computer memory; where the CPU stores software, programs, and data currently being used. RAM is usually volatile memory, meaning that when the computer is turned off, crashes, or loses power, the contents of the memory are lost. A large amount of RAM usually offers faster manipulation or faster background processing.

Rangefinder - The viewfinder on most cameras is a separate viewing device that is independent of the lens. Often mounted above and to the right or left of the lens. It exhibits a problem known as parallax when trying to frame subjects closer than five feet from the camera so it is advisable to use the color LCD when shooting closeups for this very reason.

RAW - RAW files basically hand the raw unprocessed data - at 12 bits per channel - from the camera’s imaging chip to your computer. Lossless compression is applied to reduce filesize slightly without compromising any quality.

Red-Eye - An effect caused by an electronic flash reflecting off of the human eye and making it look red. Compact cameras with the flash located close to the lens suffer the worst from this problem. Pro photographers use a bracket to hold an external flash unit above and off to the side of the lens to eliminate red-eye.

Red-Eye Reduction Mode - A special flash mode whereby a pre-flash or a series of low-powered flashes are emitted before the main flash goes off to expose the picture. This causes the pupil in the human eye to close and helps eliminate red-eye.

Render - The final step of an image transformation or three-dimensional scene through which a new image is refreshed on the screen.

Resize - Usually means to take a large image and downsize it to a smaller one. Most graphic viewing and editing programs offer a Resize option for this purpose.

Resolution - The quality of any digital image, whether printed or displayed on a screen, depends in part on its resolution—the number of pixels used to create the image. More and smaller pixels adds detail and sharpens edges.

- **Optical Resolution** is an absolute number that the camera's image sensor can physically record.

- **Interpolated Resolution** adds pixels to the image using complex software algorithms to determine what color they should be. It is important to note that interpolation doesn't add any new information to the image - it just makes it bigger!

Camera makers often specify the resolution as: QVGA (320 x 240), VGA (640 x 480), SVGA (800 x 600), XGA (1024 x 768) or UXGA (1600 x 1200)

RF - Range Finder - a type of camera viewfinder that uses one lens to frame your subject and another lens to capture the image. See "SLR" for the other type.

RGB - Means Red, Green and Blue - the primary colors from which all other colors are derived. The additive reproduction process mixes various amounts of red, green and blue to produce other colors. Combining one of these additive colors primary colors with another produces the additive secondary colors cyan, magenta and yellow. Combining all three produces white.

RS-232 - Standard type of serial data interconnection available on most PC type computers. It's the slowest way to transfer image data from a camera. Most digicams made after 2001 do not have serial ports any more, they now use USB.

Saturation - The degree to which a color is undiluted by white light. If a color is 100 percent saturated, it contains no white light. If a color has no saturation, it is a shade of gray.

Scanner - An optical device that converts images - such as photographs - into digital form so they can be stored and manipulated on computers. Different methods of illumination transmit light through red, green and blue filters and digitize the image into a stream of pixels.

Scene Modes - Many digicams now have an exposure mode called SCENE where the user selects the best pre-programmed scene to suit the current shooting conditions. The camera will automatically change many settings to capture the best possible image.

SCSI - A high-speed input/output bus used mainly in Macintosh computers but also popular in many high-end PCs. Abbreviation for Small Computer Systems Interface.

SD - Secure Digital card, a flash memory card used in digicams and MP3 players. It is identical in size and shape to the MultiMedia Card (MMC) flash cards. The difference being that SD cards were designed to hold protected (copyrighted) data like songs. Not all cameras that use SD cards can use MMC cards so be sure to read your owner manual before buying additional cards.
and check here: Flash Memory Cards/Readers

Secure Digital - Secure Digital. See "SD" above.

Self Timer - Preset time delay (2, 5 or 10 seconds) before the shutter fires. Allows the photographer to get into the picture without using a cable release or remote control. It is also great for taking macro shots as you don't touch the camera to trip the shutter and thus eliminates any camera shake.

