Lesson 11

Designing Creative Looks

Now that you're familiar with the primary and secondary color grading tools, you know the fundamental tools used to achieve creative looks. The same tools you used for primary and secondary grades are used for the final phase of color grading: creative looks.

The colors within a scene can influence how your audience should feel. Cold tones denote a brooding character, and warm colors tend to signify that everything is going well.

You can also use color to quickly communicate place and time by creating distinct looks for each location and time. Finally, your grading can stylize your project and give it a unique, memorable look.

In this lesson, you'll learn how to employ these practices as you create, save, and compare three distinct looks.

Time

This lesson takes approximately 30 minutes to complete.

Goals

Setting Up the Project

We will again use the Wyoming Cattle Rancher project but a new timeline. We'll also change the project, so we no longer use Resolve color management (RCM). This will give you a chance to learn how to use Lookup tables (LUTs) for normalization. It's a bit less accurate and more cumbersome than using a color management system (I'm really selling this, aren't I?), but it is the more traditional route, so it may come in handy to understand it.

1. Open DaVinci Resolve 17 and from the Project Manager window, open the Wyoming Cattle Rancher project.
2. Starting from the edit page, select the Timelines bin and double-click the Creative Looks timeline.

This is a simple timeline that we'll use to create our unique looks. First, we need to disable color management.

3. Choose File > Project Settings and select the Color Management category.
4. In the Color Science drop-down menu, choose DaVinci YRGB to disable color management.
5. Click Save to close the settings.

You have now disabled color management, and the clips in the timeline should look relatively dull. These are log clips, and as we learned in Lesson 8, log clips always appear somewhat low saturated and low contrast when viewed on an HD or computer display. You'll restore some of the luster of these clips by applying Lookup tables.

Using Lookup Tables

A Lookup table, or LUT for short, is just a plot graph or a series of columns and rows like a spreadsheet that takes the input color, modifies it in some way, and produces an output color. You can visualize it as a custom curve editor. LUTs often come in two forms. A 1D LUT handles a single component, like luminance. 3D LUTs take into account three components—most commonly, red, green, and blue—when producing the output color. These color mappings are saved as simple documents that can be read by different applications, monitors, and cameras.

At first glance, LUTs appear very similar to color correction presets in that they affect the color and luminance of your image with a click of a button. However, LUTs have many uses: they are most often used on-set to give the production crew an idea of what each shot will look like once graded. LUTs can also assist with color space conversions and monitor calibration. They can also sometimes be used like filter effects for creating commonly used looks.

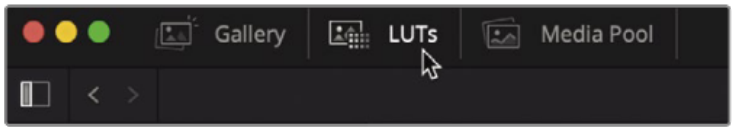
Applying a LUT

Lookup tables allow you to quickly recalibrate how your color pixel data is displayed, essentially providing another form of color management and/or color correction. Conveniently, DaVinci Resolve comes equipped with many different LUTs for converting one color space to another, and you can easily apply these LUTs from the color page.

