

Blackmagic Fusion 9 - Your Journey from Novice to Expert

Compatibility of the course with DaVinci Resolve 15

This document provides guidance for those who want to follow the course within DaVinci Resolve 15. Differences between the handling in Resolve and Fusion are listed below. If you notice any further differences not listed, please let me know and I will update this document.

Please note, that this document cannot replace a basic training in DaVinci Resolve. The assumption is, that students who want to take this course with DaVinci Resolve already have some experience in the software from an editing or color grading perspective. You should be able to load and render footage and have a basic understanding of how to work with clips from the media library and with the timeline from the edit page.

The course was tested with DaVinci Resolve Studio 15.2.2. Below observations should be applicable to the free version as well. With respect to the Fusion functionality, the difference between DaVinci Resolve Studio and the free version should be equivalent to the difference between Fusion Studio and the free version of Fusion.

The first two chapters were tested step by step to show the difference of the interface. Afterwards, you will be familiar with the Resolve 15 interface and should be able to follow along easily. I have only tested the final comps for the later chapters and noted down the main differences. In case you need further details or get stuck, please reach out!

General Start

To start, go to the “Edit” tab, right click into the Media Pool window and select “New Fusion Composition”. Select framerate 30 and a duration of 10s, that should work for all examples. Then switch to the Fusion tab. A node “MediaOut1” will be there by default. Keep it. At the end you can connect your Fusion work to that node. Then you can go back to the edit page and you can use your Fusion comp like any other clip in the timeline.

Importing Fusion Comp Files

If you want to import fusion comp files, you can do so from the menu File → Import Fusion Composition. In some cases the loaders might not work and you might have to manually fix or replace them. You can replace them with the MediaIn nodes.

Chapter: Quick Start - Your First Sky Replacement

Lesson: Sky Replacement only with Merge

- Keyframes on the timeline are not green, but white tick marks.
- F4 will not completely enlarge the window. To see your comp in fullscreen, I suggest to connect to “MediaOut1” and switch to the timeline. Or in case you have a decklink card or similar you might be able to use it as a 3rd viewer for full screen view. To enlarge the working window you can disable the node graph by clicking on “Nodes” in the top line and also hide the Inspector.

Lesson: Adding Title

- You find the tools menu by right clicking on the flow graph. Text+ is under Generator.

Chapter: Fusion Basics - Foundations for your Projects

Lesson: Interface

- The Interface is arranged a bit differently and you might have to do a little searching...
- Top menu is the global resolve menu.
- Tabs don't exist, but you can have multiple Fusion Compositions in your Media Pool and switch between them.
- There are less viewer options and no layouts and no detached viewer. You can switch between single and dual view though, there is a button directly over the viewer.
- Instead of Bins there is the “Effect Library”.
- You can set the render area of the timeline with the numbers on the left, however you cannot trim or extend the total length. You select the total length when creating the fusion composition in the media library. And of course you can later trim in the edit.
- F1 shortcut does not work, you have to open the manual through the help viewer and search from there.

Lesson: Tools

- Some tools are under different categories, but it's organized intuitively.
- In the Inspector, there is a small button to open up the versions.

Lesson: Masks

- To enable / disable the checker underlay, click on the three dots on the top right corner of the viewer window.

Lesson: Animation and Motion Blur

- When importing the helicopter, the alpha channel is already multiplied in Resolve, nothing to do.

- Disable “Auto Resolution” when changing the image size of a background node.
- The “Use OpenCL” switch is just called “Use GPU” in Resolve. In case you have issues with OpenCL, you can switch it from Auto to Disable.
- Player settings for Motion blur, High Quality, Proxy etc. are available via right click on the transport controls of the timeline (where you have play, stop, etc.).

Lesson: Loader and Saver

- Loader and Saver still exist but are typically not used in Resolve. Here you can use MediaIn and MediaOut instead. MediaIn is the default when you drop clips or select clips from the media library.
- MediaOut will link your clip back to the editing / color / delivery page (i.e., the fusion composition there). Rendering will happen together with the other rendering through the delivery page. In case you want to use a saver node, you can still do that and render the saver node separately through the Fusion menu of the top menu bar.

Lesson: Rendering

- Player settings for Motion blur, High Quality, Proxy etc. are available via right click on the transport controls of the timeline (where you have play, stop, etc.)
- Proxy Settings are not accessible from main app but through top bar: Fusion → Fusion Settings → General

Lesson: Organizing the Flow Area

- The settings for the flow area are under Fusion → Fusion Settings

Lesson: Spline Editor

- No major difference.

Lesson: Creating a Shadow

- When creating Brightness/Contrast node go to inspector and check Pre-Divide/Post-Multiply

Chapter: Integration for VFX and Motion Graphics

- The “Timeline” tab in the Standalone version corresponds to the “Keyframes” viewer in Resolve.
- For the Muzzle Flash example, do not import the footagecrate-automatic-machinegun-sidew-shells.mov file. It does not work in Resolve 15. Instead import the png file sequence. You can drag and drop the file

sequence into DaVinci Resolve by selecting all files and then dragging. It will create one clip in the Media Pool.

Chapter: Tracking - Follow the Action

- No major differences.

Chapter: Keying - Not only for Blue & Green Screen

- Both the Luma Keyer and the Ultra Keyer seem to behave slightly differently internally. The usage is still the same, but you might need slightly different parameter settings to achieve the same result. Meaning when adjusting the parameters for the optimal key, you might end up with different values, e.g., for the color “Low” and “High”, compared to my result. Also, when you import my solution into DaVinci Resolve, the keying result might not look great and you might have to adjust the values again. Since I always encourage you not to copy values from me, but actually do the tuning yourself, this should not be a big issue.
- As of version 15.2, the Primatte Keyer is not available in the Fusion tab of DaVinci Resolve. I suggest you skip the two lessons - or do them in the standalone version.

Chapter: 3D Environment - Motion Graphics and Camera Projection

- No major differences.

Chapter: Particles - Custom Effects for VFX and Motion Graphics

- All the tools are there and seem to work the same. However, I did experience some crashes, when loading the fusion comp files. I cannot say for sure if this is related to my machine configuration or a general problem, but for now Fusion standalone seems to be more stable with the particle tools.
- You should be mostly fine when working step by step, however if you do experience too many stability problems, my only recommendation is to hope for more stable releases from Blackmagic in the future and in the meantime consider the free standalone version as an alternative.
- A few tools might need slightly different parameters (e.g., in the color correction / post processing) to achieve the exact same visual result. The methods should be the same though.

Please reach out through the forum or via email to info@vfxstudy.com if you find any further differences not mentioned here or if you need any help otherwise.