Transkoder

Powerful dedicated 2K/4K transcoding application automates fast, high-quality digital file conversion at the highest performance for studios and VFX facilities involved in motion picture and high-end TV production.

Colorfront Transkoder is the ultimate tool for **DCP and IMF mastering**, including: the industy's highest performance **JPEG2000 encoding and decoding**, 32-bit floating point processing on multiple GPUs, MXF wrapping, accelerated checksums and AES encryption and decryption, IMF/IMP and DCI/DCP package authoring, editing, transwrapping.

Colorfront Transkoder 2022 | What's New?



Colorfront Transkoder 2022 runs on both PC and Mac.

Audio

Dolby Digital Plus Audio Encoders for HEVC

Dolby Digital Plus (DDP) and Dolby Digital Plus with Dolby Atmos (DDPA) audio encoders are now supported in Transkoder for HEVC deliverables.

AU Audio Type AACAC BIT AC3 TH PCM 8 FR, DDP 6 DDPA ame GPU ACC

64 Audio Channels on Video Out

Transkoder can now output up to 64 discrete audio channels for UHD quad-link (4x1.5G or 3G) SDI outputs with Kona 5 and Corvid 44 video cards.



Volume Meter with 64 Channels

Transkoder can now display 64-channel audio in the Volume Meter window.



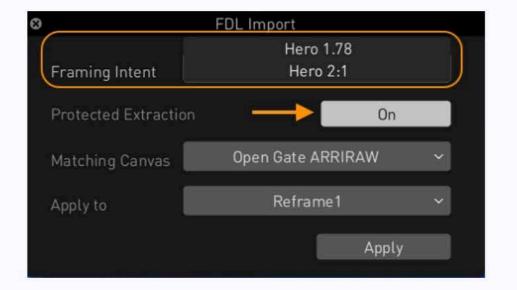
Metadata

Support for New ASC FDL

Import ASC's standardized Framing Decision List (FDL) as a JSON file and apply it to the current shot for pixel accurate extractions from various camera formats.

Loudness Analysis

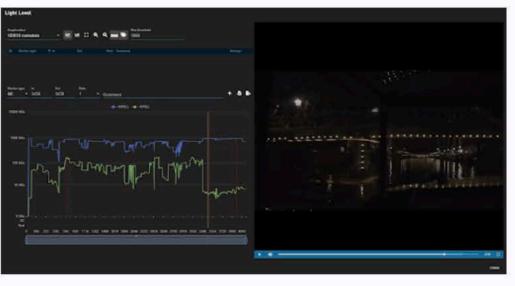
Analyze audio loudness with Transkoder to meet delivery specifications based on various industry standards, including TruePeak, Dolby Dialogue Intelligence, Netflix [sdf] and EBU R128.





Graph Viewer in Colorfront Web UI

Assistant operators can now run and analyze QC checks from anywhere in your facility using Colorfront's highly capable, easy-to-use Web User Interface. The Web UI now includes a Graph Viewer for checking the results of Light Level Analysis or Video Compare form renders, HDR10 or Dolby Vision V2/V4 metadata, and for adding QC or reel markers.



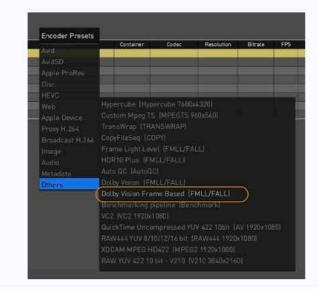
HEVC Encoding with Dolby Vision Metadata

Transkoder now supports encoding HEVC files with Dolby Vision metadata using the Dolby Encoding Engine (DEE). The DEE is Dolby's stand-alone file-based CLI application for encoding Dolby Vision and Dolby Audio content, including HEVC processing, which has been integrated into Transkoder. The user can easily generate profile 5 and profile 8.1 Dolby Vision HEVC video files based on the metadata applied to the timeline.

Dolby Vision from HDR10

Using the Dolby Vision Frame Based encoder is the easiest and fastest way to convert an existing HDR10 project to Dolby Vision format by generating Level 1 metadata on a frame-by-frame basis.

