Newsletter

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Larry's Final Cut Pro Newsletter

Editor: Larry Jordan Issue #22 - January, 2006

Welcome to the latest edition of my monthly Final Cut Pro newsletter -- and welcome to 2006!

The goal of this newsletter is to provide information helpful to the professional user of Final Cut Pro. This newsletter publishes each month. Past issues are not archived, however, key articles are posted to my website for your reference. All software references are to Final Cut Pro 5 unless otherwise noted.

Please invite your friends to visit my web site -- www.larryjordan.biz. We now have over 100 tutorials to help you get the most out of Final Cut!

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Discover the Power - 10-city Seminar Tour Starts Jan. 18

Our next seminar tour starts in Austin, Texas, on Jan. 18 and travels to ten cities around the US. We are very excited because, for the first time, we are offering **TWO** seminars:

• Supercharge your Editing - for the beginning to

intermediate editor

• The High-end of Final Cut Pro - for the intermediate to advanced editor

Supercharge your Editing is a four-hour evening session that will show you techniques to get more organized, improve your editing speed and efficiency, and get a better handle on outputting to video tape and the web. Click here to listen to a brief audio description from me.

And now, thanks to the generosity of a donor who wishes to remain anonymous, we are able to offer *special student pricing* to the Supercharge seminar to all full-time students: \$79!

The High-End of Final Cut Pro showcases working with HDV, HD and 24 fps video in the morning, then shows you how you can improve the quality of your audio, including repairing bad audio, using Soundtrack Pro in the afternoon. Click here to listen to a brief audio description, also from me.

To make this session even more interesting, the DR Group, one of LA's leading Final Cut sales, rental and production facilities, is providing HD equipment for us to use during the seminar.

This is all very exciting, and I'm delighted with the response to both these seminars. We still have seats available. **Register for both sessions today and save money.**

Click here -- http://www.larryjordan.biz/seminars -- to register or learn more. I look forward to seeing you there!

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Technique: Creating Special Effects with Non-Standard Sequences

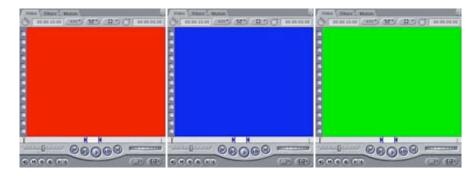
We all know how to create new sequences in which to edit clips. In fact, most of us probably take our sequence settings for granted.

But here's a technique that can change the whole way you think about sequences.

What we are going to do is to create a sequence that is WIDER than a normal frame of video. We will then put three video frames into it -- side by side -- and use them as a background in a traveling matte.

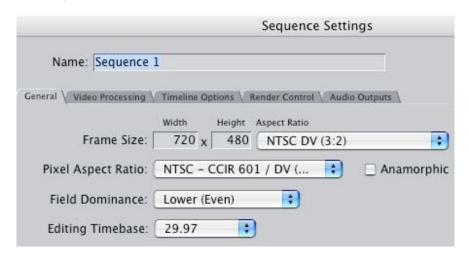
A traveling matte is a great way to fill text with moving video. Except in this case, we will fill the text with three different frames of video.

And, in a first for this newsletter, I've created a little QuickTime movie at the end of this technique so you can see what the final effect looks like.

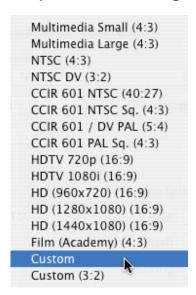


1. I went to PhotoShop and created three full-screen color images - one red, one blue and one green. You can use any video you want, I selected these three colors because it makes this exercise easier to explain.

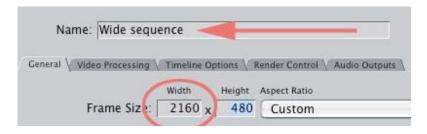
Here are the three images, imported into Final Cut, with each displayed in the Viewer.



2. Next, I created a new Sequence (Cmd+N), then went to Sequence > Settings to make some changes.



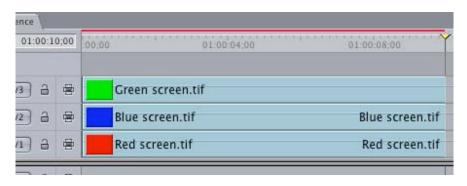
3. From the **Frame Size** pop-up menu I selected "Custom." This allows me to create a custom image size, rather than the default DV-NTSC setting I normally use.



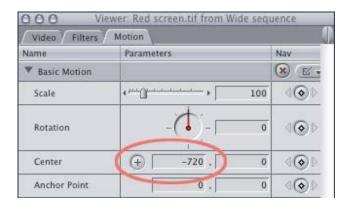
4. Next, I changed the horizontal width of the sequence to **2160** pixels. Because I want to display *three* full-size DV images side-by-side, I need to make the sequence one image tall (480 pixels) by three images wide (720 x 3 = 2160).



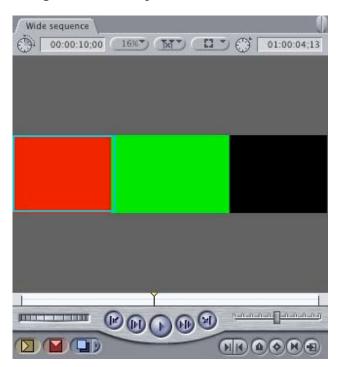
5. When I loaded the sequence into the Timeline, look at how wide it displays in the Canvas.



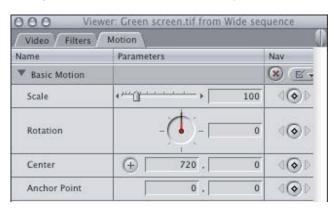
6. Next, I edited my three color clips to the Timeline and stacked one on top of the other.



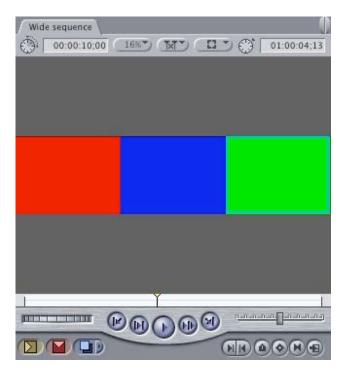
7. I double-clicked the Red image, on V1, to load it into the Viewer. I made sure the Scale was set to 100%, and adjusted the Center position to -720. This moved the Red image all the way to the left side of the sequence.



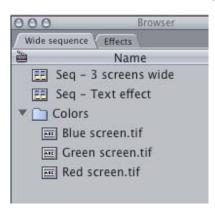
8. My Timeline now looked like this. (Remember, the Green image is on V3 and currently blocks the Blue image.)



9. I double-clicked the Green image, on V3, to load it to the Viewer. I made sure the Scale was set to 100%, and adjusted the Center position to 720. This moved the Green image all the way to the right side of the sequence.



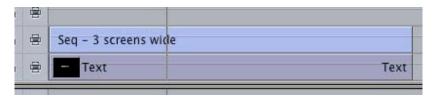
10. My wide sequence now looks like this. This is a single sequence, but wide enough to hold three full-screen images!



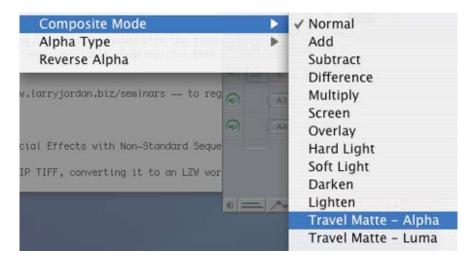
11. I created a new, normal, sequence in the Browser and named it " **Seq - Text effect**". I also renamed my Wide sequence: " **Seq - 3 screen wide**" so that both my sequences would appear together in the Browser. (Notice that I also created a Bin, called "**Colors**," and moved my three color clips into it. This is just an optional step.)



