

# Final Cut Studio Solutions

Third-Party integration featuring The Foundry



## Furnace

### The Solution

Furnace is a collection of image processing plug-ins for Final Cut Pro, incorporating The Foundry's sophisticated motion-estimation technology. Furnace was honored with a Scientific and Engineering Award from the Academy of Motion Picture Arts and Sciences in 2006.

Furnace enables Final Cut Pro editors and artists to repair and re-time challenging shots without the added overhead and generational losses normally involved in exporting to external compositing packages. Based on Apple's FxPlug standard, Furnace provides optimal image quality and full, native performance in Final Cut Pro.

Highlights of the package include: **DirtRemoval**, which automatically detects and cleans dirt, dusts and hairs from digital film scans. **MatchGrade** derives color and grade information from reference images and applies it onto new footage. **Kronos** creates sophisticated slow-motion and re-timing effects via The Foundry's motion estimation algorithms.

Furnace provides an arsenal of production-tested tools designed to fix issues at the compositing stage and prevent time-consuming re-renders of 3D and 2D animation. Thousands of leading digital artists worldwide already use Furnace to enhance digital visual effects and post-production workflows on leading television projects and motion pictures.

### Products highlights

**DeFlicker** is a fully automated plug-in designed to remove flicker in a sequence. It can remove multiple over-lapping phase-different flickers, while adapting to cope with motion in the sequence.

**DeNoise** is a noise and grain removal plug-in that uses advanced motion estimation technology along the direction of motion. It can reduce noise without introducing any of the artifacts typically associated with noise reduction.

**Kronos** also uses The Foundry's advanced motion estimation technology to build in-between frames in a sequence. Kronos can be used to speed up (with motion blur) or slow down an image sequence. Artists have the option of supplying foreground mattes, to give retimed objects tight crisp edges and the latest version will detect and account for occluded regions of the image.

**ReGrain** is an advanced grain management tool, which duplicates grain either from a sample image or stock footage and applies it to a new sequence.

**DirtRemoval** automatically detects and cleans dirt, dust and hairs from a film scan.

**MatchGrade** copies the color look from a reference sequence and applies it to the source image. This technique involves a non-linear, color histogram transformation useful for balancing and color matching plates to a master grade.

**MotionBlur** utilizes advanced image processing to add organic looking motion blur to a sequence. Blur can be added automatically based on the amount of motion in the sequence of the shutter time or set manually.



<http://www.thefoundry.co.uk>

The Foundry is a world-leading innovator of visual effects and image processing technologies that boost productivity in motion picture and video post-production. The company holds a trio of Academy Award-winning products including Keylight; the high-end compositing system Nuke and the visual effects plug-in collection, Furnace. The Foundry is headquartered in London with offices in Los Angeles.