



# *ADOBE PHOTOSHOP*



# Welcome to In2-Training

## *Delegate Information*

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We hope you find the friendly, informal atmosphere helps you to relax and enjoy your training session. If you have any questions during the day, please do not hesitate to ask. We want you to gain the maximum benefit from your investment.

## *About this Manual*

This course manual is for you to keep and is intended as a reference so that it can be referred to during your daily work. Each section covers a different topic with easy to follow step-by-step instructions.

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## About camera raw files

A *camera raw* file contains unprocessed picture data from a digital camera's image sensor. Many digital cameras can save images in camera raw format. The advantage of camera raw files is that they let the photographer—rather than the camera—interpret the image data and make adjustments and conversions. (In contrast, shooting JPEG images with your camera locks the camera's processing into the image.) Because the camera doesn't do any image processing when you shoot a camera raw photo, you can use Adobe Camera Raw to set the white balance, tonal range, contrast, color saturation, and sharpening. Think of camera raw files as photo negatives. You can go back and reprocess the file any time you like to achieve the results you want.

To create camera raw files, set your digital camera to save files in its own, possibly proprietary, raw file format. When you download the file from your camera, it has a file extension such as .nef (from Nikon) or .crw (from Canon). In Bridge or Photoshop, you can process camera raw files from a myriad of supported digital cameras from Canon, Kodak, Leica, Nikon, and other makers—and even process multiple images simultaneously. You can then export the proprietary camera raw files to DNG, JPEG, TIFF, or PSD file format.

You can process camera raw files obtained from supported cameras, but you can also open TIFF and JPEG images in Camera Raw, which includes some editing features that aren't in Photoshop. However, you won't have the same flexibility with white balance and other settings if you're using a TIFF or JPEG image. Although Camera Raw can open and edit a camera raw image file, it cannot save an image in camera raw format.

● **Note:** The Photoshop Raw format (.raw extension) is a file format for transferring images between applications and computer platforms. Don't confuse Photoshop Raw with camera raw file formats.

## Processing files in Camera Raw

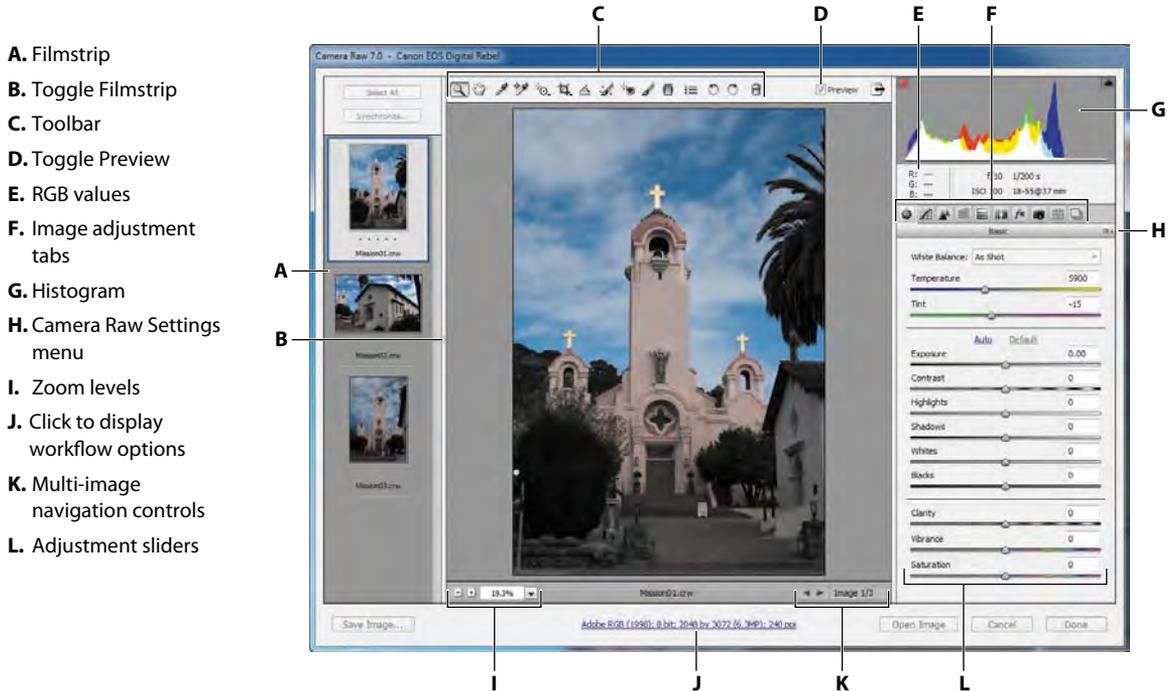
When you make adjustments to an image in Camera Raw, such as straightening or cropping the image, Photoshop and Bridge preserve the original file data. This way, you can edit the image as you desire, export the edited image, and keep the original intact for future use or other adjustments.

