



Introduction to Resolve

1

Introduction to Resolve

DaVinci Resolve integrates editing, color correction, and finishing within a single, easy to learn application. The editing and grading tools found in Resolve should be immediately familiar to experienced artists who've used other postproduction applications, but they're also very approachable to folks who are new to postproduction.

Additionally, dedicated tools available for on-set workflows integrate tasks such as media duplication, shot and metadata organization, and on-location look management into a complete tool set that lets you smoothly segue from the camera-original media being acquired in the field to the organization and use of that media in a wide variety of postproduction workflows that use DaVinci Resolve at their heart.

The tight integration in Resolve between on-set media, metadata, and "look" organization, editing, and grading means that you can freely move from one task to the next without skipping a beat. This makes it easy to back up and organize your media, and then immediately dive into editing a program, switching over to color-correct clips in the middle of your editing spree, before going right back to editing, without needing to export projects or launch other applications. And you can go further, using the collaborative features of DaVinci Resolve to enable multiple artists, for example an editor, a colorist, and assistants, to work together on the same timeline simultaneously, for the ultimate integrated workflow.

Of course, no postproduction professional works in a vacuum, and DaVinci Resolve makes it easy to work with other facilities by importing projects and exporting project exchange formats and rendered or managed media among applications such as Apple's Final Cut Pro X, Adobe's Premiere Pro, Avid's Media Composer, Autodesk's Smoke, and many other applications via robust support of XML, AAF, and EDL import and export workflows.

This chapter introduces the DaVinci Resolve user interface (UI), explaining where to find each group of features, and how the highly focused and tightly integrated Media, Edit, Color, and Deliver pages of functionality work together to let you pursue nearly any postproduction workflow you can imagine. After this brief tour, the rest of Part 1 of this manual provides much more in-depth information about every aspect of functionality found in DaVinci Resolve.

This chapter covers the following topics:

Getting Started	23
Logging In	23
The Project Manager	24
Preferences	24
Project Settings	26
Switching Among Pages	27
The Media Page	27
The Media Storage Browser	28
Viewer	28
Media Pool	29
Metadata Editor	29
Audio Panel	30

The Edit Page	30
The Media Pool	31
Effects Library Browsing	32
Edit Index	32
Source/Offline and Timeline Viewers	33
Inspector	34
Toolbar	34
Timeline	34
Edit and Color Page Effects and Fusion Connect	35
The Color Page	36
Viewer	36
Gallery	37
Node Editor	38
Timeline	38
Left Palettes	39
Center Palettes	39
Keyframe Editor	40
The Deliver Page	40
The Render Settings List	41
The Deliver Page Timeline	42
The Viewer	42
The Render Queue	43
User Interface Conventions in Resolve	43
Customizing Each Page Using the Interface Toolbar	43
Adjusting the Workspace	44
Dual Monitor Layouts	47
Contextual Menus	48
Buttons and Pop-up Menus	48
Adjusting Parameters	49
The Three Buttons of a Mouse or Other Input Device	49

Getting Started

When you install DaVinci Resolve and then open it for the first time, there are a few things you're going to want to do before you begin working on your first project.

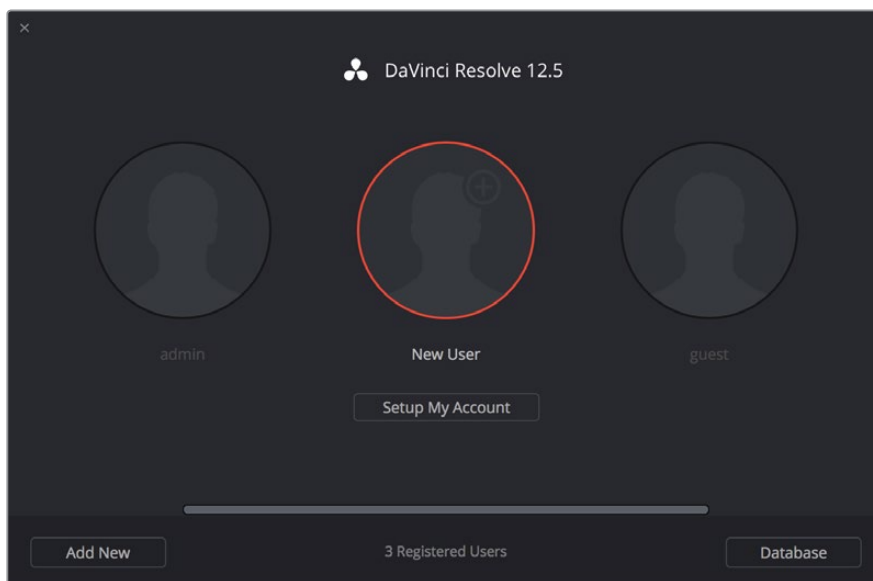
Logging In

If you've installed DaVinci Resolve in its multi-user environment, the first window you'll see is the login screen. If you installed DaVinci Resolve's default single-user environment, opening Resolve immediately takes you to the Project Manager, discussed in the next section.

DaVinci Resolve was originally designed as a multi-user application for professional grading suites where an elaborately appointed room at a high-end facility was being shared among a stable of colorists. Resolve is still very much used in that capacity, and the login screen provides the interface that's used to create and manage multiple users on a single workstation.

Another way of looking at the multi-user capabilities of Resolve is organizational in nature. Each login has individual settings, preferences, projects, and PowerGrades. This means that you can create users, not for specific individuals, but for specific types of projects that you want to share common project settings and PowerGrades.

To open a user, simply double-click that user's icon, or follow the on-screen instructions to create a new user and then double-click it to open.



The login screen that appears when you first open Resolve

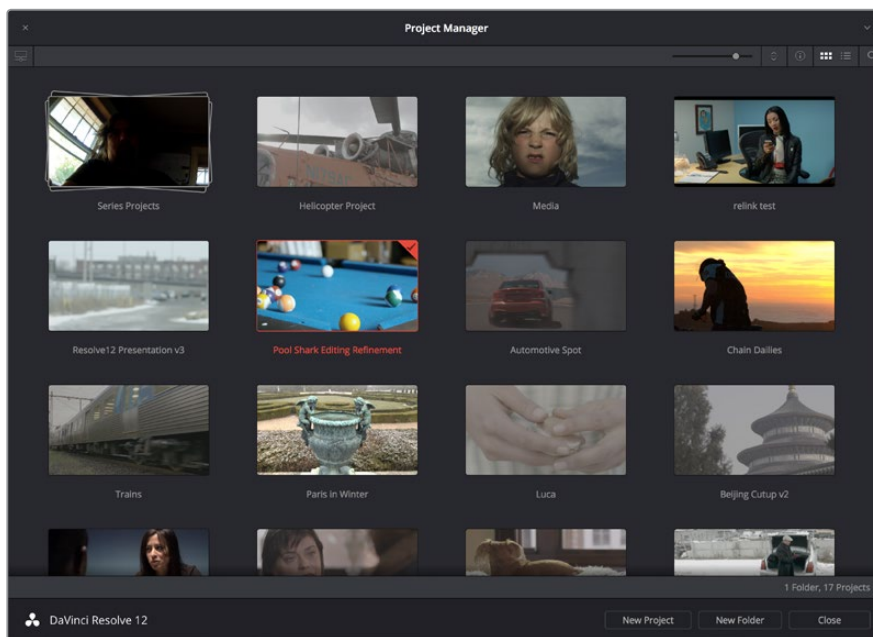
Whether you simply use the default admin login to do your work (which is fine), or you create your own individual login, there are several controls for creating and customizing user logins, all of which are covered in Chapter 2, "Logging in and the Project Manager."

The Project Manager

If you've installed DaVinci Resolve as a single-user environment, the Project Manager is the first window you'll see when you open Resolve

The Project Manager is a centralized interface for managing all projects belonging to the user who's currently logged in, whose name appears at the upper right-hand corner in a project title bar. This is the second window you'll see when opening DaVinci Resolve. The Project Manager is also the place where you import and export projects to and from Resolve, whether you're moving projects around from user to user, or moving projects from one Resolve workstation to another.

To open any project, double-click it. To create a new project, double-click the Untitled Project icon.



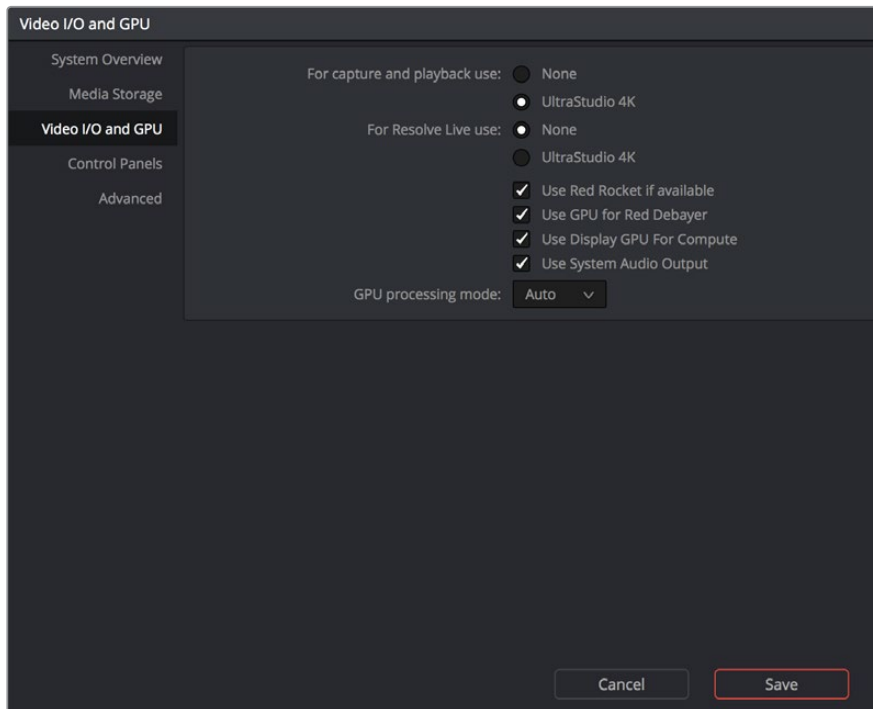
The Project Manager shows all projects belonging to the current user

More information about the Project Manager appears in Chapter 2, "Logging in and the Project Manager."

Preferences

The Preferences Window lets you set up the overall environment of your DaVinci workstation, choosing which language to display the interface with, what hard drive volume to use as the scratch disk, what I/O interfaces to use for playing audio and viewing video output, and which, if any, control panel to use while grading. If you have a system that doesn't change very often, then you may only rarely use the Preferences window. On the other hand, if you're working with a mobile system with changing video interfaces, control panels, and scratch volumes, then you may use this window more frequently.

