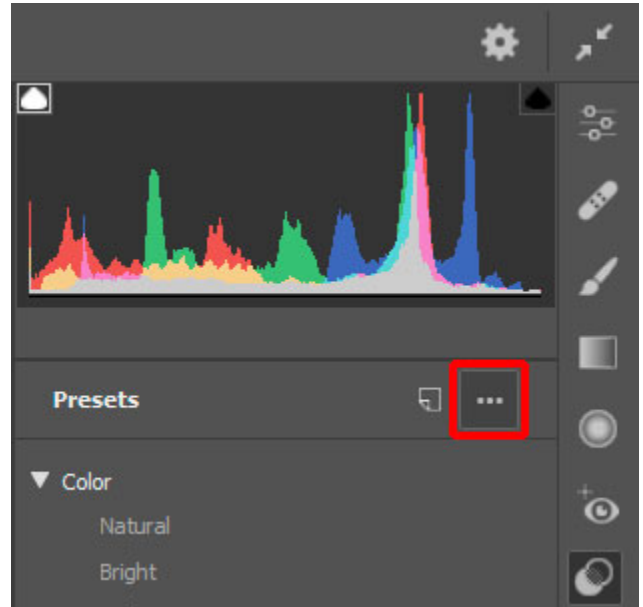# Installing the Linear Profile

Before installing, make sure you can locate the downloaded .zip folder that contains the linear profile. It has a name that starts with "Linear..." and has a "zip" file extension. This .zip folder will be needed during the installation process. Dave Kelly also has a video on installing and using linear camera profiles that very closely mirrors these directions: https://www.youtube.com/watch?v=mRn6rPt5gyk

Potential Mac issue: Apple computers might decompress the downloaded .zip folder by default. If you cannot locate the .zip download folder directly, you might need to REcompress it first before you'll be able to install the linear profile. To do this, use Finder to view the contents of your "Downloads" folder. Find the .dcp file that begins with "Linear..." Right-click on it and choose "Compress" to create a .zip folder containing the .dcp file. Once you have created this .zip folder, you will be able to use it for installation.

1. Open an image in Photoshop.

2. Make the Background layer or any pixel layer the active layer.

3. Open the Camera Raw Filter using the menu: Filter > Camera Raw Filter.

4. From the Camera Raw Filter, click the Presets button.
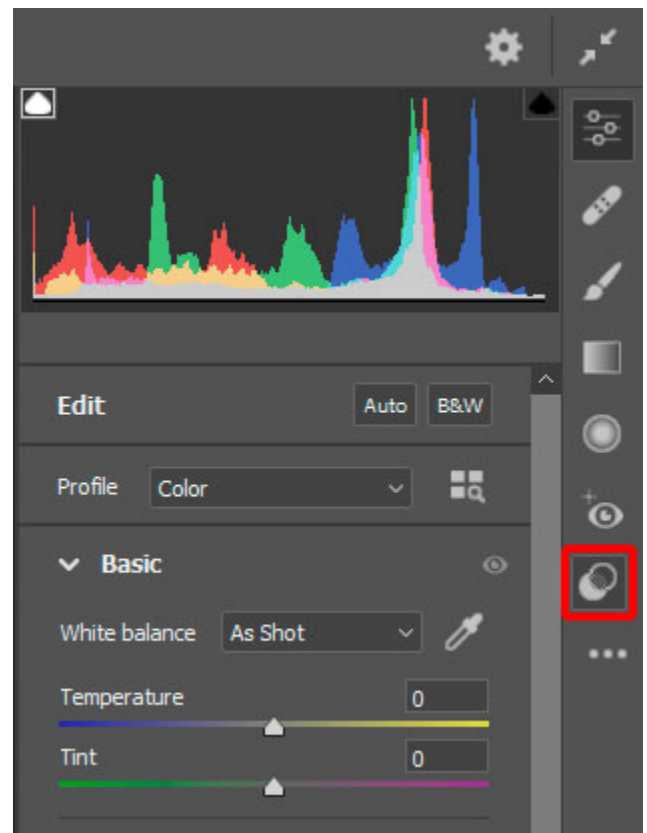
5. From the Presets menu, click the <u>Ellipses button (...)</u> to open a menu of additional items.