1 Click the color page button to switch to the color page.

2 Select clip 1 in the timeline.

3 In the user interface toolbar, click the LUTs button to show the LUTs browser.

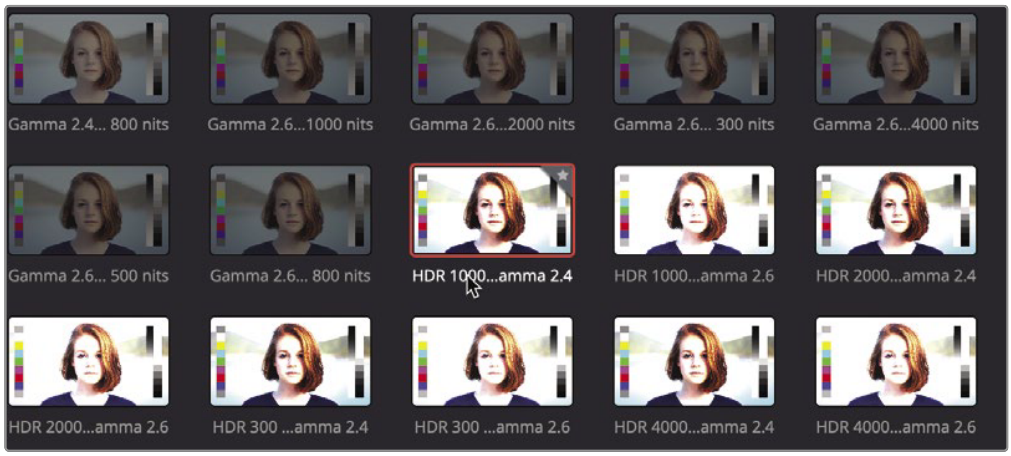


The LUTs browser is divided into different cameras and color space categories. When you're working with a specific camera and need to convert it to look appropriate for your display, you can apply one of the LUTs from your camera's category. We are using HDR clips, so we will choose from the HDR LUT category.

4 In the LUT browser, select the HDR ST2084 category.

This category is used for high dynamic range content and will allow us to remap these clips for our display. You can preview any LUT by moving your mouse pointer back and forth over any LUT thumbnail in the browser.

5 In the browser, locate the HDR 1000 nits to Gamma 2.4 and move your mouse pointer back and forth over the thumbnail to preview the LUT in the viewer.



This clip appears more natural because the LUT remaps the gamma to better fit within the limits of our display. You can apply this LUT to a node, and it will act just like any correction you created using the custom curve or primary controls.

6 Right-click the LUT thumbnail and choose Apply LUT to Current Node.

The LUT is applied to node 01, but just like using color management, LUTs do not know where to set your shadows and highlights. The LUT doesn't know if your white balance is correct. You still need to balance the shot after applying a LUT.

7 In the lower left of the Resolve window, display the Parade scope.

8 Using the Primary controls, adjust the black point, white point, and color of each region to properly balance this shot.

9 Right-click node 01, and choose Node Label, and then label this node BALANCE.

> **TIP** LUTs change the appearance of your clip within a single node. They do not have node structures and do not employ secondary grading practices like qualifiers or windows.

A node with a LUT on it is just like any other node. You can make changes to that node or add nodes after it to make changes.

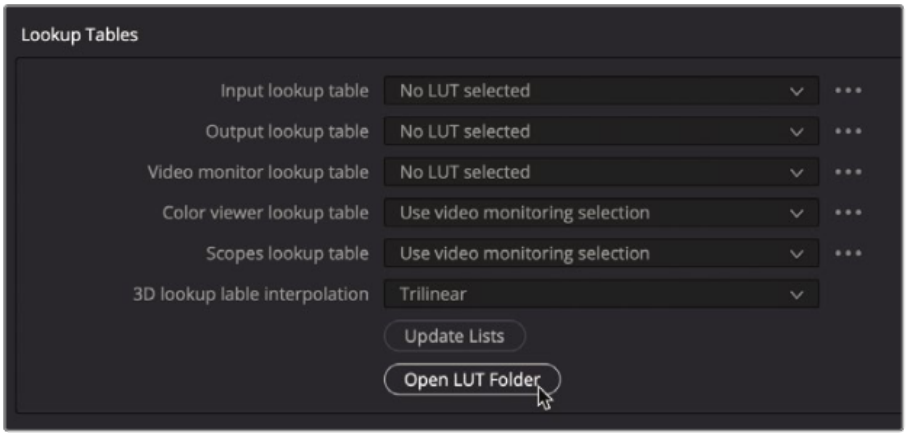
Loading LUTs

DaVinci Resolve comes with a variety of LUTs that you can start using right away. However, one of the strengths of DaVinci Resolve and its LUT workflow is the ability to create custom LUTs and share them with other colorists or production crew members.

