OpenDrives Unleashes
DaVinci Resolve

Color Correction Defined.

Color correction or color grading is the process of altering the color of various scenes in a film or program to achieve specific aesthetic or technical goals.

Enterprise storage solution provides your artists the opportunity to work on the same material from the same shared volume. This significantly reduces the waiting period to get into and through color after picture lock due to a more efficient collaboration where color grading clients can access the content at any time in the production pipeline.

Virtually all commercially edited video undergoes some type of color correction. Color correction is therefore an integral part of professional video production pipelines, requiring specific tools and expertise to efficiently achieve the required results.

During the color grading process, a variety of issues can be addressed, such as adjusting the varying exposure of evening shots to maintain visual continuity; expanding contrast; "developing" the image from RAW camera recordings; enhancing the photographic representation of product colors; increasing accuracy of skin tone reproduction; directing the viewer's eye to points of interest; or conforming your project to a specific look and visual palette. The 'Final Color' color grading is typically the last component in the post-production workflow before Delivery and Mastering, yet some preliminary color correction may also occur in Dailies Creation, Editing, and VFX, depending on the desired workflow.

Additionally, color correction for television productions ensures that all color values in every frame comply with international broadcast standards for the intended display environment (i.e. 'legal' or 'broadcast safe' colors for TV). Violating these standards can create visual artifacts leading to a bad viewing experience, and can see a program pulled from television broadcast schedules.

OpenDrives Supercharges Resolve

OpenDrives storage solutions provide unmatched performance and throughput for DaVinci Resolve workflows. Whether the project calls for 8K 12-bit DPX, multiple concurrent streams of HD 4444, 4K EXR, or hours of original camera RAW files, OpenDrives delivers the performance demanded by color grading workflows, while also consolidating disparate storage pools, drastically reducing copy and render time, and additionally increasing team productivity and outperformance.

With blistering speeds as high as 3.6 GB/s to each workstation, OpenDrives solutions frequently enable artists to eliminate the typical Conforming step in their workflows and simply work in the native resolution of your source media. This advantage saves time, money, and headaches.

The simplicity and flexibility your organization obtains from an OpenDrives-driven DaVinci Resolve solution translate into real-world financial gains. These benefits include delivering more billable color-correction services at more points in a workflow; having the time to spin more iterations to fine-tune a project; having more time and bandwidth to take on more clients in parallel; and achieving better synergy and efficiency with other partners or departments in your post-production environment.

The pairing of OpenDrives and Blackmagic DaVinci Resolve creates an incredibly powerful and sophisticated workflow engine to generate new opportunities for any Color Correction enterprise.

Key OpenDrives Features for BlackMagic DaVinci Resolve:

• Support for running containerized applications directly on the OpenDrives compute module to increase performance

• Cost-effective and efficient collaboration via containerized DaVinci Database Server

• Inline caching fulfills data requests directly from cache memory rather than slower disk reads for faster data recall

Technical Notes – 24 FPS Test results

• 8K DPX 12 bit - 3600MB/s 3 concurrent, 1 per workstation due to workstation limitations

• 4K DPX 16 bit - 1200MB/s 9 concurrent, 3 per workstation

• 2.8K ARRI RAW - 165MB/s 72 concurrent, 16 per workstation

• 8K R3D 5:1 Compression - 368MB/s 29 concurrent, 5 per workstation

• 4K R3D 6:1 Compression - 52MB/s 211 concurrent, 16 per workstation

REFERENCE ARCHITECTURE

Storage
OpenDrives Ultimate Series 4TB

Ethernet switch
Arista 7060CX32-S

Hardware Panel
Blackmagic DaVinci Resolve
Mini or DaVinci Advanced Panel

Workstations
Conform Workstation
Win10 HPZ840 or Mac Pro

8K Review Workstation
Win10 HPZ840 or Supermicro
SuperServer 7048GR-TR

4K Workstation – Primary Grading Suite
Win10 HPZ840 or Supermicro
SuperServer 7048GR-TR

More information

OpenDrives
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