

# Advanced Color Grading in DaVinci Resolve 17

## 1. Introduction

## 2. Opening a Resolve Archive

- Opening an Archive
- Grading Workflow Steps
- Balancing Shots
- Shot Matching
- Secondary Grading
- Creating a Look

## 3. Setting Tonal Range & Contrast

- Picking Black & White Points
- Refining Contrast with Master Wheels
- Adjusting Contrast & Pivot
- Adjusting Contrast Controls in Settings

## 4. Setting Contrast with more Flexibility

- Using Curves
- R17 Pop-out curve palette
- Unganging Luminance
- Adding Control Points
- Curves vs. Wheels

## 5. Balancing Colors

- Adjusting Tonal Range with the Custom Curve
- Balancing Color with Curves
- Adjusting Tonal Range and Balancing Color with the Primaries Wheels
- Normalizing a Shot with Color Match

## 6. Understanding Log & Primaries Wheels

- Using Primaries and Log Wheels on a Gradient
- Adjust Log Master Wheel Ranges
- Combining Primaries Wheels and Log Wheels Corrections

## 7. Building a Shot Matching Strategy

## 8. Organizing with Flags & Filters

- Changing Default Flag Color
- Flags and Clip Instances
- Filtering the Timeline with Flags
- Markers vs. Flags

## 9. Matching Shots with Shot Match & Primaries Bars

- Automatic Shot Matching
- Adding a Shot-Matching Node
- Matching Shots with Stills
- Creating a Keyboard Shortcut for Labeling Nodes
- Wiping a Still
- Resizing Shots
- Shot Matching with the Primaries Bars
- R17 Redesigned Bars UI

## 10. Shot Matching with Curves

- How to use the RGB Parade when Matching Shots
- Wiping a Timeline Clip
- Shot Matching with Curves
- Understanding Lum Mix
- Matching the Skies
- Comparing Shots with a Split Screen
- Multiple Playheads split screen mode

## 11. Controlling the Viewer's Eye

- Working with Power Windows
- Correcting Outside a Window
- Creating Shallow Depth of Field with Tilt-Shift Blur
- Creating a Vignette Effect with a Power Window
- Saving a Window Grade as a Preset

## 12. Sharpening & Tracking Key Elements

- Using the Blur & Sharpen Palette
- Evaluating Sharpening
- Isolating Sharpening with a Power Window
- Tracking a Power Window
- Manually Tracking in Frame Mode

## 13. Fixing Overcast Skies

- Using a Qualifier
- Grading the Qualified Sky
- Replacing a Sky
- Creating and Connecting an Alpha Output
- Clip Resizing
- Adding Atmosphere
- Combining Qualifiers and Power Windows
- Using a Gradient Power Window

## 14. Warping Colors to a Target

- The Color Warper Palette
- Working with Hue and Saturation Graph
- Refining Selections with Mesh Density
- Using Tools, Range, and Auto Lock
- Selecting Skin Tones
- Working with the Chroma-Luma Graph

## 15. Face Refinement

- Applying the Face Refinement Effect
- Facial Feature Analysis
- Checking and Adjusting the Matte
- Improving Skin Quality
- Face Refinement Color Grading Parameters
- Retouching Parameters
- Blending in Facial Adjustments
- Face Refinement on a Different Subject

## 16. Adjusting Skin Tones Manually

- Color Grading Workflow Review
- Grading Skin Tones with HSL Curves
- Using the Hue vs. Hue Curve
- Using the Hue vs. Sat Curve
- Using the Luma vs. Sat Curve
- Using the Sat vs Lum Curve
- Softening & Sharpening Skin

## 17. Importing an XML Timeline

- Understanding Conforming
- Creating a New Project
- Importing an XML File

- Reviewing the Imported Timeline and Media

## 18. Syncing an Offline Reference

- Importing a Reference Movie
- Linking the Reference Movie
- Displaying the Reference Movie
- Addressing Media Offline Warnings
- Changing Reference Movie Starting Timecode
- Matching Color Spaces

## 19. Conforming a Timeline

- Replacing a Missing Clip with Conform Lock
- Comparing Shots
- Using Wipe Modes to Compare Clips
- New Viewer wipe modes
- Transforming a Clip with a Difference Wipe
- Stepping Through Clips

## 20. Re-conforming to HQ Footage

- Proxy vs. Full Quality media
- Disabling File Media Path Lock
- Reconforming from Media Storage

## 21. Generating Proxy Media

- Settings for Creating Proxy Media
- Generating & Confirming Proxies
- Linking to Proxies Generated Elsewhere
- Playing Proxy Media
- Creating a Proxy-Only Archive for Remote Editing

## 22. Color Managed Workflow

- Rec. 709 and Log Gamma Curves
- Using a LUT with Log-encoded Clips
- Resolve 17 LUT Improvements
- Using the Color Space Transform OFX Node
- Color Space Transforms vs. LUTs
- Setting up Resolve Color Management
- Setting the Input Color Space Manually
- RCM Preset Detailed Settings
- Working with the DaVinci Wide Gamut Preset
- RCM & Color-space aware grading tools

