DaVinci Resolve 12 Insights

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DAVINCI RESOLVE 12 FUNDAMENTALS
with Patrick Inhofer

Overview

For nearly a decade DaVinci Resolve has been the go-to tool for colorists working on Hollywood films, commercials and high end corporate communication. Well known for its powerful, intuitive and color precise tools, DaVinci Resolve has been used to color grade more projects than any other grading application.

Once only available to high-end facilities at the cost of a million dollars or more, DaVinci Resolve is now accessible to anyone with a Mac or PC that is looking for the highest quality color grading. Available in a free version (DaVinci Resolve) and a full version (DaVinci Resolve Studio) never before has "high end" color grading been as available to film makers, editors and visual effects artists.

In DaVinci Resolve 12 Insights, indie feature film and broadcast colorist Patrick Inhofer guides viewers through color grading a real-life documentary project using DaVinci Resolve 12. With emphasis placed on real world situations and real world workflow, viewers will quickly learn how to harness Resolve for their own projects without being overwhelmed with encyclopedic knowledge of this deep application.

Target Audience

Beginner and Intermediate colorists, editors, cinematographers, directors and their assistants.

Topics Covered

- Understand how to read and use vectorscopes and waveform monitors for color correction

- Developing a repeatable color correction workflow

- Getting clips, timelines and projects into Resolve

- Making contrast and color adjustments

- Making targeted secondary corrections with keys and shapes + creating looks

- Matching shots and rendering footage

- Apply all the above concepts and tools to a real-world Documentary

Course Organization

This course is split between three types of movies:

- **Interface training** - DaVinci Resolve workflows, buttons and tools for managing the entire color correction process

- **'In Action' Project-based Lessons** - Put the interface training to work by color correcting the bundled Tanzania documentary.

- **'Colorist Lingo'** - Learn the language of colorists as you progress through the training.

About Patrick Inhofer

Patrick Inhofer is a professional colorist and owner of Fini.tv, currently living and working in Orlando, Florida.

A 25+ year post veteran, Patrick brings his two decades of experience working at New York City post houses to low- and mid budget productions. He works on films, documentaries, television series, and corporate videos—and has been the colorist for notable directors such as Barry Levinson, Bruce Sinofsky, and Dorothy Lyman.

Patrick founded the color grading website TaoOfColor.com and publishes a free weekly color correction publication, The Tao Colorist Newsletter. In 2012 he cofounded MixingLight.com. He is currently writing a book, *The Color Correction Coach*, for Focal Press

Patrick was an adjunct professor at Hofstra University. He often presents color correction seminars at industry conferences, to User Groups. He occasionally leads small group multi-day seminars teaching DaVinci Resolve and the craft of color grading.

TABLE OF CONTENTS

Introduction

Chapter 1: What's New for Colorists in Resolve 12.0?

by default. What if you work with multiple Users or used the multi-User interface to organize your projects? How do you get back to that interface? That's what this movie is about.

7. **The New Graphical User Interface, In 4 Minutes** (4:27) **01_03**
This latest release of DaVinci Resolve sports a brand-new, completely revised User Interface. You'll get oriented to this new UI in under 5 minutes.

8. **Keyboard Shortcuts: Tips and Tricks** (4:31) **01_04**
DaVinci Resolve 12 has made many more User Interface elements accessible using custom keyboard shortcuts. Here's a quick look at the expanded options for user-defined shortcuts that will make many Resolve users very happy.

9. **Five 'Don't Miss' Features in 5 Minutes** (5:35) **01_05**
The 'headline' new features in Resolve 12 often take time to explain. But there are several other features that can be explained very quickly but are also easy to miss. This movie collects 5 of my favorite 'little' features.

10. **The New (and Easy) 'Relink' Command** (2:31) **01_06**
In earlier versions of Resolve, relinking to the Media on your hard drives could potentially be a time-sucking tedious chore. Finally, Resolve 12 brings a modern relinking routine that was long overdue.

11. **Saving Hard Drive Locations As 'Favorites'** (1:40) **01_07**
Are you tired of always digging down to the same folder locations when browsing your media drives? You'll be happy with a new feature in Resolve 12 that puts an end to that chore.

12. **How To Create and Use 'Smart Bins'** (2:16) **01_08**
Metadata. That term is all the rage. And our digital cameras embed our media files with all sorts of metadata. But how the heck are you supposed to sift and sort through all that metadata? Learn how you can create rules that sift through your media and dynamically populates 'smart bins'.

