Newsletter

Welcome to the tenth edition of my Final Cut Pro newsletter!

The goal of this newsletter is to provide information helpful to the professional user of Final Cut Pro. This newsletter publishes around the middle of each month. Past issues are not archived, however, key articles are posted to my website for your future reference. Unless otherwise noted, all references are to Final Cut Pro HD, and are not guaranteed to work under any other version.

Also, please invite your editor friends to visit my web site -- www.larryjordan.biz. We are working to make it a great Final Cut resource!

Newsletter Contents

Survey -- What Gender are FCP Editors?

I love these surveys, because your answers help me tailor this website to better meet your needs! (Click here, if you want to see the results of last month's survey.) It seems about 60% of you have been using Final Cut for two years or longer. Because of your level of experience, I'll make sure to provide tips and techniques targeted toward the advanced user.

Recently, I got into a long discussion about whether Final Cut editors tend to be men or women. So, this month, I decided to ask about your gender. As always, all your responses are anonymous and very much appreciated.
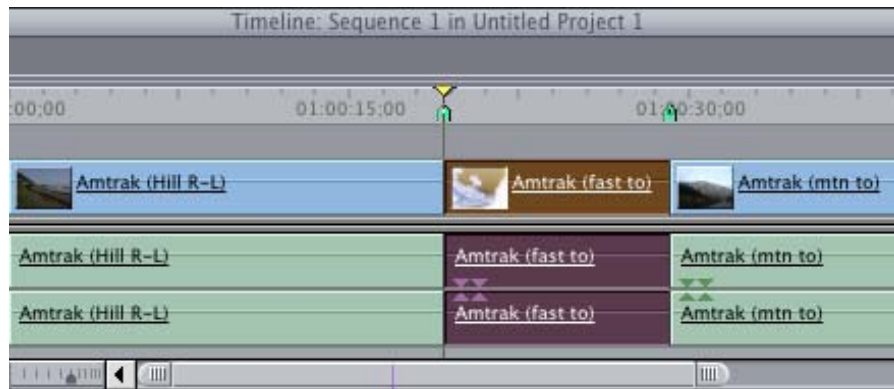

Technique: Creating a Slow Motion Effect

Victor Aulestia wrote in asking me to describe how to create a slow-motion, black-and-white effect in Final Cut Pro.

Creating both these effects are easy, though there is a trick you need to be aware of when changing the speed of a clip.

Here's a timeline with a shot selected the speed of which I want to change. (By the way, have I mentioned I love to take pictures of trains? Sigh. I know, it's a personal failing.) I've indicated the length of the clip using two markers in the Timeline.
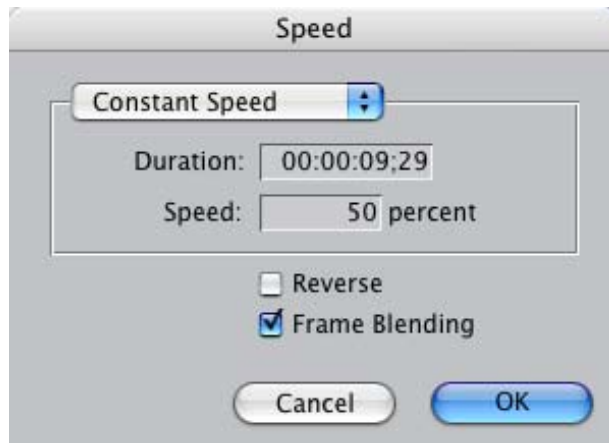
Choose **Modify > Speed**. This dialog allows you to speed up, or slowdown a clip. On most systems, a speed change from 50% (half-speed) to 200% (double-speed) will play in real-time. Greater speed changes require rendering.

00   01:00:15:00   01:00:30:00

Amtrak (Hill R–L)   Amtrak (fast to) (50%)

ntrak (Hill R–L)   Amtrak (fast to) (50%)   Am

ntrak (Hill R–L)   Amtrak (fast to) (50%)   Am
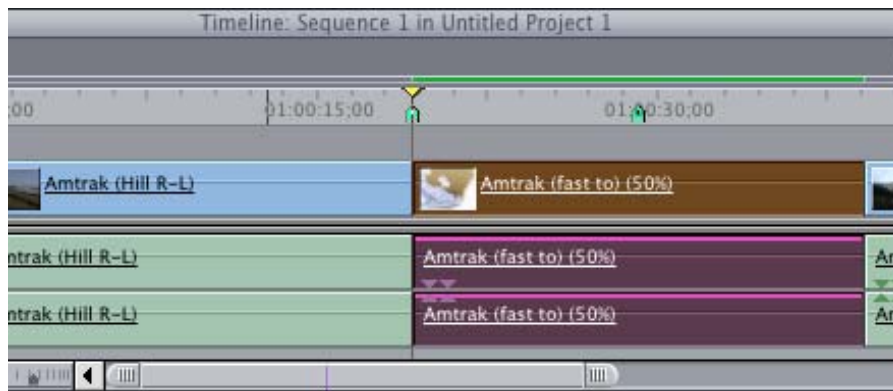
Here's the trick. Notice that when you apply a constant speed change to a clip, the duration of the clip ALWAYS changes, depending upon the speed change. Faster clips are shorter, slower clips are longer. At the same time, the audio speed *also* changes. Slower audio sounds deeper, faster audio sounds higher.

Notice, also, that not only did the clip get longer, but all succeeding clips got pushed down the Timeline. Most of the time, I don't want this. So, when I want to apply a speed change to a clip, I'll move it to the end of the Timeline, where the change in duration won't affect anything. Then, after changing the speed of the clip, I'll trim it to the length I need and move it back into it's correct place in the Timeline.