- Summarizing Color Management

## 23. Working with Local Versions

- Reading Stills Numbering
- Applying a Grade from a Still
- Creating a Cross Process Look
- Renaming Local Versions
- Creating Multiple Local Versions
- Resetting Nodes and Grades
- Applying a Bleach Bypass Look
- Selecting Local Versions
- Using a Split Screen to compare Versions
- Local vs. Remote Versions

## 24. Appending Grades & Nodes

- Shot Matching before Applying Looks
- Appending a Node Graph
- Copying Individual Nodes from a Still
- Copy/Pasting Individual Nodes
- Copy/Pasting Specific Attributes

## 25. Using Shared Nodes

- Shared Nodes Explained
- Saving a Shared Node
- Applying Shared Nodes
- Modifying the Grade on a Shared Node
- Adding a Vignette via a Shared Node
- An Alternate Method for Applying Shared Nodes
- Using Split Screen to Adjust Multiple Shared Nodes

## 26. Saving Grades for Other Projects

- Using the PowerGrade Album
- Creating Project Memories
- Using Unmix
- Applying PowerGrade Album Stills
- Exporting Stills
- Importing a Still
- Exporting with a Display LUT
- Workflow Options for Working with Stills

## 27. Rippling Grades from Shot to Shot

- Understanding Node Numbering
- Rippling Node Changes
- Rippling Node Changes to Groups

## 28. Copying Grades Using ColorTrace

- Comparing Starting Timelines
- Starting Color Trace
- Setting the Source Timeline
- Effects and Definitions
- Automatic and Manual Modes
- Color Trace Color Coding
- Copying the Grades
- Manually Matching Clips
- Verifying the Grade

## 29. Copying Grades Using the Timelines Album

- Setting the Target
- Using the Timelines Album

## 30. Using Remote Versions

- Remote vs. Local Versions
- Loading the Remote Version
- Creating a Remote Grade
- Setting All Clips to use Remote Versions
- Clip-based Undo
- Grading Remote Versions
- Excluding a Clip from a Remote Grade
- Renaming a Remote Version

## 31. Applying Remote Grades to a New Cut

- Reviewing the Ungraded Stringout
- Fast Review
- Setting the Timeline to use Remote Versions
- Apply a Grade with PowerGrade Album Presets
- Importing an Editing Timeline
- Auto-grading Imported Timelines with Remote Versions

## 32. Understanding Node Based Corrections

- The Anatomy of a Node

- Understanding Node Order
- Color, Luminance and Saturation Across Nodes

### 33. Adjusting Contrast & Luminance on Nodes

- Crushing the Shadows
- Attempting to Recover Lost Shadow Detail
- Is Color Information Really Lost?

### 34. Dominant Color Grades & Surrounding Nodes

- Creating a Cold Look
- Exempting Skin Tones from a Look Grade
- Impact of a Look Grade on Qualifying
- Refining the Qualification
- Limiting Qualifier with a Power Window
- Node Order Impact on a Qualified Grade Before a Look Grade

### 35. The Parallel Mixer Node

- Working with the Parallel Mixer Node
- Morphing into a Layer Mixer Node
- Adjusting a Grade for the Layer Mixer Node
- Mixer Nodes Summary

### 36. Visualizing Mixer Nodes

- Adding a Generator and Making it Gradable
- Creating 3 Layer Mixer Nodes
- Mixing Colors with Power Windows
- Understanding Layer Mixer Nodes
- Changing Layer Mixer Composite Modes
- Reordering Layer Mixer Nodes
- Understanding Parallel Mixer Nodes

### 37. The Layer Mixer Node

- Creating a Stylized Look
- Grading the Water
- Isolating the Water
- Grading the Foliage
- Grading the Foreground Elements
- Sharing a Matte Between Nodes
- Isolating and Grading the Towel
- Creating and Working With Compound Nodes

## 38. Applying Transparency to Video Tracks

- Stacked Clips in the Edit Page
- Adding an Alpha Output
- Keying a Shot with the 3D Qualifier
- Finessing the Matte
- Eliminating the Boom Mic
- Eliminating Spill
- Grading the Foreground

## 39. Importing & Using an External Matte

- Importing and Associating an External Matte
- Adding the External Matte Node
- Passing Transparency to the Output Node
- Tracking to a Background Plate
- Creating a Compound Clip for Grading

## 40. Making Corrections with the Magic Mask

- Isolating a Person
- Tracking & Refining the Mask
- Isolating Skin with Magic Mask and a Qualifier
- Isolating Clothing

## 41. DaVinci Resolve Processing Pipeline

## 42. Using Scene Cut Detection

- About Scene Cut Detection
- Creating a New Project and Running Scene Cut Detection
- The Scene Detect Window
- Analyzing the Video Clip
- Checking and Adjusting Cut Points
- Removing Dissolve Cut Points
- Working with the Cutoff Line
- Adding Cuts to the Media Pool
- Adding Cut Clips to a New Timeline in Correct Order
- Performing SCD on a Timeline