IMF	Nob output Kange Mapping
GUI	Range exapping for RGB SDI evilped
VIDEO	номі
VIDEOSTREAMING	Dolby Vision HDMI Tunneling 0ff
AUDIO	Enable Dolby Vision HDMI tasmelling - works with AJA toRK/ tasHe / Konab
STARTUP	Dolby Vision Tunneling Mode (YCbCr IPT
CONFIG	Dolby Vision HDMI tunneling mode
GRADE	Dolby Vision Tunneling Crop On Off
METADATA	Controls If LS matadata is sent to the TV via HDMI or not
QC	Color Depth On HDMI AUTO 8 Bit
	Color depth on HDMI subput



ACES

New Default ACES Pipeline

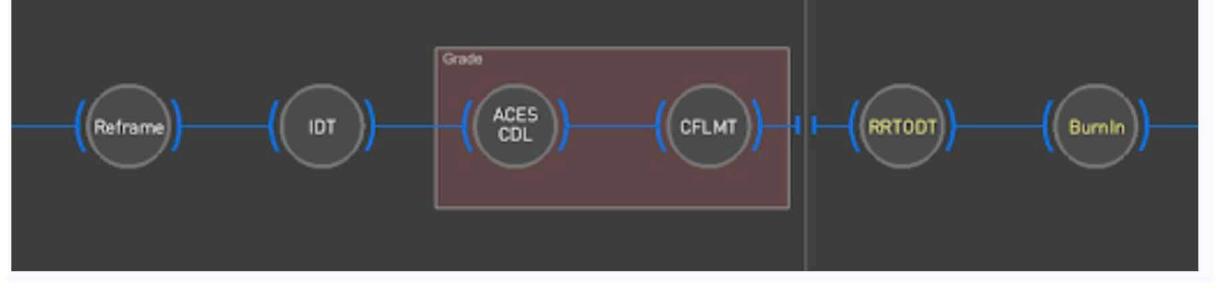
Transkoder's new simple ACES color pipeline is fully compatible to ACES 1.3 and supports all published transforms. The Colorfront Engine ACES LMT (Look Modification Transform) can derive perceptually matching deliverables at any light level.

ACEScct	×
1.	00
1.	00
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	1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 0.1 0

ACES AMF Import and Export

Import looks using a completely new ACES viewing pipeline via external ACES AMF metadata file in two ways: build a completely new ACES viewing pipeline or only update it based on the imported AMF metadata.

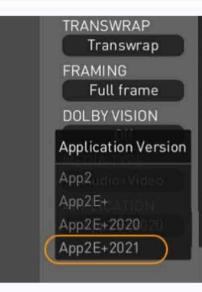
Import Media Import Remote Media Import Media From Path	Alt+A	
Remote	Þ	
Generate Report		
CFE	•	
Export Looks	×.	
Import Looks		Build Pipeline from AMF
Global Presets	•	Update Pipeline from AMF
Export Timeline	•	From EMD Folder
Settings	Tab	 Re-Load Imported Looks in Look Store
Save Default Settings		
Pamous Custom Default Sattings		



IMF and DCP Mastering

Support for Latest IMF App2E+ Standard Transkoder supports the latest IMF application standard, App2E+ 2021 with Color8:HLG, Lossy/Lossless HTJ2K

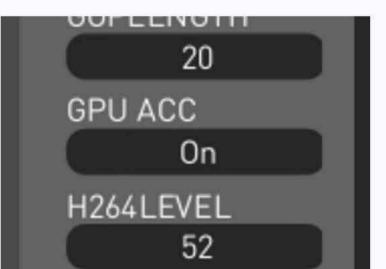
(High Throughput JPEG 2000) format and Dolby Vision metadata in ISXD MXF.



Rendering

GPU-Accelerated H.264 Encoder

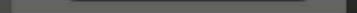
8-bit H.264 encoders have been accelerated by GPU processing, which results in much faster rendering capability than with CPU.



New Web Encoder for PIX HDR Deliverables

Transkoder has a new Web encoder preset to generate HDR HEVC MP4 deliverable for PIX for color-accurate HDR review.