13. **Two Ways Of Using The 'Smooth Cut' Transition** (2:17) **01_09**
One of the headline features on the Edit Page is the brand-new *Smooth Cut* transition. It's a morph effect designed as a transition to hide jump cuts for interviews. But that's not the only way to use this new transition. It can be used in a completely obvious manner that spices up your timeline.

14. **The Hidden 'Timeline Smart Filters'** (3:29) **01_10**
Did you know you can filter the timeline in the Edit Page? You can - and it's not a new feature, but it's tough to find and has a slew of new filtering options. In this movie you'll learn a few good reasons

for using this slightly more obscure feature on the Edit Page— and how it'll save you a ton of time under the right circumstances.

15. **Understanding Resolve's 'Order of Operations'** (1:49) **01_11**
Which gets processed first, the Hue Curves or the 3-Way Color Wheels? Resolve's 'order of operations' was considered a trade secret… until DaVinci Resolve 12 shipped. Now the User Manual has exposed this detailed information—and we'll go over it together to give you some ideas on how to make use of this knowledge.

16. **A Quick Tour of Bezier Handles in Resolve 12** (3:50) **01_12**
Bezier handles have been added to a bunch of tools in this version of Resolve. Not only will we take a tour to discover where to find the new places to expose those beziers… we'll also explore the places where you could find them in the past few versions of Resolve.

17. **What Are 'Compound Nodes'?** (3:06) **01_13**
Once you've gained some experience color correcting in Resolve, no doubt the day will come when you wished there was a way to better organize complicated node trees. You're not alone. Many of us have asked for this feature—and Resolve 12 delivers.

18. **The Tracker: Using The New '3D Perspective' Option** (2:21) **01_14**
The Tracker has always been one of Resolve's most powerful, surprisingly easy-to-use features. A new tracking option has been added in Resolve 12. Find out why this new '3D Perspective' option is worth spending time talking about?

19. **The Tracker: Understanding the New 'Frame' Behavior** (4:06) **01_15**
Get the low-down before you get tripped-up. Resolve 12 seems to be initiating a change in how The Tracker works with Power Windows, specifically when working in the 'Frame Mode'. This mode, for modifying your tracks, has been completely re-imagined and works completely differently from what it did prior to Resolve 12.

20. **Group Grading: Collapsing Grades** (2:13) **01_16**
If you're a fan of color grading with Groups, no doubt you wished it was easier to copy your node tress from the Group level down to the Clip Level. Learn a huge time-saving shortcut for doing just that.

21. **Keying: Working With The New '3D Keyer'** (3:03) **01_17**

Blackmagic has given us a brand new keyer to play with. And if you can draw lines on an image, well, that's pretty much all there is to it. Sort'a. Learn how to use this new tool.

22. **Keying: The New 'Clean Black' / 'Clean White' Tools** (2:18) **01_18**

It's rare that you can pull a perfect key. To help you out, Resolve 12 has a new set of parameters to help clean up your key signals more quickly.

23. **A Tour of the New 'Media Management' Panel** (3:11) **01_19**

Resolve's old 'consolidate' command has been given a make-over, including a name change. Take a quick spin through the new media management options available to you in this new widget that lets you copy media between drives.

24. **Easy Exporting to Avid Pro Tools** (2:03) **01_20**

The editing toolset in Resolve 11 was fine for making revisions. But now that DaVinci Resolve 12 is a full-blown non-linear editor—there's the expectation that entire shows will be built and delivered from Resolve 12… so you can now export your audio for a Pro Tools session, a brand new feature.

Chapter 2: Building A DaVinci Resolve System

25. **Who Uses DaVinci Resolve?** (3:35) **02_01**

Are you wondering what's the big deal with DaVinci Resolve? Are you curious if DaVinci Resolve is for you and why are professionals attracted to it? This movie will give you some background on the power and popularity of DaVinci Resolve.

26. **Overview: The DaVinci Resolve Toolset** (6:00) **02_02**

Let's strip away the intimidating User Interface and get an overview of DaVinci Resolve's main tools. You'll learn its major sets of tools used for color correction—getting you oriented for later in this Chapter when we start working with the software.

