Premiere Pro CC Notes

Part 4: Color Correction

1. The Color Correction Process

No matter which tools you use, the color correction process should follow the same steps:

A. Correct Individual Shots

- a. If possible, start correcting a scene by correcting the master shot, or the shot that contains as many of the color details of the other shots in the scene as possible, rather than an isolated close-up.
- b. Look at the shot and ask the following questions:
 - What details in the shot should be black?
 - What details in the shot should be white?
 - Is there enough contrast in the shot? Too much contrast?
 - Is the shot bright enough overall? Too bright?
 - How do the colors look? Is there an overall color cast?
 - Are the colors saturated enough? Too saturated?
- c. Use Video Scopes to get objective answers to the questions above, and to help you make your corrections.
- d. Correct the shot by adjusting (in this order)
 - black level
 - white level
 - midtones
 - the above three together set brightness and contrast
 - color hue
 - color saturation

B. Establish shot-to-shot consistency

If brightness, contrast, and color vary from shot to shot in the scene, it can make the cuts seem more jarring (which is bad if you're trying for continuity). Once you have adjusted the master shot, correct the rest of the shots in the scene to match as closely as possible. This may mean that scene consistency is more important than the optimum look of each individual shot.

C. Add styles or looks

If you want a more stylized look for a scene you can add it to several shots at once.

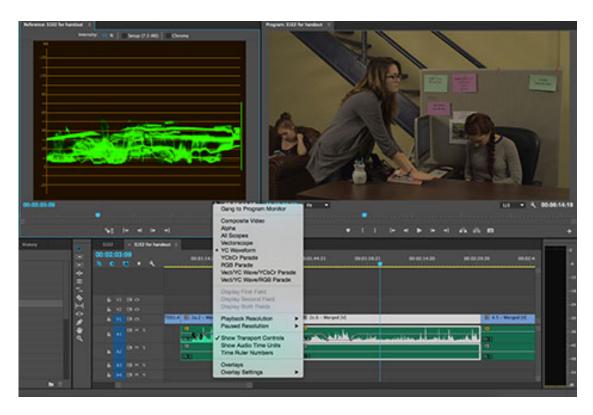
D. Render the results

If you have done a lot of color correction, Premiere may no longer be able to play the shots in real time.

2. Video scopes

- A. Window>Reference Monitor
 - a. the Reference Monitor appears as a floating panel
 - b. drag it BY ITS TAB to the side of the Project Pane to position it between the Source Pane and the Project Pane
 - c. adjust the sizes of your panes so that you can see the sequence frame and the Reference Monitor easily
 - d. Click the Settings (wrench) button lower-right of Reference Monitor
 - make sure "Gang to Program Monitor" is checked
 - select "YC Waveform"
 - e. The Reference Monitor now shows the Waveform monitor, and it will reflect changes in the frame in the Program Monitor
 - f. Above the Waveform monitor:
 - uncheck "Chroma" so you only see brightness info
 - uncheck "Setup (7.5 IRE)" unless you are working in SD video

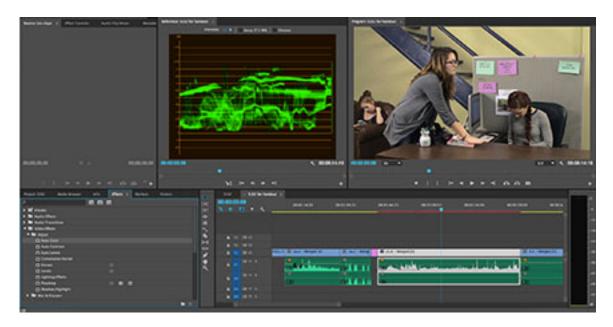
The Waveform Monitor shows brightness values in the image on a scale from 0 (black) to 100 (white). The traces correspond to the image – if there is a bright object on the left side of the screen, then the brightness values will be higher on the left of the waveform.



Workspace setup for using Video Scopes, including Settings menu for the Reference Window. Note that the shot has been (intentionally) shot with lower contrast than desired. The Waveform Monitor shows that blacks hover slightly above the 0 level and whites are very far below the 100 level.

3. The Auto-color Tool

- in the Effects Panel (in Project Pane in default workspace)
 - Video Effects Bin>Adjust>Auto Color
- drag from Bin onto selected clip to adjust



After Auto Color applied: note the difference in image and waveform from "before" picture above. The blacks now touch the 0 level. The whites are still not at the 100 level, but the image still looks too bright overall – the dangers of using anything "auto."

