

Workflow: Processing Your Images with Adobe® Lightroom®

Over the last several years Adobe Lightroom has emerged as the premier image editing tool, and for good reason. Its perfect combination of power and ease of use appeals to both professional and amateur photographers.

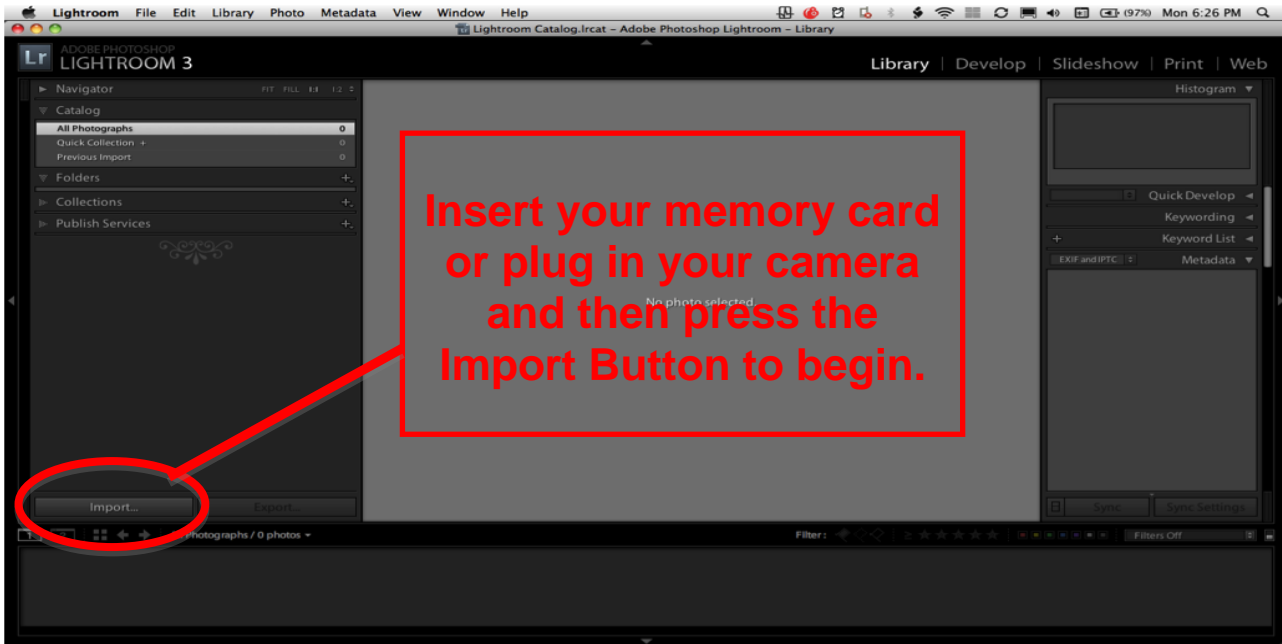
Getting Started

Getting started using Lightroom begins by setting up your first Catalog and importing some photographs. Lightroom will begin by creating a *Folder with a New Catalog*. It gives you the option of where you want to put the *Folder* as well as what you would like to name it. By default Lightroom will create this folder in your My Pictures Folder (PC) or Pictures Folder (Mac).

These folders are fine locations if you only work on a desktop computer. If you use a laptop, or a laptop and a desktop, we recommend creating this initial folder on a separate portable hard drive. The screenshot below shows that a new folder with the name of *Lightroom Catalog* will be created on the *Portable Hard Drive*.



Once you create your folder you will be taken to the Lightroom interface.

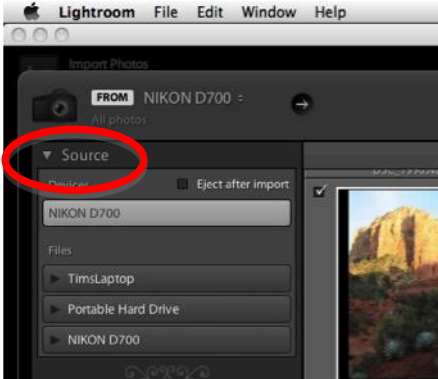


Import Interface

When you click the import button you are presented with Lightroom 3's new import interface shown below. Each area demands a bit of attention. The import interface will control where your images are stored as well as how they are stored. Work from left to right in this box and read each section carefully.



The import box does a few simple things for us. It lets us choose where our images will be coming from, which images we want to import and how they will be dealt with, and where we want to put the images. And finally, it lets us change the name or any other metadata as they are importing.