Canvas: Sequence 1 in Untitled Project 1

Sequence 1

00:00:51;25   44%   01:00:25;21

To change a clip from color to black-and-white, be sure the clip remains selected on the Timeline then…
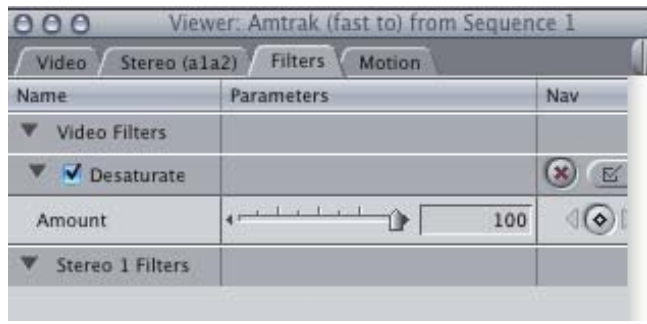
choose **Effects > Video Filters > Image Control > Desaturate**. This filter removes all the color from a clip.

And, ta-DA!, you are done…. Except, well, see desaturate is nice, but a romantic sepia tone would be nicer. So, with the clip still selected in the Timeline, add a *second* filter by choosing **Effects > Video Filters > Image Control > Sepia**.
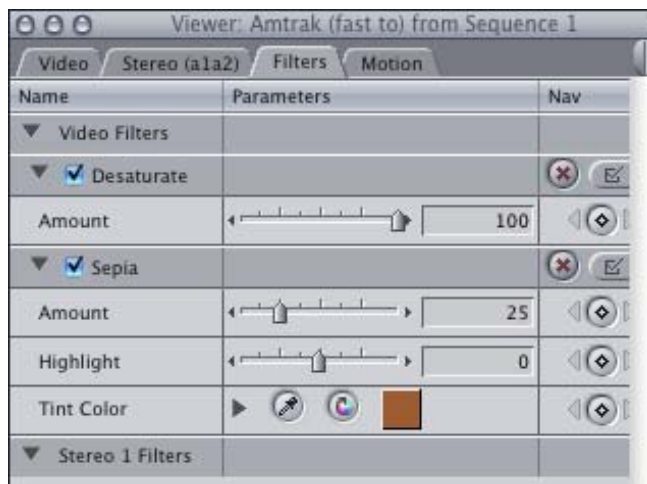
The default filter settings are a trifle aggressive, so change your settings

to match my illustration, then click the color tab and make the medium brown color a bit darker.

Personally, if you want warm, nostalgic romance, nothing beats a sepia-toned image. Though, um, this effect looks a lot better in a wedding video than in the video of a train.

Tip: Deleting Clip Markers in Groups

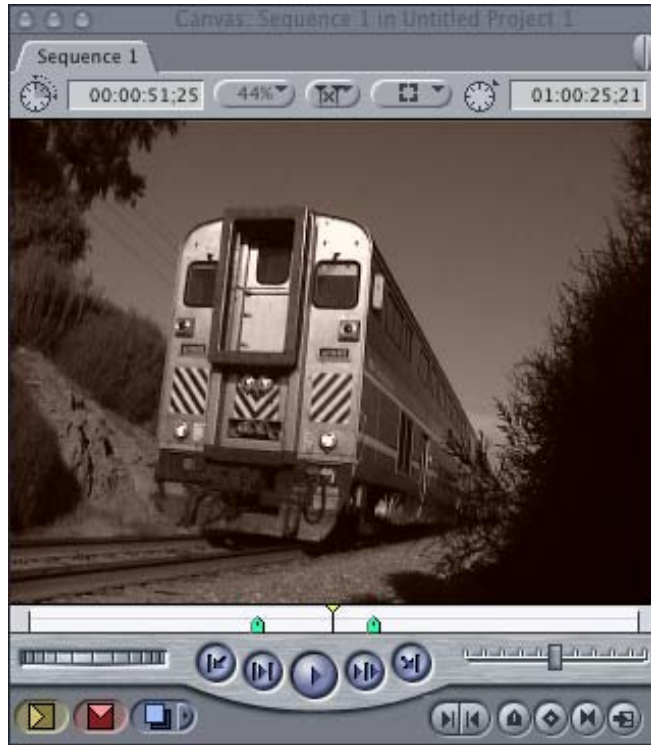I discovered this tip a while ago, but I didn't realize it's significance until recently. So, I wanted to share it with you.

There are two types of markers in Final Cut:

- Timeline markers
- Clip markers

The general rule on markers is that you can delete a single marker by moving the Playhead on top of a marker and:

- Clicking the **Delete** button in the **Edit Marker** dialog box
- Typing **Cmd+`**
- Choosing **Mark > Markers > Delete**

You can also delete all the markers in the Timeline or a selected by clip by:

- Choosing **Mark > Markers > Delete all**
- Typing **Ctrl+`**

However, there's also a way to delete several clip markers without deleting all of them.