## Opening images in Camera Raw

You can open Camera Raw from either Bridge or Photoshop, and you can apply the same edits to multiple files simultaneously. This is especially useful if you're working with images that were all shot in the same environment, and which therefore need the same lighting and other adjustments.

Camera Raw provides extensive controls for adjusting white balance, exposure, contrast, sharpness, tone curves, and much more. In this exercise, you'll edit one image and then apply the settings to similar images.

- 1 In Bridge, open the Lessons/Lesson05/Mission folder, which contains three shots of the Spanish church you previewed earlier.
- 2 Shift-click to select all of the images—Mission01.crw, Mission02.crw, and Mission03.crw—and then choose File > Open In Camera Raw.



The Camera Raw dialog box displays a large preview of the first image, and a filmstrip down the left side displays all open images. The histogram in the upper right corner shows the tonal range of the selected image; the workflow options link below the preview window displays the selected image's color space, bit depth, size, and resolution. Tools along the top of the dialog box let you zoom, pan, straighten, and make other adjustments to the image. Tabbed panels on the right side of the dialog box give you more nuanced options for adjusting the image: You can correct the white balance, adjust the tone, sharpen the image, remove noise, adjust color, and make other changes. You can also save settings as a preset, and then apply them later.

For the best results using Camera Raw, plan your workflow to move from left to right and top to bottom. That is, you'll often want to use the tools across the top first, and then move through the panels in order, making changes as necessary.

You will explore these controls now as you edit the first image file.

- 3 Click each thumbnail in the filmstrip to preview all the images before you begin. Or, you can click the Forward button under the main preview window to cycle through them. When you've seen all three, select the Mission01.crw image again.



- 4 Make sure that Preview is selected at the top of the dialog box, so that you can see the effect of the adjustments you're about to make.

## Adjusting white balance

An image's white balance reflects the lighting conditions under which it was captured. A digital camera records the white balance at the time of exposure; this is the value that initially appears in the Camera Raw dialog box image preview.

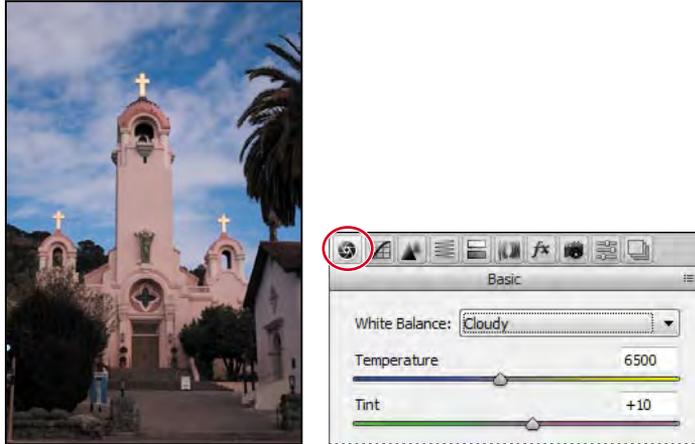
White balance comprises two components. The first is *temperature*, which is measured in kelvins and determines the level of “coolness” or “warmness” of the image—that is, its cool blue-green tones or warm yellow-red tones. The second component is *tint*, which compensates for magenta or green color casts in the image.