12. I then created a text clip (Goudy Heavyface, 168 point) to serve in our example...



13. ... edited it into the Timeline, and edited "Seq - 3 screens wide" on top of it.



14. To get the color to display *inside* the text, I needed to create a traveling matte. I did this by selecting the **V2** clip and selecting **Modify > Composite Modes > Travel Matte - Alpha**.



Poof! The colors are now displayed inside the text. Remember, since you can use ANY video clip, imagine what this would look like with video you shot playing back inside the text clip. The process is the same.



15. Now, to get the colors to move inside the text, I dragged **Seq - 3 screens wide** up into the Viewer. I set a **Center** keyframe at the *beginning* of the clip to **-720**, and a second center keyframe at the *end* of the clip to **720**.



16. Now when I play the sequence, the video plays inside the text, while the sequence pans inside the text, creating a look that can't be achieved any other way.

And, in a first for this newsletter, here's a small (500K) QuickTime movie that shows the finished effect. Remember, I just used Red, Green, and Blue as an example, You can use any video and the effect will look even better.

Click here to play video.

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Tip: Final Cut and Importing TIFF images

As I was working on this last technique, I discovered

something I didn't know -- or had forgotten.

When I created my color screens in PhotoShop CS2, I saved them as a TIFF, as I prefer the TIFF format for creating images for importing into Final Cut.

However, I saved them using ZIP compression, and Final Cut refused to import the files.

When I re-saved them as TIFFs using LZW compression, Final Cut imported them perfectly.

Hmm... I never knew there was a difference, but, apparently, there is.

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Update: The Life-span of DVD's

From time to time in this newsletter, we've had discussions about the life-span of CD and DVD media. At a trade show recently, I had a chance to talk to the engineers at MAM-A, one of the better CD/DVD media companies, about the life-span of burnable disks.

Here's what I learned.

The life-span of a burnable CD or DVD is highly dependent upon the quality of the organic dye it uses. Not all organic dyes are the same. In fact, organic dyes will vary from one product line to another from the same manufacturer. (Want to know the technical name of the dye? Phthalocyanine. No, I can't pronounce it.)

For example, MAM-A Gold label CD/DVD discs have been shown in the lab to last 6 times longer than silver label.

MAM-A estimates their Gold label CD-R's have a life-span of 300 years and the silver CD-R's of about 50 years. Other discs that they have tested look like they'll fail in 2 years or less.

Due to differences in organic dyes between CDs and DVD's, Gold label DVD's have a lab-rated life-span of 100 years, if handled properly. MAM-A silver label CDs and DVD's can start to degrade after 20-30 years.

Also, to improve disc longevity, store CDs and DVD's in jewel cases, on edge, in a dark and temperature controlled space. For those of you old enough to remember, these are the same instructions we followed for storing vinyl records.

Here's a link to NIST which discusses the best ways to archive CDs and DVD's:

http://www.itl.nist.gov/div895/carefordisc/

I'd been reading recently about a concept called "CD-ROT." CD-ROT is caused when a bacteria attacks the aluminum backing of a replicated CD. Burned discs are generally not affected by CD-ROT.

Also, MAM-A recommends that to improve data integrity and compatibility, burn your disks more slowly. My recommendation is to burn CDs at 16x speed and DVD's at 2x speed.

They felt that those numbers were a bit conservative. As their engineer, Joe Weisenbach, stated: "We see excellent results burning CDs at 16x, we have not seen significant improvements in burning DVD's at speeds less than 8X."

As a follow-up, I sent MAM-A an email asking about the correlation between "lab-testing" and "real-world" testing. They replied: "Who knows? We've only been making them for 12 years."

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Update: Life-span of DV tapes

Bill Moede, of Green Bay, Wisconsin (which I mention because it is near where I grew up), sends in the following update:

I have also had dropouts on older miniDV tapes, 4-5 years. For that reason, if we are retaining material long term, I master to DVCAM. I have DVCAM tapes that are nearing 8 years old with no problems.

I had also been making backup masters on SVHS, I have of some of these tapes that are still quite good after 12 years.

For a few years, I was backing up to digital 8mm just using a digital 8 camera with DV input, but I was seeing some dropout on those tapes after a few years also.

Currently, we are making backup emergency copies to Maxell Broadcast quality DVD's. Yes, I know its compressed, but better that no video at all!

Also, I do not reuse miniDV tapes more that 2 years old.

Uli Plank also adds a comment:

[Larry wrote:] I understand your frustration -- dropouts are not good. However, I am DEFINITELY not a fan of archiving on hard disk.

Uli continues: Very true! But in the case of very important footage, as long as it is short enough, I'd rather consider optical media. Tape is very sensitive to dust and magnetic fields, which are nearly everywhere. DVD-RAM is a very robust long-term medium and "only" depends on the availability of a reader (which may change it's connectors, OS-support and such). And, well, even a tape needs a compatible player;-)

Larry replies: Thanks to both Bill and Uli.

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New! Final Cut Pro 5 - Beyond the Basics Training DVD Released!

I'm delighted to announce the release of my latest training DVD -- Final Cut Pro 5 - Beyond the Basics -- published by Lynda.com.

This DVD contains about 8 hours of narrated QuickTime movies where I show you how to use many of the advanced features of Final Cut Pro 5. Topics include:

- How to setup your system
- Sub-clips and nesting
- Audio in Final Cut
- Advanced Motion Effects
- Advanced Filter Effects
- Chroma-keying
- Working with Composite modes
- Creating travel mattes
- Color correction and limit effects
- Understanding media management
- Trouble-shooting

<u>Click here to download a small PDF</u> (76K) containing a detailed Table of Contents.

Click here to order your copy.

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Follow-up: Compressor Settings and Issues

Steve Browne, from Australia, wrote in with a question on Compressor which sparked this next technique:

I read your website and also have done all your tutorials on Lynda.com, as well, of course, buying one of your books! So I appreciate all the advice you have given. I also appreciate that your voice is easy to listen to!

Anyway in your next newsletter can you write something on Compressor 2? There is a lot of talk on the Apple discussion site that 2 pass VBR gives artifacts, especially on transitions and is generally to be avoided.

What would your recommendation be? For a commercial production what would you use, or would you go to BitVice?

Karl Arndt also chimed into this discussion:

At our Final Cut Users Group meeting the question of 2-pass encoding came up when doing small (short) projects. Our guru master, Jerry Hofman as well as others, felt with short programs, anything under 60 minutes, that there was no advantage to using 2 pass VBR. Single pass encodes did not affect the quality of the encode at all and the speed of the encode was much faster.

I know from your Final Cut tutorial video, which I live by, that you go into great length on setting up the parameters of High Quality encoding. Do you agree with Jerry regarding the short program assessment? What bit rates would you adjust to the single pass encode?

Larry replies: I was all set to answer this question, when I got a great email from Uli Plank which helps explain the problem.

[Larry wrote:] My recommendation is to set the average data rate to 5.5 and the max data rate to 7.2 -- regardless of whether you are burning or replicating(i.e. going to a glass master). There's no advantage to going much higher and there are significant problems with data rates that are too high.

Uli responds:

If I may chime in on this, with my years of experience in DVD-authoring as well as teaching it (and being the leading author on DVD-production in German language).