27. **Davinci Resolve 12 vs DaVinci Resolve 12 Studio** (8:22) **02_03**

One of the most commonly asked questions: What's the difference between the Free and Paid versions of DaVinci Resolve? Do you need to buy the Paid version or will Free get the job done for you? This movie will help you decide. And in case you're wondering, this training works both both versions of Davinci Resolve 12.

28. **Building A Resolve System: Overview** (7:22) **02_04**

Resolve 12 runs on a remarkable range of computer platforms. But that doesn't mean it'll run

reliably on *every* computer. How do you find out if your computer meets Resolve's minimum requirements? And what are other considerations you need to take into account?

29. **Building a Resolve System: Computer Hardware** (7:50) **02_05**

If you want to build a powerful, capable Resolve workstation then you need to follow specific guidelines. This movie covers the rules about compatible graphics cards. Plus, how much RAM and VRAM? And… Mac and Windows hardware options.

30. **Building A Resolve System: Monitors and Calibration** (8:19) **02_06**

How can you be sure that the colors and brightness values you see on your display are accurate? What's the difference between working with a Computer Display and a Reference Monitor? What hardware and software will let you know if your display is calibrated? These questions are answered in this movie.

31. **Installing & Launching DaVinci Resolve for the First Time** (4:43) **02_07**

Where do you find the software? Plus: a look at other Blackmagic software you may need to download and install before launching Resolve for the very first time.

32. **Updating From An Earlier Version of DaVinci Resolve** (8:24) **02_08**

If you have DaVinci Resolve 11 or earlier installed, what's the safest way to update? If you want to do a clean install, the workflow is covered in this movie—just be sure to save your custom or third-party LUTs in Resolve's LUTs folder or they'll be deleted as well.

Chapter 3: Understanding Disk Databases, User Modes and Projects

33. **Disk Databases: The New Default** (7:07) **03_01**

What is a Disk Databases and why is it so important to understand? Where does the default database exist on your hard drive? Why and how can you change its location? This movie will give you some ideas on how to manage your databases.

34. **Single-User and Multi-User Login Modes** (3:09) 03_02

What is the difference between Single-User and Multi-User Login modes? When in Multi-User Login, where do the Single-User projects reside?

35. **Creating, Managing, Organizing, Importing, Exporting Projects & Databases** (11:33) **03_03**

A step-by-step walk-through of managing your Projects. *Plus, you'll import the database we'll be using for the rest of this training.* You'll also learn how to export DaVinci Resolve project files and begin to discover the power of right-clicking in DaVinci Resolve.

Chapter 4: Getting Started with DaVinci Resolve 12

36. **Overview of the Resolve Interface** (7:35) **04_01**

    How does a job flow through Resolve? Learn the fundamentals of each 'Page' and learn the power of the Right-Click Contextual Menus. This movie provides overall context of how Resolve is designed before we dig into the specifics of each 'Page'.

37. **Customizing Your Workspace** (8:39) 04_02

    Traditionally, Resolve has had a very rigid interface with only a few customization options. Resolve 12 gives you a lot more opportunity to tweak the interface for the task you're performing. Learn the new options for customizing the DaVinci Resolve 12 User Interface… plus some of its limitations.

38. **Essential System Preferences** (5:33) **04_03**

    Resolve has two sets of preferences. This movie covers those preferences that effect every database and every project. It includes how to set up Resolve to work with attached hard drives, external monitors and colorist controls surfaces.

39. **Essential Project Settings** (7:20) **04_04**

    There are dozens and dozens of settings that can be tweaked for each Project. Learn which settings you *must* set before adding a single piece of media or creating your first timeline—because they get locked down and can't be changed later. Plus, there are a few settings you'll want to tweak at the start of most jobs.

40. **Tweaking Project Settings for Better Performance** (6:32) **04_05**

    Real-time playback is essential for accurate analysis of your color correction and editing decisions. Among the dozens of Project Settings which ones do you tweak if you're having trouble getting real-time playback?

41. **Closer Look: The Media Page** (11:05) **04_06**

    To get started in Resolve you have to add your media to the Media Pool, on the Media Page. This movie digs deep into the various panels, widgets and tools for examining your footage and loading it into Resolve for editing and color correction.

42. **Closer Look: The Edit Page** (13:44) **04_07**

    The Edit Page is the next stop, after the Media Page, for creating or importing a timeline that will eventually be color corrected. In addition to looking at the various panels, widgets and tools for non-linear editing, you'll learn what to do if your F-Key shortcuts aren't working.