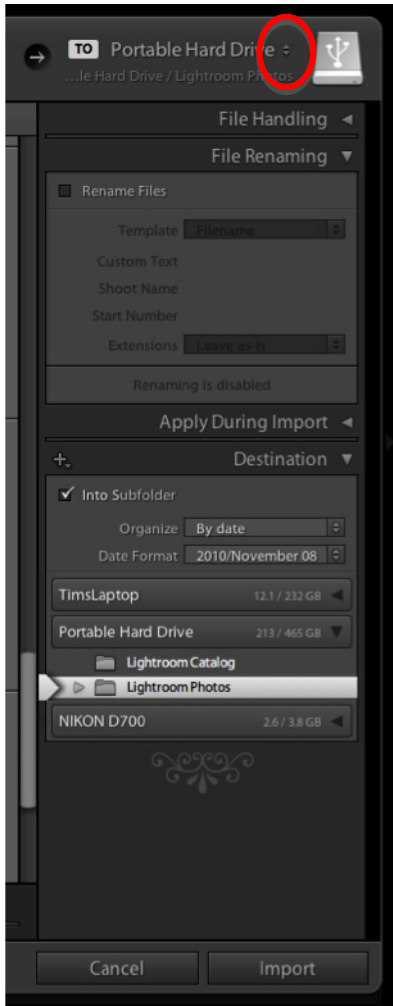
Beginning at the left you can see that Lightroom is importing from the Nikon D700. If you wished to import from a different location you could choose it from the drop down list under source (circled in red).

As you move to the right along the top you will see your choices of *Copy as Dng*, *Copy*, *Move*, and *Add*. Choose *Copy as Dng* when importing Raw Files. Choose *Copy* when importing Jpegs.



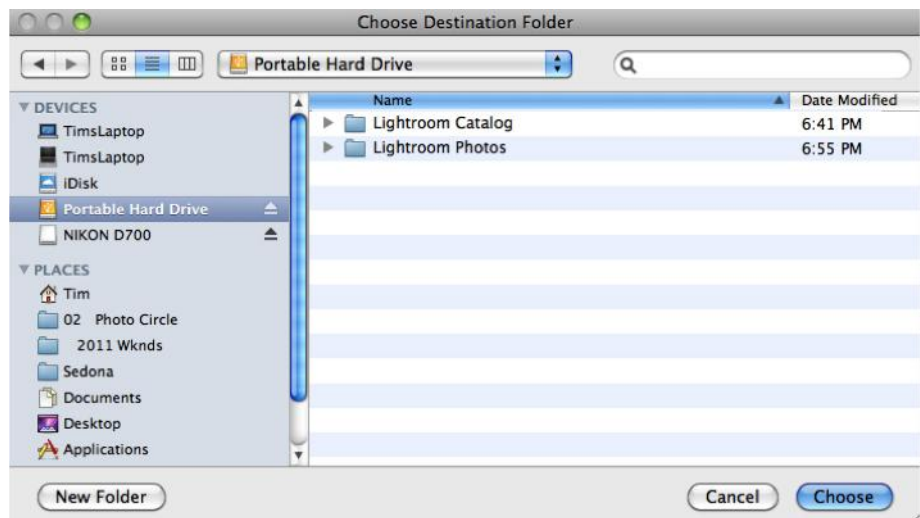
Below the import settings you will see the thumbnails of the images that are on the Flash Card or Folder you are importing from. If the thumbnail is checked in the upper left, it will be imported. At the bottom of the screen you can *Check All* or *Uncheck All* to quickly choose or unchoose images for import. Images that are *Grayed Out* are already in your Library.

To the right of these options you will see the *Sort* option. By default this is set to *Capture Time* –a reasonable choice. The thumbnail slider is to the right. Moving it to the right makes the thumbnails larger, to the left, smaller.



Click on the Double Arrow (circled in red) to choose where you want the images to go. From the drop down list choose *Other Destination*.

This choice brings you to the Finder/Explorer window. Here you can choose or create a folder to contain your imported images. We recommend creating a *Lightroom Photos* folder on your *Portable Hard Drive* as seen below. **All** of your photographs will live in this folder. The only other folder on this drive contains the *Lightroom Catalog* (.lrcat) and backups of the Lightroom Catalog. This tidy system will eliminate confusion and make backups easier.



Moving down you will find the Destination Panel. Here you tell Lightroom to put all of your images into a *Subfolder* of the *Lightroom Photos* folder. This example shows the common practice of choosing to organize by date. Another option would be to create subfolder sets based on names. For example: Countries>USA>State>National Parks>Yellowstone>Geysers.

Click the Import Button at the bottom right to get started.

You have just created a very simple and efficient Lightroom system.

- Lightroom, the program, lives on your desktop or Laptop.
- Lightroom's Catalog which keeps track of your images lives on your Portable Hard Drive in your Lightroom Catalog Folder.
- Your Photographs all live in your Portable Hard Drive in the Lightroom Photos Folder.
- You are now free to plug your Hard drive into any computer that has Lightroom.
- Creating a backup of your photographs AND catalog is simple. Use a backup program such as Acronis (for PC) or Carbon Copy Cloner (Mac). Simply back up your entire Portable Hard Drive folder.

