

## To Process Images in Camera Raw

Select one or more camera raw files in Bridge, and then choose **File > Open In Camera Raw** or press **Ctrl+R** (Windows) or **Command+R** (Mac OS). When you finish making adjustments in the Camera Raw dialog box, click **Done** to accept changes and close the dialog box. You can also click **Open** to open a copy of the adjusted image in Photoshop.

**TIPS** Shift-double-click a thumbnail in Bridge to open a camera raw image in Photoshop without opening the Camera Raw dialog box. Hold down Shift while choosing File > Open to open multiple selected images.

## The Camera Raw dialog box

**A.** Filmstrip **B.** Toggle Filmstrip **C.** Camera, file name, and Exif information **D.** Toggle full screen mode **E.** Image adjustment tabs **F.** Histogram **G.** Camera Raw Settings menu **H.** Zoom levels **I.** Click to display workflow options **J.** Navigation arrows **K.** Adjustment sliders

## Image Adjustment Tabs

These offer different methods for editing your photo. From left to right, they are:

**Basic** Adjust white balance, color saturation, and tonality.

**Tone Curve** Fine-tune tonality using a Parametric curve and a Point curve.

**Detail** Sharpen images or reduce noise.

**HSL / Grayscale** Fine-tune colors using Hue, Saturation, and Luminance adjustments.

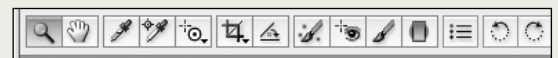
**Split Toning** Color monochrome images or

create special effects with color images.

**Lens Corrections** Compensate for chromatic aberration and vignetting caused by the camera lens.

**Camera Calibration** Correct a color cast in the shadows and adjust non-neutral colors to compensate for the difference between the behavior of your camera and the Camera Raw profile for your camera model.

**Presets** Save and apply sets of image adjustment settings as presets.



## The Toolbar

The toolbar at top contains the following tools listed from left to right:

**Zoom** tool, **Hand** tool, **White Balance** tool, **Color Sampler** tool, **Crop Tool**, **Straighten** tool, **Retouch** tool, **Red Eye Removal** tool, **Adjustment** brush, **Graduated Filter** tool, **Preferences** dialog button, **Rotate Counter Clockwise 90**, **Rotate Clockwise 90**.

## White Balance

Camera Raw applies the white balance setting and changes the Temperature and Tint properties in the Basic tab accordingly. Use these controls to fine-tune the color balance.

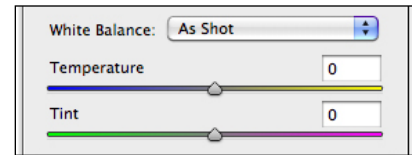
**As Shot** Uses the camera's white balance settings, if they are available.

**Auto** Calculates the white balance based on the image data.

**Temperature** Sets the white balance to a custom color temperature. Decrease

Temperature to correct a photo taken with a lower color temperature of light; the Camera Raw plug-in makes the image colors bluer to compensate for the lower color temperature (yellowish) of the ambient light.

Conversely, increase Temperature to correct a photo taken with a higher color temperature of light; the image colors become warmer (yellowish) to compensate for the higher color temperature (bluish) of the ambient light.



**Tint** Sets the white balance to compensate for a green or magenta tint. Decrease Tint to add green to the image; increase Tint to add magenta.

## Adjusting Tone

**Exposure** Adjusts the overall image brightness, with a greater effect in the high values. Decrease Exposure to darken the image; increase Exposure to brighten the image. The values are in increments equivalent to f-stops. An adjustment of +1.50 is similar to widening the aperture 1-1/2 stops. Similarly, an adjustment of -1.50 is similar to reducing the aperture 1-1/2 stops. (Use Recovery to bring high-light values down.)

**Recovery** Attempts to recover details from highlights. Camera Raw can reconstruct some details from areas in which one or two color channels are clipped to white.

