

# The Digital Corner

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### PHOTOSHOP ELEMENTS VER. 7 --- ADJUST COLOR CURVES COMMAND

#### INTENDED AUDIENCE OF ARTICLE

This article is written for those who have experience and/or have taken one or more workshops on Adobe Photoshop Elements. Most users might consider this command to be used by experienced Elements' users.

#### INTRODUCTION

In the previous two issues of the **Digital Corner** we learned to use **The Raw Converter** for our first step in editing an image. Now we will learn to use a command to enhance the tonality and contrast of our photographs, **Adjust Color Curves** command.

The **Adjust Color Curves** command enables you to do the same adjustments that Levels does plus adjustments in specific tonality data ranges. **Adjust Color Curves** command can be used to:

- Lighten/darken highlights in an image
- Lighten/darken shadows in an image
- Increase/decrease brightness and contrast in mid-tones
- Create a solarization effect

In this article we will discuss the various parts of the command in the **Adjust Color Curves** dialog window and will implement the adjustments on one of the photographs we processed in **The Raw Converter** of the previous **Digital Corner** article, **The Raw Converter (Part 2 of 2)**.

#### OVERVIEW OF ADJUST COLOR CURVES COMMAND

The **Adjust Colors Curves** command cannot be given as an adjustment layer. Therefore, create a duplicate layer of the Background layer. The duplicate layer will allow you to edit nondestructively and allow you, at a later time, to modify your curves adjustment. The commands are:

Duplicate Layer:	Ctrl+J or Layer → Duplicate Layer
<b>Adjust Color Curves:</b>	Enhance → Adjust Color → Adjust Color Curves

Figure 1 is the **Adjust Color Curves** dialog window. We will first discuss the different parts of the dialog window before using the command on the image we processed in **The Raw Converter** of the previous **Digital Corner** article.