The Lightroom Interface

Lightroom has an exceptionally simple interface. Built like a box it has a Panel on the left and right. A panel on the top and bottom, and one in the center. These panel locations and sizes stay the same in all views, but their function changes. The five Modules (views) can be seen at the upper right of the interface: **Library** □ **Develop** □ **Slideshow** □ **Print** □ **Web** Clicking on the word changes the panels to reflect the aspects of that module.

The **Library Module** is where you View, Search and Organize/Rate your images.

The **Develop Module** allows you to enhance your images through various adjustments.

The **Slideshow Module** is the location for creating slideshows of your favorite photographs.

The **Print Module** is the place you go to print out your photos on your home printer.

The **Web Module** is where you can create a simple web page of your images.

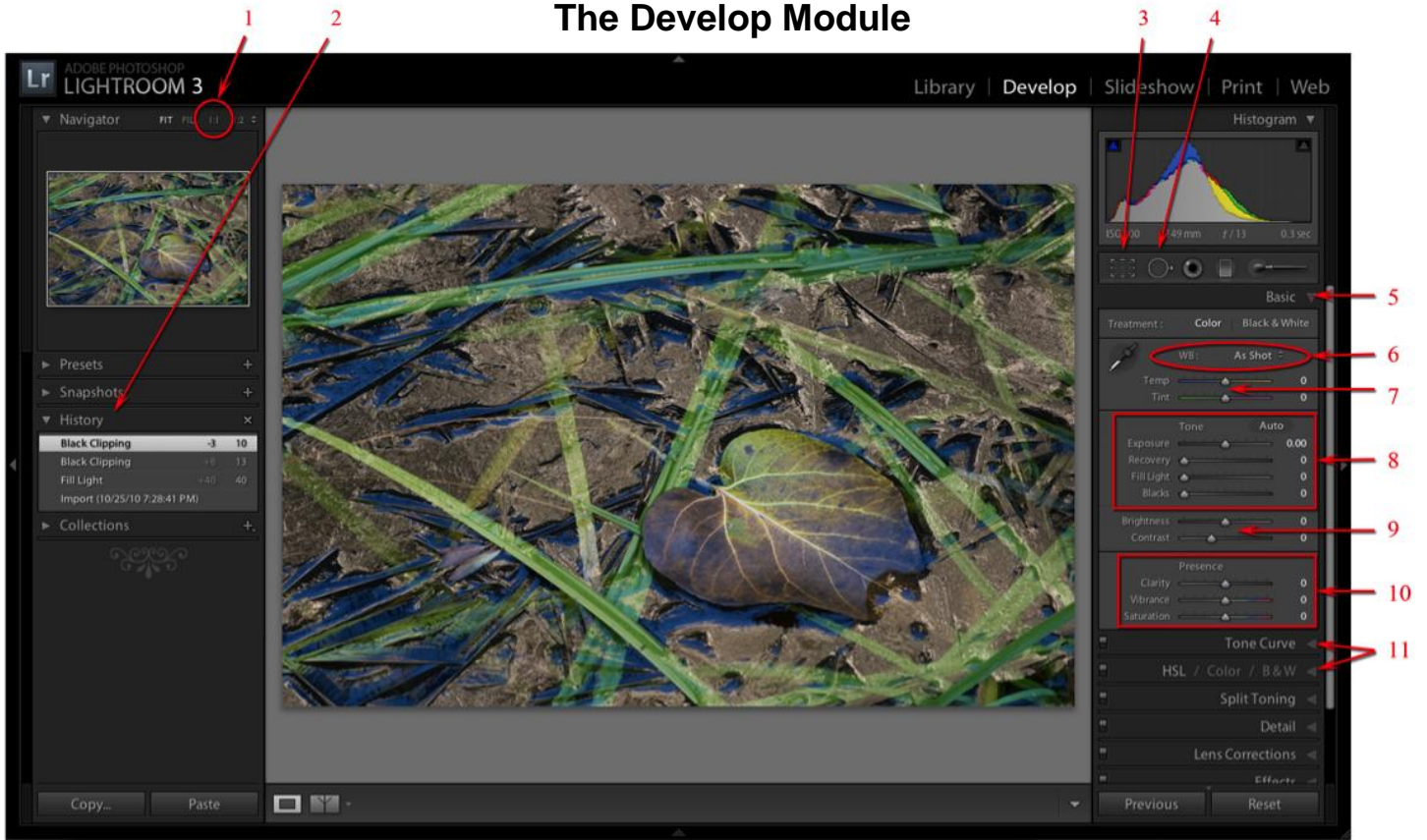
The Library Module

Here you can add metadata in the right hand panel, scroll through your thumbnails in the lower panel, change which folder you want to view in the left panel or magnify your photo in the center panel. Press the Space Bar to enlarge the image to 100%. Click, hold and drag to move around within the enlarged view. Press the space bar again to return to full image view.