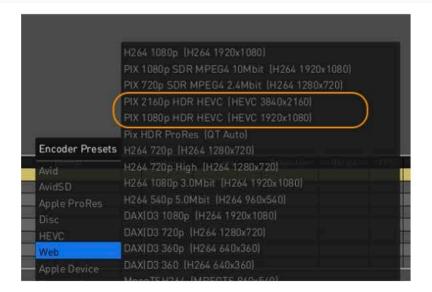
0			Fin	salize - 1949				
	IMF-IMP	8	Settings En	coder Untilling		e Eversone	Norming Solar	
Application	App#2E+ J2K	×	Format		IMF HU	ILU HDR (App2E-	1	.*
Render Mode	Encode/Transwrap					ender Selected	Off	*
Framarate	23.976		Resolution	Auto	B	Framing	Full frame	¥
			DolbyVision	00	10.65			
			ISXD stratogy	Same As Video				
Frolite	MainLevet &	÷.	SubLevel	SubLevel 4		MaxBitrate	800 Mbit	2
PixType	R68444 12bit	1	Range	OE.2 (Foll range)	. *	CompType	IMF Lossy Profile	1.9
32RMode	Normal J2K HTJ2K							





High-Throughput JPEG2000 (HTJ2K) Support

Encoding and decoding High-Throughput JPEG2000 (HTJ2K) frames for IMF packages.



Remote Workflows and Streaming

Remote Media Browser for Importing From Frame.io Transkoder now supports importing remote media not only from S₃, but also from Frame.io via the menu.

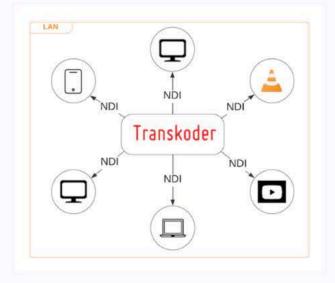
Name	Туре	Size	MTime	
A006C021_150902_R0D0	file	95.83 MB		
A005C031_160120_R51F_H	file	125.57 MB		
A005C021_150831_R0D0	file	95.5 MB		
A003C025_150830_R0D0	file	93.35 MB		

Remote Streaming - Lossless Audio Coding Support Both AAC and PCM audio outputs are supported for streaming via Transkoder and the Streaming Player application.

Performance			
		CPU Utilization:	
Stream Connection Status:			
		Packet loss rate:	0.00 %
		Lost/Drop/Fixed:	0/0/0 pkts
> AAC 1/			11.62 mbps
Stream Quality:		RTT:	
Performance:		CQ/DQ:	
Video IO Type:		Remote src/res readah	
		A/V mux delay [1s peak	
		Encryption state:	
Broker: brokerapi-test.	Broker: brokerapi-test.colorfront.cloud		mRecordingTKD49659
Email: ajnal		Timetine: (dailies stream footage
WatermarkID:	GBBK87	Streaming Channel:	
Input Color:		Remote state:	playing / 00:09:20
		Version (remote/local):	50701 / 54380
Video I/O Color:			

NDI Video Output

Transkoder supports using NDI (Network Device Interface) for video output, a standard protocol for ultra-low latency, lossless video encoding and video transmission over the IP network.



TRANSKODER 2022 FEATURES

COLORFRONT ENGINE

Advanced color volume remapping tools using the Human Perceptual Model for multiple display mastering maintaining the original creative intent

HIGH DYNAMIC RANGE

Dolby Vision, HDR10, HLG and Premium Large Format Cinema support Dynamic range remapping and industry leading HDR mastering and QC tools

DOLBY VISION

Creation and authoring of metadata, eCMU, HDMI tunneling, 4.0 processing, DEE Dolby Vision HEVC encoding

8K VIDEO OUTPUT

Real-time 4K and 8K video output using AJA Kona5 with 12G-SDI and Blackmagic Decklink 8K Pro

• IMF and DCP

Industry-leading IMF and DCP mastering tools, including Photon validation, App2E+, App4 (Cinema Mezzanine), App5 (ACES), ProRes RDD45

IMMERSIVE AUDIO

Reading, packaging, authoring and QC Immersive Audio Bitstreams. Preview object audio playback on 2.0, 5.1, 7.1, 7.1.4 speaker setups

• NEW SUBTITLE ENGINE

IMSC IMF and DCI subtitles, advanced international language and styling support, multiple subtitle and CC tracks

PC AND CLOUD PLATFORMS

Frame.io support, REST API, workflow automation, S3 cloud storage, AWS EC2 support