Sepia - The (brown) mono-toned images from the "good ole days" now often found as a special image effect on some digicams.

Serial Port - Same as "RS-232" above.

Shutter - The physical device that opens and closes to let light from the scene strike the image sensor. Digicams use both electronic and mechanical shutters.

Shutter Lag - The time between pressing the shutter and actually capturing the image. This is due to the camera having to calculate the exposure, set the white balance and focus the lens.

Shutter Priority AE - the user chooses a shutter speed and the aperture is automatically determined by lighting conditions. Shutter speed priority is used to control motion capture. A fast shutter speed stops fast action, a slow shutter speed blurs a fast moving subject.

Skylight Filter - This is an UltraViolet absorbing filter that helps overcome the abundance of blue in outdoor photographs. Not really necessary in digital photography as the camera's white balance system adjusts for the color temperature of the scene. We do use them to protect the camera's lens from scratching, fingerprints or dirt.

Slow Sync - A flash mode in some digicams that opens the shutter for a longer than normal period and fires the flash just before it closes. Used for illuminating a foreground subject yet allowing a darker background to also be rendered. Good for night time shots of buildings with people in the foreground. Often called Night Scene or Night Portrait mode.

SLR - Single Lens Reflex - Means the camera has a viewfinder that sees through the lens (TTL) by way of a 45°-angled mirror that flips up when the shutter fires and allows the light to strike the image sensor (or film).

SmartMedia - (aka SSFDC), a flash memory card that consists of a thin piece of plastic with laminated memory on the surface and uses a gold contact strip to connect to the camera. SmartMedia cards are available from 4MB up to 128MB in size.
For more info see Flash Memory Cards/Readers

Smoothing - Averaging pixels with their neighbors. It reduces contrast and simulates an out-of-focus image.

Spot Metering - The camera's auto exposure system is focused on a very small area in the center of the viewfinder to critically adjust the overall exposure value ONLY for that area.
see also: "Center-weighted" and "Matrix metering"

SRF - Sony raw format filetype identifier. i.e. DSC00101.SRF

SSFDC - Solid State Floppy Disc Card - See "SmartMedia" above

Stitching - Combining a series of images to form a larger image or a panoramic photo. Requires special graphic software.

Subtractive Color - Photographs and objects of nature create color by subtracting or absorbing certain wavelengths of color while reflecting other wavelengths back to the viewer. This is called subtractive color. Example - The common apple, it is seen as "red" by the human eye or a digital camera. The apple really has no color (light energy of its own), it merely reflects certain wavelengths of white light that cause us to see red and absorbs most other wavelengths. Color paintings, color photography and all color printing processes use the subtractive process to reproduce color. In these cases, the reflective substrate is canvas (paintings) or paper (photographs, prints), which is usually white.

SuperCCD - Fujifilm's image sensor used in their line of digital cameras. For more

information, read their SuperCCD press release.

SVCD - "Super Video Compact Disc"
A CD-ROM disc that contains high quality video and audio. Typically, a SVCD can hold about 35~45 minutes (650MB) of video and stereo-quality audio (depends on the data rate used for encoding). The video and audio are stored in MPEG-2 format, much like a DVD. SVCD video has better quality than VHS video.

SVCD Video Parameter Settings
Frame Size: 480x480 (NTSC) or 480x576 (PAL)
Frame Rate: 29.97frames/second (NTSC) or 25 frames/second (PAL)
Video Data Rate: Variable bit rate up to 2600 kbps
Audio Settings: 32~384 kbps MPEG-1 Layer 2 audio bit rate

SVGA - SuperVGA refers to an image resolution size of 800 x 600 pixels.

Telephoto - The focal length that gives you the narrowest angle of coverage, good for bringing distant objects closer.

TFT - Refers to the type of hi-res color LCD screen used in digicams. TFT = Thin Film Transistor.

Thermal Dye Sublimation - please see Dye Sub

Thumbnail - A small, low-resolution version of a larger image file that is used for quick identification or speedy editing choices.