When you are ready to enhance your images, click on your desired image then click the *Develop Module* at the top right of the screen. The Panels will change to reflect the new tools associated with *Developing* your photographs. Very few (if any) photographs look their best coming straight from the camera. Almost every photograph taken can benefit from some amount of tweaking. The Panel on the right houses the tools that will allow you to bring out the best in all of your photos!

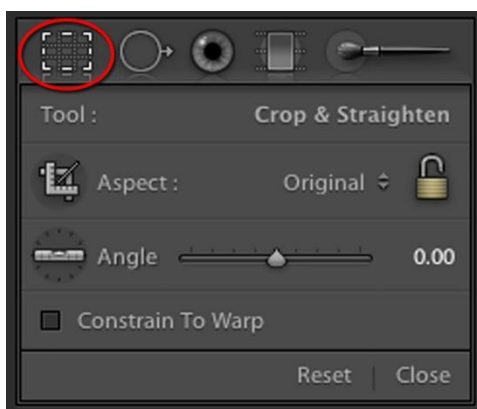
The Develop Module



- | | |
|--------------------------------|--|
| 1. Actual Pixels / 1:1 Preview | 6. White Balance Setting |
| 2. History Panel | 7. Tint Sliders |
| 3. Crop and Rotate | 8. Tone Sliders |
| 4. Spot Removal Brush | 9. Brightness & Contrast Sliders |
| 5. Basic Panel | 10. Clarity Vibrance & Saturation |
| | 11. Expand panels by clicking on arrows. |

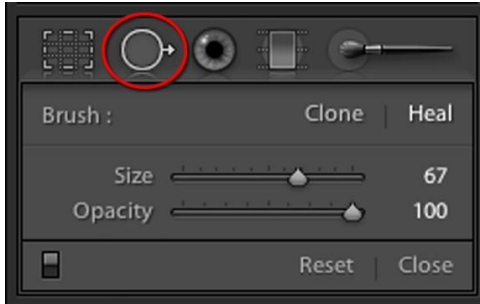
The History Panel

The history panel is Lightroom's safety net. With it you can follow the progress of your edits on each image. As you make a change to the photograph, it gets recorded in the History Panel. You can use this panel to "go back in history." Simply click any History "state" to bring the image back to that state. Return your image to its absolute beginning by clicking on the "Import" state.



Cropping and Straightening Images

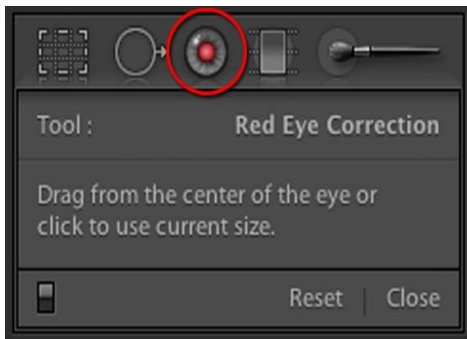
1. Cropping and straightening are done with the same tool.
2. Click on the **Crop & Straighten Tool** near the top of the right panel. This puts your image into crop mode.
3. Grab one of the handles along the edges of your image and drag to a new position. Your image is now cropped! Next to the lock on the right, click on the **Aspect** drop-down to change the proportion of your crop.
4. To straighten, move the **Angle** slider to the right or left.
5. Click on the crop tool again to accept your changes.



Cleaning up Dust Spots

Clean up your images in the first stages of development! Remember, when spotting your image always magnify your image to 100% (actual pixels).

1. Click on the **Spot Removal** tool. A menu appears below. Move the size slider to adjust the size of your tool.
2. Click over the spot you wish to remove. Lightroom will automatically find appropriate information in which to cover the spot. This will be displayed as a second circle connected with a line. If you don't like the area Lightroom chose, you can grab the second circle and move it to a more desirable spot. Your change is revealed immediately.
3. You can alter the size of the spot by moving Spot Size Slider or by turning your scroll wheel on your mouse.
4. To undo a spot, press Ctrl+Z (Cmd+Z for Mac). To undo multiple spots, press Ctrl+Z (Cmd+Z) again. To undo all the spots, click the Reset button in the Spot Removal Tool panel. The larger Reset button, to the right of the Previous button located at the bottom of this panel, resets all of the develop settings applied to the selected image.
5. Navigate around your image by pressing the Space Bar to temporarily change your cursor to a hand tool and then click and drag with your mouse.
6. Click on the Spot Removal tool again to accept your changes.



