



Connecting the Camera

Types of Importing

-Digital Camera

-HD Camera Deck

-Analog Camera

-VHS Tape





Connecting the Camera

Digital Camera

A Digital Camera records data on a digital video tape. Digital Video retains video quality and uploads to a computer via Firewire.

Most Digital Video tapes are MiniDV format, however different tape formats are often used.



To Connect Your Camera to the computer you must check out a firewire cable from the CRC Desk. You will be given a firewire cord with 4 & 6 pin ends on it. (Similar to the one on the right) The 4 pin cable plugs into the D/V port on your Digital camera and the 6 pin cable plugs into the computer

4 Pin Firewire



Once the camera is connected you can control the camera from the computer

Only firewire will work. Digital Video cannot be uploaded to the computer through USB.

Make sure that all other tape decks, converters, and cameras are turned off, otherwise they will conflict and no connections would work.

6 Pin Firewire



HD Camera Deck



There are many different kinds of Camera Decks. Camera decks work just like a digital camera and play digital tapes. This lab has Standard decks and HD decks. Only the HD decks can import **High Definition Video**.

Just open the door to the tape deck and place your tape in the center of the deck.



Push the tape into the deck and eventually the deck motor will grab the tape and feed it into the machine.

Close the deck door and press play. The tape will play over firewire to the computer.



When you are done importing open the door and press the eject button underneath the door. The Tape will pop out.

Make sure that all other tape decks, converters, and cameras are turned off, otherwise they will conflict and no connections would work.

Analog Camera

An Analog Camera records data on a regular video tape. The tape decks in the lab are not Analog and cannot play them. You must bring in your own camera. Some Analog Cameras have Firewire Outputs (turn to page 2, Digital Camera Connections). But most have AV to RCA (or S Video Connection)



If you need any cables such as the A/V to RCA cable, please ask the CRC at the desk in Meyer 1154



Find the A/V plug on the back of the camera, and plug the lone metal plug into the camera, the RCA end goes into the Video Converter placed at selected Editing stations Match the colors from the cables to the colors on the front of the converter.



Analog cameras that do not have firewire cannot be controlled by final cut pro. You will have to press play on the camera and capture via the computer. Look at the "Importing Video" section in the Final Cut Pro Tutorial.

If you are importing from a VHS there are VHS decks available at selected editing stations for your use.



Connecting the Camera

VHS Tape Deck



Some stations here at Meyer have VHS tape decks and will play and help import VHS tapes to your computer.

The Tape Decks have a TV attached to help you to cue up your tapes. It is recommended to use the tv while editing because video on the computer screen looks much different than video on a television screen.

The tape decks are also attached to the Video converter. If things are not working make sure that the converter is turned on.



Make sure that all other tape decks, converters, and cameras that you are not using are turned off, otherwise they will conflict and no connections will work.

To Play tapes use the Play, Stop, FastForward, and Rewind buttons. In Final Cut you can capture by pressing capture now. Please refer to the Final Cut Pro "Importing Video" tutorial.

Final Cut Pro Manual

**An Introduction using Final Cut Pro
by Andrew Cholerton**



Final cut Pro is a non-linear, non-destructive digital editing software. Non-linear means that your original footage doesn't need to be in any order. You can take the beginning of a movie and put it at the end of your video and vice-a-versa.

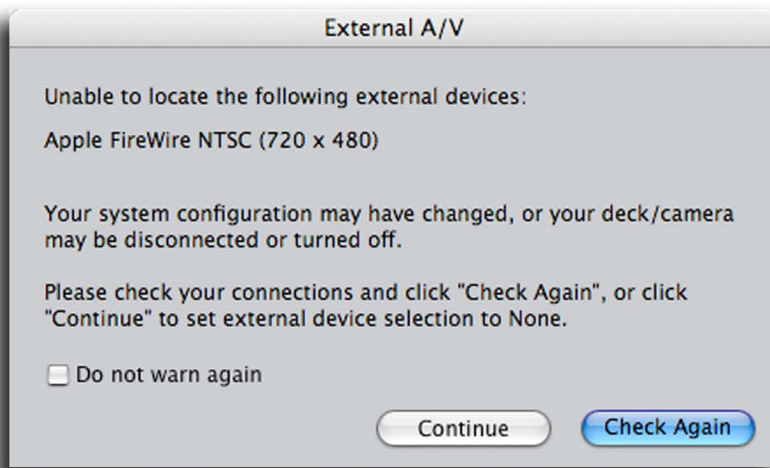
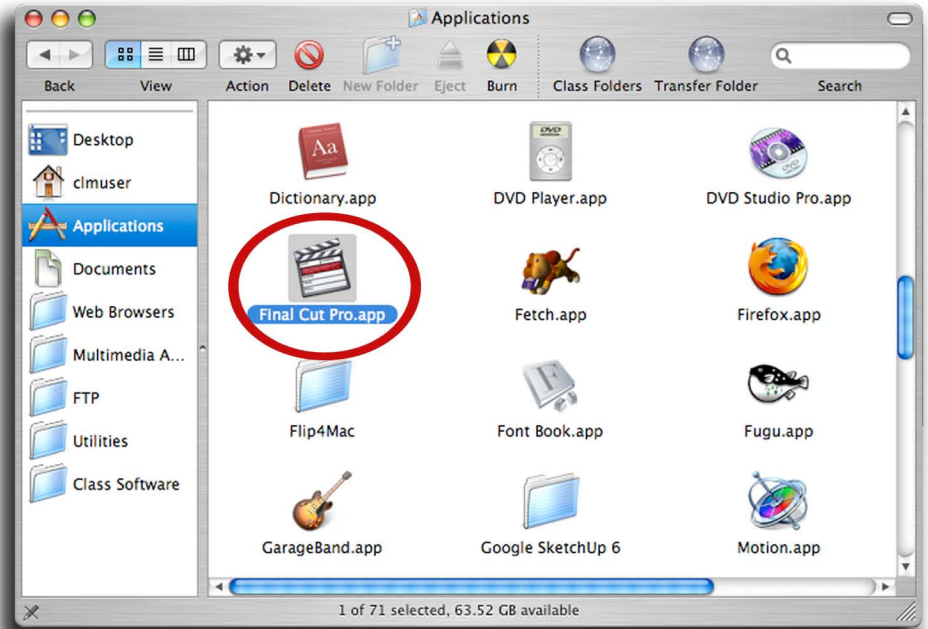
Non-Destructive video editing means that no matter what you do to your content in final cut pro your original footage will never be harmed. You can always return to your original footage and copy your original footage.