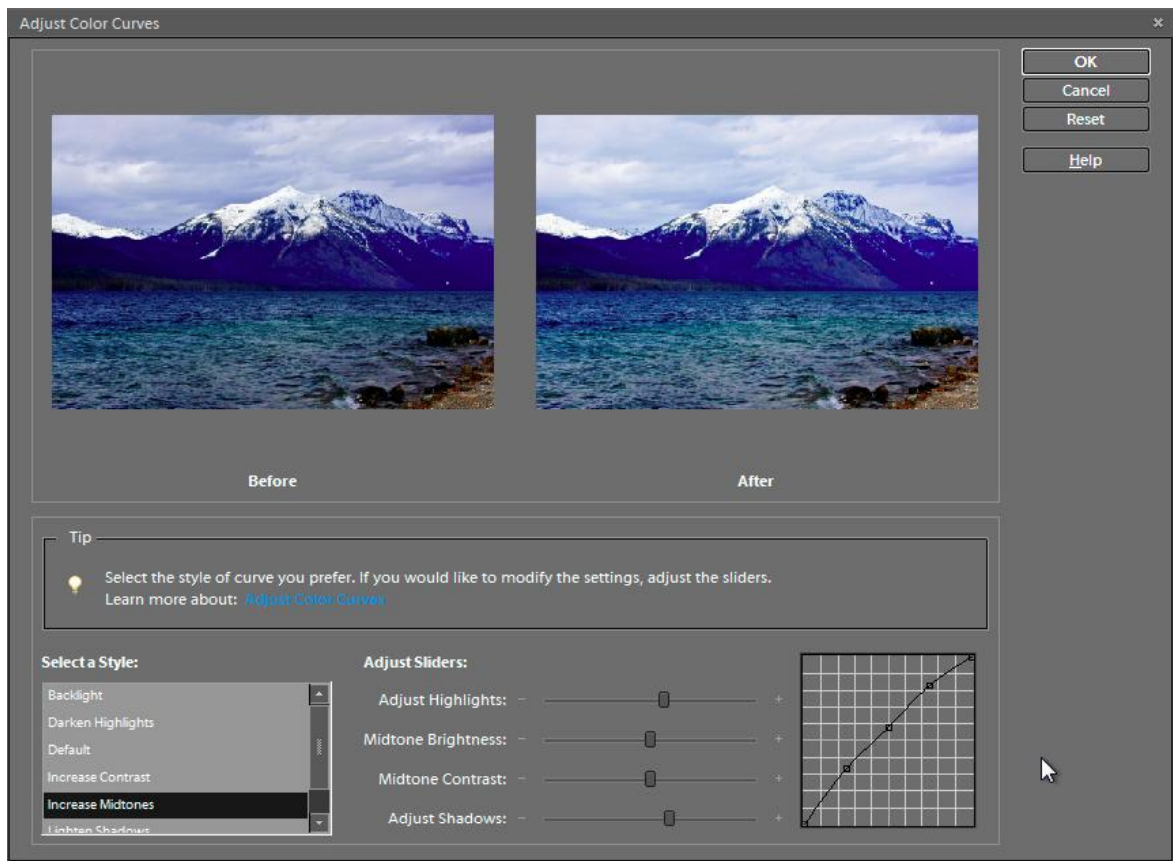


Figure 1: Screen Capture of Color Curves Window

### Before and After Views

There are two views of your image being displayed. The image view on the left is the image before entering the **Adjust Color Curves** command. The view on the right is the image with the adjustments made in the **Adjust Color Curves** command dialog window.

### Graph

The graph at the bottom right corner is a graph of input and output values. The input values are at the bottom of the graph on the horizontal axis and the output values are at the left side of the graph on the vertical axis. Remember that the tonal values range from 0 thru 255. On the horizontal axis (input value), zero is plotted at the left side and 255 is plotted at the right side. On the vertical axis (output value), zero is plotted at the bottom and 255 is plotted at the top. Before making any adjustments, the input values equal the output values; hence, we have a straight line from the bottom left to the top right. The grid has 10 horizontal and 10 vertical lines. This means that the first grid line from the left (or up from the bottom) has a tonal value of 25.6 (let's call it 26); the next grid line has a tonal value of 52; and so on. The middle grid line has a tonal value of 128.

A baseline curve is shown where:

- Top right represents the brightest possible tone --- 255
- Bottom left represents the darkest possible tone --- 0
- All the gray tones in between

When you use **Adjust Color Curves** command, you are remapping existing tones to other tones.

**Example:** Take the tonality of the linear line at the 5<sup>th</sup> vertical grid line (gray midtone --- value of 128) and move the curve up to the 6<sup>th</sup> horizontal grid line (lighter gray midtone --- value of 154); you have remapped a tonality of 128 to a new tonality of 154. How does this example affect the image? The midtones of the image have become lighter; hence, the image has become brighter.

Notice the three circles inside the graph (not at the ends of the straight line). This is what is commonly thought of as the midtone range. Lowering the center point darkens the midtones. Raising the center point lightens the midtones. Increasing the slope of the line (lowering the leftmost point and raising the rightmost point) increases the contrast of the midtones. Decreasing the slope of the line decreases the contrast of the midtones. These simple concepts are at the heart of how to use curves.

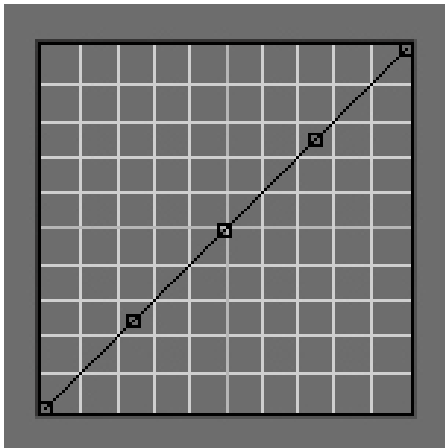


Figure 2: Graph

### Select a Style

**Select a style** is a list of seven presets that will remap the graph to give a preset desired effect. Figure 3, Select a Style (Presets), is shown below.



Figure 3: Select a Style (Presets)

Let's discuss the effect for each style. For this discussion let's define the three points in the graph. The leftmost midtone point is at value 65; middle midtone point is at value 128; rightmost midtone point is at value 195.

