

Doña Ana Camera Club Printing Setup Guide

Purpose – to make prints that match what you see on your monitor

1. Camera set-up: See your camera's menu screens or manual or bring your camera to a Camera Club meeting for personal help:
Set color space to **Adobe RGB**
(sRGB is the default, but is a limited color space for the Web)
2. Set-up the color space for your image editing software:
Settings/Preferences – set color space to **Adobe RGB 1998**
3. Calibrate your monitor:
(Your monitor must display the correct colors to produce prints that match what your image editor has shown you. If this is not correct, you have little chance to produce print colors that match your monitor image.)
Adobe Gamma – for CRTs, distributed by Adobe with some Image Editors
QuickGamma – free, very basic, no color calibration, Win XP-7
- Download from: <http://www.quickgamma.de/indexen.html>
Hardware Monitors – accurate, \$60 and up (much better)
4. Size your image and ensure sufficient pixels for printing:
Pixels needed for printing:
240-360 pixels per inch (up close viewing)
e.g. need 7.2 MPixels for an 8x10 print at 300 pixels per inch
150-240 pixels per inch (view from a distance, may see individual pixels up close)
How can you increase the number of pixels in an image?
 - a. Increase with image editing software (works with some software – max 1.4x length and 1.4x width = 2x area) - may work if a reasonable number of pixels exist in the image
 - b. Interpolation - increase pixels 10% at a time - may work if a reasonable number of pixels exist in the image
 - c. Genuine Fractals (\$120) - Photoshop plug-in which can enlarge the image to any size by using complex mathematical formulas
5. When printing with image editing software, set the following parameters:
Software handles colors – you spent time getting images correct with software, why would you let the printer handle the color choices?
Printer profile for paper (generally profiles are created by your photo paper manufacturer) – choose a profile that matches the photo paper being used.
The printing gamut is very dependent on the paper profile—choose correctly!
Rendering Intent – this is needed for images whose colors fall outside the gamut of the color space being used:
 - a. **Relative Colorimetric – Normally used.** Moves only the out of gamut pixels to the edge of the color space, but could produce “banding”
 - b. Perceptual – *Use only for highly saturated colors.* Reduces the overall color saturation by moving all pixels in the color space to allow out of gamut pixels to be inside the color space
6. **Printer Driver:** Select the paper being used, but turn off **all** printer color adjustments