



Curves Comparison Tool

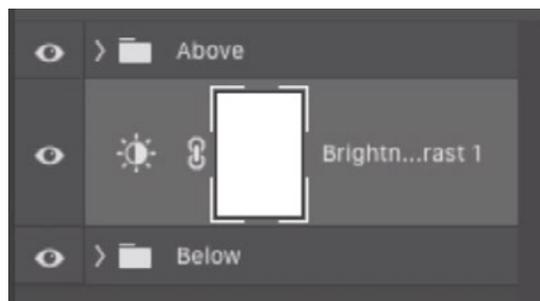
Curves Comparison Tool

In this lesson, we're going to learn more about my favorite adjustment in Photoshop: Curves. I have created a tool that will help one to better understand Curves and I'd like to share it with you.

This tool will allow you to take other adjustments (Levels, Brightness & Contrast, etc.) and see how you could get the equivalent result using Curves. A lot of these adjustments are actually using Curves behind the scenes to achieve their results, but they don't have the full power that you would have if you were using Curves. The tool will also show you how you can [sometimes] take someone else's technique and translate it to get the same effect using Curves.

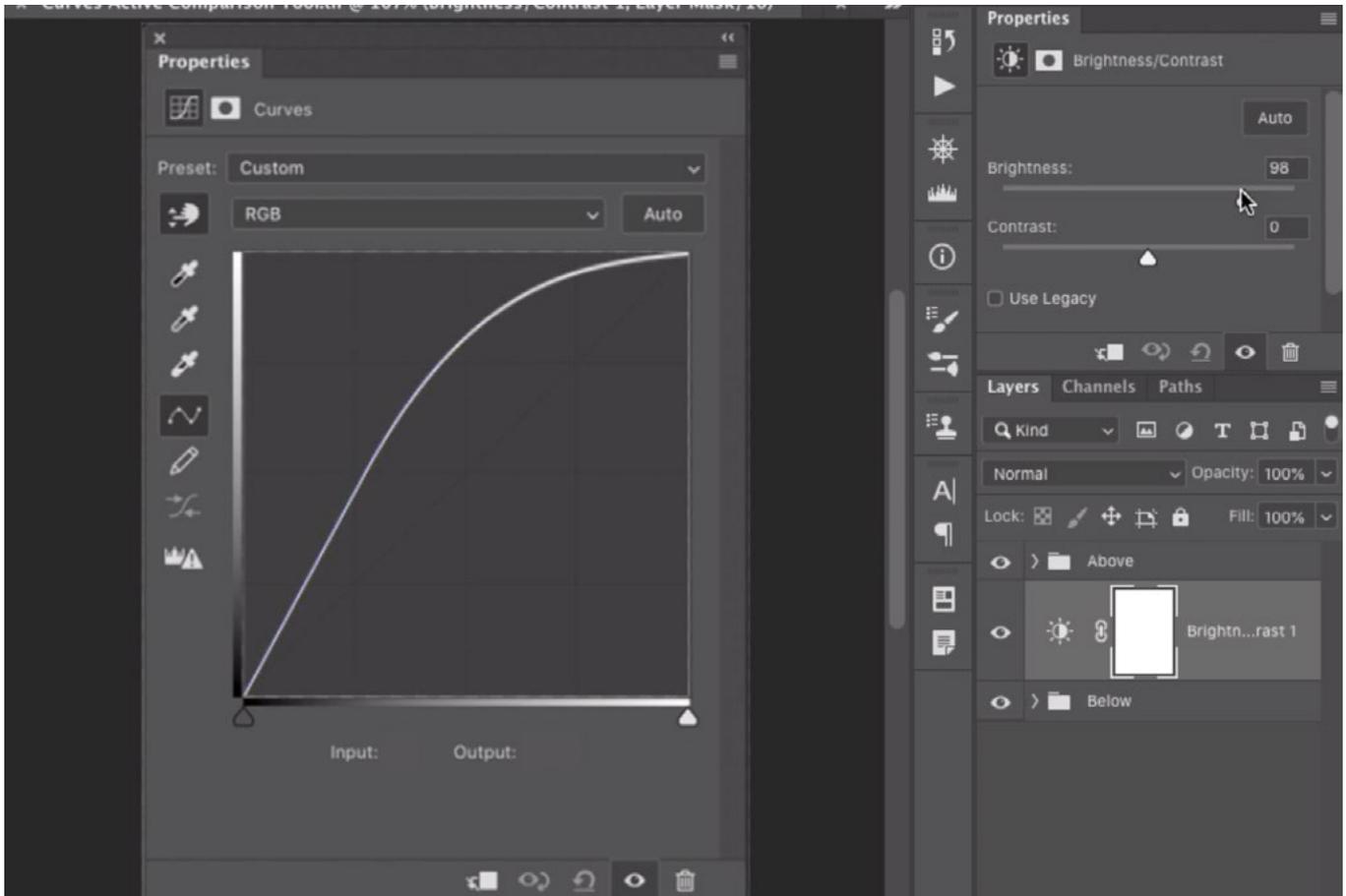
In the lesson video, I actually walk through the process of creating this document, but we're not going to cover that in this guide because I have included the document in the downloads section for this lesson.