When given a LUT, you must install it in DaVinci Resolve so it appears in the LUT browser like Resolve's bundled LUTs.

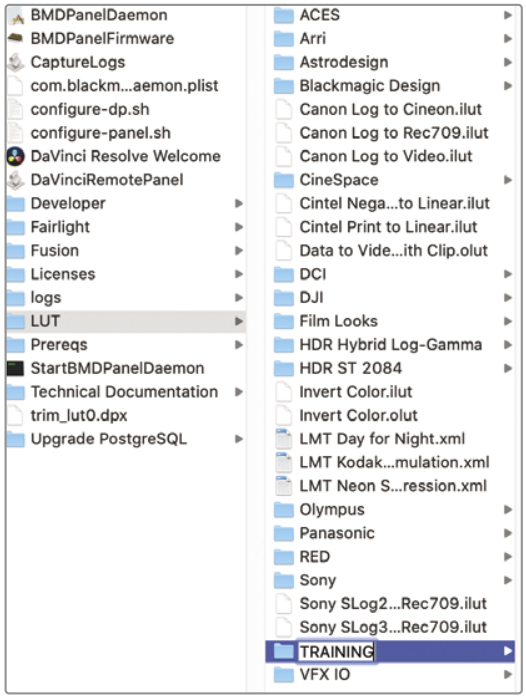
1 Choose File > Project Settings, and in the Project Settings, click the Color Management category.

2 Click the Open LUT Folder button.



A window opens that contains a list of LUTs and folders of LUT categories.

3 In the window, create a new folder called TRAINING.

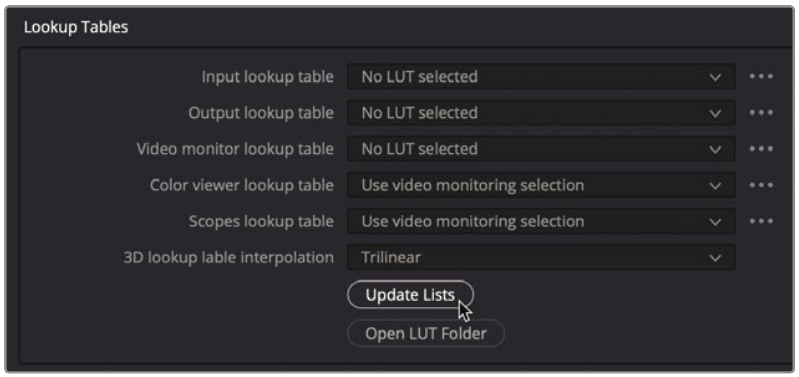


4 Open a second Finder (macOS) or Explorer (Windows) window and navigate to R17 Beginners Guide Lessons > Lesson 11.

5 From the Lesson 11 folder, drag the Lesson 11 LUT Day For Night.cube file into the TRAINING folder.

> **TIP** DaVinci Resolve creates and uses LUTs in the DaVinci Resolve .cube format. This is an open LUT format and can be reviewed technically in a simple text editor.

6 Back in DaVinci Resolve's color management Project Settings window, click Update Lists.



7 In the Project Settings window, click Save.

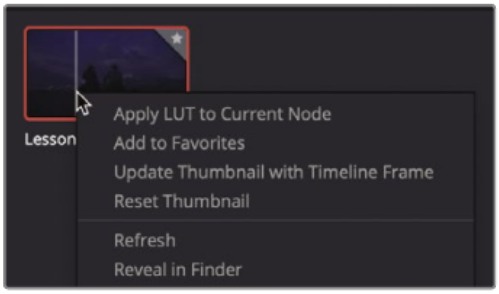
You now have a LUT loaded into DaVinci Resolve, and you will be able to access it in the LUT browser.

> **TIP** Be cautious when downloading LUTs from third-party sources. Their implementation could result in your content looking very different from the originally intended adjustments. Since postproduction companies can generate LUTs precisely calibrated to their environments, they are popular for in-house use. However, using LUTs taken out of those controlled environments can cause results to vary widely.