I'd like to add a few things, regarding Compressor

2 in particular. In their effort to tackle the problem of overshooting data-rates in C1, Apple seems to have ruined the quality of 2-pass VBR encoding to some degree. I've seen quite a few cases now where 2-pass VBR doesn't look as good as the simple 1-pass (which is not strictly CBR, but close). So, my first recommendation is:

If you have the space, use 1-pass over 2-pass VBR until Apple fixes the problem. You are absolutely right about staying below 8 mbps (including all soundtracks!) if one is going to duplicate (i.e. burn) the DVD's. And definitely avoid PCM audio, always use AC-3 for DVD-/+R. If you want to play even safer, stay under 7.5 mbps in the sum. Going lower won't help with compatibility on critical players, rather try different brands of DVD-/+R.

If you are going to replicate (i.e. press the DVD's from a glass master), you are allowed to go higher. The sum of all streams should not exceed 10.8 mbps in this case, every spec-compliant player is supposed to play such DVD's. But don't expect too much of an improvement in quality if, let's say, [you are] using 9 mbps instead of 7.5 for your video. The visible improvement will be far lower than the change from 4 to 5.5, for example.

You'll rather want to use the higher data-rate for additional soundtracks in higher quality formats, like PCM or DTS (if the client is ready to pay for it, the encoders are costly).

If you are still unsatisfied with your video quality from Compressor, try another encoder. On the Mac, there are BitVice (www.innobits.se) and MCC (www.mainconcept.com), both of them have watermarked demo-versions online.

The best software encoder is, unfortunately, still only available for the PC (Cinemacraft). But if you have very discerning clients and regular encoding jobs, it may be worth the investment to set up a fast PC (even with the basic version of that encoder) and use it for encoding only while doing your creative work on the Mac.

Finally, please remember the good old rule of GIGO (garbage in -> garbage out): if you feed it bad video, no change of data-rate and none of these encoders will really help. The worst thing is any kind of video noise, it's pure poison to MPEG. Any levels of [camera] gain higher than 6 dB on most

camcorders is asking for trouble.

Larry, again: Also, in the Late-Breaking News PDF on Compressor that is available on Apple's website, there's this warning from Apple:

Using all Best settings may result in unexpectedly long processing times. If you are reducing the frame size in addition to deinterlacing the frame, Fast or Better will likely provide sufficiently high quality, depending on the amount of downward resizing.

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Technique: Normalizing Audio Levels in Soundtrack Pro

Last month, I discussed how to replace bad audio with clean ambient noise. This month, I'd like to show you how to use the Normalize feature in Soundtrack Pro to raise audio levels in a clip, without running the risk of sending them into distortion.

First, though, let me explain normalization. When we raise the level of an audio clip, there's always the risk that we will raise it too far, causing it to distort. In Final Cut, there is no effective way to prevent this, short of listening to every clip and adjusting the volume.

Normalizing takes a different approach. When you normalize a clip, you are raising the volume of the entire clip so that the loudest portion of the clip equals the normalization value. In other words, normalizing raises the volume of a clip, without running the risk of distortion.

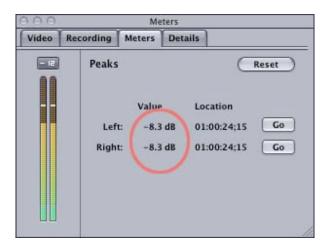
When dealing with a very soft clip, normalization can be a huge help!

Here's how to normalize a clip in Soundtrack Pro.

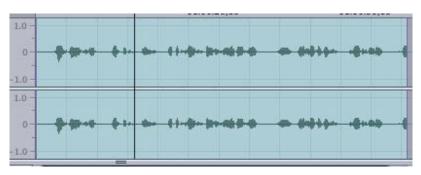
1. Open Soundtrack Pro and open the clip you want to adjust. Or, you can Send the clip from Final Cut to a Soundtrack Pro Audio File project. Or, drag the clip on top of the Soundtrack icon in the dock or Application folder. Or, ... well, shoot, just open the clip.



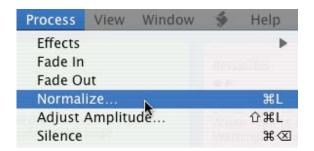
2. Here's a clip opened in an Audio File project. An audio file project allows us to edit a single clip. Clips can be either mono or stereo, however, we can only edit *one* clip at a time.



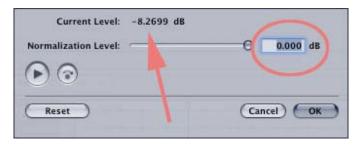
3. When I play the clip, the **Meters** tab shows me that the loudest portion of the clip is **-8.3** db, while the majority of the clip is down near -12 db. In other words, this is too quiet.



4. **Double-click** the waveform to select the entire clip.



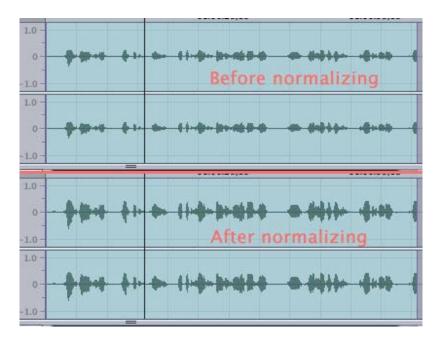
5. Choose **Process > Normalize** to open the normalization dialog.



6. The Normalization dialog defaults to a 0.000 deb level -- which is TOO HIGH! It also shows that the maximum volume of the clip is a little more than -8 db. What this dialog says is that it will raise the volume of the selected audio clip such that the loudest portion of the clip equals 0 DB.



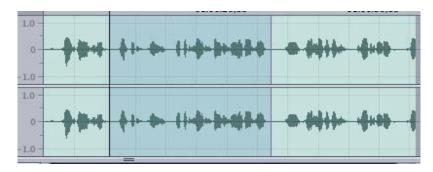
7. If I am normalizing a clip that will be played by itself and not part of a mix, I will normalize it to **-3** db, as shown here. If I am normalizing a clip that will be played as part of a mix, I normalize it to **-6** db. I can set this level either by moving the slider, or by typing in a value. In this example, I typed in a value.



8. Here's a comparison of the clip before and after normalization. Notice that the top waveforms are small, while the bottom waveforms are much taller. The clip is now significantly louder, as indicated by the taller waveforms.

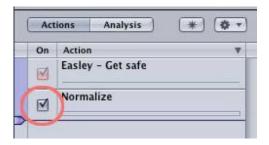


9. Now, when I play the clip, see how the loudest portion has increased from -8 db to -3 db, as indicated by the red circle. Also, the overall volume of the entire clip is increased, without any risk of distortion.



10. Sometimes, though, a part of the clip is too loud -- a cough is a good example. In that case, if you normalize the entire clip, the loud cough prevents the rest of the clip from increasing in level. In these cases, you want to select the

audio you want to increase, as indicated here, then normalize as we've just discussed. In other words, select the audio to exclude the cough, then normalize.

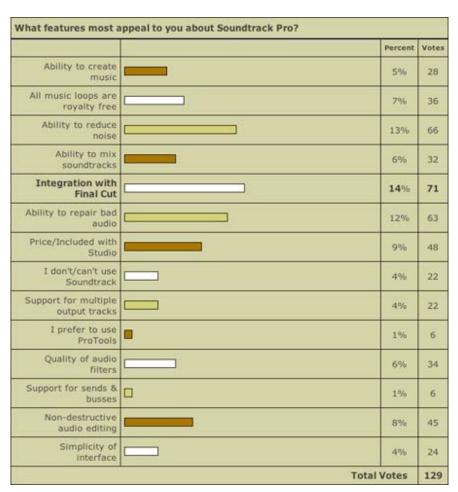


11. One of the real benefits of Soundtrack Pro is it's ability to non-destructively edit audio. For instance, if you UNcheck the Normalize check box in the Actions menu, you can compare what your clip sounds like with, and without normalization. This is a great way to make sure everything sounds the way you want it to.