Whenever you change any settings in the Preferences, you must quit and restart Resolve for those preferences to take effect.



The DaVinci Resolve Preferences let you set up your environment

A quick overview of the Preferences appears below, but for more information, see Chapter 3, “Project Settings and Preferences.”

System Overview

Provides an overview, for reference, of all hardware and computer characteristics that are relevant to DaVinci Resolve running smoothly, including listing of installed GPUs. A Language pop-up at top lets you specify which language the DaVinci Resolve user interface displays. Resolve currently supports English, Spanish, Chinese, and Japanese.

Media Storage Volumes

This is a list within which you define the scratch disk used by your system. The first volume in this list is where Gallery stills and cache files are stored, so you want to make sure that you choose the fastest storage volume that’s connected.

Video I/O and GPU

The preferences in this panel let you choose video interfaces and GPU processing hardware on your workstation. If you have multiple Blackmagic Design I/O interfaces connected to your computer, you can choose one to use for monitoring video output, and one to use for Resolve Live, a feature that lets you grade camera output during a shoot as part of an on-set workflow.

Control Panels

Lets you choose and configure (if necessary) a control panel that’s connected for use during grading in Resolve.

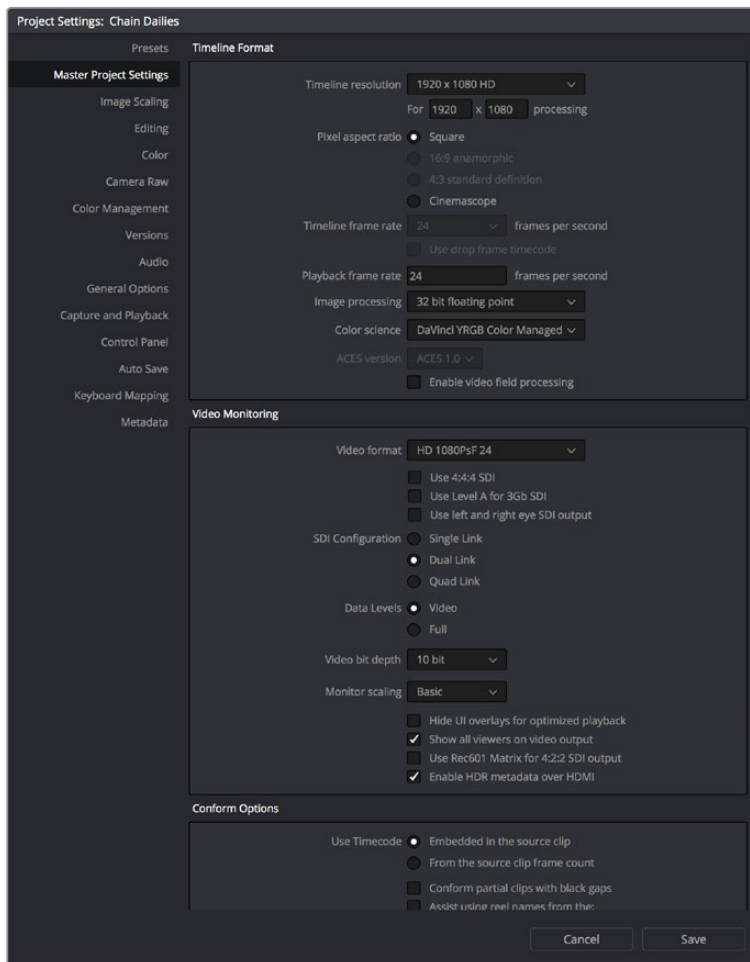
Project Settings

Once you've created a project, all project-specific settings are found in the Project Settings window. To open the Project Settings window, just click the gear button at the bottom right on any page.



Project Manager and Project Settings buttons

The Project Settings open in the middle of the screen, divided into a series of panels which can be selected from a sidebar to the left. Each panel contains a collection of related settings that affects some category of Resolve functionality. To open a panel of settings, simply click its name in the sidebar at the left.



The Project Settings show all project-specific settings and attributes

The Master Project Settings define the principal attributes of a project, such as the timeline resolution, timeline frame rate, color science, and bit depth. Image Scaling settings define how clips that don't match the timeline resolution are scaled to fit. There are other panels for Editing settings, Color settings, Lookup Tables (LUTs), et cetera.

For more information about Project Settings, see Chapter 3, "Project Settings and Preferences."

Switching Among Pages

DaVinci Resolve is divided into four main pages of functionality, which can be accessed using four buttons at the very bottom of the DaVinci Resolve interface. These buttons are organized in order of workflow, and they're always available, letting you quickly switch between importing media, editing, grading, and outputting your project in a structured manner.

You can also switch pages using the following keyboard shortcuts.

Page	Keyboard Shortcut
Media	Shift-2
Edit	Shift-4
Color	Shift-6
Deliver	Shift-8

The Media Page

The Media page is the primary interface for media management and clip organization in DaVinci Resolve. It's central to the way DaVinci Resolve works that the source media used by a project is organized separately from the project data that you import and manage in the Edit page. In this way, you can manage and update the clips used by timelines in the current project with ease, switching between offline and online media, reorganizing clips, and troubleshooting any problems that occur.

The Media page also contains much of the core functionality that will be used for on-set workflows, and in the ingest, organizational, and sound-synching steps of digital dailies workflows. This chapter covers most of the functionality found in the Media page, including functions in detail that are referenced throughout this manual.

The Media page is divided into six different areas, designed to make it easy to find, select, and work with media in your project. Much of the functionality and most of the commands are found within the contextual menus that appear when you right-click clips in the Media Storage, File Browser, or Media Pool.

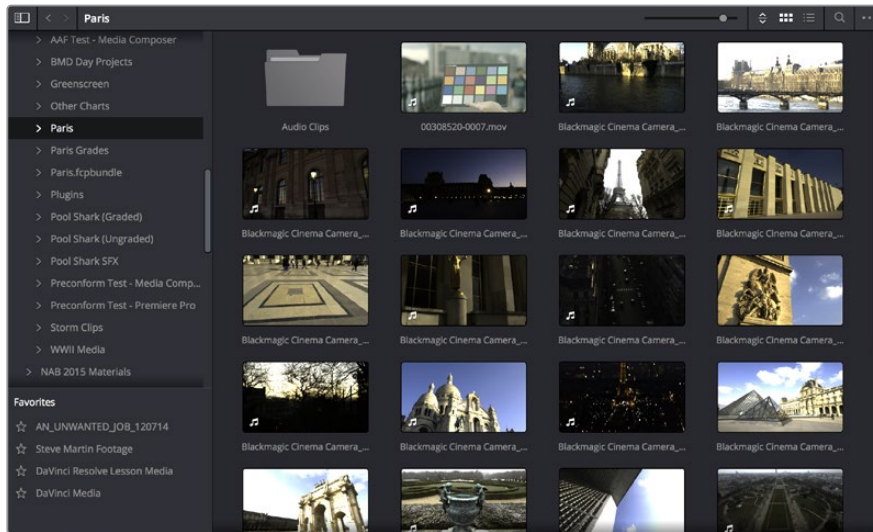


Media page

For more information on using the Media page, see Chapter 7, “Using the Media Page.”

The Media Storage Browser

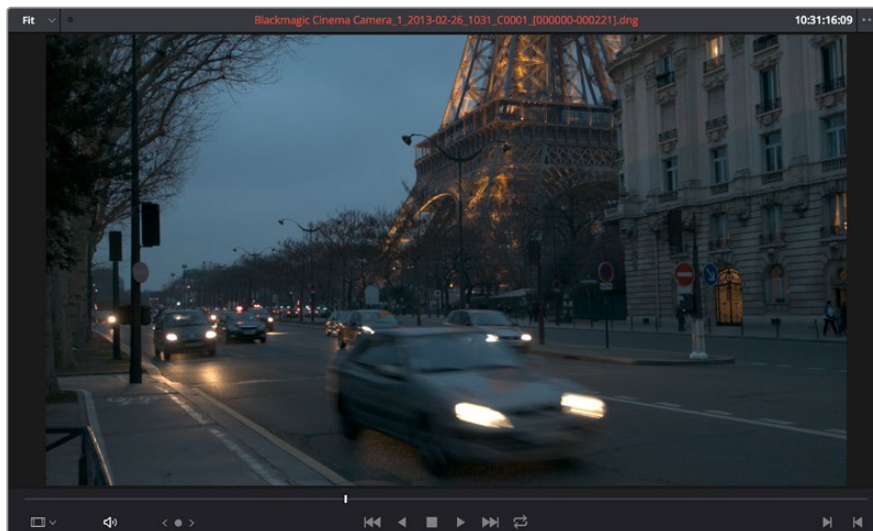
The Media Storage browser shows a list of all volumes that are currently available to your Resolve workstation. It's used to locate media that you want to import manually into your project.



Media Storage with scrubbable Clip view

Viewer

Clips that you select in any area of the Media page show their contents in the Viewer. A jog bar appears at the bottom, letting you drag the playhead directly with the pointer, while a jog control between the mode pop-up and transport controls lets you move through a long clip more slowly. The full width of the jog bar represents the full duration of the clip in the Viewer. The current position of the playhead is shown in the timecode field at the upper right-hand corner of the Viewer. Simple transport controls appear underneath the jog bar, letting you Jump to First Frame, Play/Stop, and Jump to Last Frame.

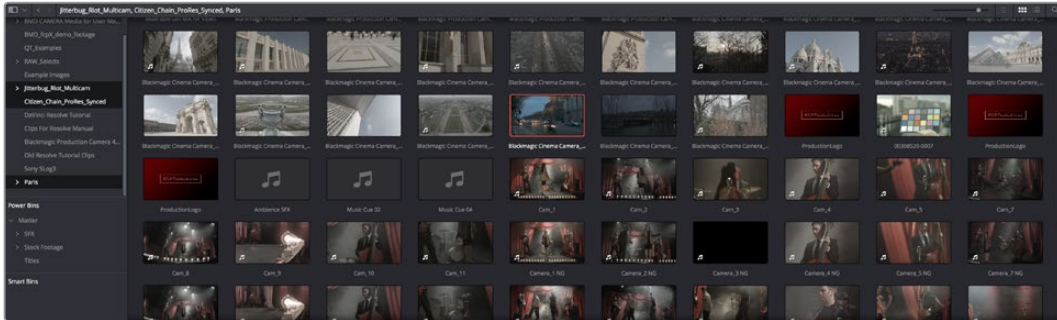


Media page viewer

You can also put the Viewer into Cinema Viewer mode by choosing Workspace > Viewer Mode > Cinema Viewer (Command-F), so that it fills the entire screen. This command toggles Cinema Viewer mode on and off.