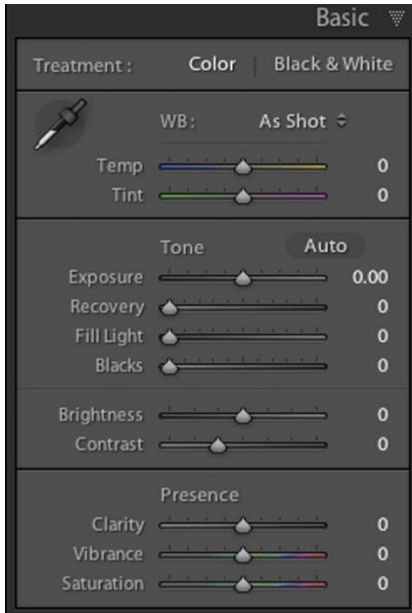
Red Eye Removal

1. With your image selected, click on the Develop module.
 2. Click on the **Red Eye Correction** tool (just to the right of the Spot Removal Tool).
 3. Place your cursor over the red in the eye. The edges of the tool should be about the size of the pupil. Use the scroll wheel on your mouse to enlarge or shrink the cursor to fit over the red pupil.
4. Click over the red to finish. Lightroom automatically fixes the red eye! Use the darken slider to lighten or darken the pupil.
 5. Hit reset to start over.

Basic Developing

White Balance

1. The White Balance adjusts the image for different lighting conditions and removes the color-cast that may be present. From the White Balance drop down menu choose the option that most closely resembles the conditions you were in when you made the image, such as cloudy, shade, incandescent light, and so on. If you are working on a Jpeg instead of a Raw image you will only see the options of As Shot, Auto, and Custom.
2. Use the Temperature slider to fine-tune the color settings. Move the slider left to create a cooler, more blue tone and move it to the right to create warmer, more orange or yellow tone.
3. Adjust the Tint slider if you would like to adjust the color tint of the image. Move it left for more green or right for more magenta.



Exposure

Use this slider to adjust the overall luminosity (brightness) of the image. This is kind of like giving more or less exposure at the time of capture. Move the slider to the right for more exposure and left for less exposure. Hold down the Alt key (Option for Mac), and slide the Exposure slider to reveal image clipping. The spots that are revealed are the very brightest points of the image.

Recovery

The Recovery slider works to bring back detail in the highlight areas. You may find that when you increase the exposure slider until the whole image looks good, you end up with some clipping. By moving the Recovery slider to the right, you can bring some highlight detail back! This slider may not work on overexposed images so you still need to pay attention to your exposure in the field!

Fill Light

The Fill Light slider will lighten the dark areas of your photograph as if you used a fill flash. By its nature it tries not to lighten up the deep blacks. If you take this slider too far it will begin to look fake. Use with care. Your best bet is to start with this slider and then do the rest in Curves.

Blacks

It will make the shadows darker while having less influence on the mid-tones and highlight values. Again, holding down the Alt key (Option for Mac) while moving the slider will reveal shadow clipping.

Brightness

This slider works mainly on the mid-tones of an image. Pushing the slider to the right will brighten up the mid-tones, while pushing it to the left will darken them. Used sparingly, the brightness adjustment will not heavily affect the shadows and highlights.

Contrast

This slider does just what you think it will - adds or decreases contrast. If pushed too far, the Shadows and Highlights of the image will begin to clip.

Clarity

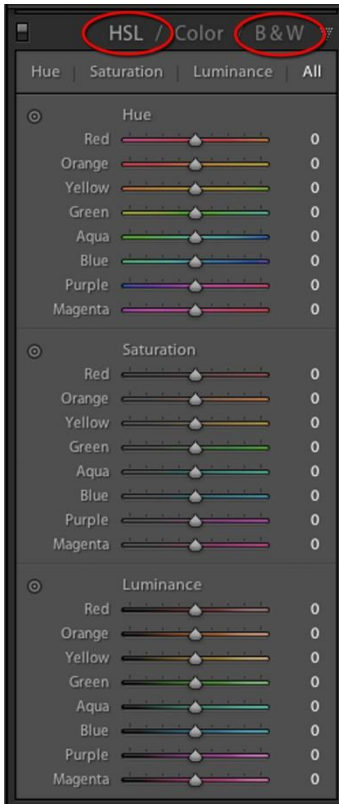
This adjustment increases or decreases the overall contrast above the shadows and below the highlights. Think of it as increasing the contrast in the mid-tones section of the photograph.

Vibrance

Great new slider! It adds saturation in a whole new way. It affects the least saturated areas in your photo first. As you continue to move the slider, the more saturated areas begin to gain in saturation. This lets you increase saturation across your image without over saturating the already intense colors.

Saturation

Moving this adjustment slider to the right increases the overall saturation of the image. Use sparingly! Oversaturation is a sure sign that your image was digitally manipulated, so easy does it.



HSL/Grayscale

This tab allows you complete control over the color in your photographs.

