

Apple Pro Training Series: Final Cut Pro X 10.1: Professional Post-Production

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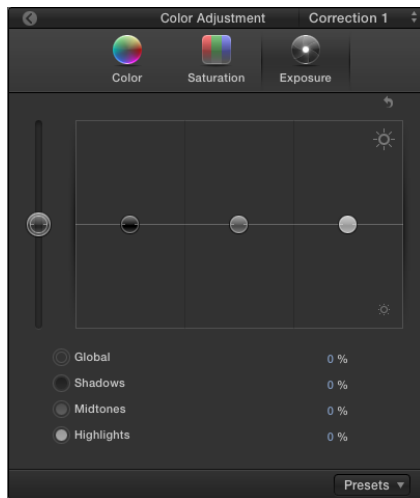
First print run

February 17, 2014: Updates and Errata

Lesson 7

Exercise 7.4.1: Neutralizing a Clip, page 378, Step 3: An incorrect image accompanies the text. The text and image should appear as follows:

- 7 Click the Exposure button to open the Exposure pane.



Exercise 7.4.1: Neutralizing a Clip, page 379, Steps 8 and 9: Incorrect images accompany the text. The text and images should appear as follows:

- 8 With the playhead cued to a point where the helicopter is still on the ground, drag down the Shadows puck as you watch the Waveform's lowest traces drop towards 0.



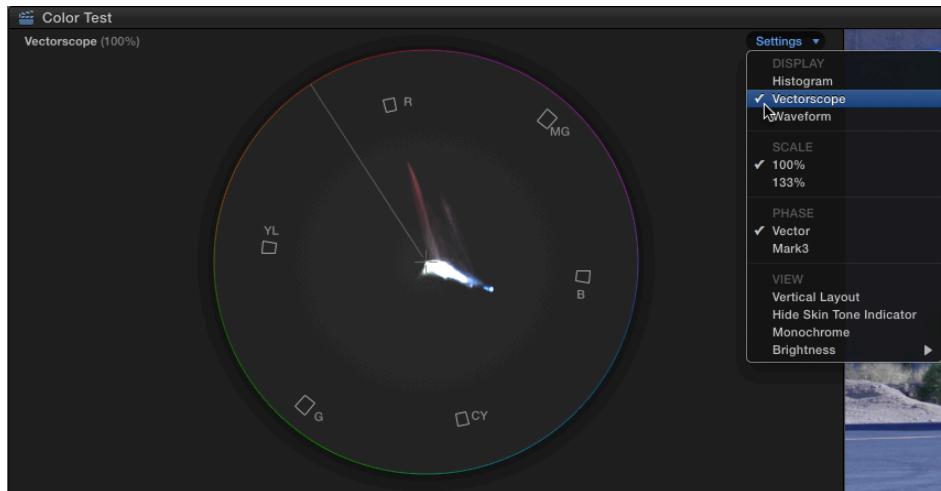
The Blue traces are still above 0. Glancing at the Viewer, the black of the helicopter has a blue tint to it. That's what the scope is telling you. Adjusting the Exposure controls is not removing the color cast, it's just making the pixels darker (or brighter). That makes Exposure controls the best to set contrast. Let's set this image up for contrast with 0 brightness for the black pixels of the helicopter.

- 9 In the Exposure pane, drag the Shadows puck down (or back up) to -2%.
- NOTE** ▶ The puck values are displayed beneath the pucks in the table.



Exercise 7.4.1: Neutralizing a Clip, page 381, Step 11: An incorrect image accompanies the text. The text and image should appear as follows:

- 11 In the Settings pop-up menu, choose Vectorscope.



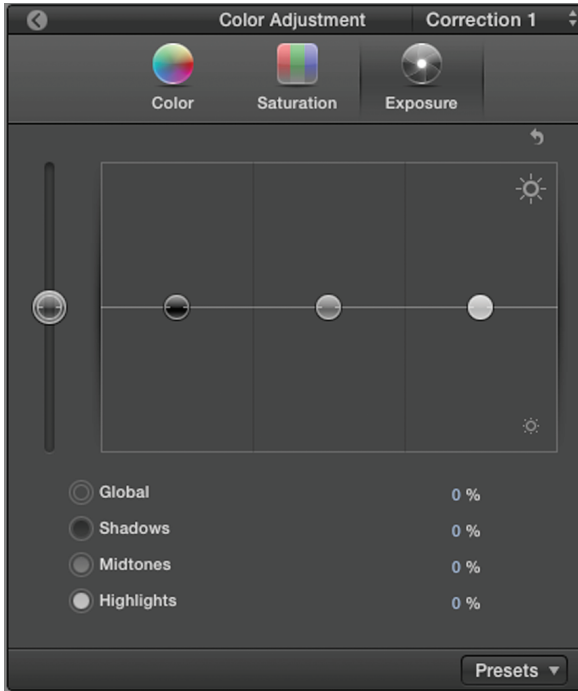
For your convenience, corrected versions of pages 378, 379, and 381 of the print book follow this page for your reference.

