

Digital Camera Glossary

Compaq Flash

This is the memory card with the largest physical size and storage capacity. About the size of a matchbook and weighing about half an ounce, these cards come with a capacity as high as 2 GB. These cards are better for use with high-megapixel digital cameras. There are also versions that store at a high-speed rate, which is helpful for shooting several pictures in succession.



Digital Zoom

Enlarging of an image that requires the camera to double the size of the pixels. Due to the doubling of pixels the image begins to become fuzzier and fuzzier as you enlarge.

Image Format

This is the manner in which digital images are stored. There are numerous ways to store an image, and the most popular are jpeg, gif, tiff, bitmap and the more complicated raw files. You can identify which format is used by looking at the end of the file name after the period. For example, picture.jpg is a jpeg file.

LCD Screen

This is a feature included on most cameras, which allows the user to preview images immediately after a photo is taken. It is this single feature that persuades many to switch the digital cameras. These preview windows, however, can be vulnerable to cracking or malfunctioning.

Megapixel

One-million pixels, a unit of measurement in an image. This number will determine the quality of the image. Think of it as the number of dots in your picture. A low density of dots will result in a poor image.

Memory Card

A small electronic device that stores files. With digital photography, it is used to save images. The larger the storage capacity, the more images it holds.

Memory Stick

Long and slender, this memory card also can be found with a "select" feature which doubles its memory. The cards come in a maximum capacity of 128 MB, but the select version stores 256 MB.



Optical Zoom

This is a type of zoom on digital cameras that replicates what a 35mm zoom does, by actually magnifying the subject of the photo.

Recycling Time

The time it takes for a camera to reset between flashing for one photo and the next. This can be crucial, as lengthy recycling times can make it hard to capture fast-moving moments like action or even a fast-moving pet or child.

Advanced Camera: Advanced digital cameras offer owners the option of manually controlling a variety of camera settings, including focus, aperture, and shutter speed.

CompactFlash: The most widely used digital memory format, CompactFlash cards are used by most current Canon and Nikon cameras, as well as many other brands. CompactFlash cards are available in sizes up to 2 Gigabytes, larger than any other currently-available format.

Digital Zoom: Most digital cameras provide two methods for zooming: optical and digital. Unlike optical zoom, which uses the optics of the lens to magnify the size of an image, digital zoom discards pixels around the edge of an image, fitting the remaining pixels into the same space to give the appearance of zoom. Since digital zoom comes at the expense of resolution, you should always choose a camera based on its optical zoom, not the digital or combined figure.

Extended Zoom: Extended zoom digital cameras offer 8x optical zoom or greater, providing far more telephoto power than most other digital cameras (the average digital camera offers 3- or 4x optical zoom). On most digital cameras, a 10x optical zoom is approximately the equivalent of a 380mm lens.

Image Noise: Image noise creates specks of the wrong color in a digital image. Image noise usually occurs in low-light conditions when a camera's light sensor registers an incorrect value, for instance recording yellow when it should record black. This error causes small dots to appear in the image. Higher quality cameras should have very little noise, even at high ISO settings.

ISO: ISO is a measurement of a digital camera's imaging sensor's sensitivity. Digital cameras with high ISO capability are better able to take low-light images and pictures of fast moving objects.

JPEG: An acronym for Joint Photographic Experts Group, a JPEG is the most commonly used type of digital image format. By eliminating very subtle color distinctions that the human eye usually cannot detect, JPEG images are compressed so that they can save faster and use less space. Because JPEG format actually alters an image, its compression is said to be "lossy," meaning that a certain amount of data is lost every time a JPEG is edited, saved, and compressed again.

Macro Mode: Macro mode allows a digital camera to take close-up pictures of small objects like flowers, insects, coins, etc. Macro capabilities vary by camera- check a camera's reviews to see how its macro mode performs.

Megabyte: A megabyte (MB) is a unit of data used to describe the size of digital images and the capacity of a digital memory card. Memory cards are available in sizes ranging from 8MB to 2 Gigabytes (a Gigabyte is the equivalent of 1,024MB).

Megapixel: A measure of resolution that reflects the ability of a digital camera to record detail. The more megapixels a camera has, the more detail its images can contain and the more they can be enlarged without losing clarity. More megapixels aren't always necessary, however. For more information see DCHQ's First Time Buyer's Guide.

Memory Stick: Memory Stick is a memory format used primarily by Sony digital cameras. Memory Sticks are available in sizes up to 1 Gigabyte.

Movie Mode: Movie mode lets digital cameras shoot video clips. Some cameras offer sound, while others can only take silent videos. The maximum length of a movie is determined by a camera's internal limits and/or the size of the memory card.

Optical Zoom: Optical zoom magnifies the size of an image by adjusting the lens. Unlike digital zoom, optical zoom enlarges the subject without sacrificing resolution.

Point and Shoot: A point and shoot camera offers few or no manual controls and very simple operation. Focus, exposure, and most other adjustments are completely automatic; all the owner needs to do is aim and push the shutter button. Most advanced cameras also have point and shoot modes.

