3.4 COLOR CORRECTION

After you have arranged and edited your video and audio clips to your sequence, you are ready for color correction. Color correction is a step in the process of film editing that can make a huge difference. It is the process of adjusting the hue (color and chroma) and luminance (brightness and exposure) of an image. The purpose is to correct videos that are too dark or light, or eliminate a color cast in a clip. It can also be used to emphasize or de-emphasize a detail in a clip. Do not get this confused with Color Grading, which is the process of color editing that stylizes your video. Learn more about Color Grading in the 3.5 COLOR GRADING tutorial.

1. Workspace

In previous tutorials, the workspace for our Adobe Premiere Pro CC project has been set to “Editing”. For the purpose of color correcting, it is suggested to change your workspace to “Color Correction”. To do so, go to Window > Work Space > Color Correction.

You will find your Source Panel in the upper middle box of your screen. The Source Panel displays the clip that is selected in your Project Panel. For a before and after of your video, it is best to select the clip that you are correcting in your Project Panel by double clicking, and going to the same frame that you have selected in your Timeline. The Project Panel is located on the next tab to the right of the Source panel. You can also check the “Shot Split View” under most Color Correction Effects settings.

It is also suggested to display your scopes in the Reference Panel, located on the bottom right corner of your screen. To do so, select the Settings icon (represented by a wrench) located at the bottom right corner of the Reference panel, and select All Scopes, you will learn what each scope displays later in this tutorial. Your monitor should now look like this.
2. Color Correction Effects

You can find all the Color Correction effects by going to the Effects tab, located a few tabs away from the Project Panel in the bottom left corner of your workspace. Go to Video Effects> Color Correction, and you will find a list of effects that you can use to make changes to your image.

You can apply these effects like you would apply any other effect. To learn how to do that, go to the 2.8 VIDEO AND AUDIO EFFECTS tutorial. Play with these effects to get a better grasp of what each do.

To apply these effects to multiple clips, you can nest the sequence of clips. To learn how to do that, go to 3.3 NESTING.

For the purpose of this tutorial, we will learn how to use the “Fast Color Corrector” which encompasses all the color correction effects into one effect. For more control over each aspect, the name of the alternative effect will be provided.

Drag the “Fast Color Correction” from your Effects Panel to the clip you are editing in your timeline. View the effect settings from your Effects Control Panel.
3. Luminance

Luminance refers to your brightness and contrast, and your mids, highlights, and shadows. The YC Waveform displays this information in a scope. It is the upper left scope if you are on All Scopes for your Reference Panel. If you wish to only see the YC Waveform, go to Reference Settings > YC Waveform.

The Waveform monitor is a representation of your image from left to right. You can uncheck “Setup (7.5 IRE)” and “Chroma”.

Brightness
The lower the waves are, the darker the image, and the higher it is, the lighter. Over 100 is overexposed, and under 0 is underexposed. Over or underexposing loses details of your image. Try to keep waves within a range of 0 and 100.

Contrast
The closer your brights and darks are together, the “flatter” your image, which means your image has a low contrast. The more spread out they are, the greater your contrast.

Brightness & Contrast Effect
Your goal is to correct your image so that it has the correct level of exposure, and so that it doesn’t look “flat”. In order to do so, you will use the Brightness & Contrast Effect from your Effects Panel on the second tab of the right side of your monitor.

In the Fast Color Correction effect, you will see two bars with “Input Levels” and “Output Level”. The left end of the bar represent the shadows, the middle represents the mids, and the left end of the bar represent the highlights.

The Input Level bar allows you to add the effect, while the Output Level bar allows you to remove the effect.
In the **Input Level** bar, drag the shadows towards the middle to make the shadows darker, or drag the highlights to middle to make the highlights brighter. Drag the mids to the left to make it darker, and right to make it brighter.

In the **Output Level bar**, dragging the shadows toward the middle makes the shadows lighter, while dragging the highlights toward the middle makes the highlights darker. Drag the mids left to make them brighter, and drag right to make them darker.

You can also adjust them more precisely by adjusting the numbers under the bars.

Use your eyes in a calibrated monitor, and your waveforms to make sure the exposure is right. Make sure your waves are slightly over 0 and under 100.

You can also adjust luminance by applying the Brightness & Contrast effect found in **Effects > Video Effects > Color Correction > Brightness & Contrast**, or by using the **Luma Corrector** or **Luma Curve** effects found under Color Correction in the Effects tab.

### 4. Remove Color Cast

Color Cast is a common problem in many shots that is the result of forgetting to white balance your shot. White balance tells your camera what in your image is white, so that the colors are as accurate as possible. To correct a color cast, go to Fast Color Correction in your Effects Control. Over the Color Wheel, you will see “White Balance” with a white box and an eyedropper across from it. Click on the eyedropper, then select a point in your image that is most white. The program will then automatically adjust your image. To make further adjustments, you can use the Color Wheel to remove the color cast. If your image is blue-ish, you can drag the center point of the Color Wheel the opposite direction of blue (orange) and it will remove the blue cast.
5. **Saturation and Color Balance**

Saturation and Color Balance is represented by the Vectorscope, which can be displayed by going to Reference Settings > Vectorscope.

The boxes closest to the center show saturation legal limits for standard definition or DV videos, and the outer boxes show HD saturation legal limits.

Color Balance refers to what colors exist in the image. Saturation refers to how much color exists in the image.

The letters in the vectorscope refer to the color. R = red, B = Blue, G = Green, YL = Yellow, and MG = Magenta, and Cy = Cyan. You may notice that these colors are represented in the same area on the color wheel in the Fast Color Correction Effect.

Using your vectorscope, you can see what most of your colors in your image are, and how much of it is there. From our example, there seems to be a lot of green in the video, and a little blue. This is expected since it is a shot of a walk in the park.

Use the Saturation Bar in your Effects Control Panel to increase or decrease the saturation. Increasing the saturation adds color to the photo, while decreasing removes color. You can either click on the blue saturation number and drag it left or right, or drop down the saturation bar and pull the playhead left or right.
You will notice that at 200 saturation, your colors look almost neon, while at 0 saturation, your image is black & white.

If your image has too much of one color, you can compensate by adding the opposite color in the wheel. For example, remove blue by adding orange.

For further adjustments to Color Balance and Saturation, use the Three-way Color Corrector effect located under Color Correction in the Effects tab. For more precise color correction, see the RGB Color Corrector, RGB Curves, or Color Balance effects.

6. **Match Shots**

For shoots where you have multiple shots in the same settings, that look different because of different cameras or lenses, you will want to match shots. To match a shot to a color corrected shot, double click the color corrected one so that it is displayed in the Source monitor. Then use the Program monitor to display the uncorrected shot. Compare the scopes of the second shot to the first shot, while looking at the preview as well to get the shots to look as close as possible.