43. **Closer Look: The Color Page** (5:57) **04_08**

   The Edit Page has been a huge focus of new features for the last few versions of DaVinci Resolve. But the Color Page is the heart and soul of this software. This movie is a closer look and introduction to the Gallery, Viewer, Node Tree, Thumbnail Timeline, Mini-Timeline and Color Correction tools.

44. **Closer Look: The Deliver Page** (4:22) **04_09**

   After you've edited and color corrected your footage, it's time to render the footage out. In Resolve, you do that from the Deliver Page. Learn how to use the built-in Easy Setups for rendering plus get oriented to how this Page is designed.

45. **Closer Look: Dual Monitor Setup** (6:28) **04_10**

   Are you wondering if you should add a second display to Resolve to spread the User Interface across two computer displays? After watching this movie, you'll probably say, "YES!" Learn how to set this up and what to expect.

46. **The Documentary: Analyzing and Importing Footage** (6:20) **04_11**

   Starting from an empty Project, you'll see how I like to get started on new Projects—with a nifty shortcut or two. You'll get a walk-through of analyzing the source footage from the Tanzania Documentary we'll be using for the rest of this training.

47. **The Documentary: Creating the Timeline** (7:30) **04_12**

   The fundamentals of editing a timeline together with important navigation and editorial shortcuts.

48. **The Documentary: Importing an XML, Method 1** (6:30) **04_13**

   If you want to import a timeline from another non-linear editor, this movie will show you how to do it with an XML.

49. **The Documentary: Importing an XML, Method 2** (3:04) **04_14**

   If you work with enough XMLs, some of them will fail to reconnect to the media in your Media. Here's my method for dealing with those situations.

Chapter 5: Editing A Project In DaVinci Resolve 12

50. **Navigating & Using the Edit Page** (11:23) **05_01**

   This Chapter is focused on helping you perform the editing tasks that will support your work while color correcting. You get started by learning how to perform basic editing operations, track targeting and working with audio.

51. **Organizing Your Media with *Smart Bins*** (3:32) **05_02**

As a colorist stepping into a job mid-stream, a great new tool for helping you learn what kind of assets are being delivered to you is the *Smart Bin*. Learn how to organize and understand your Media Pool using the automated filtering offered by Smart Bins.

52. **Mastering Keyboard Shortcuts** (5:07) **05_03**

One of the biggest signals to your clients that you really understand DaVinci Resolve, is your mastery of keyboard shortcuts. Learn some of the essential, default keyboard shortcuts to help you edit 'at the speed of thought'.

53. **How to Customize Your Keyboard Shortcuts** (4:00) **05_04**

The default shortcuts are frequently not where you'd prefer them. Often, some of your favorite commands may not have a shortcut. Where do you go to remap your keyboard shortcuts? Can you re-map the shortcuts to match other non-linear editing systems? Plus, an idea or two on adding keyboard shortcuts to get you started.

54. **Additional Timeline Commands** (6:23) **05_05**

Beyond keyboard shortcuts, learn essential timeline management commands. Plus the basics of manipulating shots and edit points in the timeline.

55. **Working in the *Edit Mode*** (7:38) **05_06**

Resolve has two modes of operation when editing in the timeline—and each mode significantly changes the effect of your mouse when manipulating shots and edit points. This movie explores the *Edit Mode.* You'll learn how to know if you're working in the Edit Mode. Plus, manipulating shots and edit points in the *Edit Mode*.

56. **Working in the *Trim Mode*** (11:01) **05_07**

The second mode of operation in the Edit Page is the *Trim Mode*. What is the essential difference between the *Trim Mode* and the *Edit Mode*? Plus, you'll learn many keyboard shortcuts for manipulating edit points and your timeline while in *Trim Mode*.

57. **Trimming in the Source Viewer** (3:02) **05_08**

When trimming in the Record Viewer, sometimes the 2-up and 4-up displays aren't big enough to help you make your editorial decisions. Here's a non-obvious method for doing those same trims, from the Source Viewer with a full-sized Viewer.

65. **Conforming a Timeline in an XML Workflow** (7:43) **06_03**

'Conforming a timeline' is the process of verifying that the timeline matches the approved timeline. When importing a timeline via XML (your most likely scenario), there are several workflows - and none of them work all the time. Let's go through your XML import options so you'll be able to troubleshoot.