Media Pool

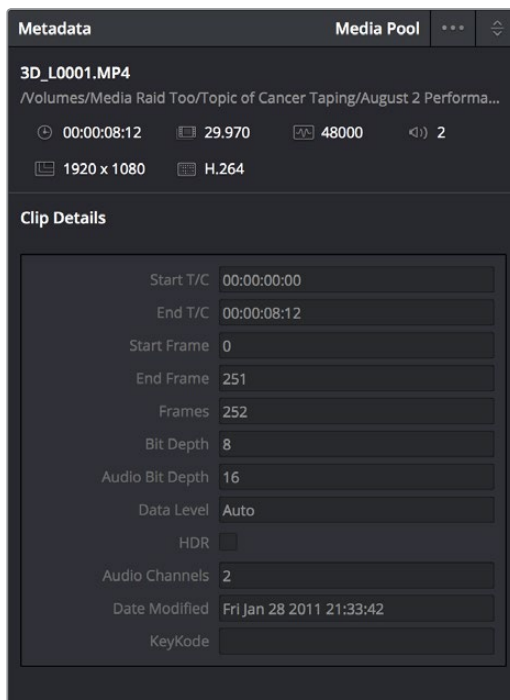
The Media Pool contains all of the media that you import into the current project. It also contains any media that's automatically imported along with Timelines that have been imported into Resolve. Ordinarily, all media imported into a project goes into the Master folder, however the Media Pool can be organized into as many user-definable folders as you like, depending on your needs. Media can be freely moved from one folder to another from within the Media Pool.

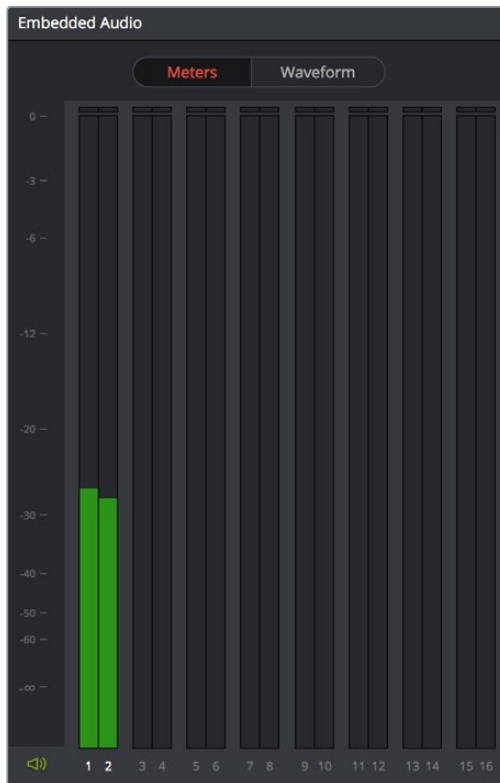


Media Pool with the Folder View closed

Metadata Editor

When you select a clip in any area of the Media page, its metadata is displayed within the Metadata Editor. If you select multiple clips, only the last clip's information appears. The Metadata Editor's header contains uneditable information about the selected clip, including the file name, directory, duration, frame rate, resolution, and codec. A series of editable fields within the Metadata Editor lets you review and edit the different metadata items that are available. A pop-up menu at the upper-right of the Metadata Editor lets you choose from many different sets of metadata fields and checkboxes, each grouped for a specific task or workflow.





Clip Metadata Editor Panel and Audio Meters exposed Panel

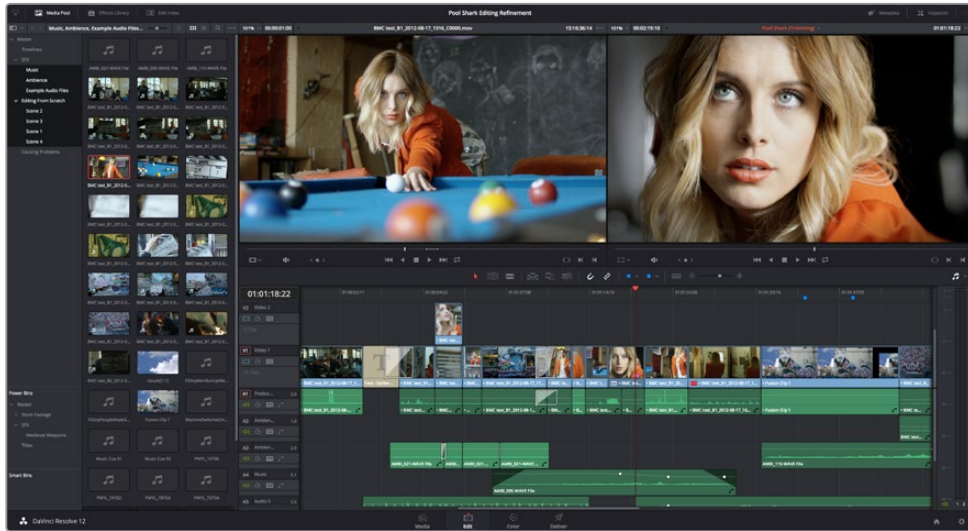
Audio Panel

The Audio Panel can be put into one of two modes via a pair of buttons above the audio meters. In the default Meters mode, Audio Meters are displayed that show the levels of audio in clips you're playing. In Waveform mode, you can load audio clips side by side with video clips opened in the Viewer in order to sync them together manually. The Audio Panel can also be hidden.

The Edit Page

The Edit page exposes a source-record style NLE that incorporates many specialized features for both creative editing and finishing. The Edit page is divided into three main regions: the browsers found at the left, the Viewers at the top, and the Timeline at the bottom, all of which work together to let you import, edit, and trim timelines with a flexible variety of tools and methods.

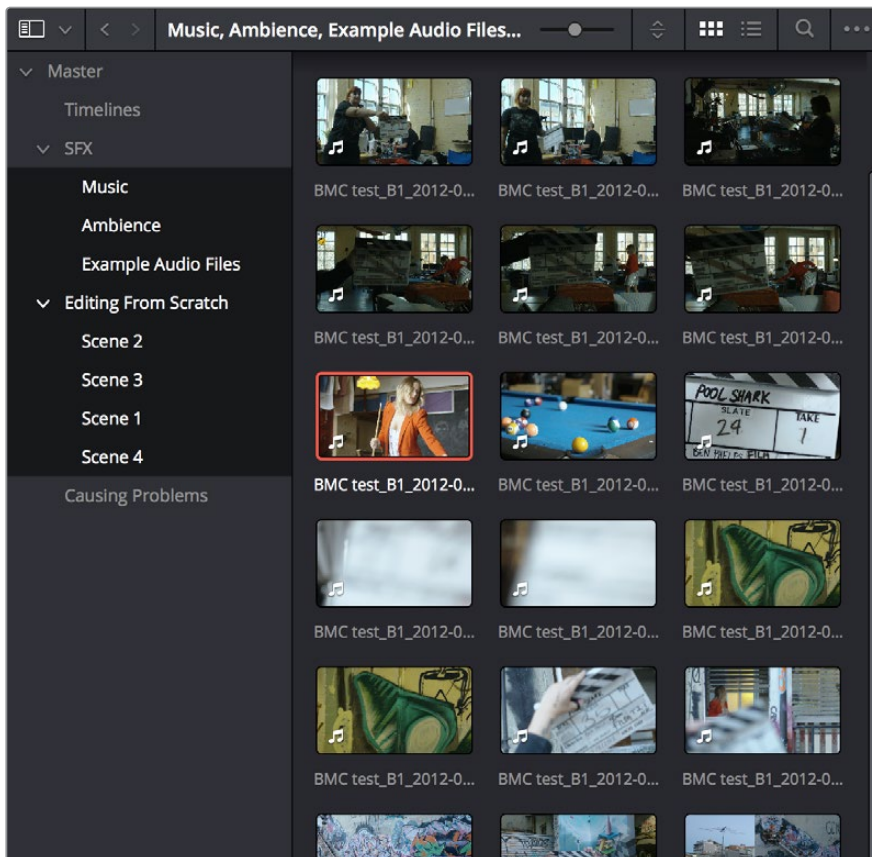
For more information on the Edit page, see Chapter 14, "Editing Fundamentals."



The Edit page

The Media Pool

The Media Pool lets you organize and peruse all of the media and timelines in a project. DaVinci Resolve projects may contain one or more edited timelines (sometimes called a sequence in other applications).

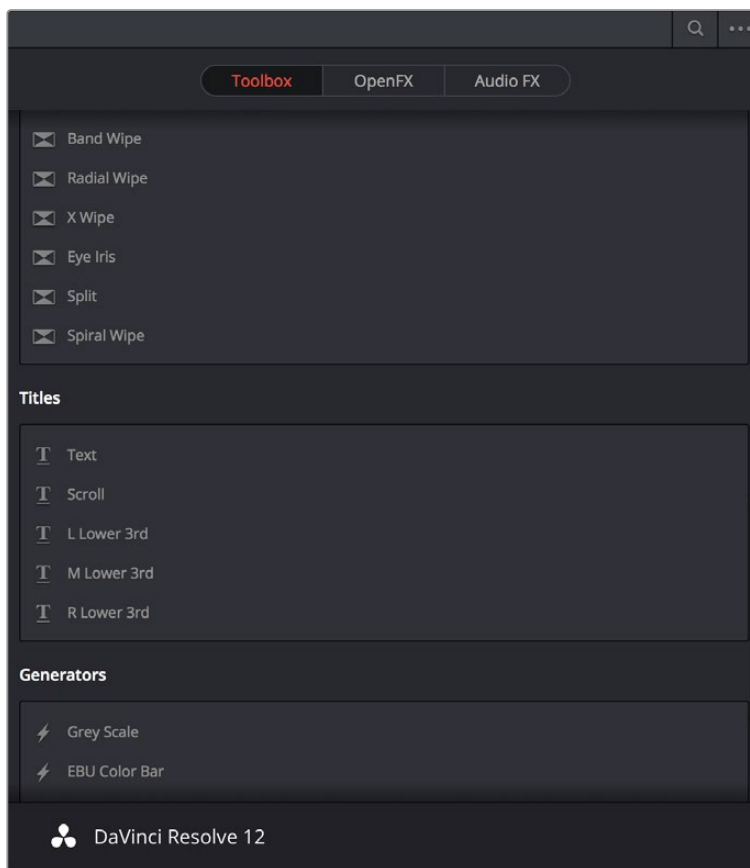


The Media Pool in Thumbnail mode

The Media Pool in the Edit page is identical to that shown on the Media page, and shows you all of the source clips and timelines that are available for editing. A Bin list at the left shows a hierarchical list of folders that you can use to organize your media. By default, the Media Pool has a single bin, named “Master,” but you can add more bins as necessary to organize your clips, opening any of them to expose their contents with a single click. The Bin list can be hidden or shown via the button at the upper-left of the Media Pool. A browser to the right shows the contents of the currently selected bin.