## Backlight

Usage: "Light is coming from a source behind the photographed subject."<sup>1</sup>

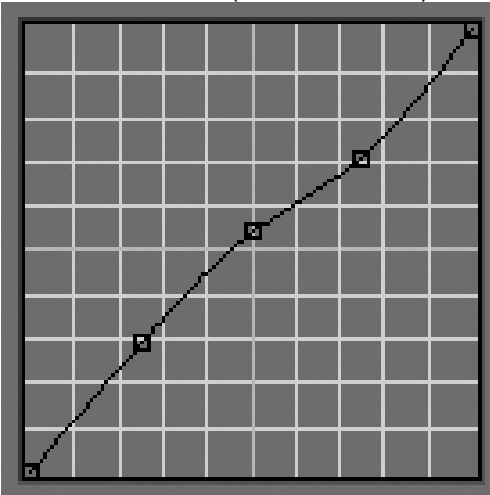
Effect: Increased shadows and midtones while decreasing highlights

Remapping

Point 65 to 78 (increase of 13)

Point 128 to 141 (increase of 13)

Point 195 to 182 (decrease of 13)



## Darken Highlights

Usage: Overall exposure is good  
Highlights are too bright

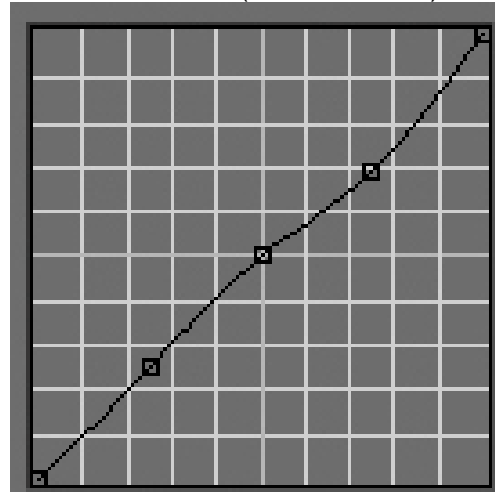
Effect: Decrease tonality of upper midtones and highlights

Remapping;

Point 65 None

Point 128 None

Point 195 to 182 (decrease of 13)

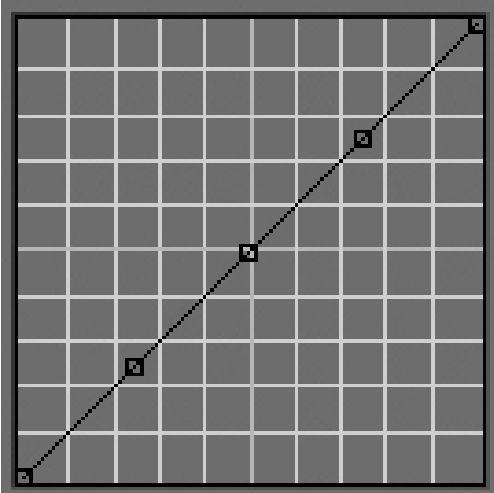


<sup>1</sup> Adobe Photoshop Elements, 7 Help.

## Default

Usage: None  
Effect: None

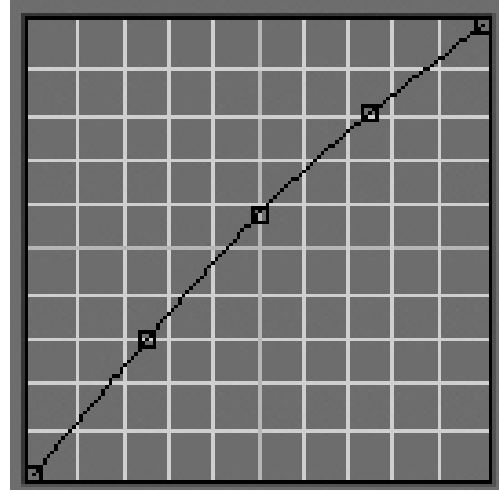
Remapping;  
None



## Increase Midtones

Usage: Increase brightness of image  
Effect: Increase tonal values in the midtone range

Remapping;  
Point 65 to 78 (increase of 13)  
Point 128 to 156 (increase of 26)  
Point 195 to 208 (increase of 13)

