

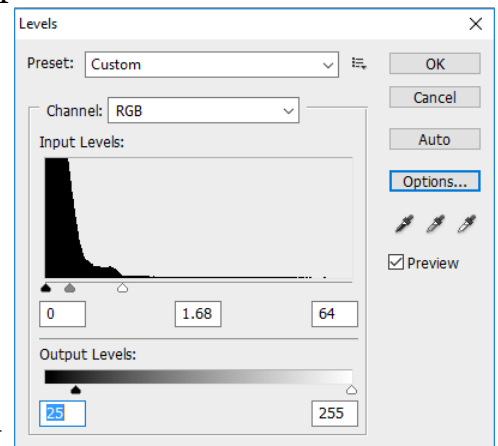
# Photoshop (CS5)

## Basic Photo Adjustments & Enhancements

Getting started with Photoshop is easy. It will not take you long to make good photos GREAT once you understand the interface. In this exercise, we will look at adjusting underexposed (too dark) and overexposed (too light) pictures.

We will also crop, increase the picture's print clarity by adding more pixels (dots per in/DPI), resize, enhance colors, , and then convert the color model from RGB (standard print & monitor display) to CMYK (which is used in newspapers & other "web press" jobs) and save as a robust data TIFF format.

If you have never done this before, you will be amazed and the ability to improve any digital photo and bring out details!

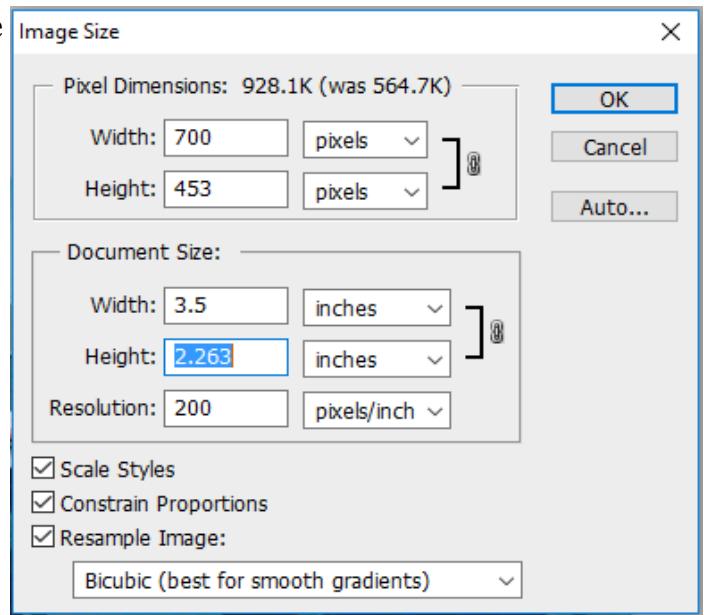


1. **Download the UNDEREXPOSED project photo** from our class website at [www.myBusinessEd.com](http://www.myBusinessEd.com) and open in Photoshop
2. **Pull down the IMAGE menu and then ADJUSTMENTS. Select LEVELS** – you will see the dialog box on the right. **Before you change the settings, however, first click on the AUTO button** so that you can quickly see the dramatic improvement we will make.
3. **One you look at the AUTO adjustment you just make, UNDO it so that you can correct the levels manually** and with more accuracy (UNDO is CNTRL + Z or you may select under the EDIT menu).
4. **The INPUT LEVELS are based on a graph that shows you the distribution of dark (0 or black) and light (255 white) pixels.** In general, you typically want to create a distribution where most of the pixels are in the middle of 0 and 255 and not all bunched up at either end. **Be sure the PREVIEW box is ticked, so you can see what your adjustments look like as you move the sliders.**
5. Pros learn NEVER to waste time with Brightness/Contrast adjustments – these 2 are opposite attributes and fixing "brightness" will throw "contrast" out of adjustment. In Photoshop, **use LEVELS instead of adjusting brightness and/or contrast.** Levels lets you redistribute the dark and light pixels in your image with precise control.
6. You do not need to use the exact settings shown on the right above – but these work. **Adjust your sliders in INPUT as shown above – then move the left slider under OUTPUT LEVELS as shown.** You probably do not need to move the right OUTPUT slider as this underexposed picture has no pixels that are true "white" (255).
7. **Use the CROP tool and select the area shown on right.** You do not need to be exact. We will resize the picture later. Be sure you cropped image focus on the table and does not include more left, right, and top – **BE SURE YOUR CROP GOES TO THE BOTTOM OF THE PICTURE.** Photos can look very odd when people's knees or feet are cut-off.



