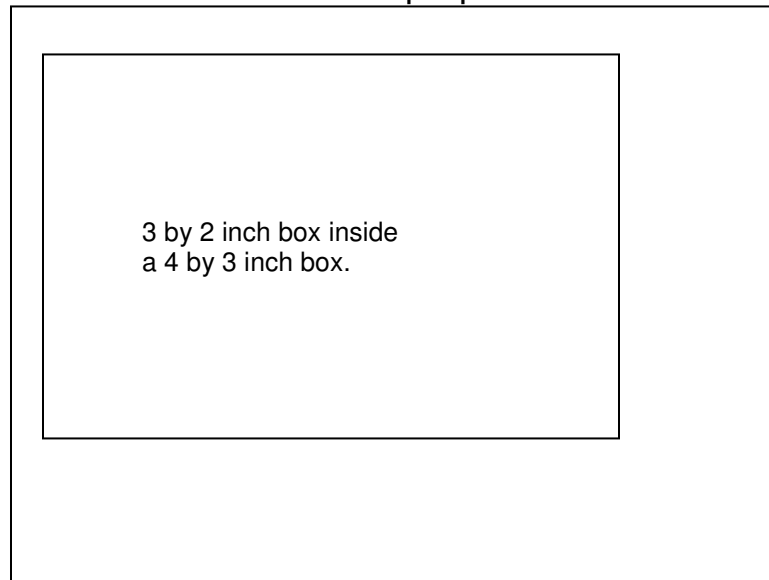


Working with Digital Cameras and Scanners

Digital Cameras & Photos

A standard 35 mm camera takes pictures with 36 mm by 24 mm dimensions. This gives the pictures a 3:2 ratio with 3" as the width. Some digital cameras take pictures in this ratio. However, because computer screens are usually built in a 4:3 ratio, digital photographs are becoming standardized with a 4:3 proportion with 4" as the width.



Digital photo files need to save information about all the areas on the picture. Each area (called a pixel) or dot is a solid color. Because the digital photos are based on the computer television screens, information is needed for RGB (Red Green Blue) information. A number (between 0 and 255) tells the computer how much

red, blue, and green goes into the color combination. For example, the color red is (255, 0, 0).

The measurement of this photo is ppi (pixels per inch) for viewing and dpi (dots per inch) for printing.



Original picture



Beak area displaying pixels

Here are some guidelines about the quality of a digital photo based on the picture's camera size.

INFORMATION ABOUT PICTURE SIZE ON DIGITAL CAMERAS		
Megapixels per Picture	Dimensions (4:3 ratio)	Print Size
Less than 1 MP	640 X 480	Up to 2.3" X 3.5" prints. Good for web viewing or sending as email attachment
1 MP	1024 X 768	Up to 4" by 6" prints.
1.2 MP	1280 X 960	Up to 5" by 7" prints.
2 MP	1600 X 1200	Up to 8" by 10" prints
3 MP 4 MP	2048 X 1536 & 2272 X 1704	Up to 11" by 14" prints.
5-8 MP	2560 X 1920 & higher	11" by 14" prints with near 35 mm photo quality in 5 MP range.

For the best quality picture, the general rule is to set your camera at its highest setting. For example, if you have a 2 MP camera, your largest setting will be 1600 X 1200. Also for the best quality, do not use the digital zoom. Using the digital zoom leads to the camera guessing to magnify the picture. It does not actually zoom closer to the camera subject.

To check your camera's settings for photograph dimensions and zoom, go into your camera's menu on the LCD screen.

Getting Images from a Website

Free images can be gotten on the web from www.freeimages.co.uk or www.freefoto.com

To get the images, you may need to click on the thumbprint first. The actual image will show up on the screen.

To save the image, right-click on the image.

Left-click on "Save Picture As"

Choose a location where the picture will be saved.

Give the picture a name that will mean something to you rather than its given number.

Remember where you saved it on your computer. Remember the web site where you originally got it.

Scanning Words, Drawings, and Images

When saving a scan as a file, choose the best format for that type of original. Also use these choices for saving digital camera photos.

If you are scanning a small area that you eventually want to resize, resample, and/or print, use at least 300 to 600 dpi. If you are scanning at twice the actual requirement such as over 600 dpi, it is considered scanning at “high resolution.”

If it is a valuable scan, save the original as a tif that will not compress or throw away any pixels.

Words	Text format as TXT or Rich Text Format as RTF
Black and White Drawings or Logos	Rich Text Format as RTF or Windows Metafile as WMF
Color Images, either drawing or photos (no loss of info)	Tagged Import File as TIF or Bit Map format as BMP
World Wide Web & Email, drawing (lossy or loss of info)	Graphics Interchange Format as GIF
World Wide Web & Email, photos (lossy or loss of info)	Joint Photographic Experts Group as JPG

Web Resources

Digital Camera Reviews and News
<http://www.dpreview.com/>

A few scanning tips by Wayne Fulton
<http://www.scantips.com/>

Digital camera tutorials and digital photography course - DCVIEWS
<http://www.dcvIEWS.com/tutors.htm>

Digital Camera Reviews and Information
<http://www.dcreSource.com/reviews/cameraList.php>

Short and Simple Guide to Buying a Digital Camera
<http://www.pcphotoreview.com/digicambuyguidecrx.aspx>

A good example of photos that have too much or too little resolution is found at Dan's Camera City
http://danscamera.com/Learning/going_digital/

Camera information & news
<http://www.steves-digicams.com>