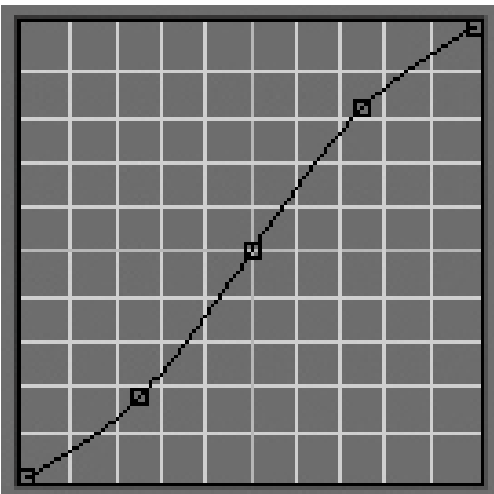


## Increase Contrast

Usage: Increase contrast of image

Effect: Increase contrast of midtones

Remapping;  
Point 65 to 39 (decrease of 26)  
Point 128 None  
Point 195 to 221 (increase of 26)



## Lighten Shadows

Usage: Lighten dark areas of image

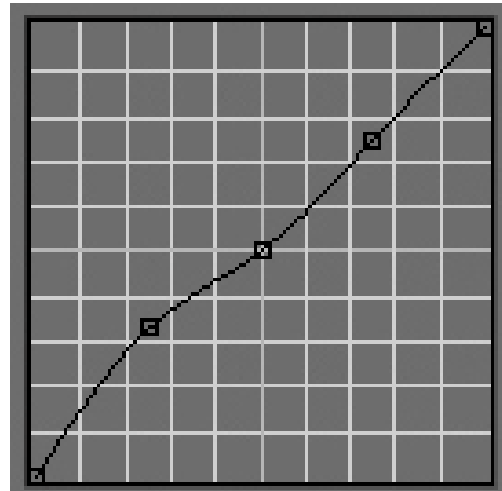
Effect: Increase tonal values of shadows and dark area of midtones

Remapping;

Point 65 to 91 (increase of 26)

Point 128 None

Point 195 None



## Solarize

Usage: Obtain a psychedelic effect

Effect: Overexpose to light

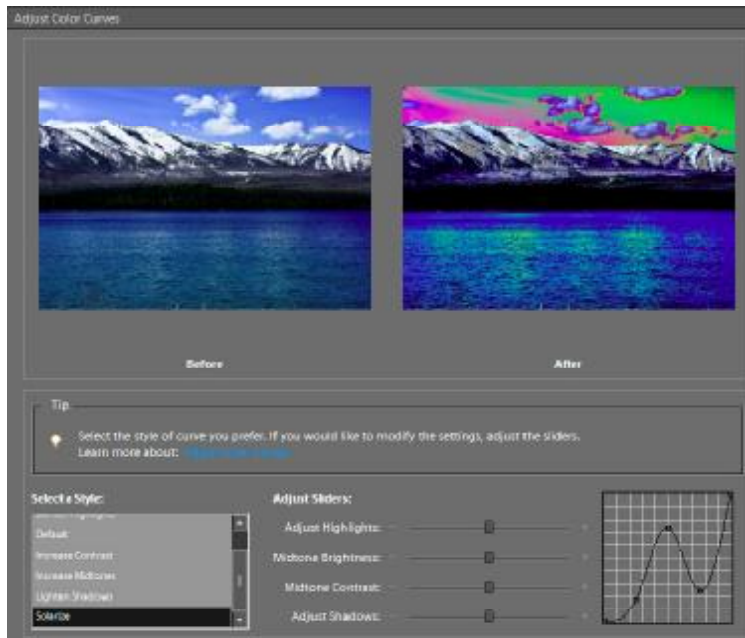
Remapping;

Point 65 to 39 (decrease of 13)

Point 128 to 195 (increase of 67)

Point 195 to 39 (decrease of 156)

When you have a reversal of direction in the curve, you will obtain psychedelic type of effect.



## Adjustment Sliders

Sometimes, selecting an **Adjustment Style** does not give us the desired effect. After selecting a style, you can use the **Adjust Sliders** to obtain the effect you want. Or you can select the **Default**

style, which is no effect, and use the **Adjustment Sliders** by themselves. Figure 4 below shows the **Adjustment Sliders** with the **Graph**.

For the Adjust Highlights, Midtone Brightness, and Adjust Shadows sliders, the affected point is either moved up or down. Move the slider to the right and the point moves up. Move the slider to the left and the point moves down.

