MainConcept Enables Blu-ray Disc and DVD Compliant Content Creation in Blackmagic Design DaVinci Resolve Studio

Although multimedia delivery is moving more and more towards streaming, there is still a demand for DVD and Blu-ray Disc. Many consumers still like to collect physical media or put it onto their shelves at home. There is still a large market for this type of media, especially in the music business for artists who are unable to setup complete environment and production workflow for streaming their performances. For this group, videos recorded on a DVD or Blu-ray Disc shipped in a moderate number of units is a viable alternative.

Videography Services from New York

Asaf Blasberg is a videographer from New York City who offers the complete production service, from filming and editing to live streaming or disc creation. His business specializes in events like music concerts, dance and theater, working across many genres including Alternative/Rock, Cabaret/Broadway, Classical, Country, Ethnic, Jazz, Pop and R&B. Asaf's services consist of state-of-the art equipment for filming with single or multiple 4K Ultra HD cameras. He handles the complete production process, finishing with the creation of high-quality DVDs, Blu-ray Discs or even 4K Ultra HD Blu-ray Discs.

For editing the footage, Asaf uses DaVinci Resolve Studio from Blackmagic Design. Their flagship software offers all the tools and features for post production, such as media management, cutting and editing clips, Hollywood proven color correction, visual effects and audio processing, which give Asaf's projects the professional look and sound they deserve. While it sounds like the software does everything Asaf needs, he ran into issues with DaVinci Resolve Studio when exporting his projects.

MainConcept Codec Plugin for DaVinci Resolve Studio

The first codec plugin approved by Blackmagic Design for DaVinci Resolve Studio

- HEVC encoding up to 8K
- Pro camera formats and preset groups
- AS-11 UK DPP Rendering
- Blu-ray Disc and DVD compliant content creation and more

At a Glance

- DaVinci Resolve Studio is Ideally suited for video post-production, creating a professional look and sound.
- Physical media is still used for a variety of needs but is not widely supported anymore.
- Asaf Blasberg often creates DVD and Blu-ray compliant audio and video, but native presets for creating these do not exist in DaVinci Resolve Studio.
- Until the MainConcept plugin arrived, Asaf used standalone software, but this has drawbacks such as reduced quality and increased time.
- By adding MainConcept's plugin, Asaf is now able to do it all without leaving DaVinci Resolve Studio.

Finding a Proper Workflow for Physical Media Production

The specifications for creating DVD and Blu-ray compliant video and audio streams are strict. Rendering projects from DaVinci Resolve Studio did not work for him. There are no native presets for generating content for physical media, so users need to know the exact specifications if they want to create compatible streams. Unfortunately, it was not possible to export streams that were accepted by the common authoring tools required to create the DVD or Blu-ray menus and burn the final content to a physical disc.

The only solution then was to use standalone encoding software that was able to generate streams accepted by the authoring tools.
But this process has drawbacks, most notably the impact on quality. With each re-encoding, quality suffers. Moreover, there is the time factor: encoding takes time as well as system resources. It potentially blocks your system during the rendering process and requires more power. This in turn can lead to higher costs because you need to export the project in the best possible quality to avoid quality loss when doing the re-encode to match the requirements of the authoring software. Last but not least, it is less efficient. In such a production process you want to keep the number of tools required for DVD and Blu-ray Disc creation as small as possible; switching between different software can be annoying and time consuming.

Upon learning about the MainConcept Codec Plugin for DaVinci Resolve Studio, Asaf contacted us, describing the issues in his workflow for creating DVDs and Blu-ray Discs. He couldn’t get DaVinci Resolve Studio to render DVD and Blu-ray Disc compliant streams that could be properly imported into his various authoring tools. MainConcept to the rescue!

MainConcept Enables Blu-ray Disc & DVD Creation with DaVinci Resolve Studio

The MainConcept Codec Plugin for DaVinci Resolve Studio is an export plugin for Blackmagic Design’s popular video-editing and post production software, allowing users to render a project directly from its timeline. Being the first codec plugin that was approved by Blackmagic Design, it adds many standard compliant and ready-to-use presets to the application. With direct integration into the DaVinci Resolve Studio user interface, editors maintain a seamless experience throughout their project workflow. Gone are the days of moving between different applications to finalize and deliver content.