When you open the document in Photoshop, it will look just like the Curves adjustment dialog. In the Layers Panel, you will see two layer groups, titled "Above" and "Below." If you place an adjustment layer between these two layer groups and then make changes using the Properties Panel for that adjustment layer, the curve line will move to show you how the Curves Adjustment could be used to achieve the same result.



To utilize the Curves Comparison document, an adjustment layer should be placed between the two groups.

For example, click on the "Below" group to make it active. Then, click on the Adjustment Layer icon at the bottom of the Layers Panel and choose "Brightness/Contrast" from the pop-up menu. The new Brightness/Contrast adjustment layer will be placed above the "Below" group and the Properties Panel will become visible. Here, you can move the Brightness and/or Contrast sliders and you will see the curve line in the document window start to change. It's showing you how Curves could be used to create that same adjustment.

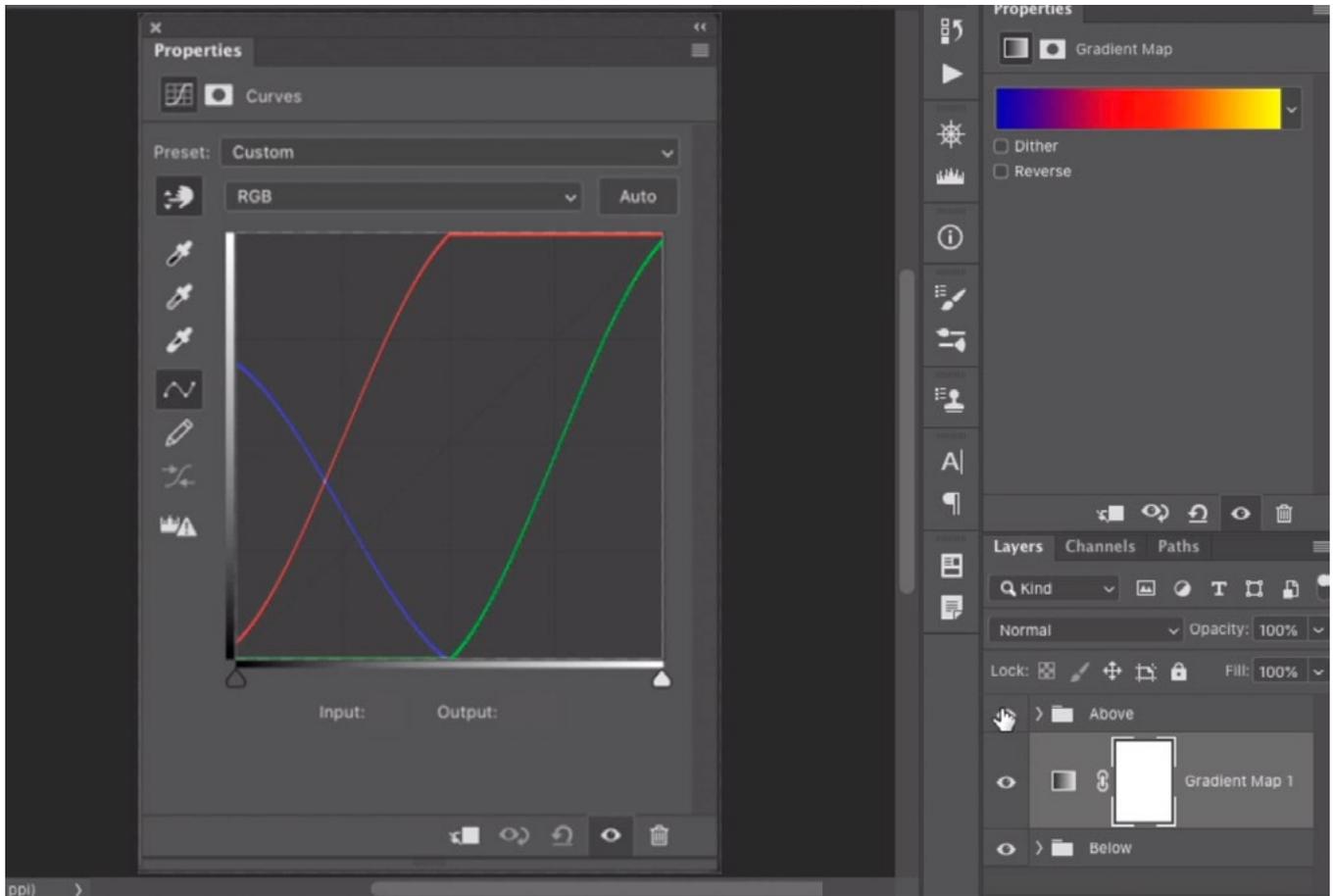


A Brightness/Contrast adjustment layer was placed between the “Above” and “Below” layer groups. As the Brightness/Contrast settings are being changed (in the Properties Panel), the curve line in the document updates to show how the same change could be made in Curves.

Note that there are some adjustments that cannot be replaced with Curves and therefore, this document will not work with those adjustments. They are as follows:

- Selective Color
- Black & White
- Vibrance
- Solid Color*
- Hue/Saturation
- Gradient*
- Channel Mixer
- Pattern*

*These are not really adjustment layers. They are special types of layers that are found within the Adjustment Layer menu.