For the Midtone Contrast slider, the affected point is either moved to the right or to the left. Move the slider to the right and the point moves to the right (increases contrast in the midtones). Move the slider to the left and the point moves to the left (deceases contrast in the midtones).

We will not discuss each slider.



Figure 4: Adjustment Sliders and Graph

### **Adjust Highlights**

Usage: To increase/decrease brightness of the highlights

Effect: Affects the tonal range from 128 to 255

Remapping;

Point 195

### **Midtone Brightness**

Usage: To increase/decrease the brightness of the image

Effect: Affects the tonal range from 65 to 195

Remapping;

Point 128

### **Midtone Contrasts**

Usage: To increase/decrease contrast of the image

Effect: Affects tonal range from 65 to 195

Moving slider to the right increases contrast

Moving slider to the left decreases contrast

Remapping;

Point 128

## Adjust Shadows

Usage: To increase/decrease the brightness of the blacks

Effect: Affects the tonal range from 0 to 128

Moving slider to the right decreases the brightness of the darker midtones

Moving slider to the left increases the brightness of the darker midtones

Remapping;

Point 65

## EXAMPLE 1 --- PROCESSING USING THE RAW CONVERTER

We will work on image with filename \_MG\_011 JPEG Processed (only processed in **The Raw Converter**). The enhancements will be grouped together as those made globally, entire image, and those made locally, a selected area of the image. Figure 5 is the image that we first processed in **The Raw Converter** of the previous Digital Corner.



Figure 5: Photograph \_MG\_0011 Processed.jpg

### Global Enhancements

Below are the steps used to globally enhance the image:

- Duplicate Background layer --- Ctrl+J or Layer → Duplicate Layer
  - Name Layer **Contrast Global**
  - Click OK
- Give command Enhance → Adjust Color → Adjust Color Curves
  - From **Select a Style**, select **Increase Contrast**
  - Click OK
- For the layer make the following changes
  - Change **Blending Mode** to **Luminosity** to eliminate any color shift
  - Change **Opacity** to **15%** because the contrast was too much

## Local Enhancements

Below are the steps used to locally enhance the image:

- Clouds --- Make them pop
  - Use your favorite Selection tool to select the whitest area of the 3 largest clouds
  - Use Refine Edges and feather the selection at about 125
  - Save selection with name **Clouds**
  - Duplicate Background layer --- Name Layer **Clouds**
  - Move layer **Clouds** to top of stack
  - Change **Blending Mode** to **Luminosity** to eliminate any color shift
  - Give command Enhance → Adjust Color → Adjust Color Curves
    - Slide the Adjust Highlights slider to the right until you have your desired effect (output value up to the 9<sup>th</sup> horizontal line)
    - Click OK
  
- Shadows in Mountains --- Increase brightness
  - Use the Lasso tool to select the shadows in the mountains
  - Use Refine Edge and feather the selection at about 75
  - Save selection with name **Shadows in Mtns**
  - Duplicate Background layer ---- Name layer **Shadows in Mtns**
  - Move layer **Shadows in Mtns** to top of stack
  - Change **Blending Mode** to **Luminosity** to eliminate any color shift
  - Give command Enhance → Adjust Color → Adjust Color Curves
    - From **Select a Style**, select **Lighten Shadows**
    - Click OK
  
- Shadows in Pine Trees near Shoreline Mountains --- Increase brightness
  - Use the Lasso tool to select the pine trees
  - Use Refine Edge and feather the selection at about 75
  - Save selection with name **Pine Trees**
  - Duplicate Background layer ---- Name layer **Pine Trees**
  - Move layer **Pine Trees** to top of stack
  - Change **Blending Mode** to **Luminosity** to eliminate any color shift
  - Give command Enhance → Adjust Color → Adjust Color Curves
    - Slide the Adjust Shadows slider to the right until you have your desired effect (the 4<sup>th</sup> horizontal grid line from the bottom)
    - Click OK

To see the effect of all the changes you have made, hold down the Alt key and left click on the eyeball to the left of the Background layer. This is a toggle switch to turn on and turn off all of the layers except the Background layer. Figure 6 shows the image after the Adjust Color Curves enhancements.



Figure 6: \_MG\_0011 Enhanced (After **Adjust Color Curves** command)