6. Choose "Import Profiles & Presets..." from the menu.

7. From the window that opens, navigate to the downloaded .zip folder (or possibly the recompressed .zip folder on Mac) that contains the linear profile. It will have a name that starts with "Linear..." Click on it to choose it and then click "Open" in the window (or just double-click the .zip folder).

8. Close the Camera Raw filter.

Once installed, the profile can be used with RAW files in Camera Raw or Lightroom. The "Using the Linear Profile" section below describes how to use it. With Lightroom, it will be necessary to restart the app before you'll have access to the linear profile.
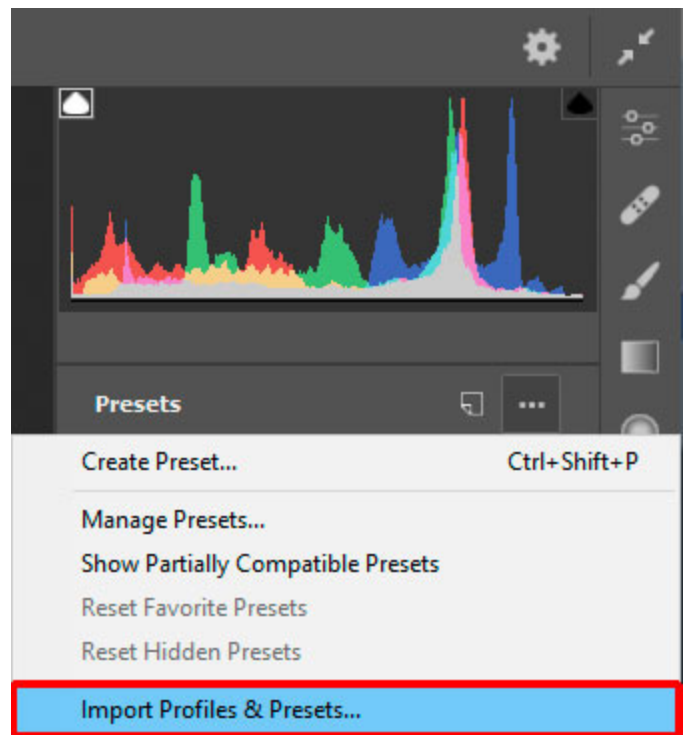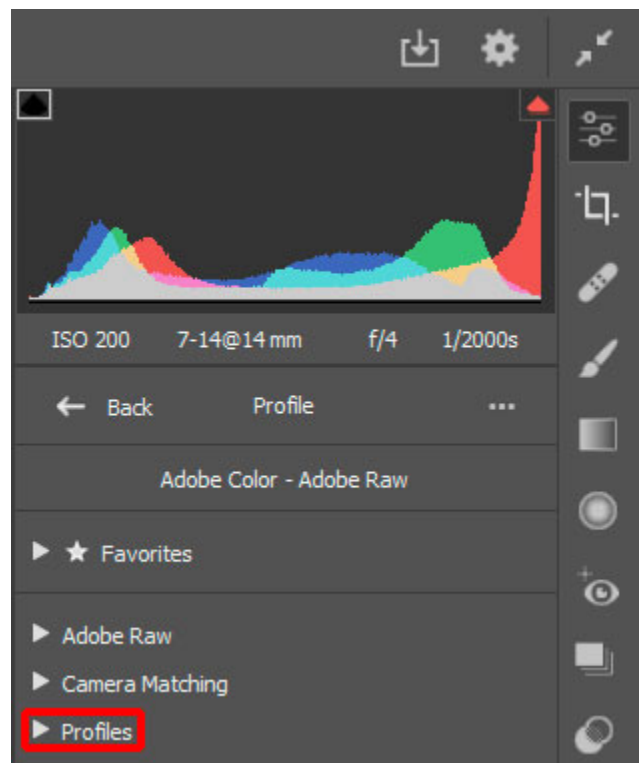
Using the Linear Profile

NOTE: For best results, restart Lightroom, Bridge, or Photoshop before using the linear profile the first time according to the directions below.