4. Fast Color Corrector

in the Effects Panel (in Project Pane in default workspace)

- Video Effects Bin>Color Correction>Fast Color Corrector
- a. Adjust black level
 - slide black triangle under "Input Levels" slider OR
 - adjust "Input Black Level" parameter
 - change in one reflects in the other
 - try to get the lowest (black) levels in the Waveform Monitor to rest on the "0" line but don't crush the black level by going too far

b. Adjust white level

- slide white triangle under "Input Levels" slider OR
- adjust "Input White Level" parameter
 - change in one reflects in the other
- try to get the highest (white) levels in the Waveform Monitor to approach (but not touch) the "100" line but don't blow out highlights use your eyes too.

c. Adjust overall brightness

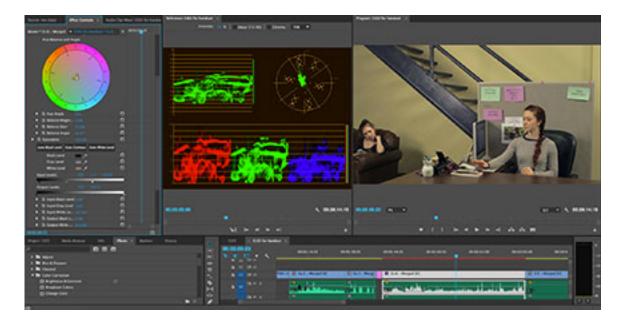
- slide gray triangle under "Input Levels" slider OR
- adjust "Input Gray Level" parameter
 - change in one reflects in the other
- this is all about your eyes make the image look as bright or dark as you want; pay special attention to faces and skin tone

d. Adjust Color Hue

- change Video Scopes to "RGB Parade" to see if red, green, and blue waveforms line up if there's a big difference there is a color cast
- drag the "puck" in the center of the Hue Wheel toward the color you want to add and away from the color you want to subtract
- the puck affects midtones mostly
- the bar attached to the puck adds an overall tint

e. Adjust Color Saturation

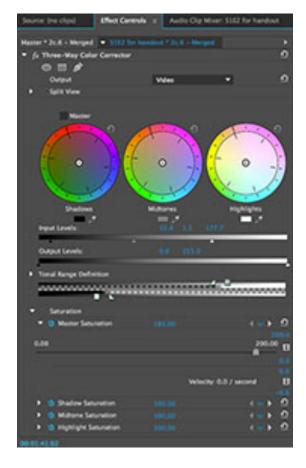
- change "Saturation" parameter
- switch Video Scopes to Vectorscope
 - the further the traces are from the center, the more saturation
- be careful not to oversaturate



Clip with Fast Color Corrector applied and Video Scopes showing YC Waveform, Vectorscope, and RGB Parade.

- 5. Three-way Color Corrector
- in the Effects Panel (in Project Pane in default workspace)
- Video Effects Bin>Color Correction>Three-Way Color Corrector

The Three-Way Color Corrector works almost exactly like the Fast Color Corrector, but gives you more control over color changes by giving you three hue controls. This allows you to change the color of shadows, midtones, and highlights separately. Once you have mastered the Fast Color Corrector, you will probably find yourself using the Three-Way Color Corrector most of the time.



6. Color-correcting Master Clips

- A. Double-click the Master clip to open it in the Source Pane
- B. Drag the desired color-correction effect into the Effect Controls Panel
 - if you tear off the Effects Control Panel and move it out of the Source Pane, you can see your effect controls and the image at the same time
- C. Make adjustments as above
- D. Remember that any adjustments to the Master Clip will be reflected in all instances of that clip, EVEN THOSE ALREADY IN A SEQUENCE.

7. Animating Color-correction Effects

- A. Select the parameter to be animated, and click on the stopwatch icon next to it
- B. Extend the Effect Controls Panel so that you can see the keyframe area to the right
- C. Move the play head to the beginning of the clip
- D. Set the parameter to the desired value and click the diamond to the right to create a keyframe
- E. Move to the point in the clip where you want the value to begin changing (if you don't want it to change from the beginning of the clip) and click the diamond to create a new keyframe
- F. Move to the point in the clip where you want the value to stop changing. Adjust the parameter value to the new desired value. Premiere will automatically create a keyframe at that point.
 - G. Use the triangles next to the keyframe diamond to move between keyframes



Master Saturation parameter in the Three-Way Color Corrector. The blue diamond indicates that the playhead is sitting on a keyframe. The triangles next to it allow you to navigate to the previous and next keyframe. The back-arrow allows you to reset the parameter to its default value and delete all keyframes. The graph at the right shows where keyframes are located (the white diamonds at top) and how the parameter value changes (from 183% to 0%). The effect on the image is that the color image turns to black-and-white as the graph falls.

- 8. Copying Color Correction to other clips
 - A. Select the clip in the timeline that has been color-corrected
 - B. Edit>Copy (CMD-C)
 - C. Select the clip onto which you want to copy the effect
 - D. Right-click>Paste Attributes
 - E. In the Paste Attributes menu, select which effects/attributes you want to copy
 - F. You can then adjust the effect on the new clip if necessary



9. Rendering Effects

- A. Most of the time, the clips in the timeline will have a yellow line above them, indicating that they can be played back in real time.
- B. Color Corrected Clips will have a red line above them, indicating that they cannot be played back in real time. To be able to do so, you will have to render them. Either:
 - a. Select the clip or several clips to be rendered
 - Sequence>Render Selection

OR

- b. Create In and Out points in the sequence
 - Sequence>Render Effects In to Out to render every effect that needs to be rendered between those points

NOTE: Sequence>Render In to Out will not only render effects, but will also render all the clips with yellow indicators as well. This is almost never necessary, since these clips already play back in real time.

- c. Rendering can take a lot of time and drive space
- d. When you export, Premiere automatically renders everything manual renders are only necessary for smooth playback