(Yup, we're back to trains, again.) To do this, load a clip from the Browser into the Viewer and set some markers. You could do this using **Mark > DV Start/Stop Detect**, or just by typing the letter **M**. Either way, you'll end up with a variety of markers in the clip.
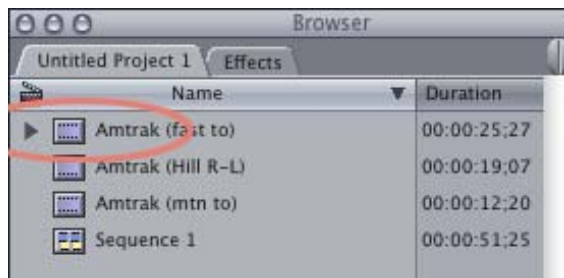
Notice that when you add markers to a clip in the Viewer, a small triangle appears next to the clip name in the Browser.
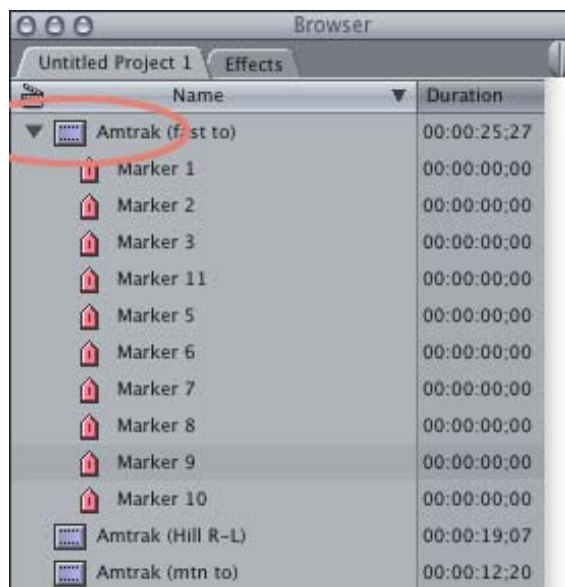
Twirl this arrow down and you'll see a list of all the markers in the clip in the Viewer. These markers are very useful, for instance when you want to create sub-clips you can drag them all into a folder in the Browser and instantly create sub-clips.
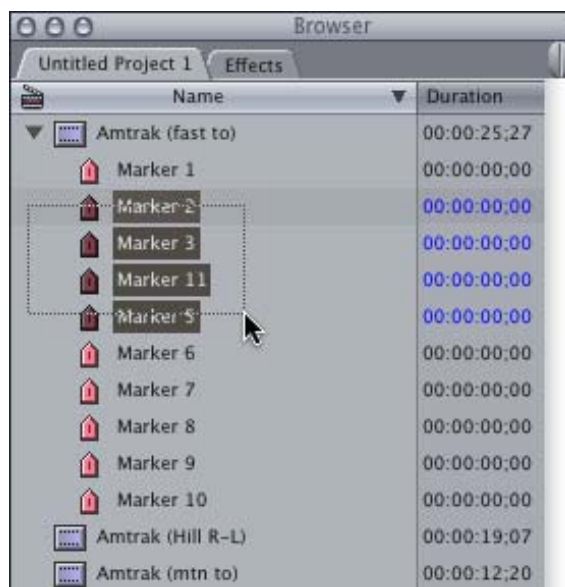
However, in this case, we want to delete some of these markers. Using your mouse select the range of markers you want to delete.
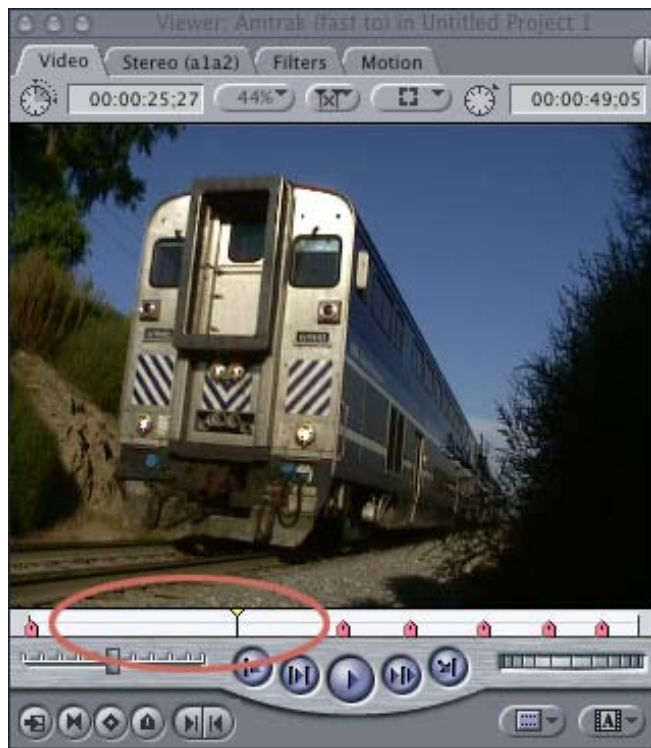
Press the **Delete** key and all selected markers disappear! Very cool.

The sad part about this technique is that it doesn't work for sequences (there's no twirly in the **Browser** for a Sequence), nor does it work for clips that have been edited to the **Timeline**. Still, for clips loaded from the Browser to the Viewer that have markers, this can be a useful tip.

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Understanding the Workflow of Final Cut Pro

As I teach, I've discovered that many students need a sense of when to do what in their editing. Understanding the Final Cut Pro workflow is increasingly helpful as deadlines continue to tighten. In fact, I've discovered that virtually all sequences are never really "done," they are just released. There's always something more than can be tweaked.

I'm convinced that if it wasn't for deadlines, no video project would ever be completed.

While I make a point to discuss FCP workflow in my classes, I hadn't considered including it in this newsletter until Scott Swearington wrote:

> I took a class from you in LA hosted by DV Creators (www. dvcreators.net) and you talked about your upcoming book. You spoke in some detail about organizing the editing process that minimizes undoing and redoing effects and so on -- it had about 9 or 10 steps. Of course, I'll buy the book, but I'd suggest some of this process would be great for the newsletter -- given you have so many folks who have used FCP less than a year and so many others, like me, who've developed bad habits.

At its heart, all video editing is story-telling, regardless of whether that story is a feature film, wedding, corporate training, or a commercial. The best videos are always stories. And, like all stories, videos get better the more you polish them. This workflow for editing within Final Cut Pro helps you decide where to best spend your time.

Step 1: **Plan your project**. Develop a consistent file naming scheme. Think about who your audience is and how to reach them. Planning is never fun, but it is *essential* to successfully completing a project.

Step 2: **Gather your media**. Capture you media from video tape. Import audio and graphics. Get the Browser organized to make it easy to track all the different elements of your project.

Step 3: **Build your timeline**. View your clips. Set In's and Out's and edit them into the Timeline. Don't worry, yet, about precision. Just make some basic decisions on which clips are in and which are out.

Step 4: **Organize your timeline**. Watch your sequence and make decisions on the order of your clips. Shuffle them around to make your story flow better. Don't worry about making each edit perfect. Concentrate on getting the flow of your story to work.

Step 5: **Trim your story**. Once the organization of your story is complete and your clips are in the right order, now it's time to start trimming your edit points so that your edits become invisible.

Step 6: **Add transitions**. There's no sense spending time putting in transitions until you've figured out the order of your clips. Transitions are fun and sexy, but you've only got limited time. Focus on what needs to be done first.

Step 7: **Add audio**. While you've been editing your audio all along, now is the time to start adding sound effects, music, background and atmosphere. The best thing you can do to improve the quality of your picture is to improve the quality of your audio.