66. **Checking the Conform with a Reference Movie** (11:41) **06_04**

Once a timeline is properly imported, the conform process isn't finished. The final step of every XML Conform is to check your timeline against the reference movie that is generated by the editor. Let's practice this essential technique using the Tanzania documentary.

67. **Automatic Scene Cut Detection: Getting Started** (4:29) **06_05**

Did the previous two movies, importing an XML, seem overly complicated to you? It's why this alternative to the XML workflow is preferred by many colorists. It's as simple as having the editor render out the timeline as a single movie—and then using Resolve's Scene Cut Detection workflow. Learn what we're talking about and how to get started.

68. **Automatic Scene Cut Detection: Pruning Your Edits** (7:01) **06_06**

Getting started with the Scene Cut Detector is the easy part. The problem is, there's almost always mistakes. You'll usually have to delete and add edit points after Resolve does its detection. Here's how to do it.

69. **Automatic Scene Cut Detection: Reconstructing the Timeline** (5:35) **06_07**

You've cleaned up the automatic detection, but we still don't have these shots in the Media Pool or in a timeline. Now you'll learn the final step of working in the Automatic Scene Cut Detector interface, so we can start color grading.

70. **Automatic Scene Cut Detection: Dealing with Dissolves and Fade** (5:52) **06_08**

Does the timeline you've cut up with the Scene Cut Detector have dissolves or fades? Then you've got one last step in the Scene Cut Detection workflow. Learn how to deal with those dissolves and fades, one of the most confusing aspect of this workflow. And then… it's time to move on to Chapter 7, where you start working in the Color Page!

Chapter 7: Image Evaluation: Seeing Like A Colorist

71. **In Action: Creative Spotting Session—Selecting 'Hero Shots'** (8:15) **07_01**

When starting a color correction session, one great workflow is pull a selection of shots to address

immediate client concerns—especially if you're with a decision maker who's short on time. Learn the 'Hero Shots Workflow' with the Tanzania documentary—using Resolve's *Timeline Filtering* feature to make it all happen.

72. **Using the Waveform: Analyzing Contrast, Exposure & Color Balance** (12:45) **07_02**
Learn the tools that help you analyze the brightness values of your image and where to find Resolve's built-in Waveforms and Vectorscope. Plus, an initial lesson in evaluating images with our Waveform display.

73. **Using the Parade Scopes: Analyzing Contrast, Exposure & Color Balance** (7:10) **07_03**
Similar to the Waveform, learn how to evaluate an image using the RGB Parade display. You'll also learn how use it in concert with the Luma Waveform and why these two waveform complement each other.

74. **Using the Vectorscope: Analyzing Color & Saturation** (6:44) **07_04**
The one thing the RGB Parade and Waveform don't tell you… how colorful an image is. That's where the Vectorscope comes into play. Learn how to read a Vectorscope and use it to glean actionable information for color correction.

75. **Working with the 'Broadcast Safe Filter'** (6:23) **07_05**
DaVinci Resolve makes it tough to generate 'illegal' brightness values but that's not true when it comes to colorfulness, or saturation. In this movie you'll learn how to identify 'illegal' saturation values in your images—and how to use (but not 100% rely on) an automated tool to help you manage saturation.

76. **In Action: Using Video Scopes to Analyze the Hero Shots** (8:07) **07_06**
Now that you've learned how to use the Waveform, RGB Parade and Vectorscope it's time to learn how a colorist evaluates real-life images using these displays. You're building on the work we've done with the Tanzania documentary, using our full suite of scopes to evaluate the Hero Shots timeline you previously created.

Chapter 8: Primary Color Correction Tools

77. **Colorist Lingo: What is a Primary Correction?** (5:10) **08_01**
It's now time to start color correcting! This Chapter focuses on the tools that help you execute 'Primary Color Corrections'. But what do colorists mean when they use the term 'Primary Correction'?

78. **Primary Color Wheels: The Offset Control** (9:20) **08_02**

   The first Primary Control you'll learn is the Offset Control, providing you an easy way to understand Resolve's color wheels interface. Offset is also the granddaddy of all Primary Corrections so it's a good place to start.

79. **Primary Color Wheels: Lift/Gamma/Gain & Brightness Changes** (9:38) **08_03**

   Otherwise known as the 3-Way Color Corrector, deconstruct how to use the 3-Way Color Wheels for making brightness adjustments. Then, you'll put that knowledge to work on a few images.