Effects Library Browsing

The Effects Library contains a folder with the different Video Transitions, Title Effects, Generators, and Filters that are available for editing in the Timeline. The Effects Library has two panels, a Toolbox panel that contains the default Transitions, Titles, and Generators that Resolve comes with, and an OpenFX panel that contains any OpenFX transitions and generators you might have installed on your system.



The Effects Library, made taller to show all of its contents

Edit Index

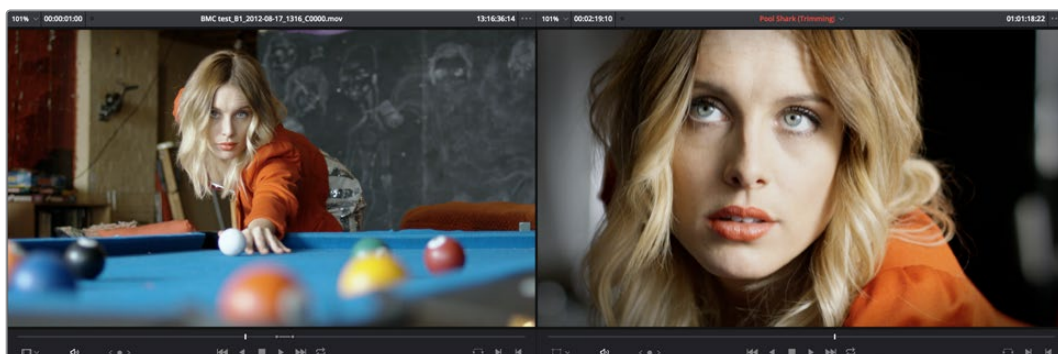
Clicking the Edit Index button opens the Edit Index. By default, this shows an EDL-style list view of all the edit events in the current Timeline. Whichever timeline is selected in the Timeline list displays its events here; each clip and transition is shown as an individual event, each of which contains multiple columns of information. If you re-edit a timeline, your changes are automatically reflected in this list.

#	Reel	V	C	Dur	Source In	Source Out	Record In	Record Out	NaN
1		V1	C		19:17:12:00	19:17:54:12	01:00:00:00	01:00:42:12	Bla
2		A1	C		19:17:12:00	19:17:54:12	01:00:00:00	01:00:42:12	Bla
3		V1	C		00:35:15:00	00:36:03:06	01:00:42:12	01:01:30:18	Bla
4		A1	C		00:35:15:00	00:36:03:06	01:00:42:12	01:01:30:18	Bla
5		V1	C		00:36:51:00	00:37:54:19	01:01:30:18	01:02:34:13	Bla
6		A1	C		00:36:51:00	00:37:54:19	01:01:30:18	01:02:34:13	Bla
7		V1	C		00:52:07:00	00:52:57:00	01:02:34:13	01:03:24:13	Bla
8		A1	C		00:52:07:00	00:52:57:00	01:02:34:13	01:03:24:13	Bla
9		V1	C		01:31:14:00	01:32:09:20	01:03:24:13	01:04:20:09	Bla
10		A1	C		01:31:14:00	01:32:09:20	01:03:24:13	01:04:20:09	Bla
11		V1	C		01:35:48:00	01:36:30:03	01:04:20:09	01:05:02:12	Bla
12		A1	C		01:35:48:00	01:36:30:03	01:04:20:09	01:05:02:12	Bla
13		V1	C		02:00:34:00	02:01:13:00	01:05:02:12	01:05:41:12	Bla
14		A1	C		02:00:34:00	02:01:13:00	01:05:02:12	01:05:41:12	Bla
15		V1	C		02:01:56:00	02:07:08:15	01:05:41:12	01:10:54:03	Bla
16		A1	C		02:01:56:00	02:07:08:15	01:05:41:12	01:10:54:03	Bla
17		V1	C		02:09:53:00	02:10:18:02	01:10:54:03	01:11:19:05	Bla
18		A1	C		02:09:53:00	02:10:18:02	01:10:54:03	01:11:19:05	Bla
19		V1	C		02:10:37:00	02:11:03:15	01:11:19:05	01:11:45:20	Bla
20		A1	C		02:10:37:00	02:11:03:15	01:11:19:05	01:11:45:20	Bla
21		V1	C		02:15:35:00	02:16:04:10	01:11:45:20	01:12:15:06	Bla
22		A1	C		02:15:35:00	02:16:04:10	01:11:45:20	01:12:15:06	Bla

Edit Index List shown open

Source/Offline and Timeline Viewers

The Source Viewer lets you view individual clips from the Media Pool to prepare them for editing. Meanwhile, the Timeline Viewer shows the frame at the position of the playhead in the Timeline. You can select either viewer by clicking, and the name of the viewer that currently has focus appears in orange. The color shown in the Source Viewer usually reflects that of the original source media, while the Timeline Viewer shows whatever grading you've done in the Color page.



Source and Timeline Viewers Inspector

You can also put either the Source or Timeline Viewers into Cinema Viewer mode by choosing **Workspace > Viewer Mode > Cinema Viewer (Command-F)**, causing whichever Viewer is currently selected to fill the entire screen. This command toggles Cinema Viewer mode on and off.

Inspector

The Inspector can be opened to let you customize compositing, transform, and cropping parameters for clips, as well as clip-specific retime and scaling options. Furthermore, the Inspector lets you edit the parameters of transitions, titles, and generators used in the Timeline, in order to customize their effect. Ordinarily, the Inspector opens alongside the Source and Timeline Viewers, but on smaller displays, opening the Inspector switches the Edit page to a single-viewer mode, showing you the Timeline item that you're inspecting alongside the Inspector with that clip's parameters.



The Inspector, opened and showing a clip's parameters

Toolbar

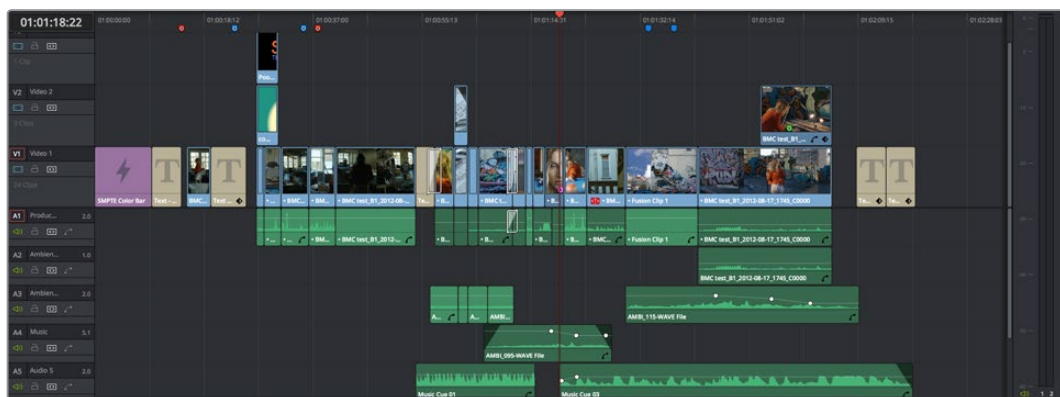
Eleven buttons starting from the left, running along the top of the Timeline, let you choose different tools for performing various editing functions.



Buttons in the Toolbar

Timeline

The Timeline shows whichever timeline you've double-clicked in the Timelines browser. It's the workspace where you either edit programs together from scratch, or import sequences from other applications to work on inside of Resolve. You can only have one Timeline open at a time.



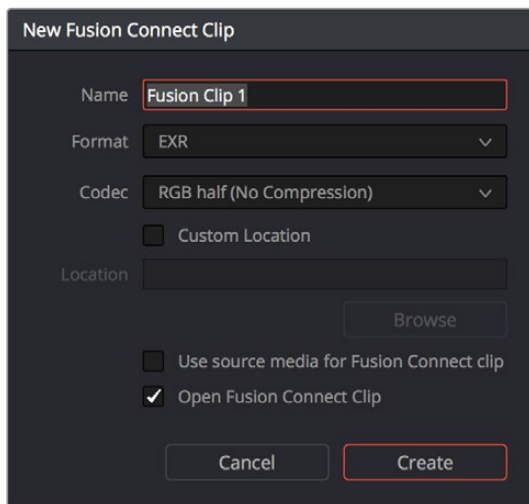
An edited timeline

The Timeline is divided into audio and video tracks, each of which has a series of header controls at the left that let you choose destination tracks for editing, name tracks, and turn tracks on and off, among other things. The appearance of the Timeline can be customized using the Timeline View Options pop-up in the toolbar.

Edit and Color Page Effects and Fusion Connect

DaVinci Resolve has a wealth of effects in both the Edit and Color pages for creating titles, transforming and animating clips, compositing and creating transparency effects, cutting mattes, applying filters, image stabilization, lens dewarping, etcetera, etcetera. To use Resolve to best effect, it's prudent to begin to think of the Edit and Color pages as complementary sets of controls. For editors, the Color page is really just a giant inspector filled with every control for color and visual adjustment you could want, that's only one click away. For colorists, the Edit page is a refined environment for dealing with conform issues and taking care of a myriad of finishing tasks quickly and easily, that itself is only one click away. For more information on the effects that are available in DaVinci Resolve, see Chapter 19, "Edit Page Effects," and Chapter 29, "Color Page Effects."

However, when you run into instances where the various effects in the Edit and Color page aren't enough to achieve the effect you require, you can use the Fusion Connect features of DaVinci Resolve to send one or more clips from the Edit page timeline to Blackmagic Fusion, the powerful node-based compositing application from Blackmagic Design, in order to do more robust compositing and effects work there. This is a simple round-trip operation that lets you send clips from the Resolve timeline to Fusion, add effects, and then render a finished effect out of Fusion that will automatically appear back in your timeline. For more information, see the "Fusion Connect" section of Chapter 19, "Edit Page Effects."



