



INTRODUCTION TO GRAPHICS

Under Exposed Image Rescue

Information Sheet No.



You might quickly optimize an underexposed wedding portrait with a blue cast by using Levels and Curves adjustments in each RGB channel and the Info palette



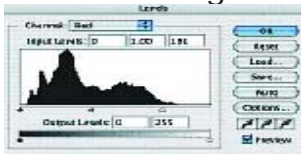
The Color Sampler tool, in the Eyedropper tool options, is invaluable for tracking color and tonal corrections at key points in an image. Open an underexposed image with a blue cast, and make sure your Info palette is visible (Window > Info or F8). Select the Color Sampler tool and click to place points on key highlight, midtone, and shadow areas. Look for areas of neutral color like a white collar, a gray sidewalk, or white clouds. In this image, the color sampler highlight points were set by clicking the collar of the groom's tuxedo (1) and the bride's veil (2), and for the shadow point, the cover of the pastor's folio (3). The RGB values for the three sample points are shown in the lower portion of the Info palette. The two highlight points show higher values for Blue than Red or Green, indicating a blue cast.

Navigator		Info		Histogram	
R :		K :			
G :					
B :					
+		X :	W :		
		Y :	H :		
#1	R : 287	#2	R : 174		
	G : 287		G : 173		
	B : 217		B : 186		
#3	R : 16				
	G : 18				
	B : 13				

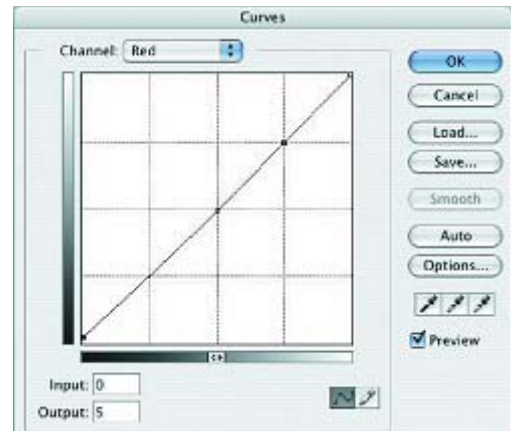
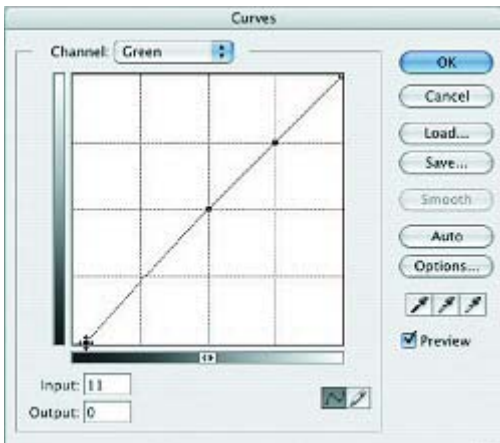


Working with the Levels command on the individual color channels corrects the image's tone and color simultaneously. Create a new Levels adjustment layer from the Create new fill or adjustment layer icon at the bottom of the Layers palette. Make sure that Preview is checked, then select the Red channel from the Channel pull-down menu. Hold Alt while moving the white Input Levels highlight slider from right to left. The image will turn black. As you move the slider closer to the midtones, red areas will begin to appear. These areas indicate groups of pixels that will be rendered without detail if the current setting is maintained. Bring the slider back to the right until no red areas of the image are visible in the clipping display. Repeat this process with the shadow slider. Initially, the image turns red with black areas indicating pixels in the shadow areas that will lose detail. Your goal is to maintain the detail in the

image by setting the endpoints just outside the threshold areas when they begin to show in the clipping display. **Note:** This technique only works with RGB images.



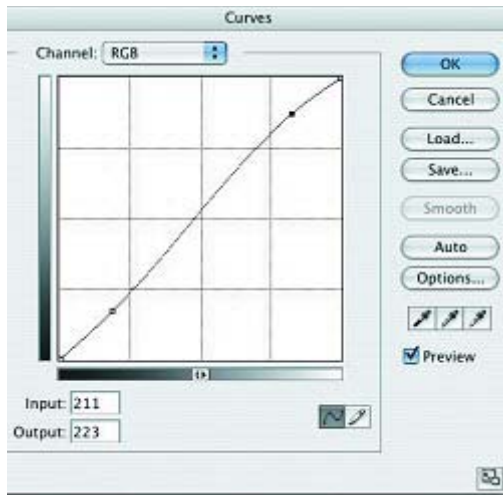
Repeat this process for the Green and Blue channels. Adjust all three color channels to a neutral highlight and shadow point. If your image contains a color cast you wish to keep (an image taken at dawn or dusk, for instance), use the clipping display to adjust the composite RGB channel. In this example, the Levels adjustment improved the lightness of the image, and the sample points in the Info palette show equal values of Red, Green, and Blue, indicating the removal of the blue cast in the highlights.



The sample point in the shadows still indicates a pronounced green cast. To correct this, create a Curves adjustment layer and selected the Green channel from the Channel pull-down menu. Position the Curves dialog box so you can see the color sampler readings in the Info palette. Notice that the Info palette shows two sets of numbers. The numbers to the left of the slash indicate the values from the previous adjustment, and the numbers to the right of the slash will reflect the changes from the new adjustment. Place two points on the curve to lock the midtones and highlights into place. Drag the shadow point for the Green channel to the right along the bottom margin of the Curves window. Stop when the color sampler reading for the shadow point shows equal values for Green and Blue.

Now switch to the Red channel, and again, place two points on the midtones and highlight portions of the curve. Move the shadow point for the Red channel up along the left margin of the Curves window slightly. This balances the RGB values for point #3 in the Info palette. Switch the blending mode from Normal to Color to restrict the change to the color information.





To give the image a little more snap, add contrast to the midtones with another Curves adjustment layer. Ctrl-click on an important shadow with detail to set a point on the curve. Set a second point on the curve in the important highlights. Here, the groom's tuxedo was used as the shadow point and the top of the bride's veil for the highlight. Create a slight S-curve by adjusting the points as shown. This makes the angle of the curve steeper through the midtones, adding contrast. Changing the layer's blending mode from Normal to Luminosity isolates the changes on the tonal information, leaving the color relationships unaffected.