TIFF - Tagged Image File Format - An uncompressed image file format that is lossless and produces no artifacts as is common with other image formats such as JPG.

Time-Lapse - Capturing a series of images at preset intervals. Also called Interval Recording or Intervalometer.

Transreflective - This is a type of LCD display that uses ambient light as well as a backlight to illuminate the pixels. Can be seen easier in bright outdoor conditions.

True Color - Color that has a depth of 24-bits per pixel and a total of 16.7 million colors.

TTL - Through the Lens, used when talking about either an autofocus or auto exposure system that works through the camera's lens. It's also (incorrectly) used to mean SLR, see "SLR" above.

Type I, II, III - Denotes various PC ATA storage devices both flash memory and removable hard disk drives. Type I and II fit in the single-height card slots, Type III only fit in the double-height slots.
See also "PCMCIA" and "PC Card"

TWAIN - Protocol for exchanging information between applications and devices such as scanners and digital cameras. TWAIN makes it possible for digital cameras and software to "talk" with one another on PCs. The word TWAIN is the abbreviation of "Technology Without An Industry Name."

Underexposure - A picture that appears too dark because insufficient light was delivered to the imaging system. Opposite of overexposure.

Unsharp Masking - A process by which the apparent detail of an image is increased; generally accomplished by the input scanner or through computer manipulation.

USB - Universal Serial Bus - the data I/O port on most digicams and found on modern PC and Mac computers. Faster than the serial port. Up to 12Mb/s with v1.1 interfaces.

USB 2.0 - The newest USB standard, close in throughput speed to FireWire now. Up to 400Mb/s.

UV Filter - This is an UltraViolet absorbing filter that helps overcome the abundance of blue in outdoor photographs. Not really necessary in digital photography as the camera's white balance system adjusts for the color temperature of the scene. We do use them to protect the camera's lens from scratching, fingerprints or dirt.

UXGA - Refers to an image resolution size of 1600 x 1200 pixels.

VCD - "Video Compact Disc"
A CD-ROM disc that contains video and audio. Typically, a VCD can hold about 74 minutes (650MB) of video and stereo-quality audio. The video and audio are stored in MPEG-1 format and follow certain standards (White Book). VCD video quality is roughly the same as VHS video.

VCD Video Parameters Settings
Frame Size: 352x240 (NTSC) or 352x288 (PAL)
Frame Rate: 29.97 frames/second (NTSC) or 25 frames/second (PAL)
Video Data Rate: 1152 kbps
Audio Settings: Stereo, 44.1kHz and 224kbps audio bit rate

VGA - Refers to an image resolution size of 640 x 480 pixels.

Video Out - Means the digicam has the ability to output its images on television screens and monitors using either NTSC or PAL format.

Viewfinder - The eye level device you look through to compose the image.

Vignetting - A term that describes the darkening of the outer edges of the image area due to the use of a filter or add-on lens. Most noticeable when the zoom lens is in full wideangle.

White Balance - Refers to adjusting the relative brightness of the red, green and blue components so that the brightest object in the image appears white. See also "AWB"

Wide angle - The focal length that gives you the widest angle of coverage.

X3 Image Sensor - Foveon's new image sensor for digital cameras that captures red, green and blue data at every pixel. Read the X3 press release for full details.

xD-Picture Card - A new flash memory card standard that was co-developed by Fujifilm and Olympus in mid-2002. Rumored to be replacing SmartMedia which has stalled at 128MB. xD is scheduled to go as large as 8GB in a form factor the size of a postage stamp.
For more info click here.

XGA - Refers to an image resolution size of 1024 x 768 pixels.

ZLR - Zoom Lens Reflex, a term coined by Olympus to describe their fixed mount lens SLR type cameras. An SLR camera has interchangeable lenses, a ZLR has a non-removeable zoom lens.

Zoom Lens - A variable focal length lens. The most common on digicams has a 3:1 ratio (i.e. 35-105mm). See "3x" and "Focal Length"

With additional terms to add to the dictionary

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