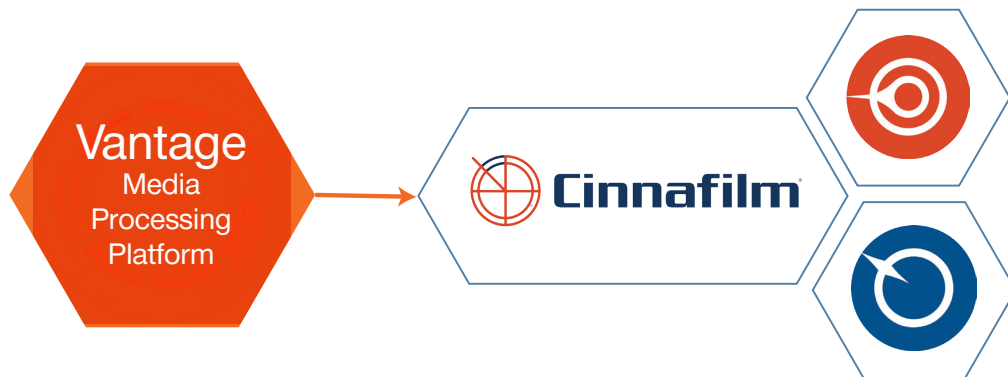


Cinnafilm Options in Vantage

Solution Brief



Cinnafilm Tachyon/Dark Energy Options in Vantage

Telestream has partnered with Cinnafilm to provide world-class frame rate conversion, image scaling, and texture management in Vantage with Cinnafilm's Tachyon and Dark Energy products.

Tachyon

With advanced pulldown removal, motion-compensated frame rate conversion, and high-quality image scaling, Tachyon provides superlative standards conversion with the ability to handle the most challenging frame mechanics problems, including:

- Intact and broken telecine/pulldown cadences
- Intermixed field dominance
- Intermixed video mode (telecine, 59.94 fields, and 29.97 in the same project)
- Compositing cadence mismatch

Tachyon is an ideal solution for content owners wishing to repurpose their content for distribution at different frame rates and resolutions for OTT delivery. High quality standards conversion ensures the highest value for content when it is repurposed for new markets.

The OTT/Streaming market has exploded and with it the need to provide pristine progressive images. While theatrical content is ready for lift-off, anything that was originally created for broadcast will have interlacing or telecine that must be removed. Most streaming platforms have a standard frame rate, and Tachyon ensures the quality at the prescribed frame rate is as good as it can possibly be. Some platforms are known for rejections due to poor quality image transformation. Using the frame mechanics wizardry in Tachyon avoids costly rejections from distribution partners.

Dark Energy

Dark Energy is an industry-leading noise reduction and texture-aware scaling solution, addressing gaussian/chroma/camera sensor/compression-based noise, film grain, and single-frame anomalies (dust, digital dropouts).

Dark Energy in Vantage provides a fully automated solution for:

- HD(2K) to UHD(4K) upscaling
- UHD(4K) to HD(2K) downsampling
- Denoise/degrain without image degradation
- Accurate image texture to ensure images look authentic at all resolutions

Dark Energy's noise reduction capabilities provide an ideal complement to Vantage's world-class video codecs. Using noise reduction before encoding can significantly increase compression efficiency, giving better-looking video at lower bit rates. The ability to encode video at lower bit rates without quality loss can provide enormous cost savings to anyone distributing content via a CDN, or to cable or satellite operators trying to get maximum throughput from their distribution channels.

Dark Energy's texture management tools allow users to scale video while maintaining authentic-looking texture. As operators prepare to provide premium UHD channels to their customers, the ability to repurpose existing HD content for distribution over those channels will be vital. Dark Energy's upscaling will provide UHD assets that are virtually indistinguishable from content that was shot on a UHD camera. Note: Frame rate conversion is not available with the Dark Energy option alone, customers who need to perform any frame rate conversions in their Dark Energy workflow must purchase (or upgrade to) the combined Tachyon and Dark Energy license.

Combined License

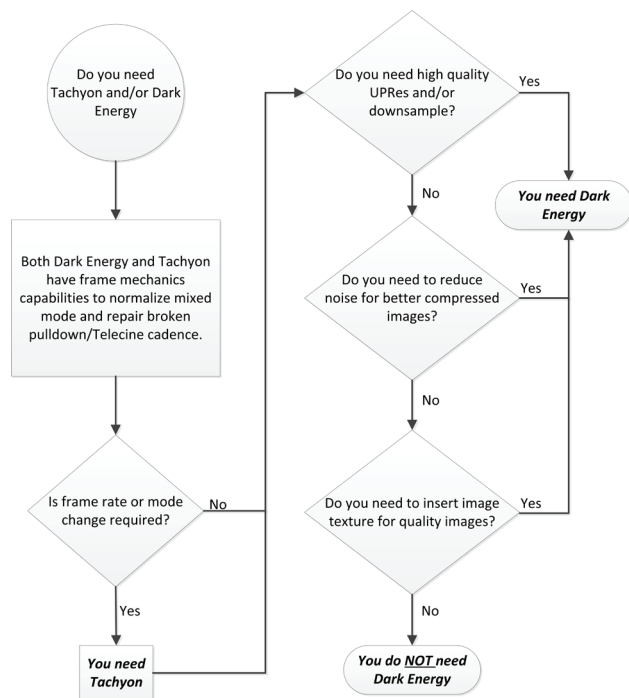
For customers who need maximum flexibility for standards conversion, scaling, noise, and texture management, a combined Tachyon and Dark Energy license is available at a considerable discount. The combined license option is particularly attractive to customers such as service providers, who want to offer the best possible range of solutions to their customers, and their customers' needs will change on a project by project basis. An upgrade option to a combined license is available to customers who already own a Tachyon or Dark Energy License. Note: The combined option is required for any Dark Energy workflow that requires frame rate conversion. The Dark Energy option alone does not support any frame rate conversions.

Availability

Cinnafilm's Tachyon and Dark Energy products require Vantage Transcode or Vantage Transcode Pro. They are accessed via the Tachyon VPL option within the Vantage Flip action or via the Tachyon converter in Flip64. Tachyon and Dark Energy are available as separate options or as a combined license. A Lightspeed server is required to run both Tachyon and Dark Energy.

How to Order

The Vantage Tachyon and Dark Energy options require Vantage Transcode or Transcode Pro on a Lightspeed server. Tachyon and Dark Energy are available as separate options or as a combined bundle. Use the flow diagram to determine which options are right for your workflows.



Tachyon / Dark Energy Workflow