

## Why Worry About White and Black Points?

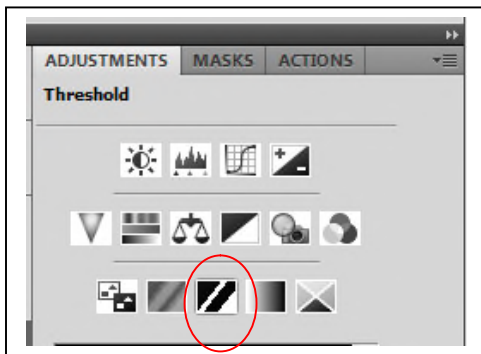
By Rick Cloran

So what is all the fuss about? The answer comes in the form of two more questions. Have you ever looked at your images (or those of someone else) and thought that they looked flat, had dull color, lacked the snap you knew was there when they were taken? Did that observation leave you with a good feeling? If you answered ‘yes’ and then ‘no’ you should be interested in what setting a good white and black point may do for your images.

Now comes the disclaimer. Will the following suggestion work 100% of the time? The answer is no, but then no technique typically does. Also, not every image has both a true white and a true black. In those cases we have to try an alternative that I’ll cover in another column.

Can you guess where the best white and black points are in an image and get a good result? Yes, but you can also drive with your eyes closed. Neither is recommended.

To find the white and black point you want to use, we first make use of an often overlooked adjustment layer called a Threshold Adjustment. In both Photoshop and Elements the icon for this looks like a torn piece of paper with a black upper left corner. A



Add a Threshold Adjustment layer to your image. Your image turns black and white. The dialog for this looks like a histogram with a single triangular control point at the bottom. As you drag the triangle to the left the entire image turns entirely white. Drag the triangle back toward the left slowly. The first pixels that turn black are the darkest ones in your image.

Click the Threshold layer eye icon to turn the effect on and off, noting where the black pixels are. Is this what you want to be the black point? If not, turn the Threshold layer back on and drag a little further to the left until more pixels appear. Repeat this process until you find what you feel should be your black point. Once you have found “the” point (small area not a single pixel) zoom in on the image. Click on the eye dropper tool (color sampler) to activate it, hold down the shift key and click once on the black point. This will set a color marker on that point in the image.

Finding the white point involves a similar process. Drag the Threshold control all the way to the right. The image will go completely black. Now drag the control slowly back to the left. The first pixels to turn white are the lightest ones in your image. Turn the Threshold layer on and off to see if those are in fact the ones that should be the whites in your image.

Just as with the black point, this may take a few tries. Don't be tempted to pick specular highlights as your white point unless these dominate your image. No one expects detail in a specular highlight. Once you find the target white point use the eyedropper tool to set a color marker on that point.

At this point the Threshold layer has served its purpose which was to find where the target black and white points really were located in the image. You can either turn it off or delete it entirely. The next step is to add a Curves Adjustment layer. Click on the black eyedropper on the curve adjustment and then click once on your black color marker in the image. Next click on the white eyedropper in the curve adjustment and click once on your white color marker. The white and black points will now be set for the image.

Some of you may be thinking that this is a long way to get to the same place you could go by holding the ALT key (Option key on a MAC) down and moving the end points on a Levels adjustment layer or the end points on a Curves adjustment layer. True, holding the ALT or Option key down will cause the image to go black or white as it did with the Threshold layer. However, you have no practical way of setting a color marker using this approach. Perhaps more importantly this moves all three channels (red, green and blue) by the same amount. You may end up clipping one or more channels. Using the eyedroppers within the Curves adjustment will adjust each channel separately. It also has the side benefit of correcting many color casts.

Are you finished? Possibly. Depending on the white and black points you selected you may have over adjusted some areas. This may mean you need to paint on the Curves layer mask to hold back the effect in those areas. You may also want even more contrast than that provided with the base curve. I recommend using a separate Curves adjustment to make that refinement.

Try this process on an image that didn't live up to your expectations. You may be pleasantly surprised by the results. It actually takes less time to do it, than to read how to do it in this column.