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Last Month's Survey: Soundtrack Pro

Last month, I wanted to learn what you liked about Soundtrack Pro. Here are the results:



With 129 responses, the top five choices were:

- 1. Integration with Final Cut Pro (14%)
- 2. Its ability to reduce noise (13%)
- 3. Its ability to repair bad audio (12%)
- 4. Its price (or that it's included in Final Cut Studio) (9%)
- 5. Its ability to edit audio non-destructively

I also found it interesting that fewer people than normal responded. Perhaps it's due to a lack of interest in Soundtrack, or the distractions of the holiday season.

As always, I find your responses very enlightening -- and use them to figure out what to cover in this newsletter.

By the way, if you want to see results from **all** our past surveys, you can find them here: http://www.larryjordan.biz/surveys.html

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This Month's Survey - 3rd Party Plug-ins

This month I'm curious to learn if you use third-party plugins with Final Cut. So, what I'm asking is whether you use third-party filters, and, if so, what you use them for.

Completing the survey takes only a minute and you can see the results as soon as you vote. As usual, I'll post the results in next month's issue.

Click here to take the survey: http://www.pollmonkey.com/p.asp?U=9535426188

Use the Back button on your Browser to return.

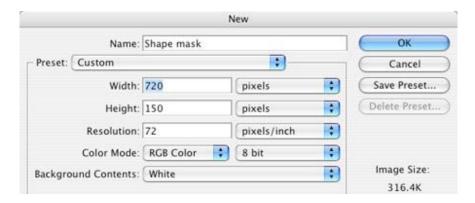
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Technique: Fancy LiveType Tricks

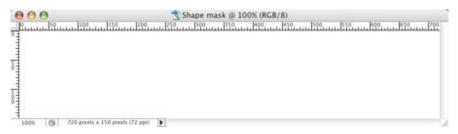
I was going to write about creating keyframes in LiveType -but, in researching this technique, I discovered a whole flock (that's a technical term) of other neat tricks, so I changed the title.

Here's what we are going to do: I want to animate a background graphic to use behind a lower-third super in LiveType. I'll create the background in PhotoShop, import it into LiveType, where I'll make it look beautiful. Or, um, at least make it look better....

Fasten your seatbelts, here we go...



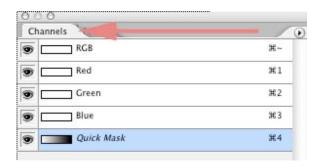
1. Open PhotoShop, any version will do, and create a new image with a resolution of **720 x 150 x 72**. This creates a graphic that goes the full width of the video frame, but only about 1/4 of a frame high. You can leave the background set to White.



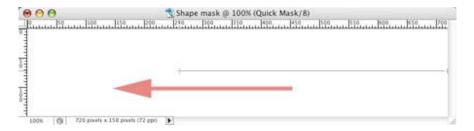
2. This screen then appears. We are going to use this as the basic shape into which we will put moving video. But, first, I want to fade the right edge so that it looks less "block-like."



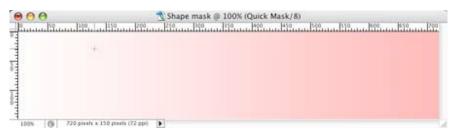
3. Click on the **QuickMask** button on the Tool palette. This switches PhotoShop from image editing mode to mask editing mode.



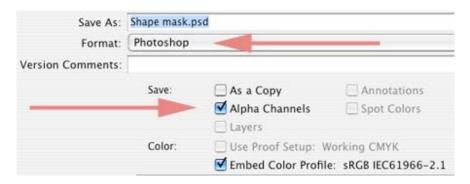
4. You can tell you are doing it right when the **Channels** palette highlights the QuickMask channel.



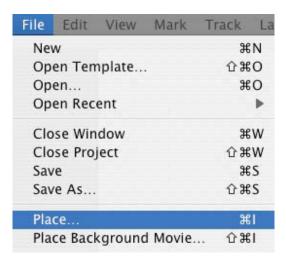
5. Select the default gradient tool and drag a gradient from the right edge to the left. This creates a mask that fades the right side to transparent, while leaving the left edge solid. If you want less fading, draw the gradient line shorter. If you want more fading, draw the gradient line longer. if you want the fade to come from the top, or bottom, or anywhere at an angle, change the direction of the gradient line.



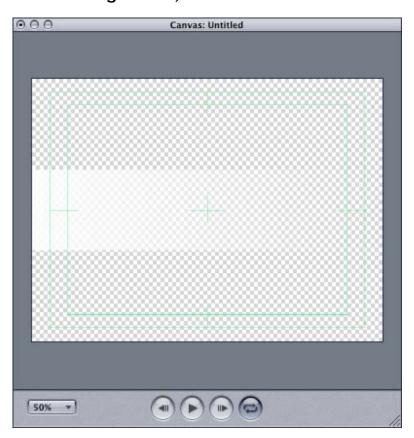
6. Here's what our image looks like, in Quick Mask mode, with the gradient drawn.



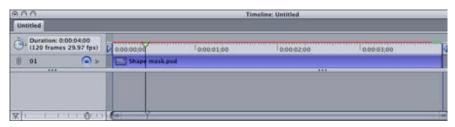
7. Save the file. Remember to keep it in PhotoShop format, with the alpha channels **on**. (Alpha channels store the transparency information for an image or clip.) In our example, I called the file "**Shape Mask.psd**".



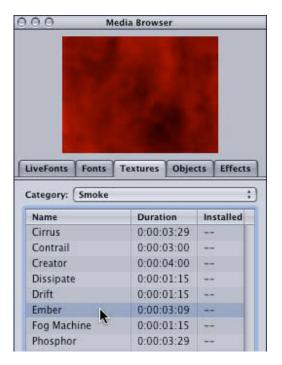
8. To bring the file into Livetype, select **File > Place** (if you want to bring the file in on a background layer, select **File > Place Background**.)



9. The Shape Mask image is displayed centered in the Canvas. Notice that the Quick Mask we created faded the right side of the image to transparency automatically when LiveType imported it.



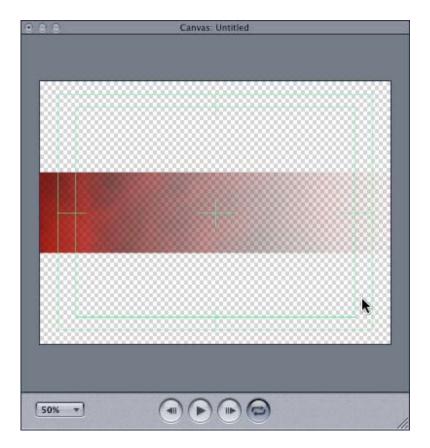
10. In the Timeline, I stretched the clip by dragging the right edge so that it runs **4:00** seconds, rather than the default 2:00 duration assigned by LiveType. Notice that I also dragged the **Out** indicator so that it touches the end of the clip. This tells LiveType how long a file to export.



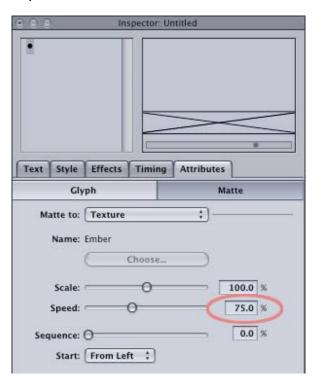
11. Now, we want to add a colorful animated fill to the graphic. Go to **Media Browser > Textures > Smoke** and select the **Embers** animation (or any other animation you prefer).