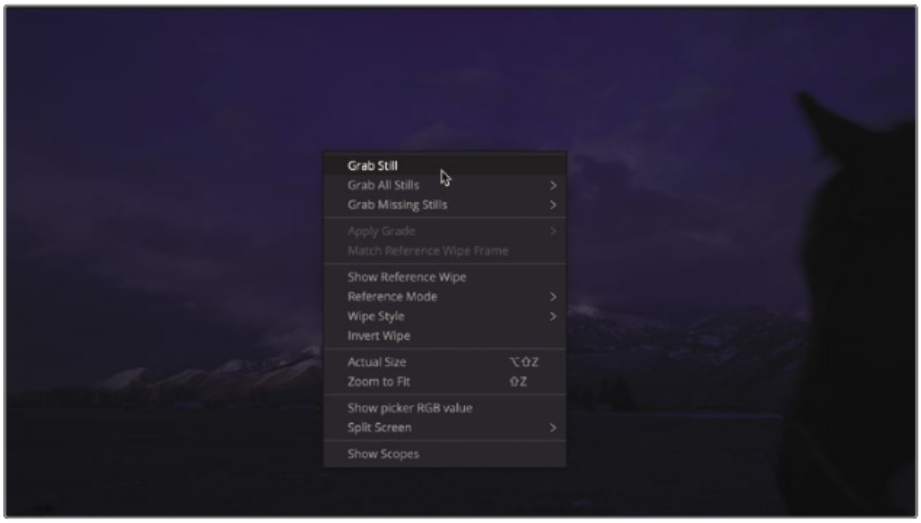
8 Right-click node 01 and choose Add Node > Add Serial node or press Option-S (macOS) or Alt-S (Windows).

9 Label the new node DAY FOR NIGHT.

10 In the LUT browser, locate the TRAINING folder, right-click the LUT DAY FOR NIGHT thumbnail, and then choose Apply LUT to Current Node.



11 Right-click in the viewer and choose Grab Still to save it to the gallery.



12 In the upper-left of the Resolve window, click the Gallery button to display the gallery and the saved still.

You have now applied the custom LUT you installed and saved it, along with the BALANCE node, to the gallery for future use.

LUTs for monitoring

LUTs are commonly used for monitoring on set. They allow you to change how a video signal displays when content is captured on camera. When the signal is captured using a filmic nonlinear gamma curve, an HD monitor will display a very flat image with low contrast and saturation. If you apply a LUT to the display or camera view finder, it can convert the signal to appear as HD (Rec 709)—the contrast will become much more pronounced, and the colors more saturated. If your project has a specific look, you can even create a custom LUT, save it, and upload it onto a Blackmagic Design camera, where you can shoot the scene while seeing an approximation of how the final footage will look.

The applied in-camera monitoring LUTs will not alter the footage being captured. It will affect only how the image appears on the camera viewer. When the footage is transferred to DaVinci Resolve, it will still have full grading capacity.

Mixing a Black-and-White Shot

In the previous lesson, you saw that one of the adjustment controls was saturation. This simple setting sets the strength of your colors, allowing you to push them beyond their originally recorded values or to decrease them completely, thereby turning the image to black and white.

In the color page, you have several methods for transforming a color image to black and white. Setting your saturation adjustment control to 0 is the obvious way, but it happens to be the least flexible way.

In the RGB Mixer, you have the option to fine-tune the strength of the individual red, green, and blue channels even for a black-and-white image, which can produce stark and interesting results.

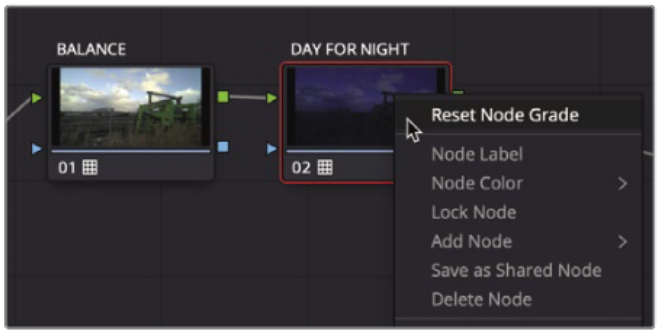
1 In the timeline, select the second clip.