1. Open a RAW file in Camera Raw or in the Develop module of Lightroom.

2. From the "Profile" section, click the drop-down arrow and choose "Browse..." OR click the <u>Search</u> button to the right of the drop-down menu.
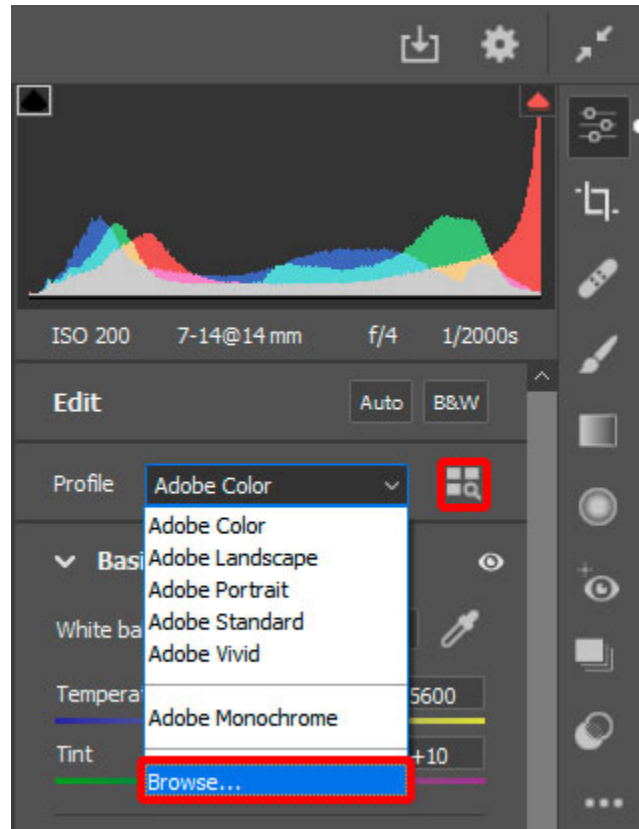
3. From the "Profile" menu that opens, scroll down to find a "Profiles" submenu item. Click on it to open it. When it opens, the "Linear..." profile will be listed. Click on the "Linear..." profile to make it the profile that will be used for adjusting your image.

NOTE: The linear profile is camera-specific and will only be displayed in the "Profiles" menu if the current image was made with a matching camera.

4. When finished, click the "Back" button to return to editing the RAW file using the "Linear..." profile.
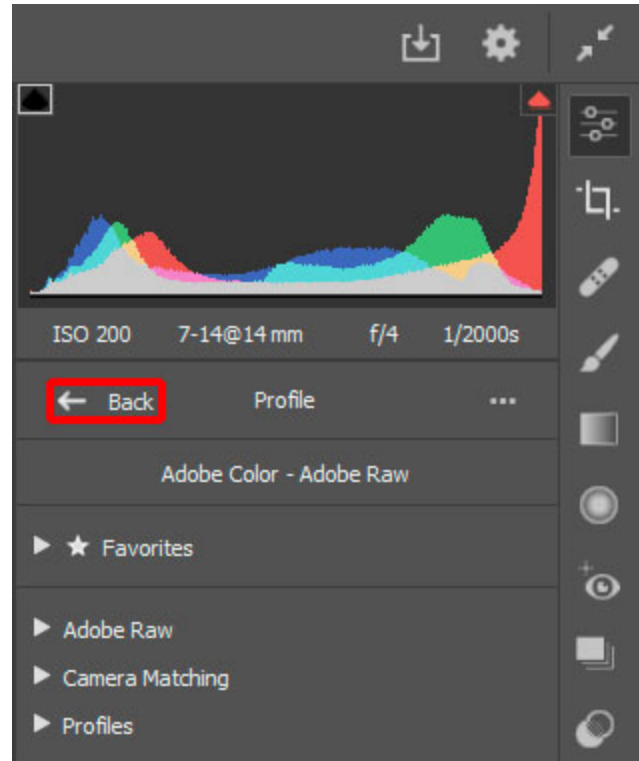
*NOTE: **You cannot apply a linear profile to a RAW file using the Camera Raw Filter inside Photoshop.** The linear profile can only be applied to a RAW file in Lightroom or Camera Raw. For an image already open in Photoshop, the opportunity to apply the linear profile has already passed. You MUST apply the linear profile during the RAW file conversion process in either Lightroom or Camera Raw. The Camera Raw Filter in Photoshop can be used to INSTALL linear profiles on your computer (as described above), but it CANNOT be used to APPLY the linear profile to a RAW file. If you already have an image open in Photoshop, you need to take a step back to where you converted the RAW file to a Photoshop document. It's in the RAW converter (Lightroom or Camera Raw) where you can apply the linear profile to your RAW file. Camera Raw and the Camera Raw Filter are NOT the same things. They might look the same, but they work very differently. The Camera Raw Filter works with documents that have already been converted from their "RAW" state to a workable Photoshop document. The Camera Raw application, on the other hand, works directly with the RAW file, and that's where you need to be (or in Lightroom) in order to apply the linear profile and work with it.*