Step 8: **Add text and effects**. Now that your story is complete and your audio is prepped, you can afford to spend all remaining time adding text and effects. Keep in mind that there is no right answer on effects. If it looks good, within the context of your project, then go ahead and use it. However, don't bog down too early in effects, or you'll spend all your time creating effects, only to discover that your story isn't complete.

Step 9: **Output your project**. Once all your editing is complete -- or the deadline has arrived -- output your media to tape, or the web, CD, or DVD.

Step 10: **Archive your project**. Save that which needs to be saved, and trash that which can be archived on tape. [Click here](#) to read an article that gives you much more detail on how to set your system up for archiving.

Although I go into more details about this process in my up-coming book (which you'll learn more about next month), focusing on how to best spend your time at each step of the editing process means you'll have more time to edit with less wasted activity.

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Tips from the Classroom

Some interesting observations from a recent class:

Kristian noticed that when using Paste Attributes in Final Cut Pro HD, you can paste keyframes for motion effects, but you can't paste keyframes for filters.

Wendy found that you don't need to create a still frame before you export it. Instead, simply park your Playhead on the frame you want to export, either in the Viewer, Canvas or Timeline, then go to File > Export > QuickTime Conversion, select "Still Image" from the Format menu at the bottom and save it. Personally, I like saving stills as TIFFs, because all graphics programs, Mac and PC, can read them. To do this, click the Options button and change the pop-up menu at the top from PNG to TIFF.

Nick found some new keyboard shortcuts:
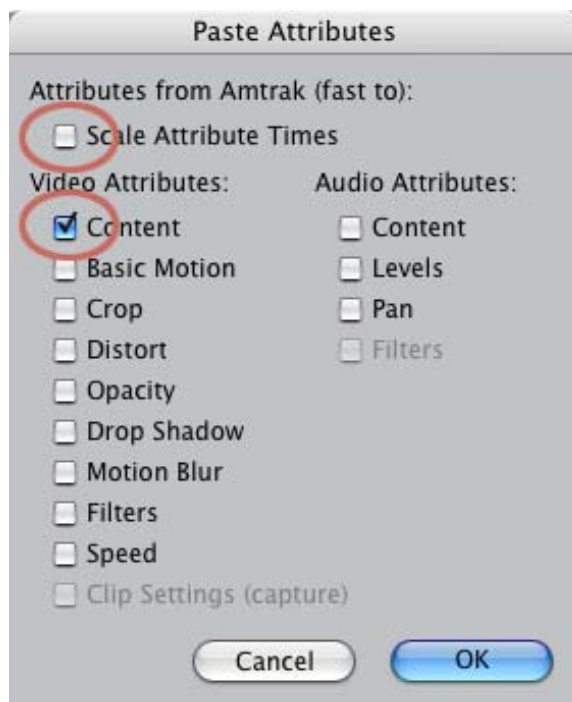
> **Command+A** -- selects all clips in whatever window is active
>
> **Shift+A** -- Sets an In and Out marking whatever clip, or range of clips, is selected
>
> **Option+A** -- Selects whatever clip, or range of clips, is marked by an In and an Out
>
> **Control+A** -- Sets an In and Out between two markers containing the Playhead
>
> **Shift+Command+A** -- Deselects everything

Paste Attributes

Attributes from Amtrak (fast to):

☐ Scale Attribute Times

Video Attributes:	Audio Attributes:
☑ Content	☐ Content
☐ Basic Motion	☐ Levels
☐ Crop	☐ Pan
☐ Distort	☐ Filters
☐ Opacity	
☐ Drop Shadow	
☐ Motion Blur	
☐ Filters	
☐ Speed	
☐ Clip Settings (capture)	

(Cancel)   (OK)

Larry discovered that when you need to replace a clip with another clip, but keep all filters and animation intact, select the clip you want to paste and copy it to the Clipboard (**Cmd+C**).

Then:

- select the clip you want to replace
- Choose **Edit > Paste Attributes** (type **Option+V**)
- Deselect **Scale Attributes** at the top
- Check **Content** -- uncheck everything else
- Click **OK**.

Instantly replaced clip.

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Technique: What Files Does Final Cut Pro HD Create (and where are they stored)?

There are a variety of files and folders that Final Cut creates automatically. Here's what they are, where they are stored and what they do.

All these automatically created folders and files are related to choices you make when you set your Scratch Disk, using **Final Cut Pro HD > System Settings**

Project File. This is the file that contains all your clips and sequences. You control what it is named and where it is stored, but, since it is created by Final Cut, I thought I would mention it here.

When you set your Scratch Disks, Final Cut creates six folders:

- Capture scratch
- Render files
- Audio render files
- Waveform cache
- Thumbnail cache
- Autosave Vault

The first three files are always stored together, based upon how you set your scratch disks at the top of this dialog.

The second three files are set based upon your selections in the middle of this dialog. Their default locations is inside the Final Cut Pro documents folder inside your User folder. While all the files these three create a small, so their ultimate location doesn't make a real difference, I tend to locate them in the same location as the first three files.

In all cases, I create a folder on my second hard drive, called **FCP Media**, and point all of these folders to that one location. That makes storing, locating and removing all files related to a single project simple and quick. Here's an article that describes this organization process.

But, I digress. Let's take a look at the files each of these folders contains.

These first three folders all create files that use the same icon, and all three folders are stored together.

> **Capture scratch**. This contains all the media files you capture with Final Cut. Audio and video. They are all stored as QuickTime files.
>
> **Render files**. These files are created whenever you render a video transition or effect. They, too, are stored as QuickTime files. The letters "FIN" in the file name, indicate they are rendered at the highest possible quality. Using other render quality settings will alter the file name.
>
> **Audio render files**. These files are created whenever Final Cut renders an audio effect, or creates a mix-down. Mix-downs occur whenever your audio tracks exceed the real-time track limit set in User Preferences. The default setting is 8 tracks.