RAW: One of the image formats available on some advanced digital cameras. RAW images are large, usually uncompressed files that, unlike JPEGs, are not processed by the camera and retain all their original data. RAW images are ideal for those who plan on editing their pictures with image-editing software. RAW images may require special software to turn them into a more common format like TIFF or JPEG.

Redeye: Redeye is the term used to describe the red color often visible people's eyes when a picture is taken with a flash. Redeye is caused by the reflection of the flash off the subjects' eyes -- a problem that is compounded when the flash is positioned close to the lens, as it is on many small cameras.

Redeye Reduction: By firing the flash several times just before exposing a photo, cameras with a redeye reduction feature cause a subject's pupils to contract, reducing the reflection that causes redeye.

SLR Camera: The most expensive of all digital cameras, digital SLRs offer complete manual control, higher resolution, advanced exposure control, and the benefits of detachable lenses. Due to the lens design, digital SLR's are not capable of shooting video.

SLR-Style Camera: With protruding lenses and large hand grips, SLR-styles cameras have bodies that are physically similar to actual SLR cameras. Unlike proper SLRs, however, these cameras do not have "through-the-lens" viewfinders and do not accept interchangeable lenses.

SmartMedia: A digital camera memory format currently used by some Olympus and Fuji cameras. These companies are using xD-Picture cards in their newer cameras, raising

the possibility that the SmartMedia format is on the way out. SmartMedia cards are available in sizes up to 128MB.

TIFF: Short for Tagged Image File Format, TIFF is an image file format that does not lose any quality when it is saved and compressed. Many advanced cameras offer a TIFF format option.

Ultra Compact Camera: Ultra compact cameras are generally one inch or less thick, and small enough to be held in the palm of a hand. While these cameras do not offer all the manual controls of larger models, they still are capable of producing high quality images.

xD-Picture Card: Released in Early 2002 by Olympus and Fuji, xD-Picture Card is the newest digital camera memory format. Physically smaller than all other memory formats, and available (as of 5/03) in sizes up to 256MB, the xD-Picture Card appears poised to replace the older SmartMedia format.

Secure Digital

This is a secure memory card about the size of a postage stamp which weighs about two grams. It is used in various types of devices including digital cameras, and can be found with storage.

XD Picture Card

This is the smallest of the common memory card formats, yet it has a large capacity.



What is the right Digital Camera for You?

1 megapixel or less: This is typically found on smaller, inexpensive cameras or cameras in combination with other devices (such as cellphones or PDAs). It will be hard to make a high-quality print of any size, but these are just fine for e-mailing photos or posting photos for a personal web site. Expect to pay \$100 or less for the camera alone.

1.1 to 2 megapixels: A slight step up, you can probably knock out a 4x6 or two of decent quality. I wouldn't recommend it for family portraits or if you really need a nice-looking print. You will pay about \$100-150.

2.1 to 3 megapixels: This is actually a good compromise between picture quality and low price for most casual photographers. You can print lovely 4x6 images, decent 5x7s and, depending on the camera, might even knock out a good 6x9. You will pay around \$150 to \$250.

3.1 to 4 megapixels: You're getting nicer. These images make practically photo-lab quality 4x6s, and great 5x7s and 6x9s. You can print an 8x10 in some instances. You'll pay about \$250 to \$350.

4.1 to 5 megapixels: Hello, 8x10s! Now you are getting closer to professional photographer levels, and the quality shows it. And you'll pay the price, around \$350 to \$450.

5.1 megapixels and up: Wonderful image quality, but high price tags. There are some high-megapixel cameras coming out with lower price tags than most, but they usually have very few features. Unless megapixels are the only thing you care about (it shouldn't be), don't get a camera that sounds outrageously inexpensive for its megapixel range. In this category, expect to pay \$450 and more.

5 MP = 2592 x 1944 pixels High Quality: 10 x 13 inches Acceptable Quality: 13 x 19 inches	4 MP = 2272 x 1704 pixels High Quality: 9 x 12 inches Acceptable Quality: 12 x 16 inches	3 MP = 2048 x 1536 pixels High Quality: 8 x 10 inches Acceptable Quality: 10 x 13 inches	2 MP = 1600 x 1200 pixels High Quality: 4 x 6 inches & 5 x 7 inches Acceptable Quality: 8 x 10 inches
4-5 MP = 2500 x 2000 pixels High Quality: 10 X 8 inches	6 MP or more 3200 X 2400 pixels High Quality: 16 X 12 inches	600 pixels = 800 X 600 pixels Onscreen Viewing = 0.5 - 1.5	1.5 - 2.5 MP = 1800 X 1200 pixels Enprint (draft quality)

If you are going to be satisfied with viewing your images on the web or on screen, there is generally little point in getting a camera which is more than 1.5Mp. You are simply paying more than you need and using more storage per image in the camera than you require. If the largest print you will ever want is an 8x10 print, a 2Mp camera will be fine - and you will actually find that you can get a reasonable print around 10x8 too. **However if you know you will want prints this size regularly, then it makes sense to buy a 4 or 5 Mp camera. For professional quality up to 15x10", a good 6Mp camera is needed, and for results that will come close to medium format quality you will need to be thinking about 11 Mp or more (and probably large bank loan!). 😊**