

Color Correction *Class Notes*

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CERTIFIED INSTRUCTOR
Premiere®

Color Correction

You need:

A properly calibrated broadcast-quality monitor

To see the color appropriately, otherwise you might not get the colors right.

A Vectorscope and a waveform monitor

You need to monitor the signals during the session

Waveform Monitor:

Displays the signal using a scale broken down in units known as IRE (Institute of Radio Engineers). One IRE is equal to 1/140 of the peak to peak voltage in a composite video signal

Vectorscope

Displays the hue and saturation of the signal. The center represents black.

Parade display

Shows the RGB channels individually

Histogram

Shows the image's dynamic range and contrast properties – does not identify colors, but the amount of light that they reflect

Adequate room lighting

So that the room light does not interfere with the way your eyes see the colors (fluorescent tube lighting will do the trick)

Legal colors:

Refers to the maximum signal amplitude that can be transmitted. It is imperative that your colors remain 'legal' for broadcast

Color-correcting Tools

Brightness and contrast

Overall adjustment of brightness and contrast – great starting point

Color Balance

Adjust the amount of RGB in the image – great for primary color correcting

Channel Mixer

Individual channel controls for adjusting the colors – great for special effects!

Curves

The upper-right part of the display represents highlights, the middle represents midtones and the bottom – left represents shadows

You can adjust each channel (including alpha) individually

Levels

Adjust contrast and brightness by using the histogram display – you can also control each channel individually

Change color

To change one color into another, using the eyedropper

Color Balance (HLS)

Controls the image Hue, Saturation, and luminance

Hue: Adjusts the chroma phase

Saturation: Adjusts the level of chroma

Luminance (gain): Controls the level of luminance (100 IRE for NTSC)

Gamma / Pedestal / Gain

Provides control for overall black, along with controls for RGB values for pedestal

Lift or pedestal control – adjusts the overall black information in the picture (7.5 IRE for NTSC)

Tint

To specify a specific color for the whites and for the blacks, giving the image an overall ‘tint’

Broadcast colors

To ‘legalize’ the colors of the image

Black and White

To desaturate the image

Color Pass

To keep only one color, while desaturating the rest

Every session will require a different type of color correction, and every person doing the color correcting will do it differently than the next person. It is important to note that if the blacks and the whites are correct, all the other colors are subjective, and depending on the viewer will look more or less accurate.

Sometimes just a simple correction will save the day. Sometimes the flesh tones are a little bit off, and the only thing that we need to do is to change the Hue a little and that will fix it.

Always do primary color correction first, and then proceed to the secondary color correction stage (if needed)

Primary color correction:

Corrects the image as a whole

To do primary color correction you could follow this sequence:

1st adjust the lift

2nd Adjust the color of the lift

This is to ensure neutral blacks

3rd adjust the gain and then the color balance of the gain to insure neutral whites

4th adjust the Gamma controls

Now you can use the RGB color balance control for the desired look

So remember Blacks – whites and then Gamma

Secondary color correction

Adjust only some colors or only some parts of the image, based on chroma, luma or even a mask.

Tools for secondary color correction”

Levels (knee)

When you raise the gain of a dark image, and then adjust the gamma for the midtones, you may be left with highlights that will be clipped out of range (exceeding 100 IRE), you can use the knee control to fix this

Area Isolation

Isolate a portion of the image with a mask to do the proper color correction in here. In Premiere we can use an image or a track matte transparency to achieve this isolation.

Remember that not two people with color correct the same signal in the same fashion. What is most important is that the blacks and whites are neutral. Look at your scopes, always check your signals and keep legal!

Luisa Winters has been in the professional videography industry for 15 years. Her Premiere Pro Training DVDs can be found on her website www.videotrainers.com

Luisa Winters has been in the professional videography industry for 15 years. A multiple award winning videographer / editor, Luisa believes videographers should attend her workshops because they will add editing techniques to their repertoire that they likely have never thought of before. She will give tips to make editing much more productive, faster, and far more inventive.

An accomplished videographer, editor, 3D animator and graphics designer, her 3D animations of the Naval Academy logo have been seen on PBS as well as in private video productions. She has created and edited scores of video projects for dozens of corporate, government, and educational, commercial and private clients. Since 1999, Luisa has conducted training sessions and master classes for Adobe Premiere Pro, which have helped thousands of videographers learn and master Adobe Premiere and other Adobe software programs.

Luisa has been a featured instructor at training workshops all over the US, Central and South America- She has given workshops in the following cities:

- Baltimore, MD
- Annapolis, MD
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- Boston, MA
- San Francisco, CA
- Sacramento, CA
- San Diego, CA
- Dulles, VA
- Fairfax, VA
- Orlando, FL
- Chicago, IL
- New York, NY
- Las Vegas, NV
- Los Angeles, CA
- San Juan, Puerto Rico
- Santo Domingo, Dominican Republic
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Luisa is a Johns Hopkins University Graduate and is fluent in both English and Spanish.

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