REMINDER: The linear profile must be an exact match to the camera that produced the RAW file. The "Profiles" submenu in Step 3. above will only show the linear profile that matches the camera that produced the RAW file. So, if you install multiple linear profiles for multiple cameras, you'll only see the linear profile that matches the camera for the current RAW file that's being edited. Other linear profiles simply won't be displayed.
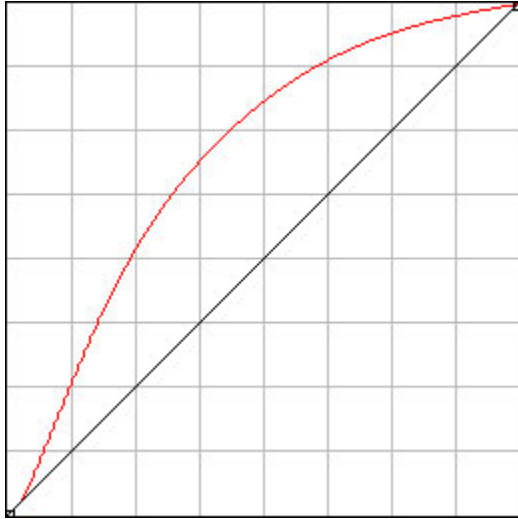
The linear profile is NOT a color profile. The linear profile simply describes the tone curve that gets applied to the RAW data when it's brought into and displayed in Lightroom or Camera Raw. The red line in the graph at the left shows the tone curve for the Adobe Standard profile. For the linear profile, there is no tone curve applied. Instead, the linear profile is a way to REMOVE the tone curves applied to the RAW data by other profiles. The black line on the graph is essentially the tone curve for the linear profile. As such, it allows you to work with the RAW data WITHOUT the tonal compression of the highlights and the tonal expansion of the shadows that is inherent with other tone curves like Adobe Color, Adobe Standard, Adobe Landscape, etc.

Switching to the linear profile will make the image look darker and with less contrast and saturation than any of the Adobe Raw profiles. This may initially be disappointing; however, it also opens up new possibilities. Based on discussions with other linear profile users, there are two basic strategies once the linear has been applied:

1) Click the "Auto" button. Lightroom and Camera Raw have an excellent algorithm for creating reasonably pleasing RAW file conversions regardless of the profile when the "Auto" button is clicked. However, the resultant "Auto-ized" image is decidedly different when starting with the linear profile compared to starting with a standard Adobe Raw profile. Starting with a linear profile insures that highlights are filled with detail and shadows don't contain exaggerated contrast. In other words, the image almost always looks better after clicking the "Auto" button, but, with a linear profile, everything is also more recoverable.