The New Fusion Connect Clip dialog

The Color Page

The Color page is where you color correct, or grade, your program. It has all of the controls available for manipulating color and contrast, reducing noise, creating limited secondary color corrections, building image effects of different kinds, adjusting clip geometry, and making many other corrective and stylistic adjustments. The Color page is divided into seven main areas that work together to let you build a grade. It's divided into seven regions.



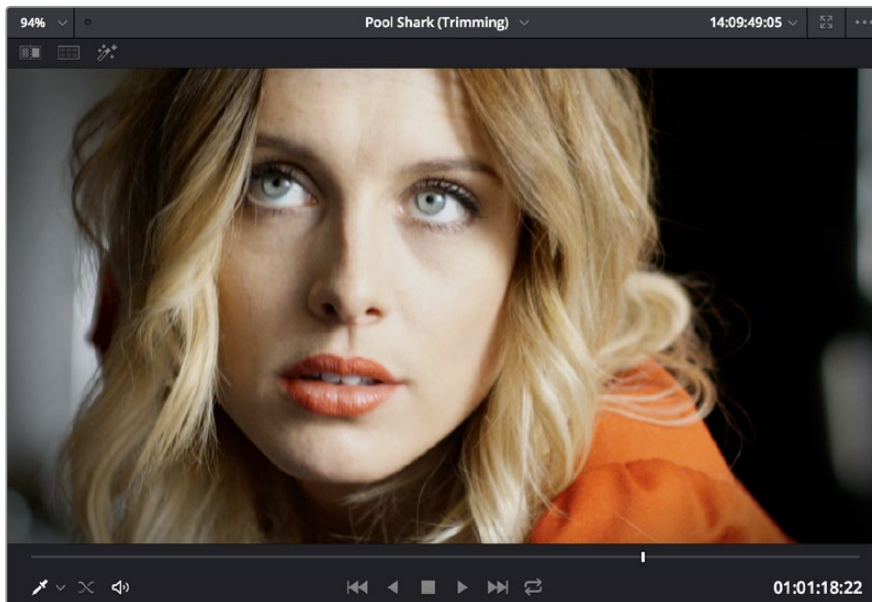
The default layout of the Color page

For more detailed information about the Color page, see Chapter 23, “Introduction to Color Grading.”

Viewer

The Viewer shows the frame at the current position of the playhead in the Timeline. The contents of the Viewer are almost always output to video via whichever I/O interface you have connected. At the top of the Viewer is a header that displays the Project and Timeline names, as well as a Viewer Timecode display that shows the source timecode of each clip by default. The Timeline name is also a pop-up display that lets you switch to any other timeline in the project. A jog bar (sometimes referred to as a scrubber bar) underneath the image lets you drag the playhead across the entire duration of the clip, while transport controls underneath that let you control playback. A toolbar at the top provides controls governing Image Wipes, Split-Screen controls, and Highlight display. Additional controls let you turn audio playback on and off, and choose which on-screen controls are currently displayed.

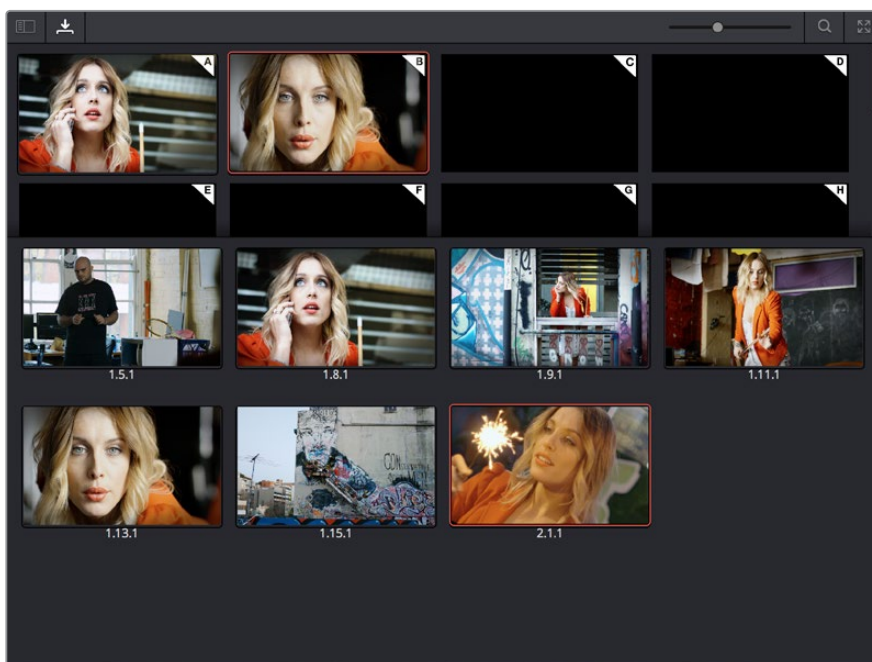
You can also put the Viewer into Cinema Viewer mode by choosing Workspace > Viewer Mode > Cinema Viewer (Command-F), so that it fills the entire screen. This command toggles Cinema Viewer mode on and off. Two other modes, Enhanced Viewer (Option-F) and Full Screen Viewer (Shift-F), are available to provide more working area for tasks such as window positioning and rotoscoping.



Viewer with transport controls

Gallery

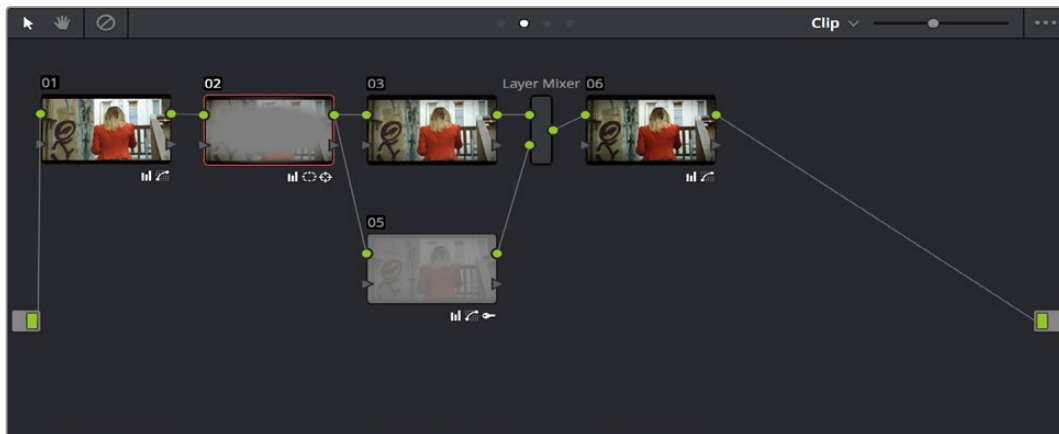
The Gallery is used for storing still frames to use as reference when comparing clips to one another. Each still frame also stores that clip's grade so you can copy it later; stills and grades are stored together. A button lets you open up the Album browser, used for organizing your stills. At the top of the Gallery, Memories let you store grade information that you can apply using a control panel or keyboard shortcuts. You can also open a larger Gallery window within the Color page that provides more room for organizing your saved stills and grades. For more information on the Gallery page, see Chapter 28, "The Gallery and Grade Management."



The Gallery has Memories, Stills saved in Albums and your PowerGrades

Node Editor

The Node Editor is where you assemble one or more individual corrections (nodes) together to create multi-correction grades (seen as node trees). This is a powerful way of assembling grades, since different combinations of nodes let you create different corrections and very specific adjustments by reordering operations, combining keys, or changing the layer order of different adjustments. For more information about the Node Editor, see the “Node Editor Basics” section of Chapter 30, “Working in the Node Editor.”

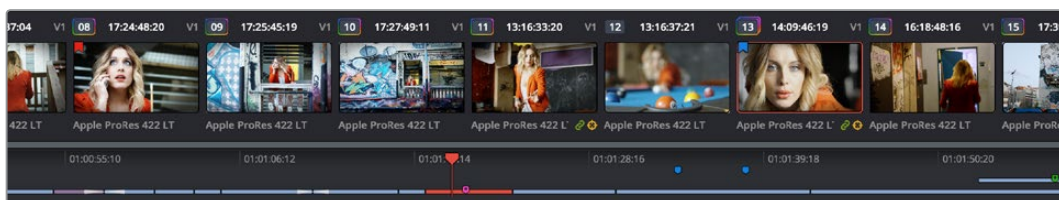


Node Editor to construct your grade processing signal flow

Timeline

The Timeline in the Color page reflects the contents of the Timeline in the Edit page, but has a different appearance that’s tailored to the requirements of the colorist. However, the content is identical, and changes made to the Timeline in the Edit page are immediately seen in the Color page as you switch back and forth. The Color page Timeline provides several ways of navigating the clips in your project, as well as keeping track of what has been done to which clips.

The Timeline is divided into three parts, each of which shows different information and provides differing controls. A Timeline Ruler at the top lets you scrub the playhead across multiple clips, and can be zoomed out enough to show every clip in your entire program. Underneath, the Mini-Timeline (which can be opened or closed via a button at the right of the palette bar) shows a small representation of the Timeline in the Edit page wherein each clip is as long as its actual duration. At the bottom of the Timeline is the Thumbnail timeline, in which each clip is represented by a single frame. The currently selected clip is outlined in orange, and information appears above and below each thumbnail such as each clip’s source timecode, clip number and track number, version name, whether it’s been graded, whether it’s been tracked, if it’s been flagged, and so on.



The Timeline

Left Palettes

A series of palettes at the bottom left of the Color page provide access to different sets of grading tools, used principally for manipulating color, contrast, and raw media format settings. Each individual palette is opened by clicking the corresponding icon at the top of the Palette panel.