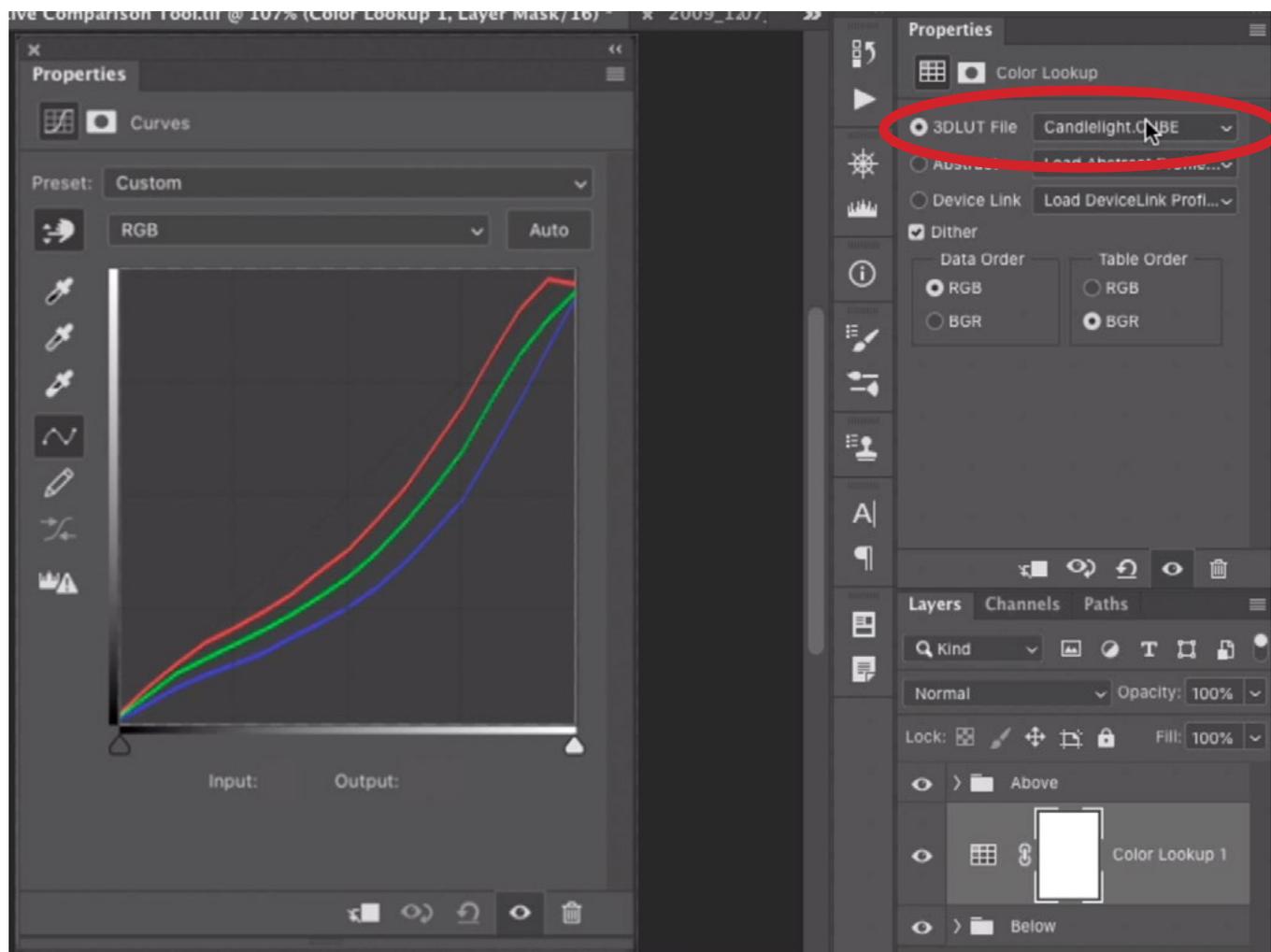
A Gradient Map adjustment layer was placed between the “Above” and “Below” layer groups. A gradient is selected in the Properties Panel and the curve line in the document updates to show how the same effect could be created in Curves.

Using the Document to Replicate a Color Lookup Table

In Photoshop, there is a technique that you can use to take an entire series of adjustment layers and convert those adjustments into a Color Lookup Table. This is something that can be applied to an image to create the same effect as that series of adjustments you created.

This can give you a way of disguising your process for creating adjustments by not revealing the techniques used behind it. This allows people to sell plugins or presets for creating effects that are difficult to reverse-engineer and see what individual adjustments were used to create them. With this tool/document, we CAN actually reverse-engineer some of these Color Lookup Tables to see how the effect was created.

You can see how to do this by creating a Color Lookup adjustment layer and positioning it between the “Above” and “Below” layer groups. (Click the Adjustment Layer icon at the bottom of the Layers Panel and choose Color Lookup.) The Properties Panel for the Color Lookup layer will appear and you’ll want to make sure the “3DLUT File” setting is turned on. Then, use the top menu to choose a Color Lookup Table. Each option is designed to create a certain effect on an image. When you choose one, the curve in the document will change to show you how to create the same look using Curves. You could take a screen shot of what the curve looks like and then refer to it when applying a Curves adjustment to an image.



A Color Lookup adjustment layer was placed between the “Above” and “Below” layer groups. An effect was chosen using the 3DLUT menu (circled) and the curve in the document shows how to create that same effect using Curves.

What Makes Curves so Special?