12. Click the **Apple to Matte** button at the bottom of the **Media Browser**.



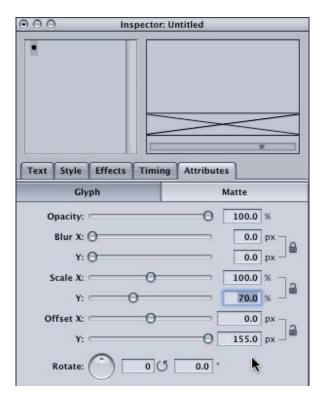
13. Sha-zaam! The embers clip totally replaces the white background of the PhotoShop clip, but it retains all the transparency information. Very cool! Preview this and notice that the clip also retains all the animation from the embers clip.



14. Except, um, the animation stops about 3/4 the way thru the clip. Sigh... It's still not perfect. The reason for the stop is that we stretched the PhotoShop clip so that it runs 4:00,

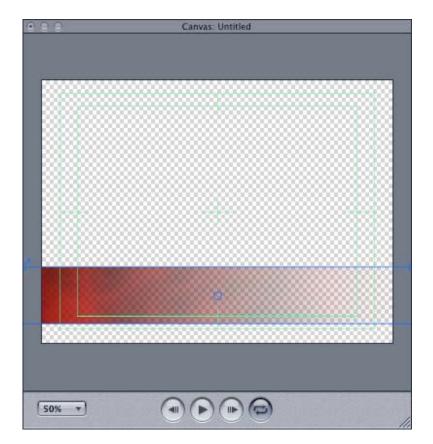
however, the embers video only runs about 3:00. We need to slow down the embers clip.

To do this, go to **Inspector > Attributes > Matte** and change the speed to **75%**. This slows down the embers clip so it runs 4:00.



15. But, we aren't done yet. Our image is in the wrong place and at the wrong size. Select the clip in the Timeline and go to **Inspector > Attributes > Glyph**. Click the **Scale** lock icon to unlock it.

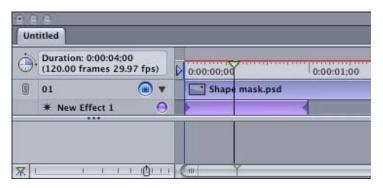
Change the **Scale Y** to **70%** to make the clip less tall. Then, unlock the **Offset** lock, and change the **Offset Y** to **155**, to move the image to the bottom portion of the screen.



16. When that's done, your image looks like this.



17. One last set of things to do -- we want the image to move in from the left side of the frame. To do this, we will create two keyframes which represent it's starting and ending positions.

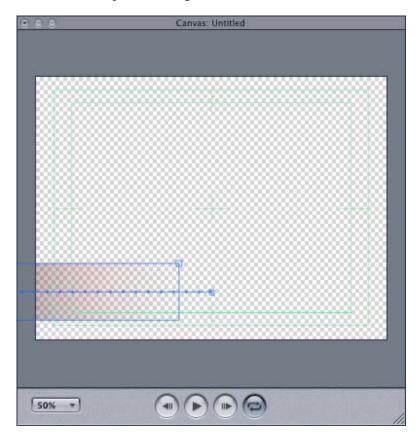


18. Move your playhead to the beginning of the Timeline. Select the Shape Mask clip. Go to **Track > Add New Effect**. LiveType creates a new effect track immediately below the Shape Mask clip, with a default duration of **1:00**. You can

change the speed of your effect by changing the duration of this clip.



19. With your playhead at the start of the Timeline, select the Effect clip. Go to Inspector > Attributes > Glyph. Unlock the Offset lock, and change Offset X to -700. (You can't move the slider this far, you'll need to enter the number.) This moves your image off-screen left.



20. Preview your image and watch as it flies on screen. The time of the move is controlled by the duration of the effect clip.

And, just show show off, here's a <u>small QuickTime movie</u> (1.1 MB) that shows what we just created.

Go to top.

Reader Mail -- LOTS of updates 1/10/06

Peak vs. RMS meters in Soundtrack Pro

Dale Komai writes:

I have an additional question regarding the Peak and RMS filter settings: When is it more appropriate

to select the Peak setting rather than RMS and vice versa? Does it depend on the type of audio file (such as an actor's voice or a musical soundtrack)? Or, are there no set rules?

Larry replies: While the meters in Soundtrack Pro display audio peaks only and don't display RMS levels, there's a filter in Soundtrack Pro, called the Multimeter, that contains a Spectrum Analyzer function that displays both Peak and RMS levels.

Here's what the Soundtrack Pro manual says:

There are three display respond modes: RMS Slow, RMS Fast, and Peak. RMS Slow and RMS Fast modes show the effective signal average (Root Mean Square) and offer a good representation of the perceived volume levels. Peak mode shows level peaks accurately.

Generally, you use the Peak indicator to display overload, or distortion, conditions. You use RMS to display the perceived loudness of the sound. The difference is in how quickly they ramp up to display loud sounds and slide down to display softer sounds. The ear is not a perfect listener. It takes time to perceive loudness or quietness. RMS meters tend to display how we hear volume more accurately than peak meters.

Scrolling End-Titles

Chi-Ho Lee, a fellow Apple trainer, writes:

I have an answer for Tim Wilson's question from last month.

Tim wrote: I am trying to do a relatively simple scrolling end-title sequence for a project. I want the titles to scroll from bottom up, but stop before the title has completely rolled off the top of the screen. It's not a question of masking, but of stopping, the scroll, before the time indicated for end of the titling clip.

Chi-Ho responds:

If you use Boris Title Crawl, you can achieve what he wants to do - stopping a scrolling in it's motion. You have to check the "Use Percentage Completion" box and then keyframe the "percentage complete" parameter. This will allow you to manually keyframe how the Roll will move from the bottom to the top or vice versa.

- - -

Grant Benatar wrote in with another suggestion:

I create all of my scrolls and rolls in Photoshop then import them as still images into FCP. I can then key frame the motion any way I want! All you have to do is increase the vertical size of the image in photoshop to suit your needs. It can sometimes take some tinkering, but it has never failed me.

Larry replies: These are two cool ideas. Thanks!

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Basic Bug

Martin Baker, from the UK, writes:

Thanks for a great newsletter. I totally agree with you about those nutty things in Soundtrack Pro! I was interested to see the question about the Basic 3D filter along with the screen shot because it beautifully highlights a long standing bug in FCP which puts kinks in the image - that "turning the corner" you were referring to! For the past two years I have worked on a show that heavily relies on corner pinning and this bug was a constant PITA!

Larry replies: I am becoming a believer in the "squeaking wheel" method of problem solving. If enough of us squeak loud enough, one of these days it will get fixed.

MPEG-2 Maladies

As long as we are complaining, Ben Balser wrote in to say:

Larry, in this new issue of your newsletter you properly quote the FCP-5 manuel in regards to the MPEG-2 codec showing up in QTPro. Well, I ran a standard upgrade of Final Cut Studio, which included both Compressor and DVD Studio Pro. I still have no MPEG-2 option in QuickTime Pro. I know MANY other professional videographers who have the same dilemma

Would it be possible for you to verify why this is? I know it contradicts what is in the book, but this is

what happens in the real world. Do I need to reinstall DVD Studio Pro or Compressor to force the MPEG-2 option to show up in QTPro? What's the deal?

Larry replies: My understanding is that Apple no longer supplies the MPEG-2 codec for QuickTime. You are not alone in pointing out that this is missing in QuickTime 7.