## 43. Timeline Resolution & Aspect Ratios

- Flagging and Filtering Key Clips
- Adding a Saved Vignette Window
- Changing Timeline Resolution
- Ways to Leverage Resolution Changes



- Upscaling with Super Scale
- Down-scaling for Playback Performance when Editing
- Applying Blanking

#### 44. Reframing Individual Clips

- Sizing Clips with Input Sizing
- Output Sizing
- Other Sizing Options
- Compositing with Node Sizing and a Mixer Node

#### 45. Removing Objects with Patch Replacer or Node Sizing

- Using the Patch Replacer Effect
- Tracking the Patch Replacer
- Replacing Objects with Node Sizing
- Tracking the Power Window
- Blending the Patch by Softening and Grading

#### 46. Using Object Removal

- Tracking the Object
- Applying the Object Removal Effect
- Scene Analysis
- Generating a Clean Plate
- Improving the Clean Plate with the Patch Replacer
- Exporting & Importing a Clean Plate
- Compositing the Clean Plate
- Match Moving the Clean Plate

#### 47. Keyframing

- Animating Sizing with Keyframes
- Activating Animation
- Adjusting Keyframes
- Adjusting Dynamic Attributes
- Animating Color Corrections
- Emphasizing Time of Day with a Grade
- Static Keyframes
- Keyframing Resolve FX

#### 48. Applying Noise Reduction

- Where in the Node Tree to Apply Noise Reduction
- Working in the Motion Effects Palette
- Working with Temporal Noise Reduction

- Setting Temporal Threshold
- Working with Spatial Noise Reduction
- Changing Noise Reduction Node Order
- Noise Reduction and Playback Performance
- NR available as ResolveFX on Edit page

## 49. Using Render Cache

- Source and Sequence Caching with Smart Cache
- Node Caching
- Understanding the User Cache Mode
- Manually Caching Node Trees
- Configuring Cache Quality
- Clearing a Cache

## 50. Creating a Group

- Grouping Clips
- Changing the Thumbnail Image
- Filtering Clips by Group
- Grading Grouped Clips Individually
- Groups and the Classic Grading Workflow

## 51. Apply Base Grades to Pre-Clip Group

- Understanding the Current Group
- Identifying a Representative Group Clip for Grading
- Normalizing a Group in Pre-Clip Mode

## 52. Adjustments at the Clip Group Level

- Setting Clip Mode
- Balancing and Secondary Corrections in Clip Mode
- Comparing Clips with a Wipe

## 53. Creating a Look at the Post-Clip Group Level

- Setting up for a Post-Clip Group Grade
- Importing and Analyzing a Reference Shot
- Grading to Match a Reference
- Returning to Clip Mode to Adjust a Grade
- Using the Sat vs. Luma Curve

## 54. Applying Timeline Level Grades

- Adding Film Grain

- Adding Blanking in Timeline Mode
- Adding a Data Burn-in

## 55. Adjusting RAW Settings at the Project Level

- Identifying RAW Clips
- Debayering RAW Files
- Debayering at the Project Level
- Grading Log-encoded Clips to Rec. 709
- Grading Rec. 709-encoded Clips
- Recovering Clipped Luminance Data
- Changing RAW Settings at the Clip Level
- Copying Custom RAW Settings
- Using Color Management with RAW Footage

## 56. Working with BlackMagic RAW

- What is BlackMagic RAW?
- Importing a .braw Clip
- Setting RAW Project Settings
- Working in the Camera RAW Palette
- Understanding Gamma Options

## 57. Using the HDR Palette

- HDR Palette vs. Wheels and Log Panels
- HDR Palette and Zone Graph Overview
- Setting up RCM for Log and RAW clips
- Zone-based Corrections
- Adjusting Zone Range and Falloff

## 58. Using Lightbox for Quality Control

- Using the Lightbox to Review Grading Status
- Filtering the Lightbox
- Reordering Clips
- Creating Custom Filters
- All-project Smart Filters

## 59. Render Workflow & Presets

- Setting the Video Output Format
- Understanding Render Presets
- Customizing a Video Preset
- Setting the Timeline Render Range
- Adding a Job to the Render Queue and Rendering

## 60. Custom Renders & Saving Presets

- Modifying the Custom Preset for Dailies Delivery
- Saving Customized Render Settings as a New Preset

## 61. Configuring a Timeline for Digital Cinema

- What is a DCP?
- EasyDCP Plugin
- DCP-compliant Aspect Ratios, Frame Sizes & Rates
- Changing Timeline Resolution to be DCP-compliant

## 62. Rendering a DCP

- Render Settings for DCP Delivery
- Setting the Composition Name
- Output Destination Requirements

## 63. Using Commercial Workflow to Export Versions

- Version Rendering Options
- Setting the Render Range
- Render Settings for Versions
- Enabling Flat Pass
- Rendering Versions

## 64. Advanced Render Settings

- Setting Quality
- Setting Keyframes
- Cinemascope
- Setting Data Levels
- Data burn-in
- Enable Flat Pass
- Showing All Jobs in the Render Queue