Depending on the settings you're using on your camera and the environment in which you're shooting (for example, if there's glare or uneven lighting), you may want to adjust the white balance for the image. If you plan to modify the white balance, make that the first thing you do, as it will affect all other changes in the image.

- 1 If the Basic panel isn't already displayed on the right side of the dialog box, click the Basic button (🔍) to open it.

By default, As Shot is selected in the White Balance menu. Camera Raw applies the white balance settings that were in your camera at the time of exposure. Camera Raw includes several White Balance presets, which you can use as a starting point to see different lighting effects.

- 2 Choose Cloudy from the White Balance menu.

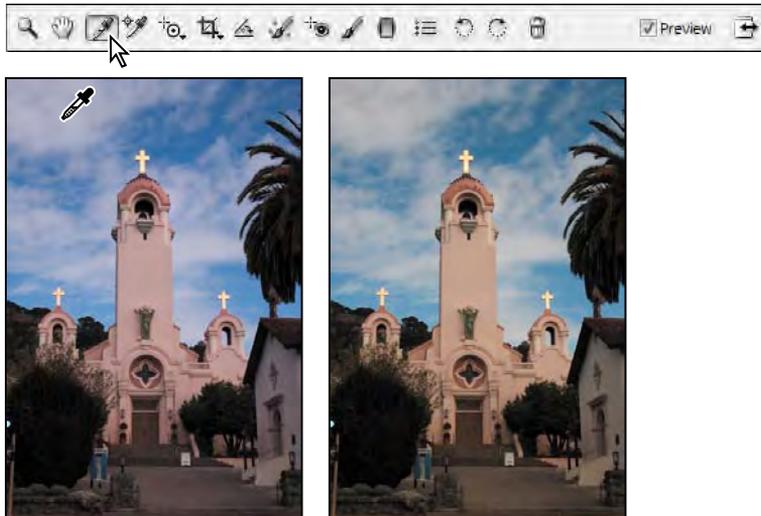


Camera Raw adjusts the temperature and tint for a cloudy day. Sometimes a preset does the trick. In this case, though, there's still a blue cast to the image. You'll adjust the white balance manually.

- 3 Select the White Balance tool (🔧) at the top of the Camera Raw dialog box.

To set an accurate white balance, select an object that should be white or gray. Camera Raw uses that information to determine the color of the light in which the scene was shot, and then adjusts for scene lighting automatically.

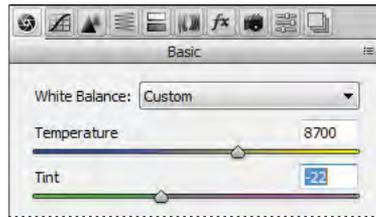
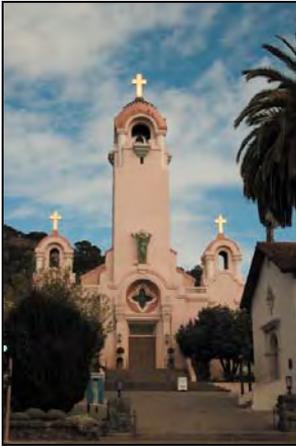
- 4 Click the white clouds in the image. The lighting of the image changes.



- 5 Click a different area of the clouds. The lighting shifts.

You can use the White Balance tool to find the best lighting for the scene quickly and easily. Clicking different areas changes the lighting without making any permanent changes to the file, so you can experiment freely.

- 6 Click the clouds directly to the left of the steeple. This selection removes most of the color casts and results in realistic lighting.
- 7 Move the Tint slider to **-22** to intensify the greens.



► **Tip:** To undo the settings, press Ctrl+Z (Windows) or Command+Z (Mac OS). To compare the changes you've made in the current panel with the original image, deselect Preview. Select Preview again to see the modified image.

## Making tonal adjustments in Camera Raw

Other sliders in the Basic panel affect exposure, brightness, contrast, and saturation in the image. Except for Contrast, moving a slider to the right lightens the affected areas of the image, and moving it to the left darkens those areas. Exposure essentially defines the *white point*, or the lightest point of the image, so that Camera Raw adjusts everything else accordingly. Conversely, the Blacks slider sets the *black point*, or the darkest point in the image. The Highlights and Shadows sliders increase detail in the highlights and the shadows, respectively.