8. **After cropping, resize the picture.** Since we are preparing this photo for a print, WE WILL NOT ADJUST THE PIXEL DIMENSIONS. Be sure the boxes shown right are ticked and CHANGE THE RESOLUTION TO 200 pixels/inch.

9. **After you change the resolution, change the WIDTH to 3.5 inches** – YOU WILL NOT SET THE HEIGHT. This will be calculated automatically because we have ticked CONSTRAIN PROPORTIONS.

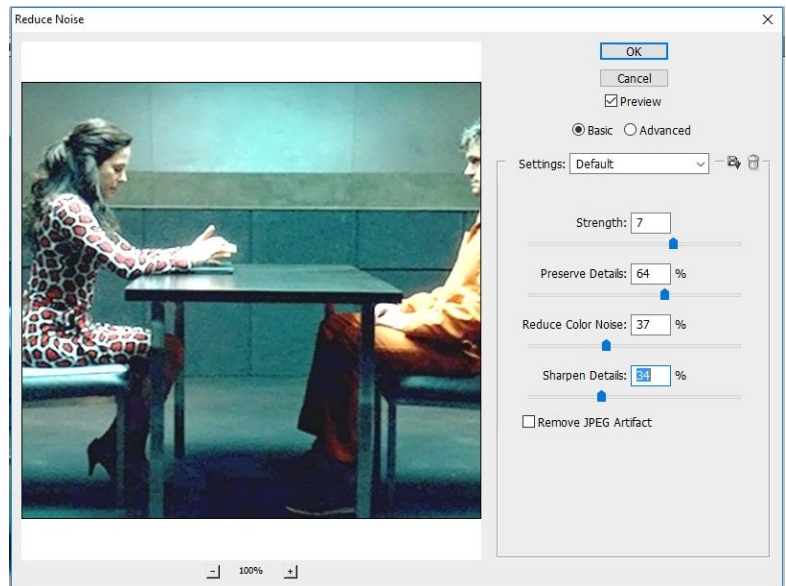


10. When pictures are underexposed, it is common for them to contain “noise” -- extra speckles. These become noticeable when we adjust levels. **Pull down FILTERS, then NOISE and select REDUCE NOISE.** The illustration to the right below shows the adjustments I used to clean up the noise – please experiment with the SETTINGS options first, so that you see different corrections.

11. **Adjust the values as needed so the picture looks crisp and as “noiseless” as possible.**

12. Before we finish, let’s add some “spark” to our image. **Underexposed pictures probably do not have clear colors.**

13. **Pull down the IMAGE menu, then ADJUSTMENTS, and select HUE/SATURATION.** Increase the saturation (intensity of color) by moving the slider carefully to the right being careful that you do not make the colors “glow” or look artificial. I added +6. You may adjust based on what you believe looks natural, yet still vivid. **There is no need to adjust HUE or LIGHTNESS** – we already made a “levels” adjustment and changing HUE is tricky as skin-tones begin to look unnatural.



14. Finally, **pull down the IMAGE menu and select MODE.** Choose the option CYMK.

15. When you are done – **save this project as adjustedUnderexposed and in a TIFF format** (FILE – SAVE AS and pull down the FORMAT menu and select TIFF).

16. **Repeat this process for the OVEREXPOSE (too light) project** – this time you will need to adjust LEVELS to darken the picture and bring out details. **Resize to the same width, 3.5 inches with CONSTRAIN PROPORTIONS.** Make the same adjustments, but use your best judgement to choose values and settings that improve this picture. **Save as adjustedOverexposed.tiff**