80. **Primary Color Wheels: Lift/Gamma/Gain & Color Changes** (6:49) **08_04**

   After making brightness adjustments, move on to making color adjustments. You'll learn how each of color wheel adjustments impact your images differently. You'll also see how to use your scopes to make informed, targeted decisions about the first 'moves' you'll make with the 3-Way Color Corrector.

81. **Primary Sliders & YRGB Processing** (9:55) **08_05**

   Located with the Primary Color Wheels are the Primary Sliders. Learn how the Primary Sliders work and their relationship with the Color Wheels. You'll also be introduced to the concept of Resolve's unique Y-only adjustments.

82. **Color Wheels: Get Faster with Keyboard Modifiers** (3:56) **08_06**

   Using the mouse for color correcting can be slow. If you color correct using your mouse then don't want to miss this movie—which will make your life easier and your corrections much faster.

83. **Understanding the Contrast and Pivot Controls** (7:21) **08_07**

   Depending on the software you're using, Contrast controls will have a different effect on your image. Learn how DaVinci Resolve's Contrast control is implemented. You'll also learn about the Pivot control, which has a huge impact on those contrast control adjustments… and why many colorists like Resolve's implementation of these controls.

84. **Adjusting Hue and Saturation** (4:57) **08_08**

   If Primary Controls are about making big, broad corrections to your images then you can't ignore the Saturation and Hue controls. Learn where to find them, since they can sometimes get buried in the interface.

85. **The RGB Mixer** (8:49) **08_09**

   Some tools don't make a lot of sense until someone explains them to you… then you can't forget

how to use them. The RGB Mixer is one of those tools. Explore and learn this non-obvious tool for executing Primary Color Corrections while also creating interesting and unique Black & White effects.

86. **Using Custom Curves as Primary Corrections** (6:26) **08_10**
An alternative to the 3-Way Color Corrector's color wheels is to execute Primary Corrections by drawing Curves, Photoshop-style. Learn the Custom Curve interface, specifically for making big broad corrections. Plus, learn how to get Resolve's Curves to respond the way they do in Avid Symphony.

87. **Colorist Lingo: What is RAW, LOG and LUTs?** (8:25) **08_11**
Do you or your clients record 'flat' or RAW images? Or maybe you've heard those terms but don't know what they mean? This movie will get us 'on the same page' with these terms, and specifically within the DaVinci Resolve ecosystem. You'll also learn how they fit within the overall color correction pipeline.

88. **Introduction to Color Correcting with RAW Controls** (5:04) **08_12**
DaVinci Resolve isn't exactly intuitive when it comes to understanding how to work with RAW footage. In this movie you'll learn where to find the RAW controls, how to set them project-wide and how to override the project-wide settings on a shot-by-shot basis.

89. **Introduction to Color Correcting LOG (or Flat Images) and LUTs** (6:20) **08_13**
Working with LOG, flat or RAW images and doing their initial contrast expansion is a very contentious subject. That's why you'll explore two different (but equally valid) approaches to color correcting LOG- or Flat- recorded images. Including, how to work with and apply Look-Up Tables (LUTs).

90. **In Action: Hero Shots and Primary Color Grading** (14:08) **08_14**
Let's put together everything we've learned so far, by executing Primary Corrections on the Hero Shots we selected and evaluated earlier in this training. Grade along with Patrick to start developing your color correction muscle memory.

Chapter 9: Understanding Nodes

91. **Colorist Lingo: What is a *Serial Node*?** (5:48) **09_01**
If you don't understand how Nodes and the Node Tree work together then you'll never fully

understand DaVinci Resolve. Now that you've got some DaVinci Resolve 12 color correction skills from Chapter 8, it's time to learn how Resolve's color corrections are constructed.

92. **Adding, Connecting, Deleting and Resetting Serial Nodes** (11:31) **09_02**

The Node tree is the color correction equivalent of the Edit Page's timeline. And like individual shots in the timeline, you'll learn the basics of manipulating and ordering individual Nodes in the Color Page.

93. **'Node Macros': The *Splitter—Combiner* Node** (4:56) **09_03**

Resolve has many different types of nodes. In the previous Chapter you were using the Serial Node. Now take your understanding of how color corrections are constructing to a new level, using the RGB Splitter—Combiner nodes and macro.

94. **Specialty Nodes: The *Layer Mixer* Node** (5:42) **09_04**

Similar to the *Splitter—Combiner* but far more flexible and powerful is the Layer Mixer node. Using a single node, you can feed multiple simultaneous operations that are recombined by the *Layer Mixer* node.