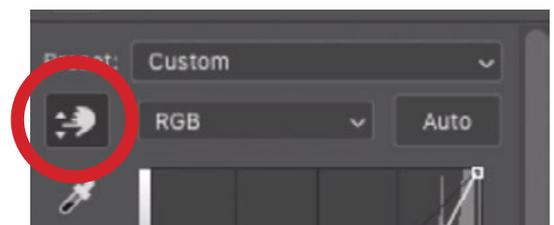
Why would we want to learn how to replace so many other adjustments with Curves? Well, I find Curves to be a very special, and very powerful adjustment. The bars on the curve chart tell you how much light your picture is using. The diagonal line (running from the bottom left to the top right) shows you where you started and the resulting curve (that you can manipulate) shows you what you're ending up with. Let's look at a Curves example.

In the example image, we have a tree set against a light sky and I would like to increase the contrast in the image. In other words, I want the light and dark areas to separate more. We'll click on the Adjustment Layer icon at the bottom of the Layers Panel and choose Curves from the pop-up menu. The Curves Properties Panel will appear and we'll make sure that the Targeted Adjustment Tool is turned on. It looks like a little hand icon on the left side of the panel. (I like to make it so this tool is always active by default and you can do that by clicking on the little menu in the top right corner of the panel and choosing "Auto-Select Targeted Adjustment Tool.")

With the Targeted Adjustment Tool active, we can click within the image to add a point on the curve. This point will represent the exact tone that we click on. If we simply place the point on the curve and not move it, that point will lock in that particular tone so that it can't be changed.



Curves will be used to increase the contrast in this image.



The Targeted Adjustment Tool

If we use the Targeted Adjustment Tool to click within the image and drag up or down, then it will place a point on the curve and move that point up or down. Moving it up will lighten the targeted tone and moving it down will darken the targeted tone. We'll click on a blue cloud in the sky and drag down in order to darken the area. In the process of doing this, however, the tree became too dark. That's because moving a point on the curve causes the entire curve line to shift. We can correct this by clicking somewhere near the previous point and dragging on the curve to position it as close as possible to its previous position.



Here, we are using the Targeted Adjustment Tool to click and drag down on the blue part of the sky. You can see that a point was placed on the curve and it's being moved down.



After adding and moving the first curve point, the entire curve shifted. Here, a second point is added to the curve and it's being repositioned to return the rest of the curve to its original position.

Now let's say we want to the light part of the tree trunk to be even lighter. We'll use the Targeted Adjustment Tool to click on the area and drag up. This places a point on the curve (representing the targeted tone) and moves it upward, lightening all areas of that particular tone.

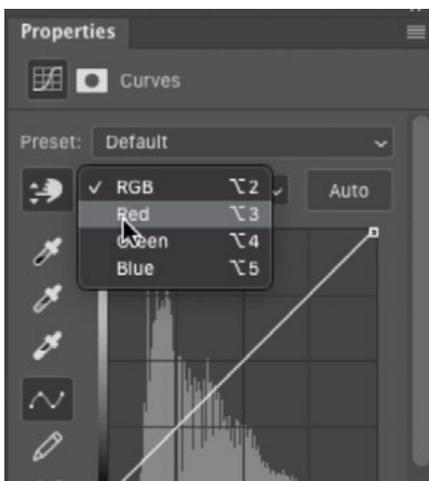
We can continue doing this, adding points to target specific tones, and then manipulating those individual tones independently of the rest of the image. Because we can target and manipulate the different tones independently of one another, Curves gives us so much more control over our adjustments. If you wanted to target a specific area with some of the other adjustments, you would first need to make a selection around the area you want to affect. That's because most adjustments are designed to affect the image as a whole.

Other Things You Can Do With Curves

You can use more than one Curves adjustment layer to target different tonal regions, masking one or more of the layers to reveal the adjustment only in the area you want to affect.



Two different Curves adjustments were added and the layer masks were used to reveal the adjustments only in the desired areas.



You can adjust individual colors by changing the color menu in the Curves dialog.

Curves can also be used to adjust the colors in an image. Use the color menu at the top of the Curves dialog to choose which color you'd like to work on. You'll need to keep in mind that each color has an opposite. The opposite of red is cyan. The opposite of Green is Magenta and the opposite of Blue is Yellow. Moving a color curve line down will remove that color and introduce its opposite. For example, if you wanted to add yellow to an image, you would use the Blue curve line and drag it down. This would reduce blue and add yellow.