



workflow, LUTs are applied while ingesting footage into the DI application. When used in this way, LUTs become destructive because the input footage is irreparably harmed: The LUT acts as an optical filter, "baking in" a look as the footage is ingested by

the DI application, limiting color-correction options.

The digital negative remains unharmed, but the copy that resides inside the DI application for manipulation has been permanently changed.

If a radical change in looks is desired, it may be necessary to reingest the footage into the DI application using another LUT, or with no LUT at all. This can be time consuming, and as we can deduce from the highly technical formula "time equals money," this isn't the most flexible approach.

Options (1) and (2) provide nondestructive instructions to the DI application for modifying the look of the actual digital negative, allowing for maximum color-correction opportunities.

A Camera-Specific Matrix. All non-raw cameras (cameras that spit out an image that's immediately usable, like the Sony F900, Panasonic Varicam, etc.) have a built-in color "matrix" that renders the color information in the video signal immediately viewable, baking it into the footage. Raw, uncompressed 4:4:4 cameras have no such thing, as it's most desirable to keep the footage in its rawest state as a complete digital negative.

SpeedGrade OnSet can apply a camera-specific matrix that immediately yields, from a raw signal, an image that is viewable by eye, which can then be enhanced using primary and secondary color-correction controls.

A JPEG Reference Image Of Your Intended Look. Each .look file contains the basis for any number of workflows with a wide variety of professional DI applications, and it does so in a ridiculously small file size. For example, the 32-bit floating

point algorithm alone can yield more precise data than a 64x64 LUT (a LUT constructed of a 64x64 integer color table), and yet is only 20 kilobytes in size. A typical 64x64 LUT can be as large as six megabytes.

Iridas has recently added support for the Tangent CP-200BK colorist control panel, adding extremely fine and familiar control to an already powerful program. Given that colorists are now being consulted during the preproduction phase of many feature and television projects, it makes sense to provide them with a familiar interface when they stop by the set and create .looks from your test footage, or create .looks remotely via an Internet connection to the Cinemage monitor.

"We are the workflow company, not the finishing company," says Patrick Palmer, COO of Iridas. "Ten or 20 years ago, the DP was able to be present for the finishing touches on their feature. This happens less and less, and DPs are rarely paid for their grading time. SpeedGrade OnSet lets the DP retain control over the look of the picture all the way through post. The DP's intent is preserved."

Those of us from the film world know well the old adage, "Always shoot for dailies." Not only do dailies determine whether the DP comes back the next day or not, they also show the rough direction of the look.

It's not unusual for directors and producers to fall in love with this "rough look" during editing, making the final grading process a political nightmare when the DP tries to give the film the finished look they'd always envisioned. "Now production

can fall in love with the *right* image," says Palmer.

Open Workflows. Iridas and Cine-tal see no point in closed workflows. Things that are easy in the analog world are much more complex in the digital world, and the more "hooks" a company provides in their products and software, the easier it is to tie them together into a solid workflow.

Both companies believe the industry is better off choosing among a wide number of products to construct custom workflows rather than being tied into a single company's proprietary products.

The age of HD is upon us, and it appears that film's days are numbered. Before we start tearing our clothing and covering ourselves in ashes, let's look at the positive side.

What-you-see-is-what-you-get technology has now been extended throughout the complete postproduction pipeline. No longer does the DP get one or two chances to perfect the look of their film by giving notes in a darkened theater.

We'll be able to rough in our own looks live, on set, and maintain them through to the final product. If we have to give up the chemical miracle that's film, the ability to preserve our intent through final grading has got to be one heck of a consolation prize.

HDVP

RESOURCES

Cine-Tal

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