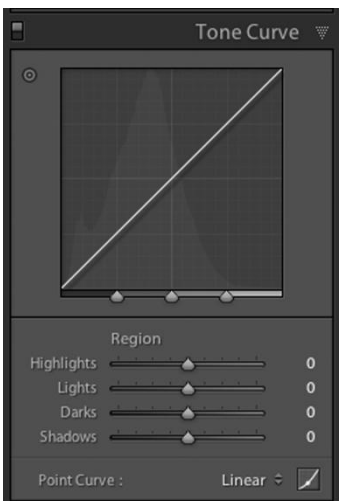
Hue: The name of the color, such as red, blue, or orange. Look at the color behind the slider to give you an idea of which direction you will be pushing that hue.

Saturation: The intensity of the color. Move to the right for more intensity and left for less intensity of that individual color.

Luminance: The brightness of the color. Brightens or darkens the chosen color.

Color: Clicking on Color (in Lightroom, only) just gives you another way to manipulate the colors in your images.

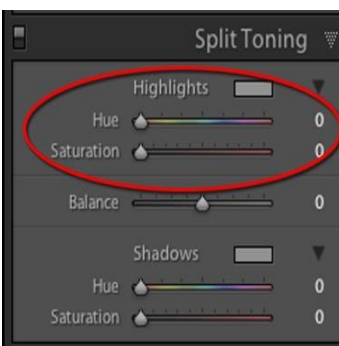
Grayscale: The HSL tab can also be used to create great looking grayscale images. Click on B&W to create a grayscale photograph. The sliders will now brighten or darken the shade of gray that corresponds with each color.



Tone Curve

The second processing area is the Tone Curve tab/panel. Adobe has made this box much easier with their introduction of the “Parametric” curve. The first thing you will notice in the Parametric curve box is the addition of sliders at the bottom of the box.

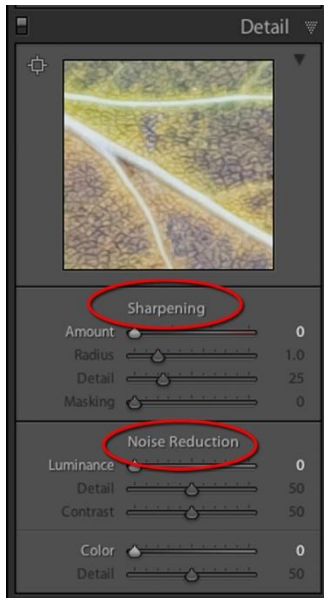
These sliders allow you to choke down or widen the individual regions that will be affected by the sliders below. Move a slider to expand or contract a region. As you move the Highlight, Lights, Darks or Shadows sliders you will see, in real time, how your change affects the curve and your image. Camera Raw allows you full control of the curve using the original “Point Curve,” if you choose.



Split Toning

This is a favorite technique in the traditional darkroom. The Split Toning box is broken up into three segments. Highlights, Balance, and Shadows.

The **Hue** sliders in the **Highlights** and **Shadows** sections allow you to choose the color that you want applied to that region. The **Saturation** sliders control how intense that color will be in that region. The **Balance** slider in the middle will introduce more of the highlight color into the shadows or vice versa.



Detail

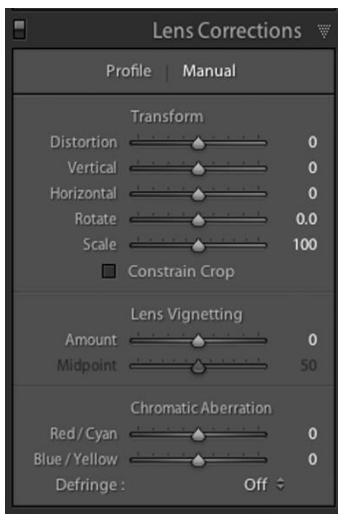
The Detail tab/panel is up next in Lightroom. Always view your image at 100% when working on noise and sharpening so that you can see the true result of the adjustments. Click on the 1:1 in the Navigator panel.

Sharpening

It is usually best to perform most sharpening in Photoshop after all the other corrections are complete. If you are printing from Lightroom, you may add a little bit of sharpening before printing.

Noise Reduction

The **Luminance** slider minimizes noise that occurs from using a high ISO. Look at the darker portions of the image to spot the noise. The **Color** slider is used to remove colored specks that occur from long exposures.

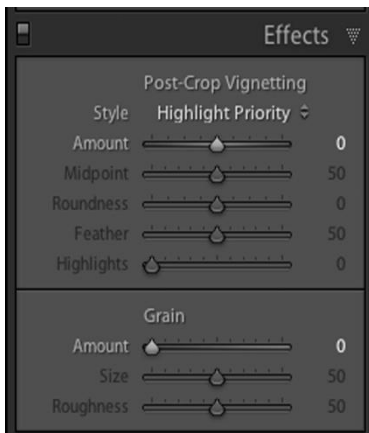


Lens Corrections

Use the sliders in the Transform Section to manually fix distortion due to perspective distortion (pointing up or down). Lens vignetting can fix or enhance corner shading.