95. **Using Composite Modes in the *Layer Mixer* Node** (5:14) **09_05**

Now that you know how to use a Layer Mixer node, discover how Composite Modes are a hidden power buried within the Layer Mixer. Learn how to access it and where to learn more details about each of the mathematical Composite Modes.

Chapter 10: Secondary Color Correction Tools

96. **Colorist Lingo: What is a Secondary Correction?** (3:33) **10_01**

Colorists usually use the term 'Secondary Corrections' to mean something very specific. And there are toolsets in DaVinci Resolve dedicated to help you perform *Secondary Color Corrections*. Learn what is a Secondary Correction and get a preview of the tools you'll be learning for executing these important types of color corrections.

97. **Custom Curves as Secondary Corrections** (7:47) **10_02**

In the chapter on Primary Corrections, you learned how to use Custom Curves as a big Primary Correction. In this movie, use the same Custom Curves interface to perform targeted Secondary Corrections. You'll also learn how to set points on a curve by clicking in the viewer plus a super-useful keyboard modifier for when setting 'control points'.

98. **Log Color Wheels as Secondary Corrections** (6:45) **10_03**

Located with the Primary Wheels and Primary Bars are the Log Wheels. Find out why I consider the Log Wheels to (usually) be a Secondary Correction and why you want to use them in tandem with the Low- High-Range controls.

99. **Color Wheels: Highlights & Shadows Controls** (3:40) **10_04**

Another set of secondary tools co-located with the Primary Bars and Wheels are the the Highlights and Shadows controls in the Color Wheels interface. You'll see why I consider these very useful secondary corrections.

100.**Color Wheels: Color Boost & Midtone Detail Controls** (3:40) **10_05**

Found next to the Highlights and Shadows controls, these controls also have a targeted effect on your image for controlling saturation and contrast detail. These tools can be very subtle secondary corrections or, if you take them to their extremes, become over-the-top primary corrections.

101.**Using the 'Hue vs.' Curves** (6:40) **10_06**

In the Custom Curves sub-palettes are several 'Hue vs.' curves. What are they, how do you use them and which one should you generally avoid?

102.**Using the 'Lum vs.' & 'Sat vs.' Curves** (4:55) **10_07**

Also located with Custom Curves and 'Hue vs.' Curves, learn why these two controls are some of my favorites—making for easy adjustments that are otherwise more complicated to pull off. Plus, find a shortcut for deleting control points.

103.**Targeting Corrections with the 'Hue, Saturation, Luminance' (HSL) Keyer** (8:05) **10_08**

In the early days of digital color correction, being able to key out part of the image to then perform corrections on it was a major milestone in the craft. One of the oldest toolsets for performing that kind of targeted Secondary Correction is the *HSL Keyer*. You'll learn how to use it and my favorite approach to 'building an HSL key'.

104.**Understanding the HSL 'Matte Finesse' Controls** (5:49) **10_09**

After methodically pulling a key, you'll use the Matte Finesse tools to 'clean up' the key. But in the end the question is, do you need to pull a super-clean key as if we were working in After Effects? You'll learn my thoughts on where and when you should be worried about 'dirty' keys.

problems, then we learn about the very powerful 'Add Outside' command; what is it doing and what are the 'gotchas'?

113. **Power Windows and The Tracker** (8:42) **10_18**

Shapes are great if the camera isn't moving and the object your masking is static. But what happens when they start moving around the frame? Learn how to track Power Windows to moving objects without resorting to keyframes.

114. **Fine-tuning Your Tracking** (8:30) **10_19**

What happens when an object you're tracking starts or ends off-screen? This happens all the time. Here are some strategies to help you deal with this common problem.

115. **In Action: Hero Shots and Secondary Corrections** (15:05) **10_20**

Sharing my thought processes with you, let's take everything you've learned to this point and apply it to our previously selected Hero Shots. In the process, you'll learn some of my favorite techniques when doing Secondary Color Corrections.

Chapter 11: Shot Matching

116. **Colorist Lingo: What Is Shot Matching?** (4:59) **11_01**

When colorists talk about 'Shot Matching', what precisely is their goal? How can you tell if you're executing Shot Matching correctly? Here are your rules for matching shots together.

