

Selecting a Digital Camera

Digital cameras differ from traditional cameras in that they do not use light sensitive film. Instead, they record images in digital form, the same way computers store information. Images captured by digital cameras are formed on paper by printing multiple lines of tiny squares called pixels. The number of pixels in a given area determines the quality of the picture. The more pixels per square inch, the higher the quality of the picture.

Today, digital cameras are available with one, two, three or four megapixel (millions of pixels) resolution. The higher the resolution, the higher the price of the camera. The megapixel resolution of the camera is determined by multiplying the number of pixels per line times the number of lines. For example, a typical two-megapixel camera produces a picture with 1760 pixels per line and 1168 lines ($1760 \times 1168 = 2,055,680$ pixels). A two-megapixel picture, when printed on paper, will produce an outstanding 8"x10" picture that rivals pictures taken with traditional cameras.

There are some digital cameras selling for less than \$100 that would be fairly satisfactory for sending pictures on e-mail. However, if good resolution is desired, the current prices range from around \$300 to well over \$1000.

The less expensive cameras store images in fixed storage areas within the camera. When the maximum number of pictures is captured, they must be transferred (downloaded) to a computer and the storage area cleared, before additional pictures can be taken. The more expensive cameras have removable storage cards which allow swapping of the cards so more shots can be taken before transferring the images to a computer. After images are downloaded to a computer, the cards can be cleared and reused over and over.

Two memory card formats are popular: CompactFlash and SmartMedia. The CompactFlash cards are virtually indestructible; while the SmartMedia cards are less durable, with exposed contact edges that if deeply scratched make the card useless.

In future articles, we will look at several other items to consider when selecting a digital camera. Please send me questions, comments or suggestions at jackscully@prodigy.net.

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January 24, 2002