

The Adjustment Brush and Graduated Filter in Adobe Camera Raw (and Lightroom)

Adobe Camera Raw (ACR) keeps evolving with each new version, and as of version 5.x, it has been able to target local parts of a photo with adjustments, rather than the acting globally as in previous versions. In addition, all of the adjustments that are made are non-destructive to the file, meaning that they can be changed at any time, or even removed. The original file is never altered. This capability is similar to Lightroom, in that all “edits” are really just instructions to make alterations to the picture, and not actual changes to the pixels.

The only time you actually start working on actual pixels is when you open the picture in Photoshop. But that would be after you do all kinds of nifty things in ACR first. In fact, if you don’t need to do anything that requires layers and other Photoshop-only moves, you may be able to finish the whole job in Adobe Camera Raw.

Navigating the Adjustment Brush

This new tool allows you to make local adjustments to a photo right in ACR by “painting” with a brush. It automatically creates masks based on where in the picture you use it, and the adjustments you make can be changed or erased at any time.

The basic controls for the Adjustment Brush are grouped into the histogram, showing you the tonal makeup of the photo, filtering adjustments (Exposure, Brightness, etc.), and brush dynamics (Size, Feather, etc.). With the filtering adjustments, you can locally change the look of the picture, in a similar way that you are used to with the global ACR adjustments. The brush dynamics allow you to decide how fast to build up an effect, and to what degree you can see the effect when it’s fully applied.

This paper will be an overview of the control and some general tips on how to use it. For a more extensive step-by-step guide, see the resources at the end of the article.

Here are some shortcuts to help select various Adjustment Brush features. They are also available from menus and icons.

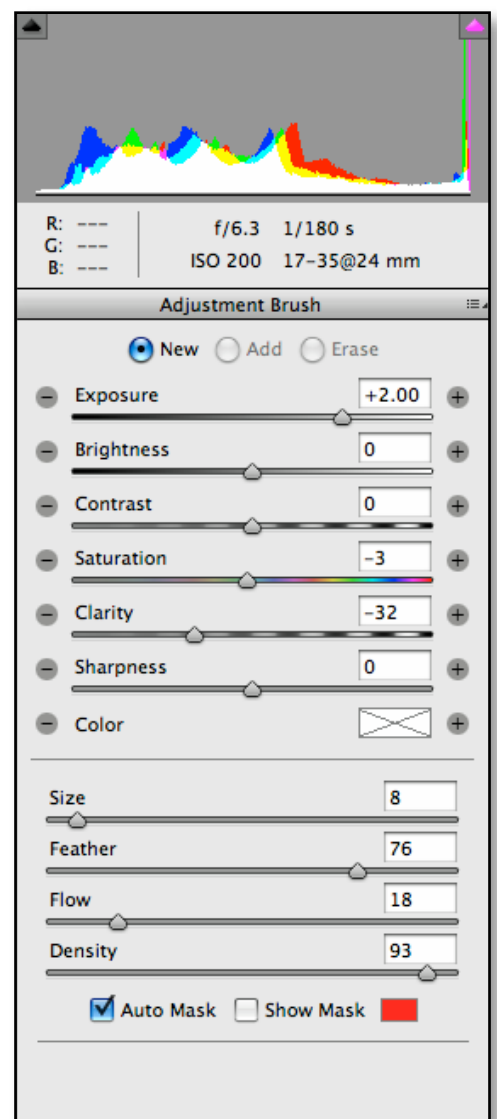
Some Adjustment Brush Shortcuts

Key	Effect
K	Select Adjustment Brush
P	Turn Preview on and off
M	Turn Auto-Mask on and off
Y	Show mask
V	Turn pins on and off
opt/(PC:alt)	Erase brush



Adjustment Brush icon (k key)

The Adjustment Brush control panel



Brush Dynamics

In this section of the control panel, you set how the brush will act when you “paint” in an effect. The **Size** slider controls how large the brush will be. You can also use the left and right brackets ([and]) to control the size.

Related to the size is the **Feather** size. This means how much of the brush will affect the photo completely, and how much will affect it slightly. The feather region gets less intense from the start to finish. Look at this example. The solid circle shows the size of the “hard” brush, and the dashed circle shows where the feathering ends. The feathering falls off to nothing at the edge of the brush.

The **Flow** slider lets you determine how fast the effect builds up as you brush. If you set it low, it will take quite a few strokes to apply the effect, which makes it easier to carefully create the adjustment.

The **Density** slider sets the total amount of the effect when you brush enough times to build it up (based on the flow).