Chromatic Aberration

Zoom into your image to 400%. If you see color fringes around the edges, you have chromatic aberration. If you see fringing, adjust either the Red/Cyan or Blue/Yellow until you see the best results. You can experiment with the **Defringe** setting. Choose **All Edges** to correct color fringing for all edges, including any sharp change in color values. If choosing All Edges results in thin gray lines or other undesired effects, choose **Highlight Edges** to correct color fringing only in the edges of highlighting where fringing is most likely to occur. Choose **Off** to turn off defringing.

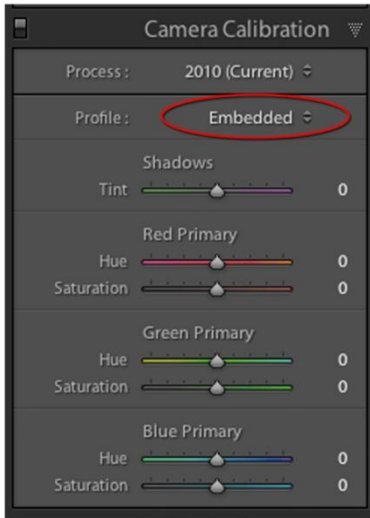


Effects Panel

Lens Vignetting

Lightens or darkens the corners of your photo. By adjusting the **Amount** and **Midpoint** sliders, you can lighten or darken the corners to fix or enhance an image. **Post Crop Vignetting** allows you to apply a vignette to images once they have been cropped.

The **Grain** sliders allow you to add photo realistic grain to your photographs for an edgy or historical look. Move the **Amount** slider to the right to add grain. The **Size** slider changes the overall size of each grain while the **Roughness** slider alters the edges from smooth to rough.



Camera Calibration

Camera Calibration allows you to customize the “look and feel” of your image. Manually manipulate the sliders to experiment with color alterations or choose a profile from the Profile Drop Down Menu circled in Red above.

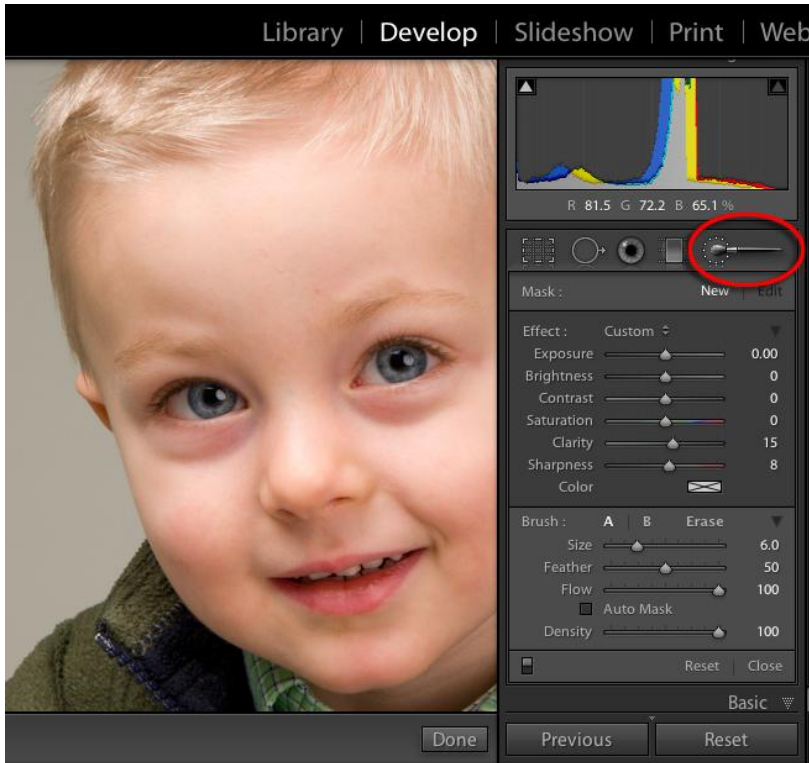
Local Adjustments

Most of the adjustments in the Basic Panel are referred to as Global Adjustments. *Global Editing* refers to the changes we make to the entire image. For example, you may want to change the exposure or brighten the image. Maybe you need to change the white balance to correct a color cast.

Local Adjustments are those done only to a specific portion of an image. Sharpening the eyes on a portrait, changing the color of a single flower, or brightening the foreground in a landscape are all examples of *Local Adjustments*.

Lightroom 3 allows a fairly wide range of local adjustments. Not only are these edits done using information from your original raw file from the camera, they are also completely non-destructive. This means that you can always change your mind later and undo or redo changes indefinitely without degrading the quality of your images. Sometimes your images need more than Lightroom or Camera Raw have to offer. In these cases, you’ll want to use the almost limitless editing ability of Photoshop.

Aside from Red Eye Correction and Spot Removal, the two local adjustment tools that are available in Lightroom are the **Local Adjustment Brush** and the **Graduated Filter**.