Tom Wolsky added this comment:

[Larry, your comment from the manual] isn't right I don't think. If you install FCP you'll almost certainly install Compressor, but if you're running Tiger and QT7 an MPEG-2 export still does not appear in QuickTime Conversion. You really are required to use Compressor or third party MPEG-2 encoders that will appear there.

Larry, again: I just went up to the Apple website and found this in their Support Knowledge Base:

Because of the superior capabilities of Compressor, the QuickTime MPEG-2 encoder is superfluous and is not included with new installations of DVD Studio Pro 4 or Final Cut Studio. If you upgrade applications on a system that already has the QuickTime MPEG-2 encoder, the upgrade won't remove the encoder; it will still be available for applications that use QuickTime export options. With new installations, you can still export directly from Final Cut Pro to get MPEG-2 output, but you should choose Compressor instead of QuickTime as the export option.

By the way, thinking about Compressor and knowing that many of you work with PAL, here is an Apple Knowledge Base article that may be relevant if you are moving files between PAL and NTSC: http://docs.info.apple.com/article.html? artnum=302511

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Moving Markers Redux

Andreas Kiel writes in with additional comments on XML2Text:

Thanks for mentioning XML2Text. People should contact me at kiel@spherico.com. Also, in last month's issue, Markus Wernig wrote: "Is there any way you can think of that would allow us to transfer markers from one master clip to an

identical second one?

"This came up in our company since many editors like to use markers on long master clips. When these master clips get corrupted (as 2 did in our case), you can simply reimport the clip, but you lose all markers. We are a movie trailer shop and work with full-length features which are usually captured in 2 one-hour clips. Losing markers can be a big deal for us."

Larry replied last month: Nope. Since you can't select markers, there's no way to copy or move them.

Andreas follow-up:

This can be done pretty easily with XML. Export each - the first clip and the second one as XML. Open both in TextEdit. Search for <marker> in the first (original) one. Set the text selection from the first marker till the end (</marker>) of the last one.

Now copy this text selection. In the text of the new clip go to the same text position the markers start at the first one - then paste and save the file. Import [the clip back] into FCP, and all markers are back again.

He can also use my XML2Text to do this.

Larry replies (this month): Interesting. I've always been leery of messing with XML for fear something might blow up. This is a neat solution.

Boris is, Actually, Here

Philip Rockey, of South Windsor High School in Connecticut, writes:

Just a note on your response to one of the questions about titling. I am using FCP Studio in school and it does include Boris titling so you can do all the font and size changes that you indicated. Most of the readers are probably not in the educational setting but just wanted to pass that along to you.

Tom Wolsky agrees with Philip:

That's not right. Boris Calligraphy is included in all versions of FCP, academic and NFR. It has been

since Boris Script was introduced in v2.

Larry replies: My apologies, thanks for the corrections.

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Avoiding an Audio Catastrophe

Tom Wolsky wrote in about my comments on monitoring audio and video from different places:

[Larry wrote] Watching video on a video monitor while listening to audio coming from your computer is a recipe for disaster -- because there's a built-in 3-9 frame delay in sending signals to a FireWire device. This means that things will sound out of sync, when they really aren't.

There is a playback offset to match the computer audio with a delay to the digital/analog conversion path. This does add a delay in the response time for playback start/stop.

Larry replies: Tom, while there is a playback offset adjustment, my point was that, in general, you will not hear audio sync correctly if you monitor from two different points.

However, Tom makes a good point. Delay is in any digital signal path, it's called "latency." You can adjust for the delay between your computer and an external device yourself by going to **Final Cut Pro > System Settings > Playback Control** tab and adjusting the **Frame Offset**. It's default setting is **4**.

The Final Cut manual states:

Frame offset can be any whole number between 0 and 30. The default value is 4. For example, if a video monitor connected to your DV camcorder shows your program 4 frames later than your computer display, a frame offset of 4 will synchronize the two.

However, and this is important, the Frame Offset adjusts audio and video equally. If your audio is out of sync, changing the Frame Offset will not bring it back into sync.

FCP & BWF

Jeff Colon writes:

I am enjoying the format and info available in the

FCP newsletter. I am a field sound recordist able to deliver files in a variety of formats that FCP will import. Issues of time code importation are vague at best. I guess the question I would like to ask. What is the preferred file format for delivery to post. BWF poly or BWF mono, same with .WAV. For FCP posties. The Time Code thing although a bit daunting is actually pretty straightforward. (I have to keep a "Cheat Sheet" with me at all times anyway). How do you all get time code into FCP (Sebsky) ???.

Larry replies: BWF, or the Broadcast Wave Format, is an audio file format that is similar to Microsoft's WAV format, but I don't know much about it..

However, Andreas Kiel has a better answer:

BWF mono or stereo files were always supported by Quicktime and FCP as well since they are ordinary WAVE files (did our first feature using BWFs successfully in early 2002 using FCP 2). Reading BWFs directly was introduced with QT6 - upon my continous feature request. With earlier versions you had to rename them with a ".wav" extension. Polyphonic BWFs are supported since QT7 and FCP5. All versions of FCP lack the ability to read the metadata from the file header.

To read the timecode and add a timecode track to the audio you can use Sebsky Tools with mono files or my BWF2XML (hard to pronounce) with also works with polyphonic files. BWF2XML also extracts additional metadata and stores everything in a FCP XML. BWF2XML can also save a small log file of the conversion.

While you can, when importing an audio file, allow Final Cut to assign timecode to it automatically. You can then change the timecode associated with a clip buy selecting **Modify** > **Timecode** to get it to match, or simply link the audio with the video and let Final Cut deal with the different timecodes automatically

However, Andreas feels that is a bad idea for longer projects.

Using this methods with files like BWFs only assigns a timecode inside FCP to the files, not to the files itself - if your project gets corrupted or you reimport the file the timecode is lost, since it is not in the file. So it is recommended to use Sebsky or BWF2XML.

Peter McAuley, adds his support for BWF2XML:

This is an excellent utility that converts BWF files in poly or mono to quicktimes with all or most of the metadata (including timecode) from the original .wav files. I recently used it for a short film where the sound was recorded as 10 track poly on a Zaxcom Deva. I synched the sound in FCP and merged the clips and started cutting away. The synch has been perfect for the entire project Andreas Kiel at Spherico was very helpful.

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Importing a Partial Clip into Soundtrack

Ted Banucci, of The Last Cut, writes:

I wanted to send you a workaround for your Soundtrack Pro Complaint #1, the fact that you can only load whole clips into Soundtracks Pro. This drives me nuts too, because I am a wedding videographer who needs to import whole tapes at a time, but usually only want the audio of the "I Do's" out of a whole hour long clip.

I'm sure you've figured out that you can do this, but I thought I would share my work-around anyway. In this case, I mark in and out points and move the clip to a new sequence. Now I can save that sequence as a QuickTime file and work on it in Soundtrack Pro as a short clip. When I want to bring it back in the project, I simply overwrite the audio portion of the in and out points with the saved Soundtrack Pro file.

It takes a few extra steps rather than just using Soundtrack Pro as an editor from the timeline, but it works! I wish they would fix that issue as well in the future.

Larry replies: This is a worthwhile workaround - however, I agree with you that this needs to be fixed in a future release.

Exporting Soundtrack

Ryeal Simms asks:

Hi Larry i wanted to know if i can save a soundtrack pro project to a QuickTime movie, I remember I could do it with soundtrack why can't i do it with Soundtrack Pro?

Larry replies: Yes, but it's a two-step process.

First, export your mix as an AIF (**File > Export > Mix**). Then, open the AIF in Quicktime (by dragging it on top of the Quicktime icon) and export it using **QuickTime movie -- File > Export** and set the pop-up menu to **Movie to Quicktime Movie**.