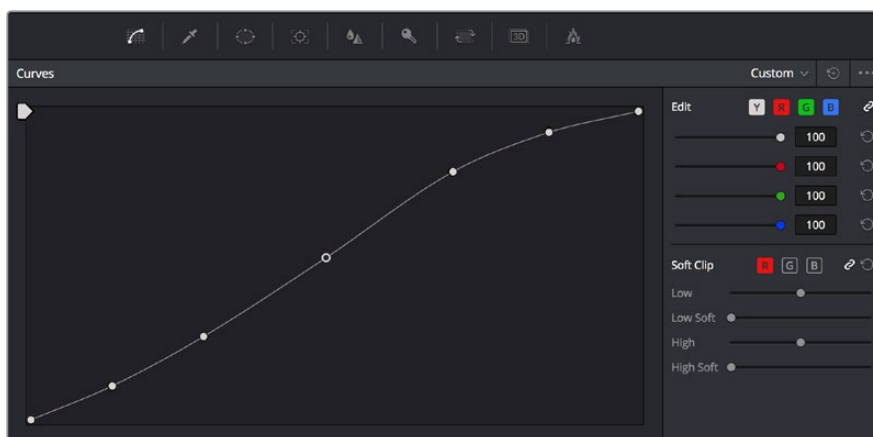
The available palettes are the Camera Raw palette (for making metadata adjustments to raw media formats), the Color Match palette (for creating automatic grades by sampling on-camera color charts), the Color Wheels (graphical color balance controls and master wheels or sliders for adjusting YRGB Lift/Gamma/Gain), the RGB Mixer (for mixing color channels into one another), and the Motion Effects palette (with controls for noise reduction and artificial motion blur).



Left palette selection buttons

Center Palettes

At 1920x1080 resolution or higher, a second set of palettes is organized at the bottom center of the Color page. These palettes span a wide range of functionality, and the adjustments you make with them can be combined with those made using the Color palettes.



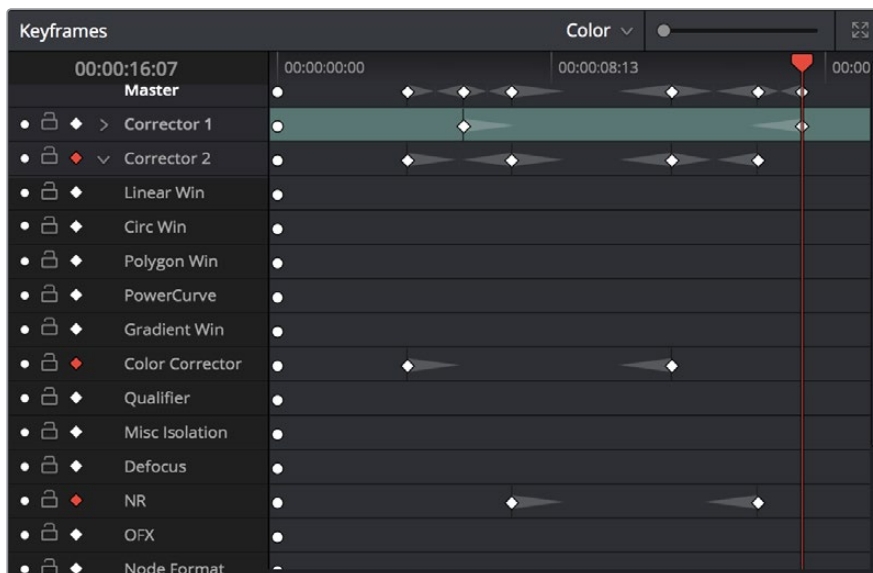
Center palette selection buttons

NOTE At lower resolutions, the Left and Center palettes are merged to fit the Resolve interface into a smaller area.

The nine available Center palettes include the Curves palette, the Qualifiers palette, the Power Windows palette, and Tracker palette, the Blur palette, the Key palette, the Sizing and Stereoscopic 3D palettes, and the Data Burn-In palette.

Keyframe Editor

The Keyframe Editor provides an interface for animating Color, Sizing, and Stereo Format adjustments over time. Each node in the Node Editor corresponds to a track in the Keyframe Editor, which lets you animate each node's adjustments independently.



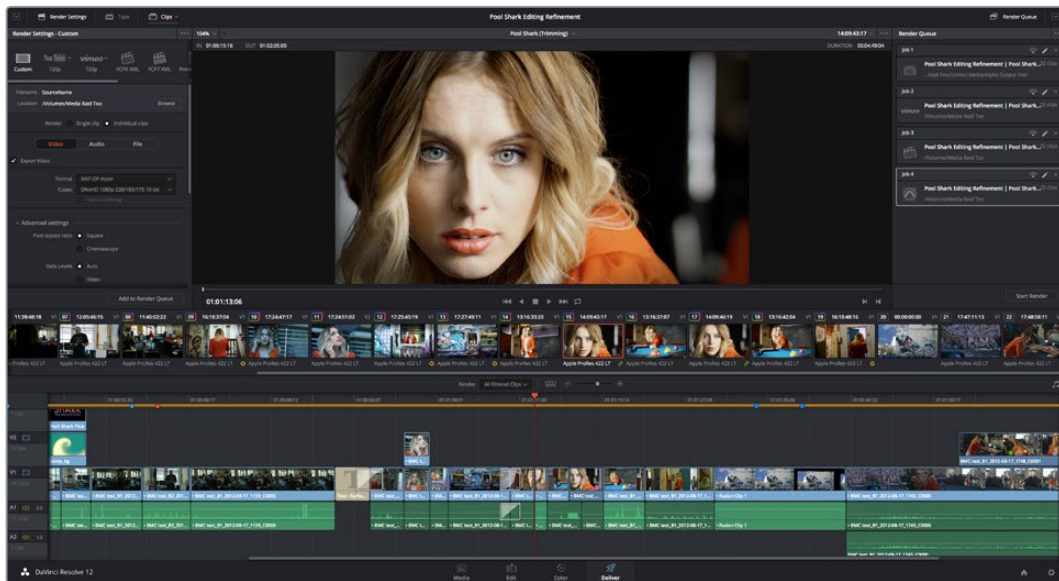
Keyframe Editor displaying dynamic grade changes

Furthermore, each node's track can be opened up to reveal Parameter Groups, so that you can animate subsets of an individual node's functions independently of other functions within the same node.

The Deliver Page

Once you've finished grading your project, you need to either render it, or output it to tape to deliver it to your client. This is where the Deliver page comes in. The Deliver page can be used both to output digital deliverables, or to output tape, depending on which mode you enable. Either way, the Deliver page is divided into five areas of functionality, each of which lets you set up a different part of a render or output to tape.

The Deliver page is set up to let you queue a series of individual jobs, each of which can have different settings, or be set up to render different parts of the Timeline. In this way, you can output multiple deliverables, or re-render multiple areas of a timeline, as your needs require.

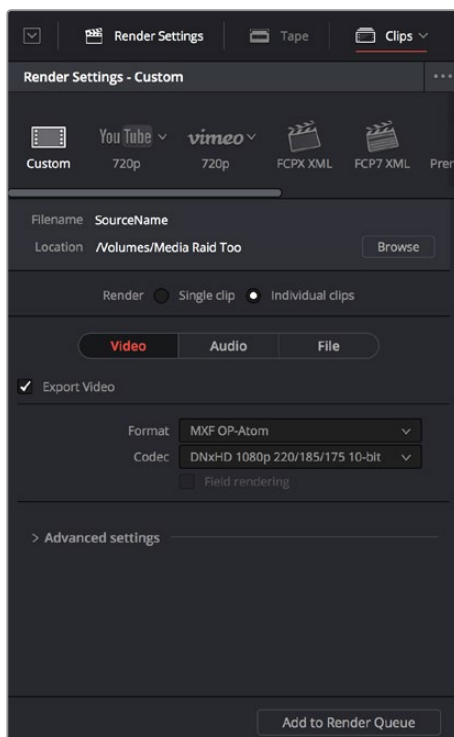


The Deliver page

For more information about using the Deliver page, see Chapter 33, “Using the Deliver Page”.

The Render Settings List

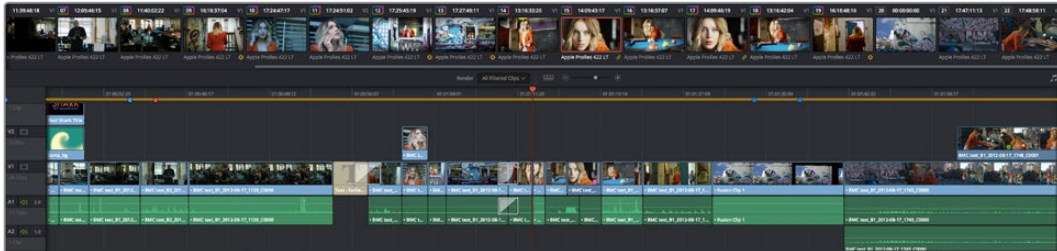
The Render Settings list contains the customizable settings that affect how media is rendered out of Resolve. These settings are covered in more detail later in “File-based Output.” The Render Settings you can choose from for outputting from Resolve appear in three panels, separating the Video, Audio, and File information-based settings in a logical fashion. By default, this list shows only the most important criteria necessary for defining a render. However, additional controls can be exposed by clicking the “Advanced settings” button at the bottom of each group of settings.



Render settings

The Deliver Page Timeline

The Timeline mirrors the Timeline seen in the Color page. You can use the Timeline in the Deliver page to turn off tracks with clips you don't want to include in the operation, define the range of clips you want to render or output to tape, and to choose which versions for each clip you want to output. You also have the option of switching the Deliver page Timeline to look like the Color page timeline instead, if that's what you're more comfortable with.

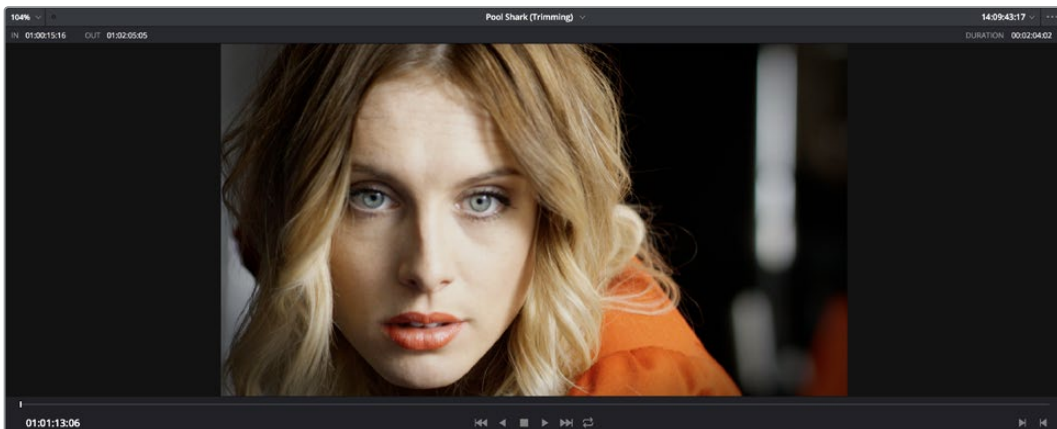


The Deliver page's Thumbnail and Mini-Timeline match the Color page

The Deliver page Timeline also has the Timeline Filter pop-up at the right-hand side of the toolbar. Using this pop-up to filter the contents of the Timeline lets you restrict the range of media you want to output in different ways. For example, if you've already rendered a timeline, but you've since made some changes, you can use the "Show Modified Clips" option to display only the clips that have changed within a particular timeframe. Another possibility is to choose the "Show Unrendered Clips" option to show all clips that have not yet been rendered.

