

Why some pictures seem big when viewed on your monitor

You have probably received an email with an attached picture that does not fit within your computer monitor and you have to scroll around aimlessly to see the entire picture. If you have wondered what is going on, the answer is rather simple — the image you have been sent is larger than the screen resolution of your monitor. If you have been sent a 6 MP image that measures 3,000 by 2,000 pixels, and your monitor resolution is set to 1024 by 768, then the image is many times larger than what your monitor can display. The email program is simply showing you what has been sent. By contrast if you open the picture in a photo-editing program you will see the entire image as the program is set up to suppress enough pixels to make the entire image viewable.



Bits & BYTES

size picture you want from any other sized picture or file. The key is whether you will like the results.

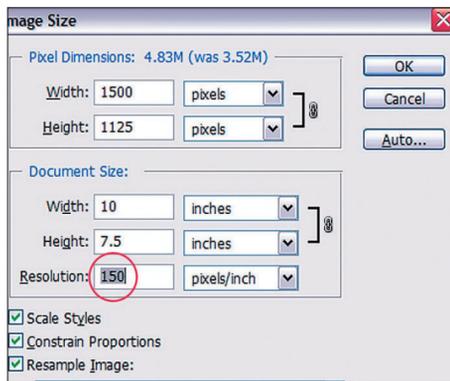
A reader recently wrote and asked me how can you take a small file and make a large print. His results were not very sharp and you could see the jagged edges of the pixels in the image.

The key to upsizing a picture is through a process called interpolation. In its simplest form, interpolation duplicates the existing pixels in the image, but when the resized image is not a multiple of the original, the computer uses some fuzzy logic, or advanced mathematics, in determining what should be replicated and what is not. You will probably find this option in a photo-editing program where you can change the original image size to the size you want. Remember, you don't gain any new detail, but the generation of additional pixels and forcing them to be printed in tighter pattern on the paper makes the individual pixels indistinguishable creating a smoother, non-pixelated picture.

Most editing programs have an option to resize a picture. In that dialog, simply enter the dimensions you want. You will want to keep the aspect ratio the same, so you should only have to change one dimension. The program will fill in the other dimension automatically. The other number you will want to change is the resolution or how many pixels per inch comprise the image. Make sure this number is at least 150. A smaller number might show the jagged edges of pixels. When this step is completed, you can run a sharpening filter on the result, which will increase the contrast of edges and give the appearance of a sharper looking image.

By the way if you have seen one of those TV forensic programs a blurry pixelated image is magically transformed into a sharp and detailed picture by running an algorithm, it's science fiction. Upsizing a picture can only work with the data provided, it will not create new details.

Again if you have ideas for future articles, please drop me a line at pmi@palmermultimedia.com.



PHOTOS PROVIDED

Be sure to set your resolution to at least 150, shown above, to ensure pixels, shown top right, won't be visible in the image. When changing the resolution to a higher number, more pixels are generated and will not be noticeable in the print, shown lower right.



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Free Health Programs!

HUMPHREYS PUBLIC LIBRARY
 November 20th - 1:00pm
"Why Should I Care About Diabetes?"
 Presented by Susquehanna Health

JERSEY SHORE PUBLIC LIBRARY
 October 28th - 2:00pm
"Understanding Cholesterol"
 Presented by Department of Health

NOVEMBER 12th - 1:00pm
"Chiropractic - It's Essential & Trustable"
 Presented by Department of Health

MUNCY PUBLIC LIBRARY
 November 13th - 1:00pm
"Prevent Cancer - Just the Facts"
 Presented by Susquehanna Health, Family Center for Reproductive Health

TAKE CARE LYCOMING - Neighbor to Neighbor

Free Health Programs will be given at the following locations:
 November 18 Highsville (8:30-10:00 am); Muncy (12:30-2:00 pm) and
 Montgomery (2:30-5:00 pm) Fire Co.'s
 November 20 Highsville (8-10 am); Jersey Shore (Philadelphia Ct. 11:30-1:00 pm); and Highville
 Township, Mt. Fire Co. (8-9 pm)
 November 21 The Campbell Street Center (9am-12 Noon)

For more information on any of these programs, please call 822-3000.

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