These next three folders all create files that use the same icon, but different from the first three folders. While these three folders are most often stored together, each can be stored separately. I make a point to set all six files to the same place: the *FCP Media folder*, which I create on my second hard drive.
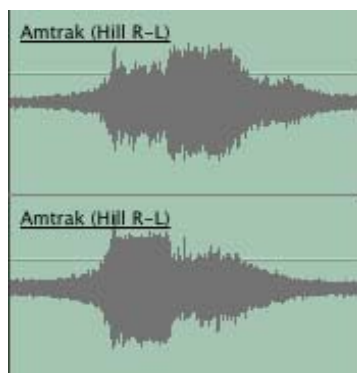
Waveform cache. These files contain the images of your audio waveforms that are displayed in the audio tracks of the Timeline. It's a good habit to turn off the *display* of your waveforms (type **Option+Command+W**), unless you are specifically editing audio clips where seeing the actual waveform on the Timeline helps you decide where to place the edit point. You'll get faster performance from your computer that way.

Thumbnail cache. These files contain the small images of your video clips that are displayed in the Timeline and the Browser.

Autosave Vault. These files contain backup copies of your project files so that, in the event of a crash, you can recover your project more quickly. You set how often these backups are created in Final Cut Pro HD > User Preferences. I have my Autosave Vault set to 15 minutes.

Generally, I don't worry about the files in the AutoSave Vault, Thumbnail Cache or Waveform Cache folders. The files are small and tend not to get in the way. However, when I am done with a project, I will always use **Tools > Render Manager** to get rid of render files and delete all media files using the **Finder**.

Now you know.

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Request for Your Help: How Long Does video Tape Last?

I need your assistance. Recently, I've had a lot of worried students saying that they heard that video tape only lasts a year or two, which means that they should back up all their media on hard disks.

To me, this seems stupid. My understanding of video tape is that, properly stored, it should last 20-25 years, far longer than any hard drive.

I'm looking for an informed person who can help answer this question. (Please note the use of the word, "informed." If all I wanted was rampant speculation, I could easily indulge in that myself.)

If you are knowledgeable about the life span of video tape, or know someone who is, I'd be grateful for some information. I'll publish the results next month.

Thanks!

Problems Between new 2.5 GHz G-5's and ATTO UL-4D SCSI cards

This last week, I was installing a brand-new 2.5 GHz G-5 that was using two SCSI RAIDs for video storage. The client also purchased an ATTO UL-4D SCSI card to connect the RAIDs to the G-5.

However, try as we might, the ATTO card and the G-5 won't talk to each other. There is, apparently, something changed on the G-5 motherboard that will ultimately require a firmware update from ATTO.

ATTO is looking into it and I expect this to have a resolution in the next few weeks. In the meantime, you will be better off using a UL-3D card in the new G-5s, which work, rather than installing a UL-4D.

If you are using DV with FireWire drives this is not an issue for you.

Just a word to the wise.

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Technique: Guidelines for Great Text in FCP HD

This technique came from an email that Brian Dorr sent regarding how text looks in Final Cut. Brian writes:

> I believe I'm running into a problem with FCP regarding text. When I create a text for a sequence, It looks really sharp and defined…until I render the sequence.
>
> Afterwards I get a lot of stair stepping. Just doesn't look as good as it did prior to rendering. Is this normal? Does it look any better on a NTSC monitor than on my Powerbook?
>
> I would like to see an article on how to properly add nice looking text to a project.

Brian, there are four things to know about text in video:

1. It is always 72 dpi
2. It is always bit-mapped
3. Curved edges will always generate stair-stepping
4. Fonts should always be checked on a video monitor, rather than a computer monitor

Having said that, though, there are several things you can do to improve the look of your text in video. And the first starts with how you scale (change the size) of your text.
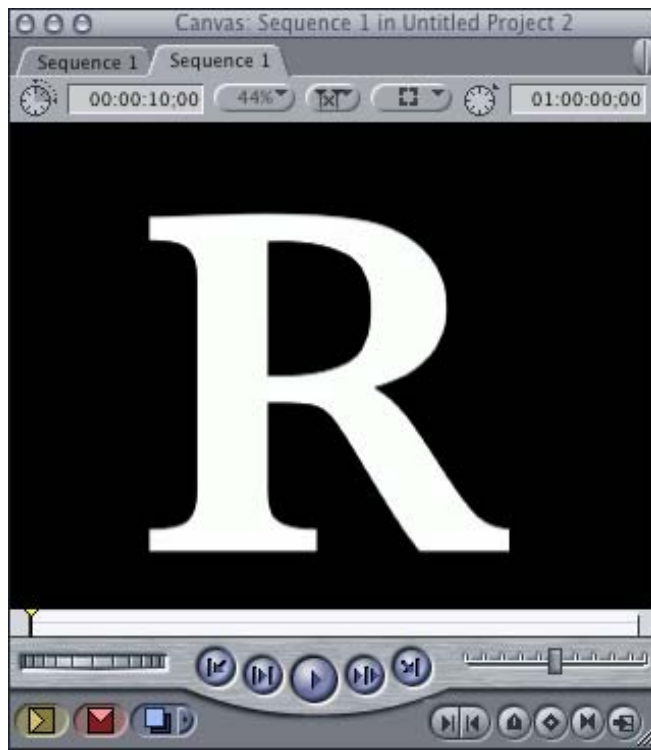
Here's an image of the letter "R" at 500 points in Baskerville. This screen shot has not been scaled, so you see it as it is displayed in the Canvas. The size of the font was set in the Controls tab of the Viewer.
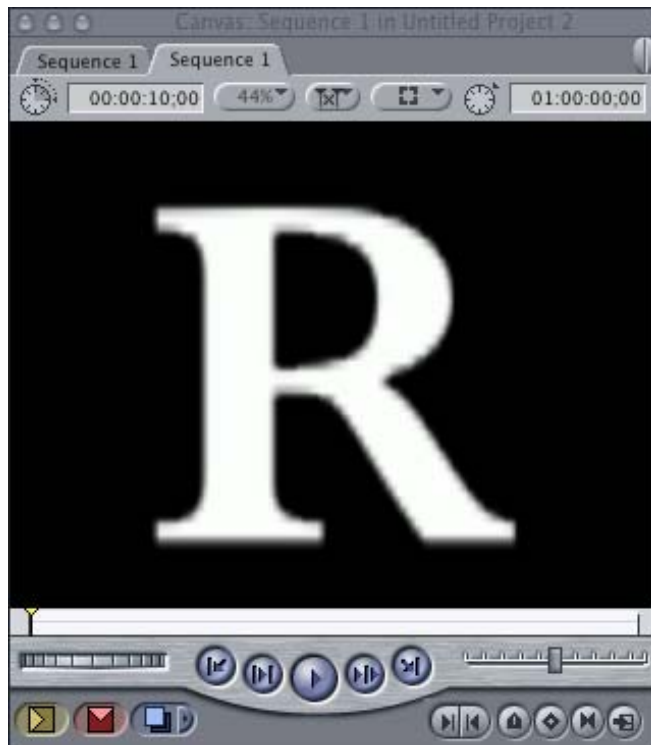
Here's the same letter "R" set to 100 points in the Controls tab and scaled to 500 in the Motion tab. Does the word "ugly" spring to mind?