Since this clip has not yet been balanced, you can use the still you saved as a starting point.

2 Right-click the DAY FOR NIGHT still and choose Apply Grade.

Both the BALANCE node and the DAY FOR NIGHT node are applied to the clip. You'll need only the first node, so you can reset the second one to remove the day-for-night grade.

3 Right-click over node 02 and choose Reset Node Grade.

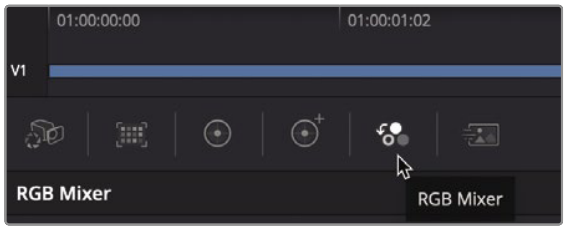


4 Label node 02 Black and White.

TIP To reset all the nodes, choose Color > Reset > All Grades and Nodes.

Now you can use the second node to create a black-and-white look.

5 In the toolbar, click the RGB Mixer button to open the RGB Mixer palette.



6 At the bottom of the palette, select the Monochrome checkbox.

Doing so will turn your image black and white. Many of the controls under the individual red, green, and blue output bars will be dimmed and unavailable. When an image is set to monochrome, you can control only the degree to which red, green, and blue channels contribute to the black-and-white mix.

7 In the RGB Mixer, on the blue output, drag the blue bar up to the top and then drag it down to the bottom.

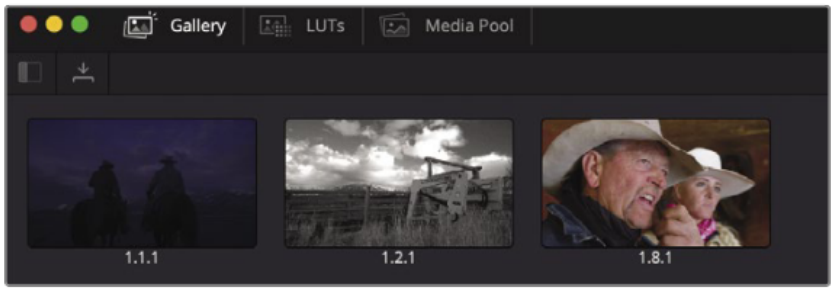
Notice that the areas with a higher amount of blue, like the sky, are the most affected as you drag.

You can repeat this step a few times while keeping your eye on the viewer to see the change.

8 Experiment by dragging the green and red output bars to see how they affect the image. Notice how strongly some elements are affected when they directly correspond to the channel color. By adjusting the green output, you can make the tractor loader darker since it was heavily green.

9 Set the red, green, and blue outputs to create a nice high-contrast look.

10 Right-click in the viewer and choose Grab Still to save it to the Gallery.



As you can see, there is no such thing as a single, definitive black-and-white version of your image. Even when the colors are completely desaturated, you can still control the prominence of individual RGB channels. This technique can result in some carefully-crafted, highly dynamic monochrome images.

Creating a Bleach Bypass

In this exercise, you'll create a bleach bypass look for the third clip in the timeline.

The bleach bypass process, sometimes called a *silver retention* or *ENR process*, is a low-saturation, high-contrast look. It stems from a film development process in which the bleaching stage was, well, bypassed. It can be seen in many television shows and films including *Reds*, *Saving Private Ryan*, and *Seven*.

1 While still on the second clip, select the node 01 BALANCE node and choose Edit > Copy or press Command-C (macOS) or Ctrl-C (Windows).

   You'll copy the BALANCED node from this second clip and paste it onto the third clip for a quick method of balancing our next shot.

2 Select the third clip in the timeline and choose Edit > Paste or press Command-V (macOS) or Ctrl-V (Windows).