The Viewer

When rendering file-based media, the Viewer shows you exactly how the media being output will look using the current settings, and the Transport controls move the playhead throughout the current Timeline.

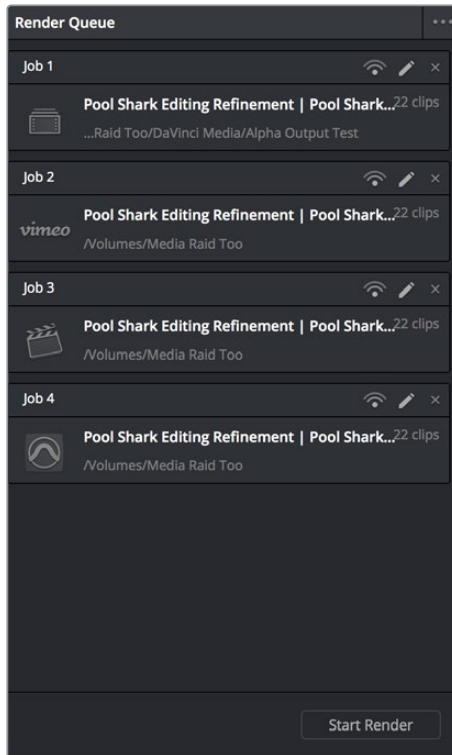


Deliver Viewer

When outputting to tape, the Viewer shows you the tape output so you can set up insert or assembly edit points, and the Transport controls move the tape in the deck if device control is enabled. You can also put the Viewer into Cinema Viewer mode by choosing Workspace > Viewer Mode > Cinema Viewer (Command-F), so that it fills the entire screen. This command toggles Cinema Viewer mode on and off.

The Render Queue

The Render Queue is a list of all the jobs you've queued up for file-based rendering. Each job can have an individualized range of clips and render settings, which you can use to render multiple sections or clips of a timeline, the same timeline output to multiple formats, or multiple timelines.



The Render Queue displays all jobs

The Render Queue also has the option to show either just the jobs within the current project, or jobs queued up and saved within all projects for the current user.

User Interface Conventions in Resolve

While each chapter covers the unique on-screen controls found in each page of DaVinci Resolve, this section summarizes how to use some of the more common controls you'll see.

Customizing Each Page Using the Interface Toolbar

Each page in DaVinci Resolve has an Interface Toolbar that runs along the top. This toolbar contains buttons that let you show and hide different panels of functionality, so you can hide things you don't need in order to create more room for controls that you're using.



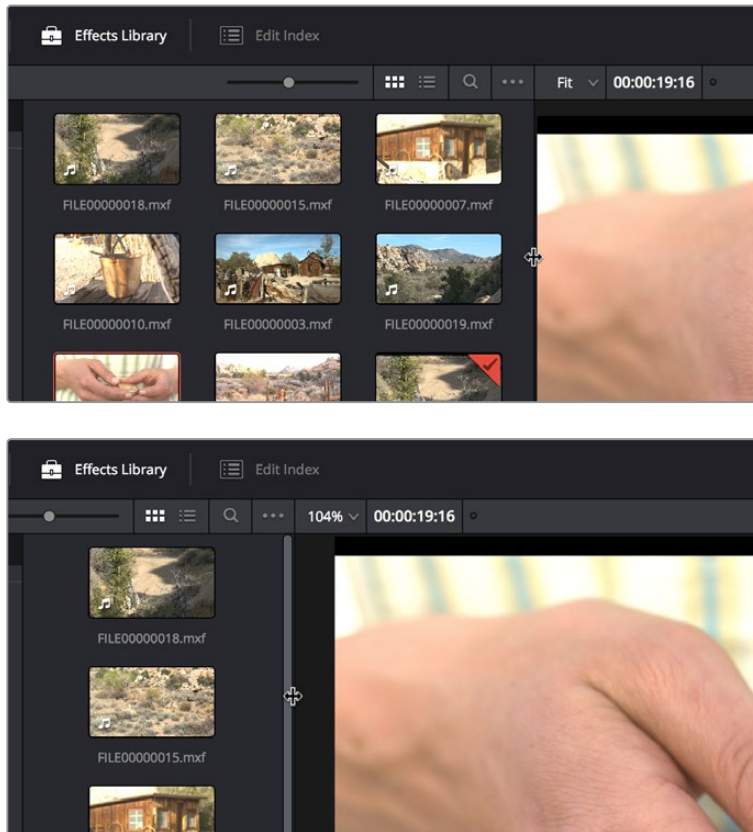
The interface toolbar for the Color page lets you customize the Color page controls

Each page has a different set of options, that reflect the capabilities of that page.

Adjusting the Workspace

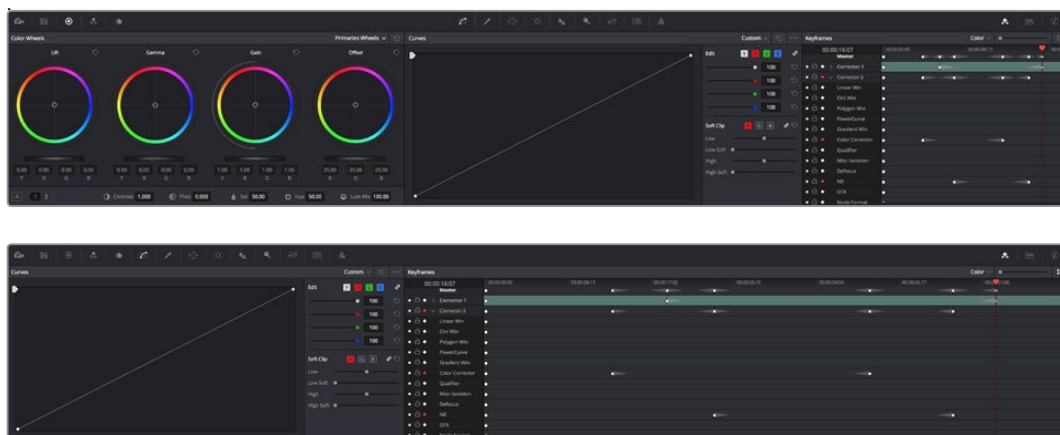
Each page of Resolve is divided into multiple panels, viewers, and palettes, each of which contains specific sets of functions. These can be customized in one of three ways.

You can resize different regions of the interface by positioning the pointer at the border between any two panels, and dragging it to enlarge one and shrink the other.



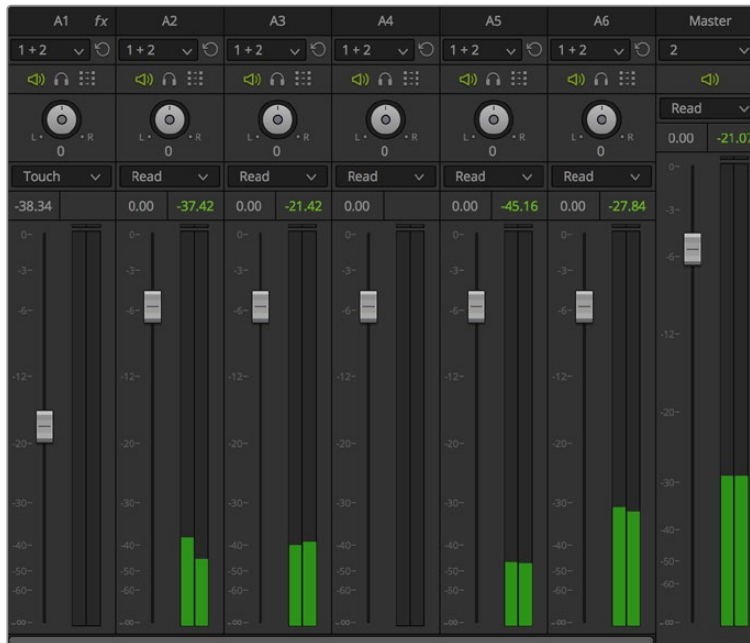
(Before/After) Resizing UI regions

Certain UI elements can be expanded, in the process rearranging another part of the UI, by clicking a small gray Expand button. For example, an expand button at the top right of the Keyframe Editor in the Color page can be clicked to make the Keyframe Editor wider, while at the same time hiding controls at the center to make room.



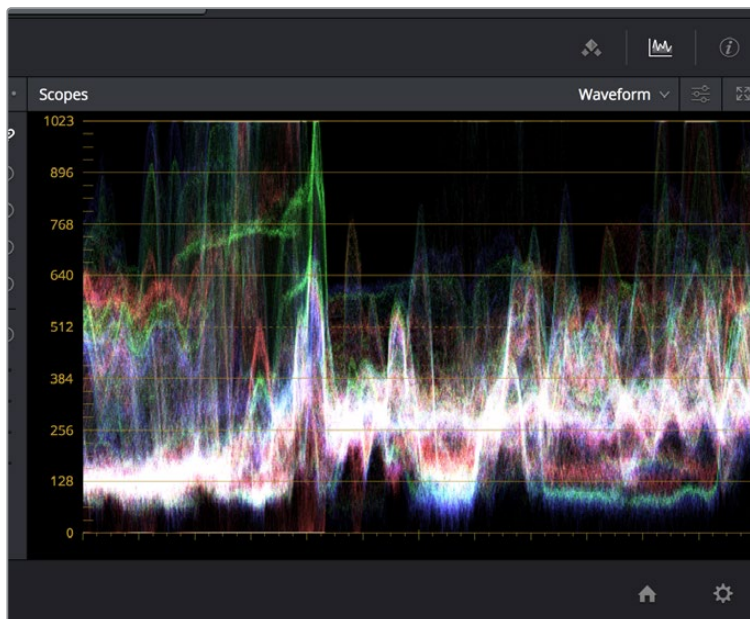
(Before/After) Expanding the Keyframe Editor

Lastly, there are two interface elements that can either be docked in their respective pages, or opened in separate windows. The first of these, the Audio Mixer, lets you analyze the volume and set levels of tracks and clips in your timeline. The Audio Mixer can be opened in its docked position at the right of the Timeline by clicking the Audio Mixer button in the Edit page toolbar, or by choosing Workspace > Audio Mixer.