Local Adjustment Brush

In the Develop Module, the Local Adjustment Brush is available near the top of the right panel (circled in red). In brief, the Adjustment Brush will paint in the affect that you desire, wherever you choose on the image!

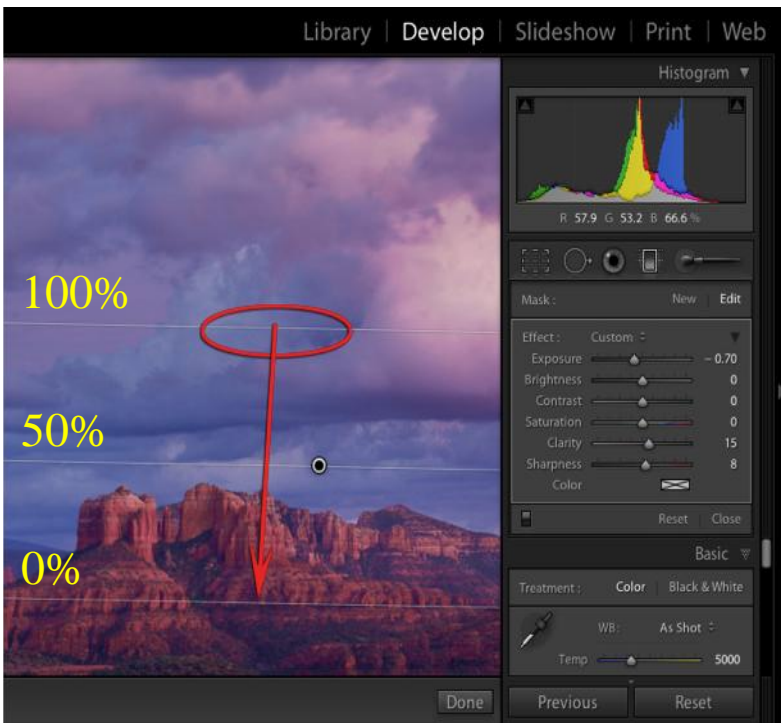
1. Click on the Adjustment Brush to activate it. The effects sliders will now be visible.
2. Move the effects sliders to right to increase the effect and left to decrease. Here we have increased the Clarity to 15 and the Sharpness to 8. This is the effect that we will paint onto the eyes.
3. The next box down controls the Brush Attributes. The Size, Feather, Flow, and Density sliders influence the way the brush will “paint” in your effect.
 - A. Bigger brush will paint a larger area quicker
 - B. More feather will decrease the amount of the effect near the edges of the brush
 - C. Flow determines the amount of the effect that is painted with each click
 - D. Click Auto Mask if you want Lightroom to try to recognize the edges that you wish to paint within.
4. Click and drag over your image to paint in the effect.
5. If the effect is too strong or too weak, return to the sliders to reposition them.
6. If you wish to create a new Local Adjustment, click New in the Mask Area. Follow steps 2-4 to create another localized adjustment.
7. Click on the Adjustment Brush Icon again to deactivate it (your adjustments are still visible).
8. At this point you have two local adjustments on your image. If you click on the Adjustment Brush again you will see two **Pins** on your image that look like White circles. These represent the two masks you made.
9. Click on a pin to activate it. It will now have a dark center. This means if you readjust the sliders, you will be readjusting that mask. Click on the other pin to readjust that mask.
10. Hitting Delete will erase the pin and its mask.
11. Hitting Reset at the bottom of the Adjustment Brush Panel will delete all masks.

Graduated Filter



In the Develop Module, the Graduated Filter is available near the top of the right panel (circled in red). In brief, the Graduated Filter will apply the affect that you desire over a portion of your image and fade it out to look realistic. This is best used when you want the whole top of your image affected while fading out the effect as it gets closer to the bottom. Same goes for the top or the sides. For smaller areas use the Adjustment Brush.

1. Click on the Graduated Filter to activate it. The effects sliders will now be visible.
2. Move the effects sliders to the right to increase the effect, and to the left to decrease. Here we have decreased the Exposure to -.7. This is the effect that will be applied to darken the sky.
3. The graduated filter applies the effect in such a way that it fades off to become unnoticeable. To start with the filter, click on your image and drag. What you are actually drawing is the graduation.



4. In this example I clicked inside of the red circle and then dragged down. This draws out the graduation portion of the effect. The Yellow numbers indicate the amount of effect each zone of the gradient receives. If you clicked on the bottom and dragged upward, the numbers would be reversed.
5. Once the Graduation Filter is drawn, you can still manipulate it. Move your mouse over the lines to move them up and down, outside the lines to rotate, or on the center to move the entire filter up and down.
6. Return to the sliders to readjust as necessary to fine tune your adjustment.
7. Multiple Graduated Filters on one image are handled in the same manner as the Adjustment Brush.
8. Click Reset under the Graduated Filter to start over.