Tom Wolsky comments:

BTW, have you notice that Compressor's audio format presets made into Droplets produce .mov files rather than .aif files?

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Batch Exporting DVD Studio Pro Markers from FCP

Dolf de Hann, of the Netherlands, writes:

I have a question regarding the batch export function in FCP 4.5 HD. I have several sequences I'd like to export all at once. Normally I would use the batch export option to do this. But the problem is that I can't find out how I can add DVD Studio Pro markers I've already put in in the timeline. When I for instance export a single sequence by using file > export > quicktime movie I have the option to add DVD Studio Pro markers. Is it hidden somewhere for the batch export option or doesn't it exist at all?

I hope you can help me out. For now I just export them one by one but in the future I definitely like to export them all at once....



Larry replies: Dolf, I think you are correct. Here's the Batch Export window and there is no way to specify exporting markers.

Tom Wolsky adds:

Batch Export doesn't work with markers as it's a QuickTime Conversion export. It should not be used if there is no file format change, and you want to maintain original quality.

However, Andreas Kiel has a suggestion:

If you the batch export you can let it render over night - and have some fun. Next morning import all sequences into your FCP project and duplicate the original sequences in FCP, add the exported sequence-movie to those and delete the original clips (doing it the other way round could cause a loss of the markers). Now export them as dependent movies individually - this takes a few seconds. Even if this requires some intermediate steps it can save a lot of time.

Trashing Preferences

Joseph Orr writes:

I was wondering why it is when I trash my prefs. in FCP5 I lose all or almost all of my codecs from my third party capture card. These cards are the Kona 2 and Decklink. Is there anything I can do to

prevent that? These are for my clients and if I help them on the phone I don't want that to happen, umm...again.

Larry replies: You aren't actually losing these settings, its just that Final Cut is resetting itself back to its default state of DV-NTSC. The best way to handle this is to know that every time you trash preferences you'll need to reset them manually, or use a very nifty little utility called FCP Rescue, which can help automate the process. I recommend FCP Rescue to all of my clients -- you can download a free copy from Apple's website.

Tom Wolsky adds:

BTW, Anders Holck's FCP Rescue site seems to have gone down. "This site has been suspended" is all that shows up.

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Lost Compression Markers

Jim Schafer writes:

I just discovered this problem.

When I export an FCP sequence out as a QT movie, self-contained or not, and then import it back into FCP to use as a clip in another FCP sequence, all of the markers exported with the original clip are lost.

This is a real problem, especially losing the compression markers.

Normally I export QT movies for use in Compressor with "DVD Studio Pro Markers" checked, but this happens regardless of the marker export setting.

If I export a "raw" FCP sequence with all the original cuts, transitions, and filters, then all the compression and chapter markers make the trip into Compressor just fine.

But sometimes I take a complex FCP sequence with lots of edits, effects and filters, export it as a self-contained QT movie, and then import it back into FCP as a clip. This is so I don't need to re-render that content as I reuse it elsewhere in the project. I also do this if I simply want to make a quick fix to an already completed project.

But I just discovered that when I bring one of these

movies back into FCP I lose all of the original compression markers, forcing me to add them manually in FCP or in Compressor.

Larry replies: The only way to see compression markers is to load a clip into Compressor. My experiments have shown that the markers are making it out of Final Cut with no problem.

Jim continues:

I've found that the compression markers make the trip into Compressor after the first export, and I looked at the text tracks in the QT movie to verify this.

But they don't redisplay when the clip is reloaded into FCP and re-exported to QT. Nor do those original markers show up in the text track of the second-level export movie. So I'm assuming that they get stripped off when the original QT movie is imported back into FCP.

Markers for "first-generation" edits made in its timeline DO show up in this second-level movie, but nothing from the sections that use the reimported QT movie. But, of course, that's because for those edits, this is a "first-generation" QT export. (Confused yet????) But if you think about it, that is consistent. "First-generation" timeline edits generate markers in FCP that make the journey into an exported QT movie. Compression and other markers contained in an exported QT movie that is then re-imported into FCP, and then exported back out of FCP into another QT movie, DO NOT make the trip.

That's what all of my experimenting has consistently shown me.

I should have told you, I'm using FCP 4.5 and Compressor 1.2.1 for this project. So I'm not using Compressor 2, but rather 1.2.1. But I am telling it to display the markers in the Preview time bar of Compressor. That's how I'm verifying that the markers are not making the trip. I'm looking at the text tracks of the QT movie, too.

Larry replies: Interesting. In talking with Andreas Kiel, I suggest you use his XML2Text utility to solve this.

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Tony Liuzzi writes:

If I have a clip in the viewer and do a speed change to 50%. Then drag it to the sequence. When you look at the clip in the sequence it has the clip name along with (50%). Now if you drag the same clip to your bin, it doesn't keep the (50%) label it had in the sequence. Why not?

Larry replies: Gremlins.

Creating a Multiclip Sequence

Wayne Orr writes:

We had already done quite a bit of editing with our 3 angle multiclip. One angle was our master clip which ran for two hours. The other two angles were about one hour each from two other cameras. We have the second tapes from those two cameras and we wanted to add them to the multiclip to finish the project. We were under the impression that we could add angles at any time and this was the time. Well, when we did that, the new angles were added so that their in points aligned with the in points of the existing clips in the multiclip. I guess that shouldn't have been a surprise. Anyway, we figured that there should be a way to add them after the clips that had ended or, failing that, there would be a way to move them into their proper position toward the end of our project...resynchronizing them or whatever. We haven't discovered any way to do that.

Larry replies: Wayne, what you need to create is not a multiclip, but a multiclip sequence. A multiclip sequence allows you to connect clips that start at different times into a single multiclip. However, to be able to do this, they must use the same timecode. A multiclip, by comparison, allows you to link clips by a common In, Out, or Timecode. Linking by In's doesn't work when the clips start at different times, which is why Apple invented the multiclip sequence.

For professional gear, feeding matching timecode to multiple cameras is relatively straight-forward. For DV cameras, it's darn near impossible. So, what you will need to do is change the timecode (**Modify > Timecode**) of each clip after you capture it so that they are running in sync. Once that's done, you'll be able to do everything you've requested. The easiest way to do this is to find a matching shot in the master shot and in the B-roll camera, then change the timecode in the B-roll clip to match the A-roll clip.

Andreas Kiel also suggests:

I would recommend to add an Aux TC with the original timecode before modifying the TC, this way you're still able to recapture the tapes without any problems.

David Smith agrees:

I have just started working with multiclips and one suggestion I remember (either from the manual or Tom Wolsky's video training dvd) is, when working with source clips having different timecodes, to enter matching timecodes into the Aux. timecode field instead of the main timecode field. The reason being, you need the original timecode if you ever need to accurately recapture the clip from tape.

You need to have a timecode placed into the Aux. Timecode field in every clip you want to include in the multiclip sequence. Then you'll have the option to sync them using the Aux field as well as for In, Out and Timecode options.

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Capture Now and Direct-to-Disk Recording

Jeremy Andrews writes:

I recall during the FCP course you mentioned the problem with audio drift on 'capture now' clips longer than 30 minutes. I've read recently on your web site a reader who responded to this, stating that this 'drift' is only with Canon cameras. According to this reader the way Canon uses time code in camera for audio and video is different than other cameras and seems to result in this problem.

Since that seems to be the case I was wondering what you may know about using a FireStore live capture device (http://www.focusinfo.com) with a Canon GL2? I own a GL2 and was thinking about purchasing the FireStore but wonder since the video being put onto the FireStore is essentially a 'capture now' if any one video shot over 30 minutes will experience drift in audio? I've googled this issue and haven't found any info so anything you may be able to ad would help.