MainConcept already offers market-proven presets for both DVD and Blu-ray Disc in their SDKs and applications. We simply ported these presets to the Codec Plugin for DaVinci Resolve Studio. Users can now select predefined render profiles for DVD (MPEG-2) and Blu-ray Disc (both MPEG-2 and AVC/H.264) in Blackmagic Design’s video-editing software, eliminating the need to switch to another tool for creating valid streams. Soon after releasing the plugin with the new presets, Asaf came back to us with a simple but obvious question, “What about Ultra HD Blu-ray?” Indeed, more and more consumers switch to 4K as 4K TVs and corresponding Blu-ray players as well as game consoles like the Sony PlayStation 5 and the Microsoft Xbox Series X have become more affordable. To support this, we added a dedicated Blu-ray Disc UHD render profile based on the HEVC/H.265 standard to the MainConcept Codec Plugin, allowing Asaf to satisfy the demand for 4K, too.

There was one more critical feature we needed to solve on the plugin side. Some authoring tools do not accept multiplexed (i.e., interleaved) audio and video streams. So the plugin allows the project to be rendered as separate audio and video elementary streams. The authoring tools used by Asaf can import all media streams properly, regardless whether they are intended for DVD, Blu-ray Disc or 4K UHD Blu-ray Disc.

“Using the MainConcept Codec Plugin highly speeds up the disc creation process in various ways. There is no need to render my projects with another encoder again, so I can remain within DaVinci Resolve Studio.” – Asaf Blasberg
With the latest release of the MainConcept Codec Plugin for DaVinci Resolve Studio we also enabled chapter marker support for the DVD and Blu-ray render profiles. Specified in the DaVinci Resolve timeline, they were preserved during rendering to be used in the authoring process afterwards. Now the viewer can jump around through the chapters when watching the disc on his home entertainment system.

**Helping the Customer to Improve his Workflow**

“Asaf’s input helped us improve the MainConcept Codec Plugin for DaVinci Resolve Studio, making us aware of the bottlenecks that some users have in their workflows,” says Frank Schoenberger, Senior Strategic Product Release Manager at MainConcept. “His expertise in the DVD and Blu-ray Disc production process revealed some gaps in DaVinci Resolve Studio that our plugin could close to make his life and work more convenient.”

“Blackmagic Design DaVinci Resolve Studio is affordable professional post production software for 4K content with a special focus on audio processing. However, I wasn’t able to create DVD or Blu-ray Disc streams that could be directly imported into the authoring tools I use,” says Asaf Blasberg. “Using the MainConcept Codec Plugin highly speeds up the disc creation process in various ways. There is no need to render my projects with another encoder again, so I can remain within DaVinci Resolve Studio. And the actual project rendering with the MainConcept encoders is not only fast but also creates streams in amazing quality.”

**About MainConcept**

Since 1993, MainConcept has provided best-of-breed video/audio codec solutions that fuel creativity and business globally for professional video production, multimedia, broadcast, digital signage, gaming, medical and security industries. Our software development kits, transcoding applications and plugins are used across industry verticals to meet an ever-expanding list of use cases. With world-class engineering, exquisite attention to detail, and best-in-class support and professional services, we are constantly innovating to deliver you the simplicity you need with the customer experience you deserve. MainConcept codecs are engineered to surpass the challenges of even the most demanding use cases and are used by organizations such as Adobe, AVID, Autodesk, Corel, Dalet, Endeavor Streaming, Globo, Grass Valley, Intel, MAGIX, Nikon, Sony, Telestream, V-Nova and Wowza. MainConcept is a subsidiary of Endeavor, a global sports and entertainment company.

**Try the Codec Plugin for DaVinci Resolve Studio Yourself**

Wondering if the MainConcept Codec Plugin for DaVinci Resolve Studio can help you to overcome the pain points in your daily video-editing and post production work?

[Download the free demo version here](#) and try it yourself!

Do you have unique issues with the delivery of your projects? We would like to hear about them! Contact us to let us know. Looking forward to hearing more about your experience with DaVinci Resolve Studio!