



Wormhole®
By Cinnafilm®



TAKE CONTROL OF YOUR VIDEO RUN TIME

Cinnafilm's Wormhole is a unique media retiming solution for file-based workflows, offering a compelling ROI for broadcasters, content owners and service providers alike.

As a plug-in for the RadiantGrid transcoder platform, the HPA Engineering Excellence Award-winning Wormhole has two primary applications: Program Retiming and Super Slow Motion. Wormhole provides $\pm 50\%$ runtime adjustment of your media while preserving video,

audio and closed caption integrity. Wormhole can hit your delivery target runtimes — perfectly. Wormhole's Super Slow Motion allows for up to a 900% slowdown of assets, and of course, not all assets are created equally, so mileage will vary.



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Overview

- Adjust run time of file-based assets with no perceivable difference in playback quality
- Process video using Cinnafilm's patented, unique motion compensated algorithms – no dropped frames, which cause stuttered action and jumping pans
- Use global settings or create a segmented cut sheet for precise control
- Precisely adjust audio run length and accurately correct pitch to match video
- Automatically adjusts closed-captions for the new run length
- Scene-by-scene adjustment and on-the-fly recalculation for total target length
- Automatic black detection

Features

- Resolution/Frame Rate Support
- Spatial: PAL, NTSC, 720p, 1080i, 1080p, 2K, 4K
- Frame Rate: 23.976p, 24p, 25P, 29.97p, 25i, 29.97i, 50p, 60p
- Color: up to 16 bit 4:4:4:4 via a full-fidelity processing pipeline
- Retime methods
- Retime based on timecode range
- Retime segment explicitly
- Super slow motion
- Ignore (hold) segment
- Exclude (remove) segment
- Automatically "fit-to-fill" segment (to meet the target asset duration)
- Detect-and-pass "black/silence" slugs