Pins

When you first start to make an adjustment, wherever you click on the image is where a pin is placed. This indicates where this adjustment started. You can toggle the pin’s visibility on and off with the **V** key. More about these later.

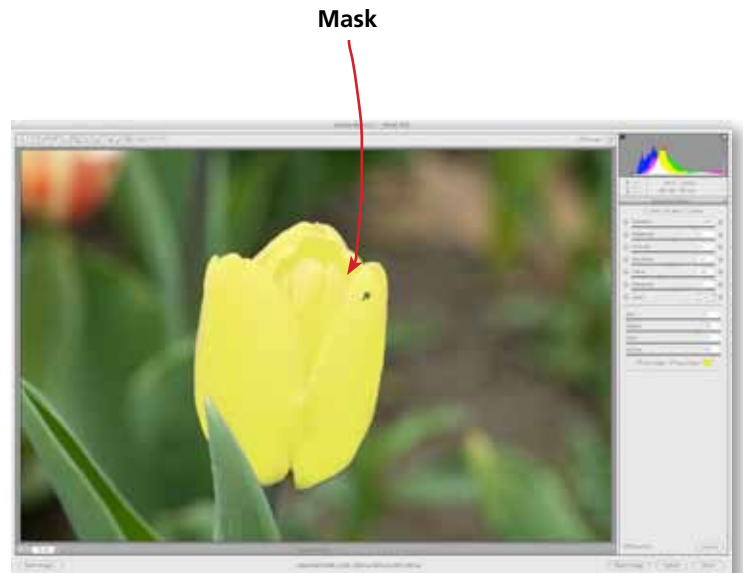
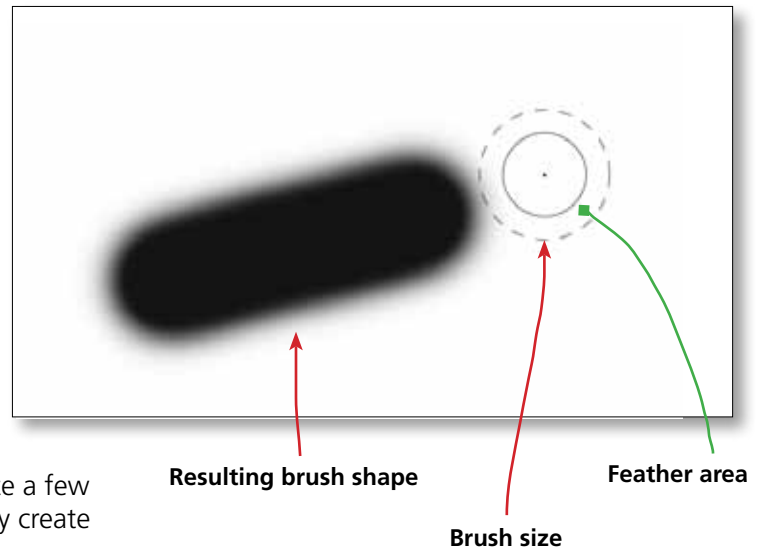
Masks

The way the Adjustment brush works is by automatically creating a mask wherever you brush. The color that the middle of the brush touches is where the mask is formed. As you move the brush, the mask is increased. If you click the **Auto Mask** checkbox, the program will try to keep the mask contained to the color first clicked on with the brush, until the middle of the brush veers way off the color. In tight spots, you may have to turn off the Auto Mask checkbox and clean up the area that the mask affects. You can do this (or erase any part of the mask) by holding down the Opt (PC: Alt) key and brushing over the area you want to erase. Alternately, if you have a large area to erase, you can click the Erase button just under the histogram and brush normally, erasing everywhere you move the brush.

Anytime you want to see the actual mask you’re creating, click the Show Masks checkbox and the mask will appear. This is especially helpful when you want to refine the edges of the mask.

You can make many adjustments on a photo, each with their own mask. When you click the **New** button (just under the histogram), a new mask is started on the next placement of the brush. Each mask will have its own starting pin.

Of course, making masks is only the by-product of using the Adjustment brush, We need them to contain the effect we are trying to add. Let’s take a look at the actual adjustments you can make.



Types of Adjustments

The masks that are created when you brush, contain the adjustments you want to make. These adjustments are made by using the sliders in the upper part of the ACR control panel. As you can see, various aspects of the look of the photo can be changed.

- **Exposure**

Exposure acts just like your camera's exposure controls (shutter, aperture, ISO) do. If you are editing a raw file, you have about the same latitude of adjustment that you have on the camera itself to change the exposure. Of course, at some point when increasing the exposure, you may oversaturate the bright areas (blow them out), or when decreasing exposure, block up the dark areas and increase picture's the visible noise, just like what would happen using the camera controls.