This brings up the first rule of using text in Final Cut: *Never scale text using the Motion tab, it will always be excessively bit-mapped. Always use the Scale setting in the Control tab.*

That's because when text is created and modified in the Control tab, it

remains vector-based, providing the smoothest edges and least amount of stair-stepping. Once you switch out of the Control tab into any other tab, such as Motion, the text is converted by Final Cut into a video bit-map. Thus, all images modified using the Scale setting in the Motion tab simply change the size of each pixel, making the text or image looked even more bit-mapped.
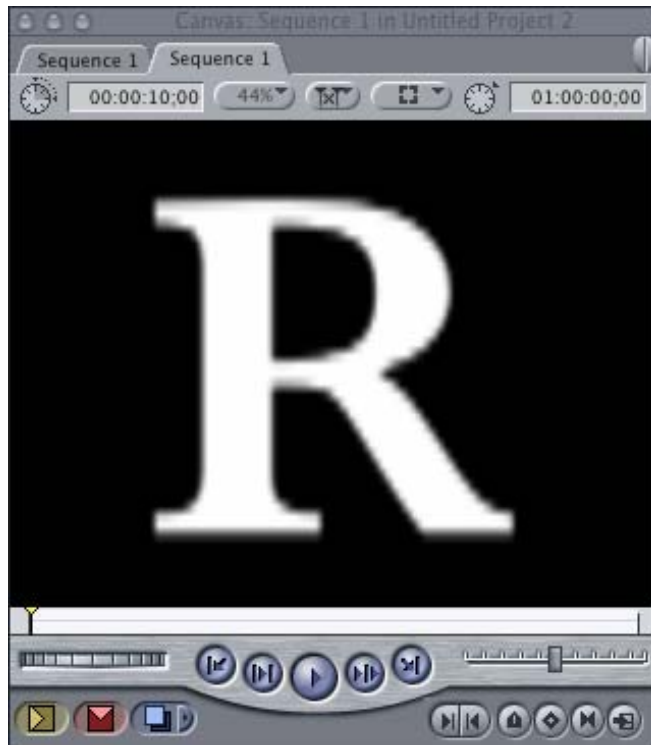
When you scale text using the Motion tab, then render it, as in the image above, any existing stair-stepping gets further exaggerated because rendering is, among other things, conforming the image to the standard video bitmap.

So, when you are creating text in Final Cut, follow these ten rules for best results:

1. Always use TrueType fonts. Final Cut likes them better than PostScript Type 1.
2. Always scale and adjust your text using the **Controls** tab in the Viewer, not the settings in the **Motion** tab
3. Avoid characters that have excessively thin edges, for example, "Didot"
4. Avoid characters that have lots of fancy curves, for example, "Edwardian Script"
5. Avoid characters that have thin little "feet," for example, "Times"
6. Avoid using characters smaller than 24 point
7. Avoid coloring text with highly saturated colors
8. Use fonts that are sans serif and solid, like "Arial," "Lucida Grande," or "Optima."
9. Increasing letter spacing often makes fonts easier to read
10. You can use fancy fonts, just be sure to use them in large point sizes

Finally, **never** judge a font until you see it on a video monitor.

And, always put a drop shadow under text to make it easier to read. My favorite settings are **Offset**: 1.5, **Softness**: 30, **Opacity**: 90.

Hope this helps.

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New and Updated Articles

Based on reader comments, the following articles are new or updated since last month:

- A Fast, Easy Method for Color Correction -- updated with additional explanations
- Finding Timeline Images Using Match Frame - updated
- Why Using the Unlink Button is Dangerous -- new
- Faster Trimming with Ripple and Roll -- new
- Compensating for Video's Non-Square Pixels -- new
- How to Remove a Through Edit -- new

Reader Mail

We have a full bag of reader mail this month. So, let's see what you wrote.

Ian Rowe writes:

> I just had to write and thank you for your great news letter. It's the little tricks and tweaks that improve my workflow and make give me better results that I love. Somehow it always seems to pertain to some aspect of a project I am working on.
>
> Last month I was busy with various mattes and low and behold an article. The same project required a lot of motion paths, and the vector curves (especially with Tom [Wolsky's] suggestion) made everything that much smoother.
>
> This week I'm a fan of the option drag to edit the video vs. audio. I am forever unlinking audio and video, but now I just don't have to (or at least I'll do it less, and be more organized in my timeline) .

Larry replies: Ian, thanks for the compliments. Writing this newsletter is hard work and I'm always glad to hear it's appreciated.

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Michael Singh writes:

Your [news]letter is so good I gobbled it all up this morning and now I'm late for work…. We're using FCP as we start post-production on "Valentino's Ghost," a 2-hour PBS documentary.

Larry replies: Final Cut is amazingly popular among documentary editors. I wish you great success with your project. And, I only publish one newsletter a month, so you won't be late too often.

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Tom George writes:

[Regarding your article on deleting through edits,] I found the delete method you mentioned very effective. I discovered about a year ago that you can also delete the through edit by Control-Clicking on the Through Edit and selecting Join Through Edit.

It's amazing how even the experts (you, not me) can use a program for years and not know of some techniques, but then it's not so surprising when you consider how many things you can do with today's software. I find that when in doubt, always try Control-Clicking on something as it might just give you the answer to your question.

