

# Cinnafilm Options in Vantage

Solution Brief



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## Cinnafilm Tachyon/Dark Energy Options in Vantage

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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

Tachyon is the world's most advanced standards conversion engine. 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 problems, including:

- Broken 3:2 pulldown cadence
- Intermixed field dominance
- Intermixed video mode
- Compositing cadence errors

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

Tachyon is also a must for anyone needing to make 24fps content for distribution partners such as iTunes and Netflix. Recreating the original 24fps video from a 29.97fps asset is a difficult process due to the high likelihood of broken and intermixed cadences. Using Tachyon is the best way to avoid costly rejections from distribution partners.

### Dark Energy

Dark Energy is the industry's leading noise reduction and texture-aware scaling solution. Dark Energy in Vantage provides a fully automated solution for:

- Best-in-class HD(2K) to UHD(4K) upscaling
- Best-in-class UHD(4K) to HD(2K) downsampling
- Best-in-class 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 prior to 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 world beating 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 and noise and texture management, a combined Tachyon and Dark Energy license is available at considerable discount. The combined license option is particularly attractive to customers such as service providers, who want to offer the best possible range 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

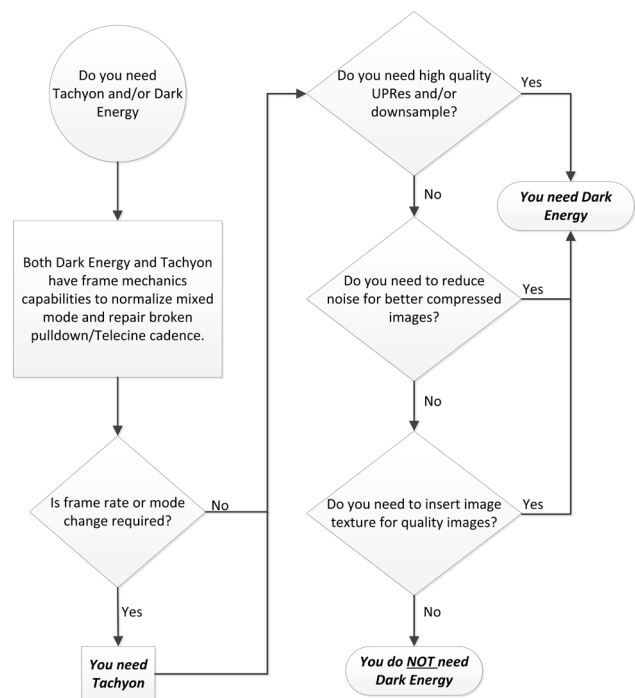
Cinnafilm's Tachyon and Dark Energy products require Vantage Transcode and Vantage Transcode Pro (they require Transcoder update 2015.6 or later). They are accessed via the Tachyon VPL option within the Vantage Flip action or via the Tachyon converter in Flip64. Tachyon and Dark Energy are available as separate options, or as a combined license.

A Lightspeed server is required in order to run both Tachyon and Dark Energy. The K20 and G5 Lightspeed servers are capable of running one Tachyon / Dark Energy job at a time, the K80 and G6 servers are both capable of running up to two two jobs at one time.

**Note:** Tachyon and Dark Energy are not currently available in Transcode Multiscreen or Transcode IPTV VOD.

### 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 is right for you.



**Tachyon / Dark Energy Workflow**