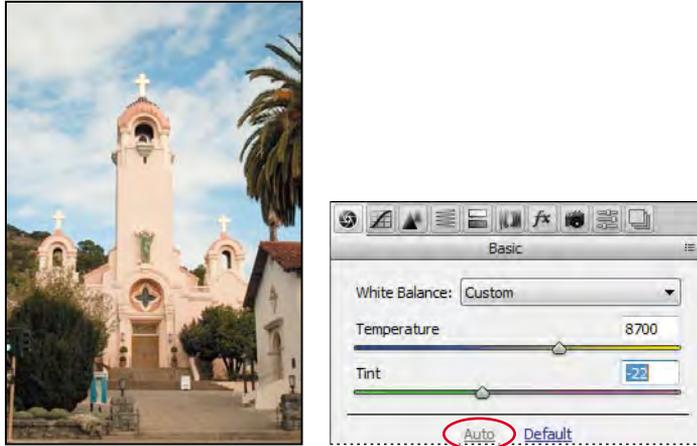
The Contrast slider adjusts the contrast. For more nuanced contrast adjustments, you can use the Clarity slider, which adds depth to an image by increasing local contrast, especially on the midtones.

The Saturation slider adjusts the saturation of all colors in the image equally. The Vibrance slider, on the other hand, has a greater effect on undersaturated colors. You can use it to bring life to a background without oversaturating any skin tones in the image, for example.

► **Tip:** For the best effect, increase the Clarity slider until you see halos near the edge details, and then reduce the setting slightly.

You can use the Auto option to let Camera Raw attempt to correct the image tone, or you can select your own settings.

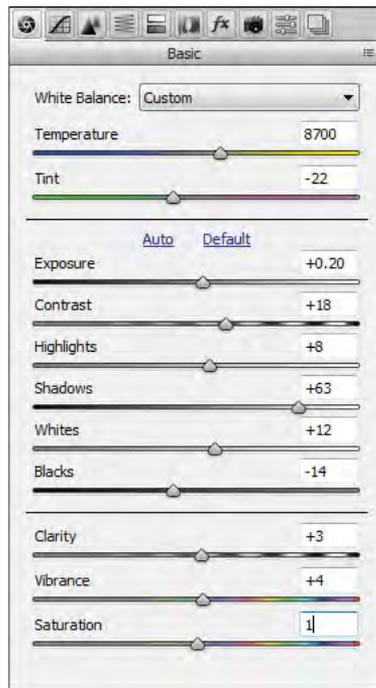
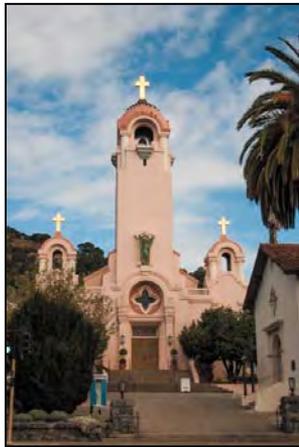
- 1 Click Auto in the Basic panel.



Camera Raw increases the exposure and changes several other settings. You could use this as a starting point. However, in this exercise, you'll return to the default settings and adjust them yourself.

- 2 Click Default in the Basic panel.
- 3 Change the sliders as follows:
  - Exposure: **+0.20**
  - Contrast: **+18**
  - Highlights: **+8**
  - Shadows: **+63**
  - Whites: **+12**
  - Blacks: **-14**
  - Clarity: **+3**
  - Vibrance: **+4**
  - Saturation: **+1**

These settings help pump up the midtones of the image, so that it looks bolder and more dimensional without being oversaturated.



## About the Camera Raw histogram

The histogram in the upper right corner of the Camera Raw dialog box simultaneously shows the red, green, and blue channels of the selected image, and updates interactively as you adjust any settings. Also, as you move any tool over the preview image, the RGB values for the area under the cursor appear below the histogram.