- **Brightness**

This control increases the brightness of the content within the mask. It may be difficult to distinguish this effect from the exposure, but what it is actually doing is moving the gray point of the picture to the right or left without affecting the highlight and lowlight points.

- **Contrast**

Contrast accentuates the differences between light and dark areas of the photo, essentially "hyping" the relationships and making the image more punchy.

- **Saturation**

The Saturation slider changes the strength of all of the hues in the photo. This is an overall change, affecting red, green and blue, unlike the way saturation can be used in Photoshop, where you can select any channel to be changed. Even though this is a coarser control, it still gives good results.

- **Clarity**

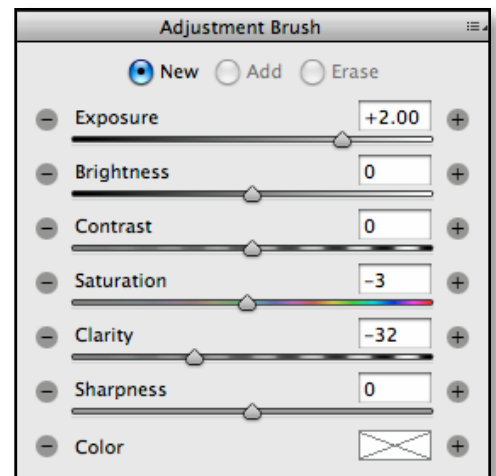
Clarity is like contrast, but only for the mid-tones. It also adds punch, but not at the extreme ends of the light-dark spectrum. It makes objects like faces and other mid-toned areas look more sharp (and contrasty).

- **Sharpness**

The first thing that you notice about the Sharpness control is that there are no parameters to set. This is a generalized sharpness that works pretty well for most uncomplicated images. For problem areas, you still will have to use Photoshop's far more comprehensive sharpening controls.

- **Color**

The color control appears when you click on the small color box. The color picker allows you to select a color for use in a number of different adjustments. If you click and drag to the photo, you can select a color from the photo.



Types of adjustments

The Graduated Filter

This feature is very much like the Adjustment Brush, except that you apply it in a different way than the Adjustment Brush. It acts very much like a graduated neutral density filter that you might use on your camera. You create the effect by drawing a straight gradient on to your picture that gradually lessens the effect as it nears the end of the gradient.

The effects are the exact same ones as the Adjustment Brush uses. The Graduated Filter differs only in the way the effects are applied. This photo shows how you would drag the filter down from the top to the horizon line. Then, with a setting of reduced exposure and brightness, it would act just like a Split ND grad filter for your camera. And you can vary it to where the exposure looks just right. And you could add saturation, sharpness, clarity, and maybe even a little more color.

Once the Graduated Filter has been applied, you can switch over to the Adjustment Brush and apply some effects to other portions of the photo. And, once again, these effects are always editable any time you bring the photo back into ACR.

One note on control pins. They behave just like in the Adjustment Brush and can be hidden by clicking the **V** key. The green point indicates where you started the filter, and the red point shows the end. If you want to constrain the filter to a 90 or 180 degree track, just hold down the shift key while dragging the filter on the photo.



Graduated Filter



Lightroom

Both the Graduated Filter and the Adjustment Brush are available in Lightroom as well as Adobe Camera Raw. The interface is slightly different, but basically the filters operate the same way. The only real difference is that you can set up two different brushes the way you want, and switch between them at any time. And, there are presets that start you on your way to setting the sliders. You can, of course, change the sliders yourself to enhance or add to the effect. Once you have things set up the way you want, you can save these settings as a new preset.

There is a lot more you can do with these and other Photoshop filters and adjustments. You can read up on them, and you can experiment. That will probably give you the best understanding of what you can achieve.



The Lightroom interface showing the Adjustment Brush

Resources

- **Adobe Photoshop CS4: Up to Speed** by Ben Willmore (Concise, easy to understand. Covers what's new in CS4. A must-have.)
- **Adobe Photoshop CS4 One-on-One** by Deke McClelland (One of my favorite authors on Photoshop).
- **Real World Camera Raw with Adobe Photoshop CS4** by Bruce Fraser and Jeff Schewe (These guys wrote the book on this technology. They are the first and last word.)
- **Lynda.com** training (Loads of video training on CS4 and just about any other software you can think of. They have a free trial.)
- **KelbyTraining.com** (More loads of video training with top names in the Photoshop world presenting. Free trial here, too.)