

Digital Camera Resolutions *What size are my pictures?*

What is the difference between DPI and PPI?

DPI means dots per inch. DPI is used for printers, it means how many dots they can print per linear inch. Inkjet printers print at 600dpi. ADG's plates for offset press, are printed at 3251dpi.

PPI means pixels per inch. PPI is used for digital cameras and monitors.
 Often the term PPI is referred to as DPI (Digital Cameras, Monitors).

What does resolution mean to me?

Resolution, by definition, is how many pixels fit into a linear inch. What PPI required by different printers depends on Line Screen. Resolution required for home inkjet printers and laser printers are between 150 & 200 ppi. For high quality offset printing, the resolution needs to be at least 300 ppi.

How do I know what size, in inches, different resolutions will be for printing?

Resolution can be easily set on all digital cameras. Below is a table containing the most popular resolutions digital cameras can take. You can use this table to see final size based on ppi.

IMAGE PIXELS PER INCH

| IMAGE RESOLUTION | IMAGE PIXELS PER INCH | | |
|------------------|-----------------------|---------------|----------------|
| | 72 ppi | 200 ppi | 300 ppi |
| 320 x 240 | 4.444 x 3.333 | 1.6 x 1.2 | 1.067 x .8 |
| 640 x 480 | 8.889 x 6.667 | 3.2 x 2.4 | 2.133 x 1.6 |
| 800 x 600 | 11.111 x 8.333 | 4 x 3 | 2.667 x 2 |
| 1024 x 768 | 14.222 x 10.667 | 5.12 x 3.84 | 3.413 x 2.56 |
| 1280 x 960 | 17.778 x 13.333 | 6.4 x 4.8 | 4.267 x 3.2 |
| 1600 x 1200 | 22.222 x 16.667 | 8 x 6 | 5.333 x 4 |
| 2048 x 1536 | 28.444 x 21.333 | 10.24 x 7.68 | 6.827 x 5.12 |
| 2240 x 1680 | 31.111 x 23.333 | 11.2 x 8.4 | 7.467 x 5.6 |
| 2272 x 1704 | 31.556 x 23.667 | 11.36 x 8.52 | 7.573 x 5.68 |
| 2400 x 1800 | 33.333 x 25 | 12 x 9 | 8 x 6 |
| 3024 x 2016 | 42 x 31.5 | 15.12 x 11.34 | 10.08 x 7.56 |
| 4064 x 2704 | 56.444 x 42.333 | 20.32 x 15.24 | 13.547 x 10.16 |
| 4256 x 2648 | 59.111 x 44.333 | 21.28 x 15.96 | 14.187 x 10.64 |

FINAL DIMENSIONS IN INCHES

Quick Tip

You can use this simple equation to figure out print size.

$$\frac{\text{Pixels}}{\text{ppi}} = \text{Size in inches}$$

Example:

$$\frac{1800}{300} = 6$$

How do I set the resolution on my digital camera?

Resolution can be set in different ways with different digital cameras. Below, you will find a few different camera menus showing where to set the resolution. The Canon has [L, M1, M2, S], next to that, there is resolution information in pixels. The HP has a star rating (more stars = higher resolution). A good rule of thumb is the least amount of pictures that can be taken = higher resolution the each image is.



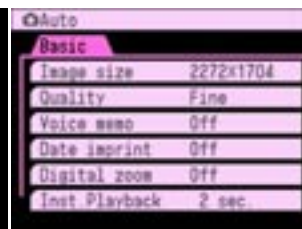
Canon Powershot S40



Casio QV-4000



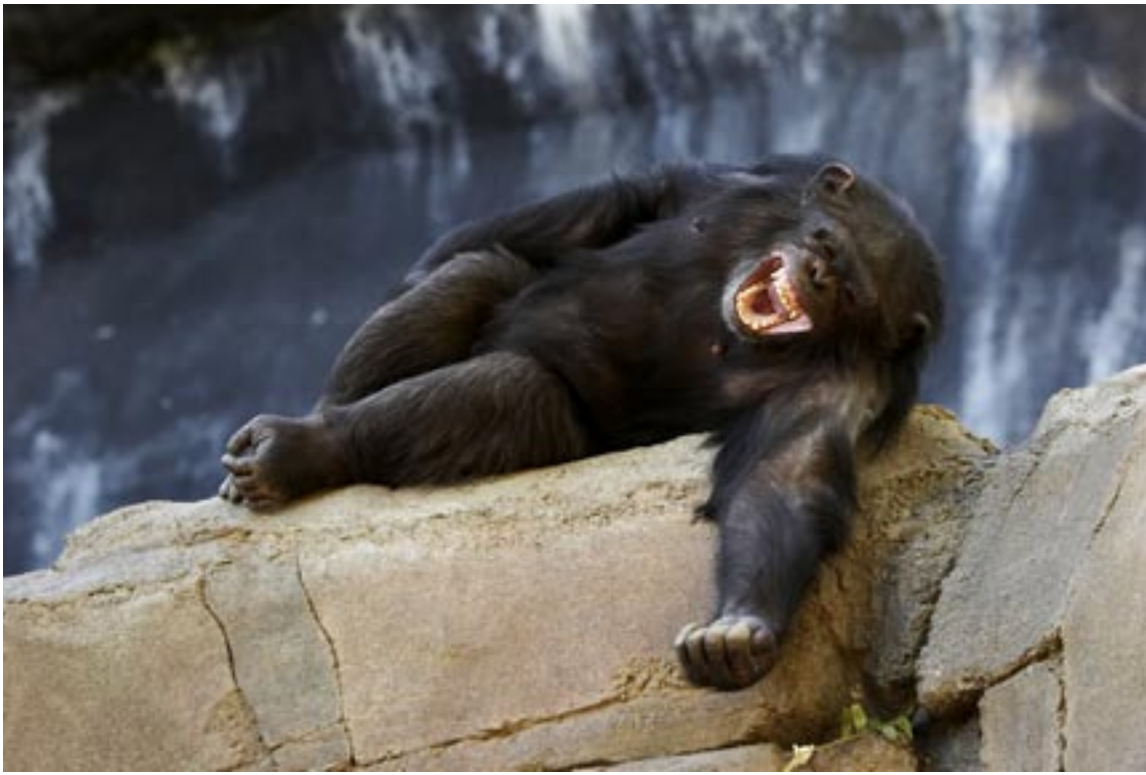
HP Photosmart 812



Minolta DiMage S404



Sony DSC-P9



PRESS QUALITY PHOTO

SIZE:
6"x4" inches
DPI:
300
FILE SIZE:
6.18MB
PIXEL DIMENSION:
1800x1200



COMMON MISTAKES

SIZE:
6"x4" inches
DPI:
72
FILE SIZE:
364.5 Kbytes
PIXEL DIMENSION:
432x288

Scaling a 72 dpi photo
to 6x4 inch size



WEB PHOTOS/
SMALL PIXEL DIMENSION

SIZE:
1.44x.96 inches
DPI:
72
FILE SIZE:
364.5 Kbytes
PIXEL DIMENSION:
432x288