And, speaking of experts, **Lisa Brenneis** chimed in with her comments on the same technique:

I always used the [contextual] menu to remove Through edits:

- Control-click the Through edit indicator
- Choose "Join Through Edit" from the shortcut menu

I didn't know you could just delete them. Until now. It takes a village to learn FCP.

Cool.

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Continuing with our experts theme, **Tom Wolsky** writes:

[In last month's newsletter Larry wrote:] "Press **Option+Left arrow** to move the edit point earlier, or **Option+Right arrow**, to move it later."

This will move the video separately from the audio. It will also not execute a ripple edit if there is an adjacent clip. I usually call in the **<** and **>** keys to ripple or roll one frame, and **Shift+<** and **Shift+>** to ripple or roll the trim edit duration. It works exactly the same way as the **[** and **]** keys Laura discovered.

Larry replies: This was an error on my part, due to hasty typing, which I corrected in an updated version of the newsletter. However, for folks that read the issue before I got it corrected, I wanted to publish Tom's comment.

Tom continues:

> [In last month's technique on [finding shots in the Timeline](#) by doing a Match Frame in the Viewer, Larry wrote:] "So if you select your sequence (by clicking on it in the Browser, not by making the timeline active), and hit **Cmd+F**, you have the option to search for Unused Media in selected sequences, and the Find Results window that comes up will show you all the unused clips."
>
> This technique only works if you've logged and batch captured your material. If you working with sub-clips or some other post-capture organization technique, the Find Unused technique is unfortunately pretty useless.

Larry replies: Since I only use Batch Capture to bring clips into Final Cut, I never knew about this limitation. Thanks for mentioning it.

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John Sadowski writes:

> Love the work! Please continue; it is entertaining and informative, and easy to read.
>
> One rant I have and maybe you can address is the ease with which one can accidentally delete a bin or sequence file. One wrong Delete key press and viola' ... gone. I believe you can recover it by reverting to an autosave.. but you can lose edits and confuse oneself as well if the accident isn't discovered for a while.
>
> I try to edit with keystrokes as much as possible and I have, through fat fingers and late night edit sessions, inadvertently deleted sequences and bins with scarcely a warning or acknowledgment. Don't you think this should have a confirmation that you must consciously select? Thoughts?

Larry replies: I never thought about this before, but a confirming dialog on deletion is a great idea. Aside from doing an immediate **Undo**, there's nothing worse than permanently deleting a sequence you desperately want to keep.

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Dick Osso writes:

> I really appreciate your newsletters. You really provide clarity on some needed issues. Which brings me to a question I have.
>
> I use a Canon GL2 and edit in FCP. [Often,] from the movie

clip, I like to make stills. So I make a freeze frame and [save it.]

But when I stop the video head over a spot on the clip, the image may look smeared on the monitor. So I try and grab a still when the imagery is not moving. But many times, the edges of the image have that SAW TOOTH look to it. So when I make the still and import it into some other slideshow application, I have to downsize the image so as NOT to see the rough edges.

Now, I thought, (and I am not all that textbook knowledgeable about the Canon or how to avoid what is happening), the Canon GL2 was using a progressive scan, which is advertised as creating stills with smooth edges and NO saw tooth. Well, I have the older GL2 and the new GL2. The new one is better, but I still get edges.

Solution ? if any?

Larry replies: Standard images created in a GL/2 and all other cameras is interlaced. This is what causes the saw-toothed lines. You can eliminate this by shooting in Progressive mode, which is a menu setting on the GL/2. However, this setting is off by default. Progressive scans all picture lines in order from top to bottom, thus eliminating the saw-tooth effect created by interlacing.

This saw-tooth effect will be worse on images which are moving, such as action sports close-ups. The way to eliminate the saw-tooth edges is to de-interlace the still image, which, essentially, doubles every other line to make the saw-tooth edges disappear. Both Final Cut and PhotoShop have de-interlace filters, as do other graphics programs.

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Larry, again. I want to express my gratitude to everyone who writes in. I enjoy reading your comments and I am always interested in improving the accuracy of these newsletters. As Lisa said, it takes a village to learn Final Cut.

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Technique: Prepping Still Images for Video

Preparing still images for video probably deserves a book; maybe two books. It is surprisingly complicated.

We've already covered, during the last two months, issues of square vs. non-square pixels. So, this month, I'll tackle other issues that make creating images for video different than creating images for computer display.

Video Resolution

The most important point to keep in mind about transferring still images to video is that all video, all the time, all around the world, forever and ever is 72 dpi.

Video is a low-resolution medium, especially when compared to print.

Consequently, all those beautiful images that you scanned at 300, 400, even 600 dpi are gonna look pretty grim when you bring them into Final Cut -- if they can even be imported at all.

This is because Final Cut only looks at the total number of pixels across by the total number of pixels down. The maximum size image that can be imported into Final Cut is 4,000 x 4,000 pixels. However, I've seen Final Cut have problems with image sequences where the image size exceeded 2,000 x 2,000.

So, the first thing you need to do to prep your images is open them in a graphics application, like PhotoShop Elements, and check the overall image size -- in pixels. Resize the image so that it is no larger than 2,000 x 2,000 pixels; preferably much, much smaller!

Image Size

Second, the image size of DV video is 720 x 480. This means that a full screen image doesn't need to be any bigger than 720 x 480. (The image size of SD video is 720 x 486.) However, just to keep us humble, video uses non-square pixels and computers use square pixels.

So, to properly scale images so that they import at the correct aspect ratios, you need to scan your images so that they are 720 x 540 x 72 for DV projects and 720 x 547 x 72 for SD projects.

These numbers used to be 720 x 534 for DV. What happened is that in FCP HD, Apple changed how it calculates the aspect ratio for imported images, resulting in a change in image size for scanned images.

By the way, these pixel values only apply to *single-layer* images. Multi-layer PhotoShop documents should be sized at 720 x 480 x 72 (720 x 486 x 72 for SD). Sigh…

Gray-Scale Values

On most computer monitors, the gamma setting (which is geek for "mid-tone gray-scale value") does not match the gamma setting for video. This means that images that look perfect on the computer look washed out on video. And video images look exceedingly dark on the computer.