Larry replies: While I am not a fan of Capture Now, this

opinion is not shared by all other trainers, so we have agreed to disagree on this point. However, capturing is not the same as recording. When you use Direct-to-Disk recoding, Final Cut is not involved in the least. Consequently, the whole issue of Capture Now becomes irrelevant.

And while Canon cameras are notorious for problems in their audio sample rates, they should still record acceptably to a hard drive.

Auto-Render

Zia Basith writes:

I have a G4 MD 1.25GHz w/ 768MB in memory. How fast should your mac be to perform "Auto Render" in the background?

Larry replies: Auto-Render never renders in the background, it only renders when Final Cut isn't busy. Here's an article that describes this in more detail:

http://larryjordan.biz/articles/lj_auto_render.html

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Creating a DVD

Mark Pimlott, over in London, writes:

I am an artist working in Holland, and preparing a series of films for an exhibition here. (Opening VERY soon). They are intended for projection, the projector connected to a standard DVD player with a repeat facility.

All the films are edited in Final Cut Pro. Following all the lovely instructions and tips of Apple and FCP how-to guides, I successfully assembled the films into a sequence of 36 minutes length.

Then, to export the films to DVD, I followed the procedure: File > Export > Quick Time Movie, and my film was 7.41GB. Too big, of course, for a 4.7 DVD.

What simply needs to be done to compress this file to get this on one DVD—playable without the computer that they were generated on—without losing quality?

Larry replies:

All DVD's require their video to be in MPEG-2 format.

This means that your video needs to be compressed from a QuickTime DV PAL format into MPEG-2. This can be done three ways:

- 1. Import your QuickTime movie into iDVD and let it compress it.
- 2. Import your QuickTime movie into DVD Studio Pro and let it compress it
- 3. Import your QuickTime movie into Compressor and let it compress it.

The best advice is to contact someone with experience in creating DVD's and let them create one for you.

You've done everything right up to this point. The last two steps are compressing your video into MPEG format and creating your DVD.

Video Scopes in PAL

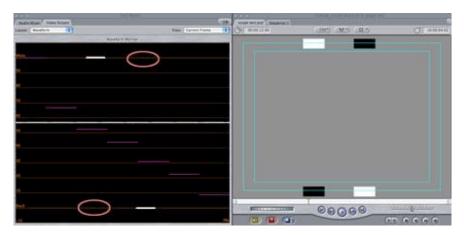
Chris Roberts, from somewhere in PAL-land, writes:

I've been meaning to email you for a while now regarding the video scopes issue in FCP. I downloaded your scope test image and resized it for PAL. Please see the attached images for the results....

As you can see, if the boxes are outside the title safe area in PAL, they still register on the waveform monitor, but not to such an extend as if they are within the title safe....

This seems to be slightly different to the NTSC sequence where they do not register at all.

Just thought I would bring this to your attention, don't know if it's any help or interest.



Larry replies: Here's Chris' test image, in PAL format, where

the white and black boxes are outside Title Safe. Notice the the white and black at the TOP of the frame are shown in the scope, while the pair at the bottom are not. Thanks, Chris, for sending this in.

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Is DigiBeta 10-bit or 8-bit?

Dave Victorson writes:

We shot a Digibeta green screen project and the studio captured the tape to an external drive for me. When I opened up the FCP project file the captured clips were 8 bit uncompressed. Should I recapture at 10 bit uncompressed?

Larry replies: It is generally accepted that DigiBeta looks best when captured at 10-bit, because data is stored natively at 10-bits on the tape. While you should always try to capture at the highest possible quality (10-bit being higher than 8-bit), especially when you are doing compositing or green screen work, 8-bit is not a catastrophe.

My recommendation is to try it. If you like it, great. If not, recapture. (By the way, you can't up-sample 8-bit to 10-bit. To get the best quality you need to capture directly into 10-bit.)

Field Dominance with HDV

Daniel Yu writes:

I read your last newsletter with great interest, particularly the section from Bill Koepnick entitled "Technique: Converting a 16:9 sequence into a 4:3 video". In contrast to what was written, I had the exact opposite experience. When I tried to make an SD-DVD from an HDV project, I found that I had to use UPPER field dominance in Compressor to get good-looking video in DVDSP. In fact, when I used LOWER field dominance, which I know is the DV standard, I got very strobe-like video that looks quite bad. The only difference with my setup is that I shot with the Z1 instead of the FX1 that Mr. Koepnick uses. Could this be the difference? I was able to confirm from various sources that the Sony Z1 at least (not sure about the FX1, but I would have thought it should be the same) shoots/records with UPPER field dominance, and that is why you need to maintain this when going to Compressor.

Larry replies: Apple posted a statement to its website saying there was a bug in Compressor 2 which screwed up field dominance settings when working with HDV. To fix it, download the Pro Apps Update #2.

White vs. Superwhite

Reid Kramer writes:

I read the article about white vs. super white in FCP. It said if you are outputting to DV, then use super white. If you are outputting to DVD, then use white. What if I am going to output to DV and DVD?

Larry replies: You are always safest using White.

Here's an article that discusses this further: http://larryjordan.biz/articles/lj white.html

Go to top.

Still-Frame Flickers

Michael Hall writes:

I have a trade mark move that I do on my projects where I'll find a nice shot and put in a still and a camera sound effect to make it look as if someone took a picture at that very moment But I'm finding that after rendering and burning to cd that sometimes my freeze frame has a little twink-movement to it I can not understand how or why this happens. I make the still using freeze frame option under the Modify menu. Do you have any thoughts on this?

Larry replies: Yes. The flicker is caused by interlacing, which is inherent in all video, both NTSC and PAL. You won't see it on your computer monitor, but you WILL see it on your TV screen. To eliminate it, once you've created your still frame, go to **Effects** > **Video Filters** > **Video** and apply the **De-interlace** filter.

That will fix it.

Fixed Batch Capture Bug

In late October, **Larry Krantz**, of Farmer's Almanac Television, wrote:

This week Apple did admit to a bug in FCP 5. We were trying to use media manager to take a completed sequence that was edited in native DV and batch capture the sequence in uncompressed 10 bit. This is something we were doing in FCP 4.5.

Our sequence is 5 minutes in length and when we used media manager to supply a new sequence for batch capture, we found it would take over 2.5 hrs of media to do the job. It is apparent that media manager is not trimming the clips to length but requiring a recapture of the original length of the logged clip.

After working with Applecare on this their team reconstructed the situation and then told us they would have to send this to engineering as a bug. They did not know of a simple work around and could not estimate when a fix might be had. They just informed us the fix would show up in a later update.

[A couple of weeks ago, Larry sent the following update:]

Several weeks ago I sent this alert for bug in FCP 5.0. As you know we have gotten an upgrade and in testing it, I believe I can safely say that I think it has been fixed. There was some small errors with media manager making batch capture clips from a sequence, but that is usually the case. Most of those are easily addressed in a one on one approach.

Larry replies: Larry, thanks for the update. It's always nice to learn of bugs that get fixed.

Wrap-up

Well, that's it for another issue. Thanks for your time and attention.

Two last-minute reminders:

- 1) Please <u>register for one of my seminars</u>, I'd love the chance to meet you.
- 2) Please take a minute and <u>answer this month's poll</u>.

As always, let me know what you think about this issue and tell your friends to subscribe. I love reading your questions and comments and sharing them with everyone.

Or, even better, send in some tips of your own. I'm happy to publish everyone's ideas. That way, we all learn!

Thanks -- and edit well!

Larry



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