Note: You can determine the print run of your physical book by checking the copyright page. Below the ISBNs near the bottom of the page, there is a line of numbers as follows on the first print run:

9 8 7 6 5 4 3 2 1

The last number on the right of the line indicates the print run number. For example, 9 8 7 6 5 4 3 2 would indicate the second print run. Whenever possible, minor updates and corrections are made to the text between print runs. eBook formats may already reflect corrected information.

- 7 Click the Exposure button to open the Exposure pane.



The Exposure pane controls only the **luminance** of the image's pixels. The Exposure pane includes controls to adjust the grayscale luminance of each pixel according to four parameters.

Exposure Controls of Pixel Grayscale Luminance

Control	0–100	0–70	30–70	30–100
Global	X			
Shadows		X		
Midtones			X	
Highlights				X

All the controls, called *pucks*, overlap the grayscale values of other pucks. This results in smooth blending across the image (unless extreme adjustments are set). This broad coverage also means adjusting one puck may require the tweaking of another puck to remove the correction from a different part of the image grayscale-wise.

For example, the Global puck alters the luminance of all pixels in the image. If you need to raise the brightness of a generally dark image, you would drag up the Global puck. But raising the Global control may send the brightest pixels, the highlights, over 100. You would fix that problem by dragging down the Highlights puck to reduce only the brightest pixels below 100 on the Waveform scope.

Looking at the Waveform's RGB Parade, you'll notice that the lowest **traces** don't extend down to 0. The Red and Green are closer than the Blue. When a black object is onscreen, such as the helicopter, all three channels should have pixels down to 0 on the Waveform.

- 8 With the playhead cued to a point where the helicopter is still on the ground, drag down the Shadows puck as you watch the Waveform's lowest traces drop towards 0.



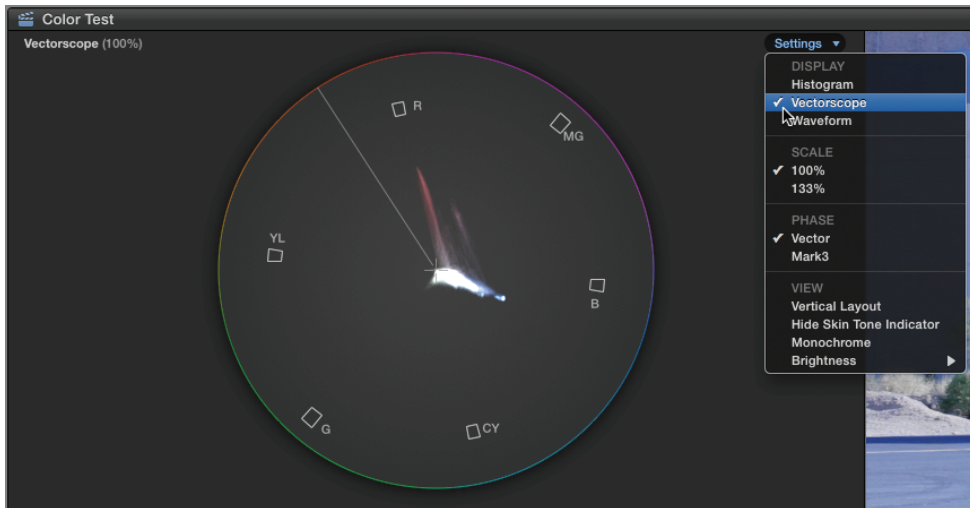
The Blue traces are still above 0. Glancing at the Viewer, the black of the helicopter has a blue tint to it. That's what the scope is telling you. Adjusting the Exposure controls is not removing the color cast, it's just making the pixels darker (or brighter). That makes Exposure controls the best to set contrast. Let's set this image up for contrast with 0 brightness for the black pixels of the helicopter.

- 9 In the Exposure pane, drag the Shadows puck down (or back up) to -2%.

NOTE ► The puck values are displayed beneath the pucks in the table.

<input type="radio"/> Global	0 %
<input type="radio"/> Shadows	-2 %
<input type="radio"/> Midtones	0 %
<input type="radio"/> Highlights	0 %

- 11 In the Settings pop-up menu, choose Vectorscope.



When an image does not have a color cast, the traces typically pass through the center point of the Vectorscope, which represents white. Video is an additive color system. Add all the video colors together at their maximum chroma values and you get white, whereas the absence of all chroma values results in black.

The Vectorscope represents the hues of color in the 360-degree scope display. A hue's saturation is represented by a trace for that color extending from the center to a target point. The farther the target point is from the center, the more saturated the hue.

Why Is the Color Board a Board and Not a Wheel?

The Color Board represents a color wheel, much like a 2D world map represents a globe. The Color Board presents the 360 degrees of the wheel's hues as left to right and the saturation of a hue as upward from the center. So, without having to know color theory, one can look at the Color Board and correctly guess that dragging a puck upward in the +Blue area would add blue, whereas dragging downward in the -Blue area would subtract blue from the image. That is, Final Cut Pro will add yellow (the complementary hue to blue) to reduce a blue cast in the image.