PHOTOSHOP: 3.3 CAMERA RAW

Raw image files are uncompressed images that contain all the information of the photo. Raw images give you flexibility in editing and allow you to achieve a better look because you have more information to adjust. Most DSLR cameras can be set to take Raw files. Raw files, however, must be processed and cannot be used right out of the camera. They also take up much more space than regular JPEG images.

Camera Raw is a feature of Photoshop that is used to process raw images. When opening a raw image, Camera Raw automatically opens. However, you can edit any photo with Camera Raw. You can do most of the same things in Photoshop itself, but you might find that Camera Raw is easier to understand and use, and often faster. The layout is very similar to Photoshop’s more efficient sister, Lightroom.

Open a file in Camera Raw

When opening raw photos, it will automatically enable Photoshop Camera Raw. However, for JPEGs and other format photos and files, it will not. To open a JPEG, or other format image, in Camera Raw, go to File > Open...

A window will pop up allowing you to browse your computer for the photo. Once you find the photo, select it. Then drop down the Format menu, and select Camera Raw. Click Open.
Camera Raw Interface

Like Photoshop, Camera Raw is composed of a Toolbar and Panels, but also has a histogram displaying the tonal ranges of the image.
Histogram

You can see the histogram displayed on the top right corner of Camera Raw. Under the histogram are the settings in which the photo was taken and the amount of Red, Green, and Blue available in the area where you cursor is on the photo. The histogram is arranged from darkest to lightest, with darkest on the left and lightest on the right.

Notice two shapes on the top left and top right corners of the histogram. The shape on the top left indicates the underexposed areas, and the shape on the top right indicates the overexposed areas. Click on either to display in your preview which parts of your photo are under or over exposed.

Toolbar

Across the top of Camera Raw, you will see the toolbar.

Zoom Tool (Z): Used to zoom in and out of the photo. Click to zoom in, and hold Alt and click to zoom out. You can also use the + and – buttons, and the Zoom percentage box at the bottom of the preview to control zoom.

Hand Tool (H): This is used to navigate through your photo.

White Balance Tool (I): A tool used to adjust the colors of your photos quickly by clicking on something that is meant to be white in the midtone range in your photo (avoid highlights). This method is quick and easy, but not always accurate. See 2.5 WHITE BALANCE for more on getting a better White Balance.
**Color Sampler Tool (S):** This tool is used to place sampling points on the image and check the RGB values of the point. When the RGBs are close to each other, then your colors are well balanced.

**Targeted Adjustment Tool (T):** This tool allows you to click and drag a part of the photo to adjust the photo curves. If you click on the highlights, it will adjust the highlights, if you click on shadows it will adjust shadows, and so on. See the Tone Curve panel to see the changes. Click and hold the Targeted Adjustment Tool to select Hue, Saturation, or Luminance to make other adjustments to specific colors. Change to the HSL Panel to see the changes being made.

**Crop Tool (C):** Use the crop tool to cut your image. Click and drag to select the area you want to cut. Click and hold the Crop Tool for crop presets.

**Straighten Tool (A):** This tool is similar to the Crop Tool but crops so that you can straighten your image. Click and drag your curser across the horizon or the horizontal line that you are using to straighten your image and it will automatically cut your image so that it is straight.

**Spot Removal (B):** This tool is used to remove spots such as blemishes or dust on your lens. It can also be used for retouching for removing something in your image. You can use this by sampling an area as a reference, then clicking on the spot you want to remove. Choose between Heal and Clone in your Spot Removal panel to the right.

**Red Eye Removal (E):** This tool is used to remove red pupils seen in some photos. Click on the red eye to fix the color.

**Adjustment Brush (K):** This tool is used to make local adjustments. You can make adjustments in the panel to the right and change the size of the brush, then apply the changes to specific areas rather than the whole image. When the point is selected you can go back and edit the adjustment, and preview it with and without the adjustment by checking and unchecking the preview located on the top right corner of the photo.

**Graduated Filter (G):** This allows you to make an affect in a gradual way like adding vignette by dragging from the side of the image inwards and decrease the exposure.

**Radial Filter (J):** This allows you to add an effect to a specific area of the image. Click and drag your curser to draw an oval around the area you want
to apply the effect to and all effects made in the panels will only be applied to that area.

Panels

The Panels are located on the left side of Camera Raw under the histogram.

**Basics:** The Basics panel has all the essential and basic adjustments you will likely use to edit your photo. This includes White Balance adjustments with Temperature and Tint, Luminance adjustments, and Clarity, Vibrance, and Saturation adjustments.

**Tone Curve:** This panel is used to make changes to luminance using a curve. This panel should be selected when using the Targeted Adjustment Tool for the default Parametric Curve.

**Detail Panel:** This panel is used to define or remove detail by adjusting the image's sharpness, as well as fix Noise using the Noise Reduction features. You can specify what elements you would like to sharpen or noise reduce.

**HSL / Grayscale:** HSL stands for Hue, Saturation, and Luminance. This panel is used to adjust colors in the photos.

**Split Toning:** This panel allows you to adjust the Hue and Saturation specifically in the Highlights and Shadows, as well as create a balance between the two.

**Lens Correction:** Some lenses distort, vignette, or have other effects on your photos. This panel is used to correct (or add) these effects that are a result of specific kinds of lenses.

**Effects Panel:** This panel allows you to add Grain and Vignette effects. In the Lens Correction panel you can add a vignette but it adds it to the full sized photo and not the cropped photo. In the Effects Panel, you can add a vignette to a cropped image.

**Camera Calibration:** This panel is used to fine-tune the Camera Raw color interpretation. Choose between Camera Profile settings to get the most accurate interpretation of photos from camera to program.
**Presets:** You can make your own presets of adjustments by clicking on the New Preset button located at the bottom of the panel to the left of the trash bin icon. You can select which adjustments you would like to include in your preset and apply the preset to later photos.

**Snapshots:** Snapshots refer to moments of time during the development of an individual image. If you want to save a stage in your editing to go back to rather than undoing edits, you can take a snapshot by clicking on the New Snapshot button located at the bottom of the panel to the left of the trash bin icon.