117. **Shot Matching Workflow I: The Base Grade** (9:16) **11_02**

Shot Matching only begins after we do our 'Base Grade' or Primary Corrections. You'll start the process by first doing a Primary Correction on two mis-matched shots, starting the Shot Matching process.

118. **Shot Matching Workflow II: Matching Shots** (9:46) **11_03**

With the Primary Corrections completed, now we match two completely mis-matched shots— partially using Scopes and partially using our eyes.

119. **The Automatic 'Shot Match' Tool** (6:43) **11_04**

Shot Matching can be very tedious. Even with rules in place it can feel like a hit-or-miss exercise. Resolve 12's new Automatic Shot Matching command sounds like awesome step up to this process! But there are very specific restrictions when using this tool successfully—follow these rules or you'll find the results very disappointing.

Chapter 12: Building Looks: Essential Tools

128. **PowerGrade Presets: Where To Find and How To Use Them?** (6:33) **12_01**

DaVinci Resolve ships with a bevy of pre-built 'Looks'. Learn how to find them. You'll also learn a secondary feature of the Gallery: How to find grades you've saved off to the Gallery in other Projects or Databases.

129. **Groups: Powerfully Grading Entire Scenes At Once** (7:04) **12_02**

When it comes to applying a Look to multiple shots or entire scenes, Resolve's *Groups* feature is terrific; here's how to enable and use it.

130. **Blur & Sharpen: Fundamentals** (3:58) **12_03**

The basics for performing simple blur and sharpen operations. Plus, we'll kick up the complexity by combining the Blur and Sharpen operations with Power Windows and the Tracker. It's complicated work that DaVinci Resolve seems to make very simple.

131. **OpenFX: Using Third-Party Plugins** (6:06) **12_04**

Learn how you can vastly expand the DaVinci Resolve toolset using 3rd party plug-ins that conform to the OpenFX plug-in standard. You're no longer limited to just color correcting but can add visual texture to your images.

132. **Discover the 'Smart Render' Caching System** (6:08) **12_05**

Are you having trouble getting full-frame-rate playback? It'll eventually happen to you, especially if you add an OpenFX plug-in or build a complicated node tree. Find out why the 'Smart Render' option is your new best friend, breathing new life into less powerful computers.

133. **Keyframing Fundamentals** (9:03) **12_06**

At some point you're going to want to keyframe your color corrections. Here's the basics you need to know to get you started.

134. **In Action: Hero Shots & Looks I** (6:45) **12_07**

Using the Tanzania documentary, we've done Primary Corrections, Shot Matching and used Secondary Corrections to solve problems and control the viewer's eye. All of these are essential steps to execute before we get to creating Looks. We'll continue working on this Tanzania timeline, taking another look at this initial process using combinations of tools you haven't seen yet.

135. **In Action: Hero Shots & Looks II** (7:42) **12_08**

Now is the time to pull together everything you've learned in this training by building on our Hero Shots timeline to give our documentary a more interesting, but not unreal, Look.

Chapter 13: Rendering, Delivering & Archiving

136. **Deliver Page: Rendering Individual Shots** (8:17) **13_01**

After we've color corrected our timeline, we've got to render out those corrections to brand new media files. In this movie you'll take a deeper look at our render options, while examining the 'individual shots' render workflow.

137. **Deliver Page: Checking Your Renders Before Delivering To Your Client** (4:58) **13_02**

If you're like me, you don't want to render and blindly send your work to your client without having checked that the renders aren't corrupt or that there's a problem with XML. Here's an organized workflow you can follow after rendering out your color grades. You'll also solve an XML problem.

138. **Deliver Page: Rendering A Single Self-Contained Movie** (7:24) **13_03**

If you want to render for upload to Vimeo or YouTube, this is the workflow you'd follow. But it also can be used for exporting very high-quality movies as a single clip.

139. **Organization Tips: Media Managing Your Project for Archiving** (9:37) **13_04**

You've color corrected your timeline. You've rendered it out for final delivery. Now it's time to back up your project assets for storage. Learn how to do this in a way that allows you to reconstruct the project months (or even years) later.

Chapter 14: Conclusion

140. **Additional Color Correction Resources** (5:01) **14_01**

There are a large number of resources to help you continue on your journey to mastering the amazing craft of digital color grading. Here's a listing of my favorite resources, including books, websites and forums.

141. **Goodbye** (3:45) **14_02**

Final thanks to all the people who helped make this training possible. And… my thanks to you, with a final thought.