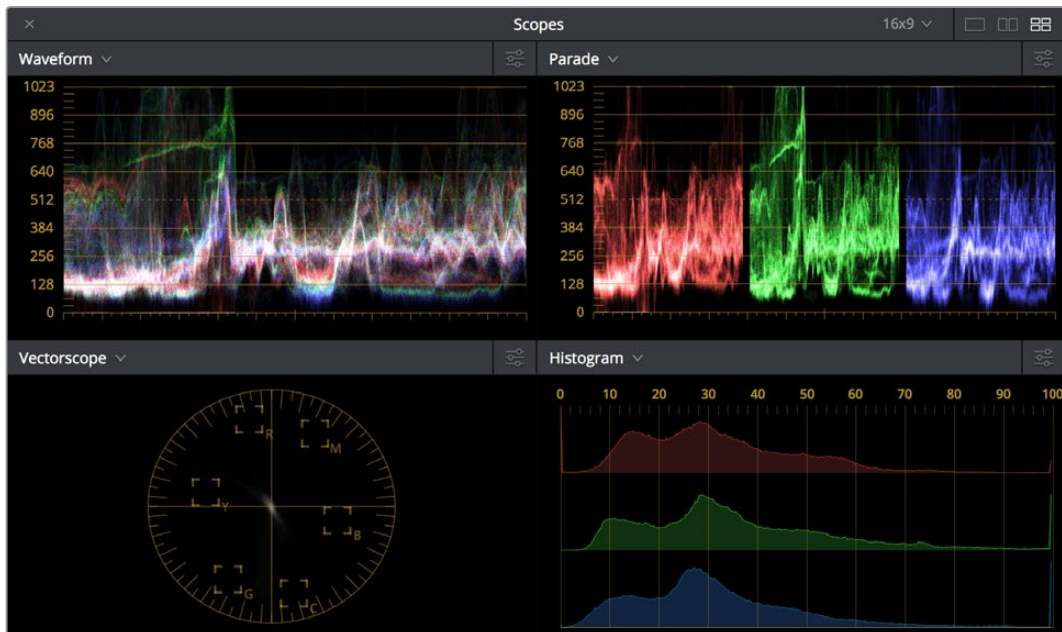
The Audio Mixer

The Video Scopes let you precisely analyze the color and contrast of clips in the Color page. They can be exposed in their docked position to the right of the Color page palettes by clicking the Video Scope button in the Color page toolbar.



The Video Scope, docked next to the other palettes at the bottom of the Color page

Optionally, you can click the expand button at the top right of the video scope to open the video scopes into a floating window, within which you can display all four video scopes together, or individually, on any monitor connected to your workstation.



Video scopes in a floating window

Additionally, the Audio Mixer and Video Scopes are available in many of the dual-screen layouts available in Resolve. The video scopes aren't just available in the Color page. They're also available in the Media and Deliver pages for whenever you need to evaluate the video signal more objectively, such as when you're setting up to capture from tape or scan from film, or when you're setting up for output.

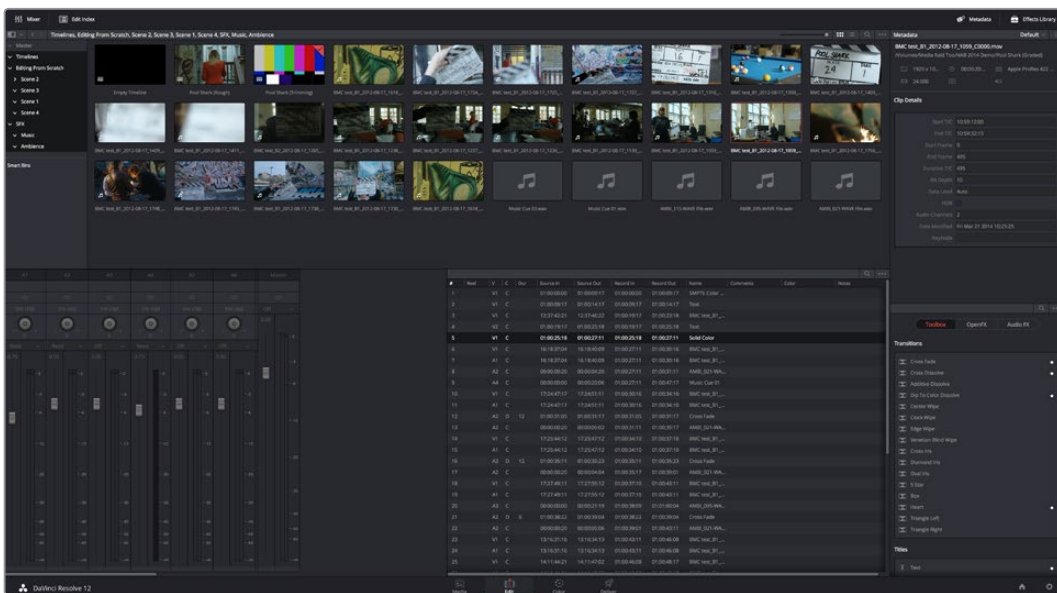
In the Resolve single screen layout, the Audio Mixer and Video Scopes can be moved to a second computer display if one's available, and both disappear temporarily if you change pages or switch to another application.

Resetting the UI

If you're unhappy with the way you've rearranged the Resolve UI, you can choose **Workspace > Layout > Reset UI Layout** to restore the UI to the default arrangement.

Dual Monitor Layouts

The Media, Edit, and Color pages can be switched between single screen and dual screen layouts by choosing Workspace > Layout > Dual Screen > On. Each dual screen layout makes it possible to see many more controls at once, often in a larger workspace that lets you manage more clips, more gallery stills, et cetera.



The Edit page in dual-screen mode

In single screen mode, you can choose which display shows the Resolve UI by choosing Workspace > Layout > Primary Display > Display 1 or Display 2. In dual screen mode, this reverses the contents of both monitors.

Contextual Menus

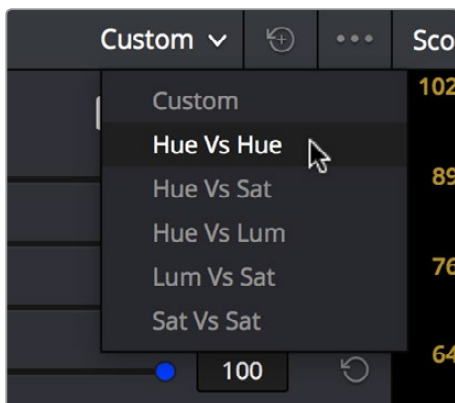
Nearly every panel on every page exposes additional functionality via contextual menus, which appear when you right-click on the appropriate item. Sometimes, different commands become available depending on whether you right-click the background of a particular panel, or on an item such as a still or node.



Contextual menus expose additional controls in the Color page Viewer

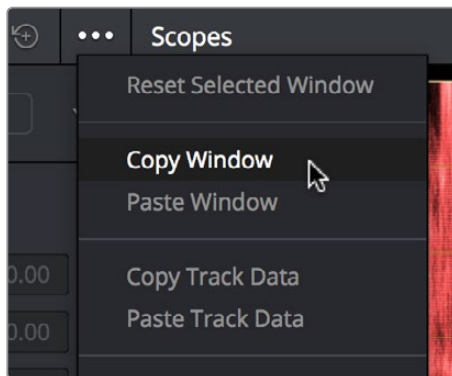
Buttons and Pop-up Menus

Most of the buttons and pop-up menus that appear in various toolbars are activated with a single click. Many panels and palettes appear with a Mode pop-up at the upper right-hand corner that lets you choose a different type of function within that palette.



Mode pop-up

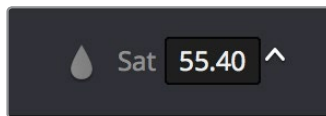
Additionally, many panels, palettes, and windows expose an Option menu, that appears as three horizontal dots, which expose additional commands related to that particular function.



Option menus

Adjusting Parameters

Numeric parameters can usually be edited in a few different ways. If a slider appears, you can drag it to change the value. If a number field appears, it can also be used as a “virtual slider” by clicking and dragging to the right to raise the value, or to the left to lower the value (white arrows indicate the direction of change).



Using virtual sliders

Double-clicking the field containing most numeric values highlights the number so that you can type a new value using the keyboard, pressing Return to confirm the change. Finally, to reset any editable parameter to its default setting, double-click its text label.

The Three Buttons of a Mouse or Other Input Device

Resolve uses all three buttons of a multi-button mouse, or the three buttons available on other type of input devices, when available. This section provides a brief summary of all the different ways these three mouse buttons can be used.

Left Button

The left button is always referred to as a click, as in, “click the auto select button.” You click to turn buttons or other controls on or off, to make selections, and to give areas of the Resolve UI focus so that keyboard shortcuts will do whatever is specific to that panel or area of the user interface.

Double-clicking the left button usually opens items that are openable, such as opening a clip from the Media Pool into the Source Viewer. You can also use double-clicking to do things like selecting nodes in the Node Editor of the Color page.

Right Button

The right button is referred to as a right-click, as in, “right-click a clip in the Media Pool.” Right-clicking an item or area of the Resolve interface usually opens a contextual menu, exposing additional commands that are specific to the item or area you’ve right-clicked.

However, some areas of the UI use right-clicking in special ways. For example, when you’re using a color adjustment curve in the Curve palette of the Color page, right-clicking a control point deletes that point.

Middle Button

The middle button (usually the scroll wheel button, but you may have to turn this on in the Mouse panel of the System Preferences) is referred to as a middle-click, which does different things in different places.

- In all pages, rolling the scroll wheel while the pointer is within a Viewer lets you zoom into and out of the image being displayed when you need to do more detailed work.
- In the Color page, you can move the pointer over the Thumbnail timeline and roll up to scroll to the right or roll down to scroll to the left. You can also roll the scroll wheel while the pointer is within the Mini-timeline to zoom into or out of the currently displayed area. Rolling up zooms out, while rolling down zooms in.
- Middle-clicking and dragging within a Viewer lets you drag the image to pan it around, which is useful after you’ve used the scroll wheel (or scroll behavior) of your mouse to zoom in.
- You can middle-click and drag within the Edit page timeline to quickly pan around your edit.
- You can also use middle-click to copy a grade in the Thumbnail timeline of the Color page, by first selecting the clip that you want to copy TO (with a simple click) and then middle-clicking the clip or gallery still you want to copy a grade FROM.
- Lastly, if you’re drawing a Bezier window in the Color page viewer using the Window palette, then middle-clicking a control point will delete that point.