The easiest way to fix this is to create great looking images on your computer, then, as a last step, open the Levels adjustment in PhotoShop or PhotoShop Elements and set the gray setting to 1.2. This darkens your image to match the standard video setting.

RGB Computer Colors are not the Same as YUV Video Colors

Your computer can create colors that a TV can not display. This is due to the computer using RGB colors, while video uses YUV.

The easiest way to see if your colors are TV safe is to import the graphic into Final Cut, then look at it on the Vectorscope (Tools > Scopes, then choose Vectorscope from the pop-up menu.
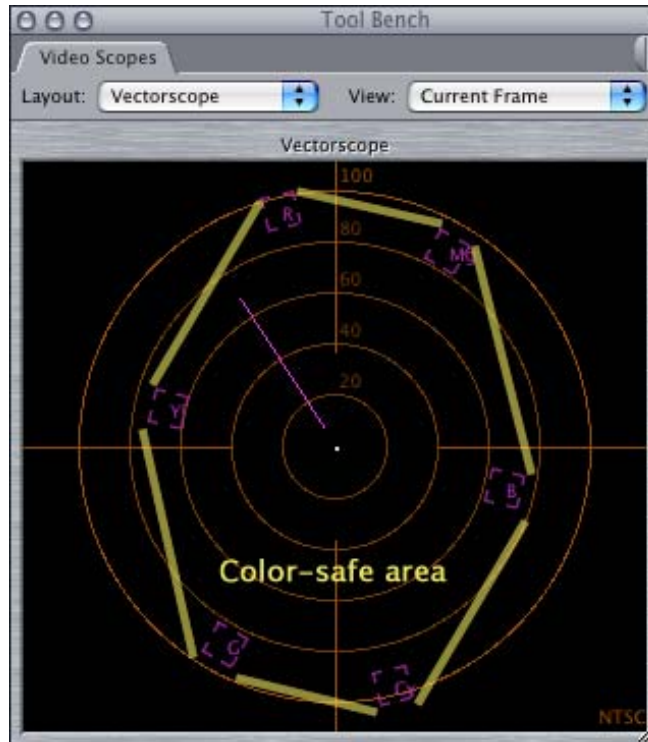
Colors which extend outside a rough rectangle drawn by connecting the six color reference boxes are colors which are not TV safe. Go back into your graphics application and tone down the saturation levels until the colors are safe.

Sharpening

Sharpening is the process of enhancing the edges of an image to improve the illusion of focus. Some sharpening is OK. However, too much sharpening will cause your images to start to "vibrate" on the TV screen. There's no hard and fast rule here. However, the best idea is to go gently on the sharpening until you can look at your images on a video monitor to make sure they look OK.

Avoiding Moiré

Moiré is the false colors that seem to appear around patterns of closely spaced stripes or dots. The easiest way to prevent moiré is to scan your images at the correct size. Moiré most often appears when you take a large image and scale it down in Final Cut. It's the scaling that creates the moiré pattern.

If you can't resize the image before importing it into Final Cut, you can improve it's apparent clarity by blurring it slightly. I know, it seems counter-intuitive. But, blurring softens the edges of the stripes or dots so that they don't create a moiré pattern.

The best way to do this is to apply a Gaussian Blur filter inside Final Cut and set it to a value of 0.5. Your moirés should disappear.

Only a Video Monitor Knows for Sure

If you haven't guessed by now, I'll make this as plain as I can. The only way to judge the quality of an image is on a video monitor. Not a computer monitor and not a TV set.

TV sets have all kinds of inherent problems and vary wildly by age and manufacturer.

Computer monitors are designed to properly display computer graphics, not television graphics.

Only a video monitor can show you the effects of interlacing, YUV color space, lower gamma settings and decreased resolution in a way that you can decide if your graphics look good on TV or not.

If you are serious about the look of your projects, you need to invest in a video monitor. However, there's no reason to spend extra bucks for a big monitor. The best monitors are around 14" in size. Why? Because whether you view your images on a large or small monitor, all TV images are always 720 x 480 (or 486) x 72. So, bigger monitors just make the pixels bigger.

For me, I have a 14" monitor in my project studio that works just great and shows me every little thing that's wrong with my image.

Which is exactly why I bought it.

Summary

Here is a summary of what you need to know to prep your graphics for video :

1. All TV graphics are always 72 dpi
2. Scan your images at 720 x 540 x 72 for everything you want to show full-screen
3. TV gray-scale values (gamma setting) are darker than on a computer. So darken your computer images by setting the gamma setting to 1.2
4. There are colors you can create on your computer that you can't show on TV. These include saturated yellows and blues
5. Don't over-sharpen images.
6. Images that have a moiré can be improved by adding a small (0.5) Gaussian blur filter in Final Cut
7. The only way to judge an image is to look at it on the video monitor, not a computer monitor or TV set)

New FREE Software Utility

Christian Fessel, an FCP trainer and subscriber from Germany, wrote this freeware AppleScript to simplify the tedious task of creating and naming folders for each new project. (It's compressed in ZIP format.)

It creates a master folder using the project's name (which you supply).
Then, within this master folder are folders for graphics, audio, projects
and so on. This provides a very fast way to backup all your project files.
The script is editable in ScriptEditor, so you can tune it for your special
needs.

Click here to download this utility.

Last Month's Survey Results

To see the results of surveys from prior issues, click here:

http://www.larryjordan.biz/surveys.html

Here's the commercial that supports this newsletter.

I provide system design, consulting, editing, training and support
for Final Cut Pro and DVD Studio Pro.

You can review my support and training services here.

If you need training, help or advice with Final Cut Pro or DVD
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Thanks.

Wrap-up

Well, that's it for this edition of the newsletter. Let me know what you
think, and tell your friends to subscribe. I love reading your comments
and sharing them with others. That way, we all learn!

Normally, in this space, I project what I'm going to talk about next
month. Except, right now, I'm completely clueless. So, send in some
ideas of what you'd like us to talk about.

In fact, send in some tips of your own. I'm happy to publish everyone's
ideas.

Oh, and I am also looking for ideas for surveys. Let me know what you'd
like to learn.

Thanks -- and have fun editing!

Larry

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