Using the "Auto" button strategy means that some small adjustments to Exposure and Contrast might be all that's needed in terms of basic adjustments. But I'd also recommend playing with the other sliders to get a sense for what is now possible with a linear profile. The responsiveness of the sliders is improved to the point that you might actually enjoy the RAW conversion process more. The sliders work better and the image responds better. In addition to exploring the adjustments in the Basic panel, be sure to also try making adjustments in the HSL/Color panel of Lightroom, which is the same as the Color Mixer section of Camera Raw. With the linear profile, the sliders in this section offer better control over color manipulation during the conversion process.

2) Go fully manual. The linear profile brings you closer to the data actually contained in the RAW file. The Adobe Raw profiles and the "Auto" button are engineered solutions to try and create a reasonably good starting point for editing the RAW file. The linear profile allows the photographer to take a step back and work more directly with the image's unprocessed data. Working with just the linear profile, the photographer is able to exercise maximum control over the RAW file conversion. It might take more work than using "Auto," but it might also be more reflective of the photographer's creative intent.

If you opt for using the "manual" strategy, Exposure, Contrast, Highlights and Shadows will definitely need adjustment to restore the image from the darker, flatter presentation that results when switching to the linear profile. Whites and Blacks usually need small adjustments also. Vibrance and Saturation should also be tested to see if these sliders help the color. Usually +15 to +30 Vibrance is necessary and up to +5 Saturation. Finally, open the Color Mixer panel (HSL/Color panel in Lightroom) and see what it can do. Hue, Saturation, and Luminance of the various colors respond very nicely with the linear profile. Even though more adjustments may be necessary when "manual" processing with a linear profile, it's actually easier to get the image to its final state. There's wider latitude in what the sliders can do and the image responds more predictably to slider movements.

There are some benefits to using linear regardless of whether the "Auto" or the "manual" strategy is employed:

1) Expose-to-the-right has greater potential. Because applying the linear profile almost always darkens the image to some degree, a slight over-exposure for the original capture may actually work quite well as long as you're not clipping the highlights by doing so.

2) More flexibility with Basic adjustments. The sliders in the "Basic" section will have more room for adjusting the image before reaching their maximum left and right positions.

3) The adjustments may look better because moving the sliders produces more predictable results. The linear profile minimizes the exaggerated adjustments that sometimes happen when using Adobe Raw profiles, which compress or expand certain tonal ranges. One linear profile user noted that the sliders feel "better calibrated" when working with a linear profile. Basically, this is saying that slider movements produce more predictable and natural results when filtered through the linear profile.

4) Better shadows and highlights. This is one area where the linear profile seems to shine. Color and detail in the shadow and highlight areas are easier to recover than with the Adobe Raw profiles, and contrast is easier to adjust.

5) Potentially more pleasing RAW conversions. The linear profile lets you control everything, but it also lets you decide how involved you'll be in creating the final RAW file conversion. Using the "Auto" strategy will simplify the process and using the manual process will provide maximum control over the RAW data.

NOTE: If the linear profile is used regularly, consider setting it as the default profile or as a preset that can be quickly applied. Another option is to click the star next to the profile's name in the "Profiles" submenu to give it a place at the top of the menu in the "Favorites" list. A favorite profile will also be present in the drop-down list of available profiles. I personally prefer seeing my images with the tone curve of one of the Adobe Raw profiles to help make an initial assessment of the image before switching to the linear profile. As such, I prefer having my linear profile as a "Favorite" in my "Profile" menu.

Removing the Linear Profile from Your Computer

To remove the linear profile completely from your computer, go to the "Imported" folder at the end of the following path:

Windows:

C:\Users\<your user name>
\AppData\Roaming\Adobe\CameraRaw\CameraProfiles\Imported

Mac:

USER Library/Application Support/Adobe/CameraRaw/CameraProfiles/Imported

NOTE: To find the USER Library on Mac, open Finder, hold down the "option" key, click the "Go" menu, and choose "Library" from the list.

Look for folders that begin with "Linear-" and remove them.