**Fill Light** Attempts to recover details from shadows, without brightening blacks. Camera Raw can reconstruct some details from areas in which one or two color channels are clipped to black. Using Fill Light is similar to using the shadows portion of the Photoshop Shadow/Highlight filter or the After Effects Shadow/Highlight effect.

**Blacks** Specifies which input levels are mapped to black in the final image. Increasing Blacks expands the areas that are mapped to black. This sometimes creates the impression of increased contrast in the image. The greatest change is in the shadows, with much less change in the midtones and highlights. Using the Blacks slider is similar to using the black point slider for input levels when using the

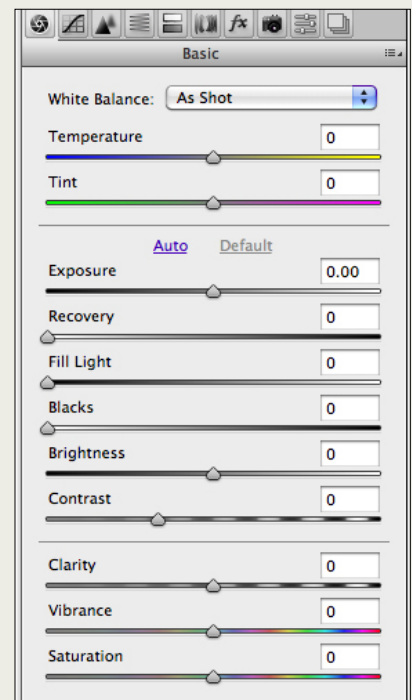
Photoshop Levels command or the After Effects Levels effect.

**Brightness** Adjusts the brightness or darkness of the image, much as the Exposure property does. However, instead of clipping the image in the highlights or shadows, Brightness compresses the highlights and expands the shadows when you move the slider to the right. Often, the best way to use this control is to set the overall tonal scale by first setting Exposure, Recovery, and Blacks; then set Brightness. Large Brightness adjustments can affect shadow or highlight clipping, so you may want to readjust the Exposure, Recovery, or Blacks property after adjusting Brightness.

**Contrast** Increases or decreases image contrast, mainly affecting midtones. When you increase contrast, the middle-to-dark image areas become darker, and the middle-to-light image areas become lighter. Generally, you use the Contrast property to adjust the contrast of the midtones after setting the Exposure, Blacks, and Brightness values.

**Clarity** Adds depth to an image by increasing local contrast. When using this setting, it is best to zoom in to 100% or greater. To maximize the effect, increase the setting until you see halos near the edge details of the image and then reduce the setting slightly.

**Vibrance** Adjusts the saturation so that clipping is minimized as colors ap-



proach full saturation, changing the saturation of all lower-saturated colors with less impact on the higher-saturated colors. Vibrance also prevents skin tones from becoming oversaturated.

**Saturation** Adjusts the saturation of all image colors equally from -100 (monochrome) to +100 (double the saturation).

## HSL / Grayscale controls

You can use the controls in the HSL / Grayscale tab to adjust individual color ranges. For example, if a red object looks too vivid and distracting, you can decrease the Reds values in the nested Saturation tab. The following tabs contain controls for adjusting a color component for a specific color range:

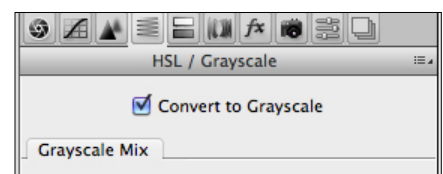
**Hue** Changes the color. For example, you can change a blue sky (and all other blue objects) from cyan to purple.

**Saturation** Changes the color vividness or purity of the color. For instance, you can change a blue sky from gray to highly saturated blue.

**Luminance** Changes the brightness of the color range.

### Convert To Grayscale

Check the "Convert to Grayscale" box to convert from color to black and white. When this is checked, only one tab is visible (see below).



**Grayscale Mix** Use controls in this tab to specify the contribution of each color range to the grayscale version of the image.