Getting Started with FCP

After checking to see if all the connections are wired correctly, find the program Final Cut Pro and open it.

To Open Final Cut Pro go to the Finder window and find FCP in the Applications Area.

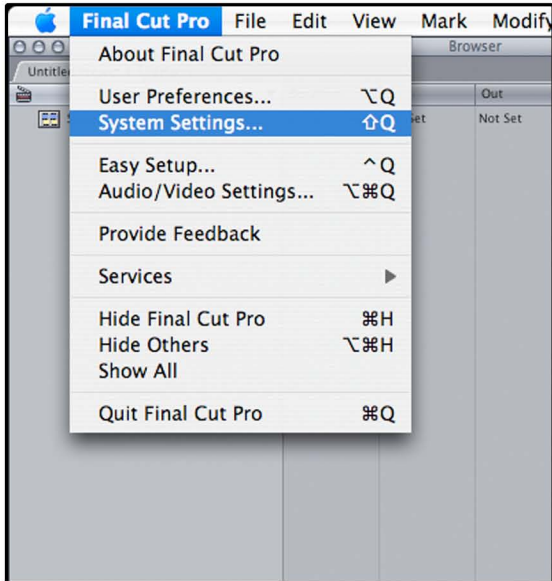
Or check the dock at the bottom of the screen and click on the Final Cut Pro icon



If you get this error and you do not want to import anything than press **Continue**. If you DO want to import something. Double Check the camera connections and click on **Check Again**

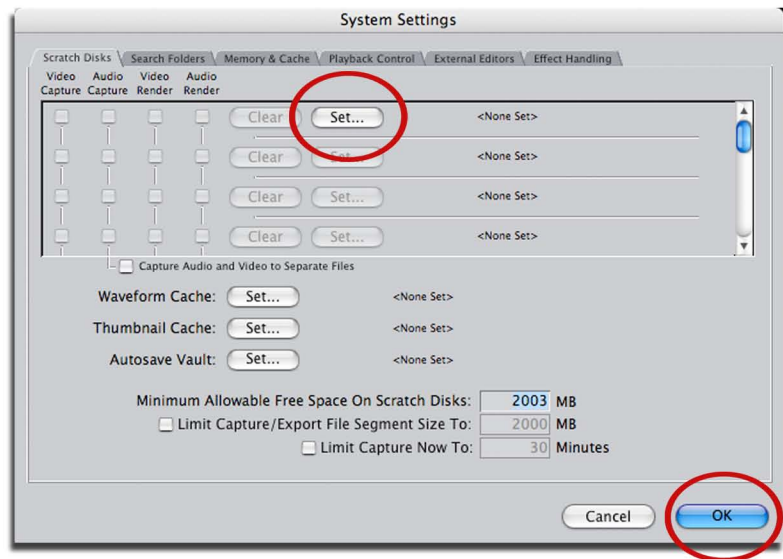
Setting Scratch Disks and Saving your Work

You must set your scratch disk everytime you open FCP



Anything saved to the desktop is deleted overnight, therefore any project you work on needs to be stored somewhere that won't get deleted. Your scratch disks is the place on the computer where all your files get saved too. e.g. Captured video, rendered files, etc...

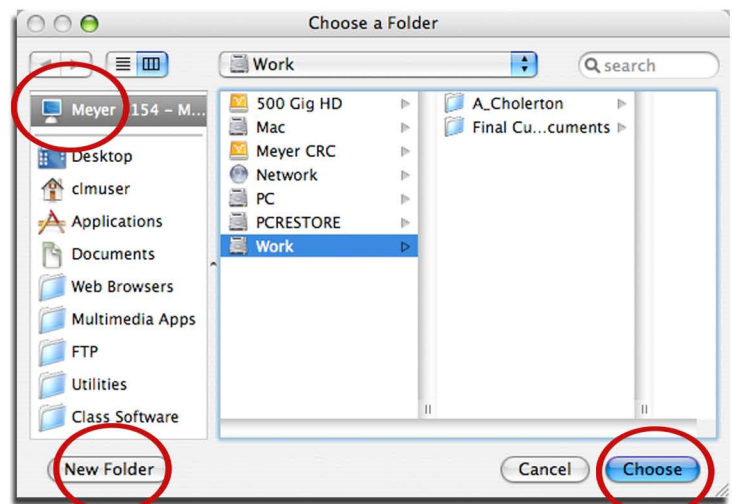
1) To set your scratch disk go into Final Cut Pro / System Settings...



2) Click on the first "set..." button

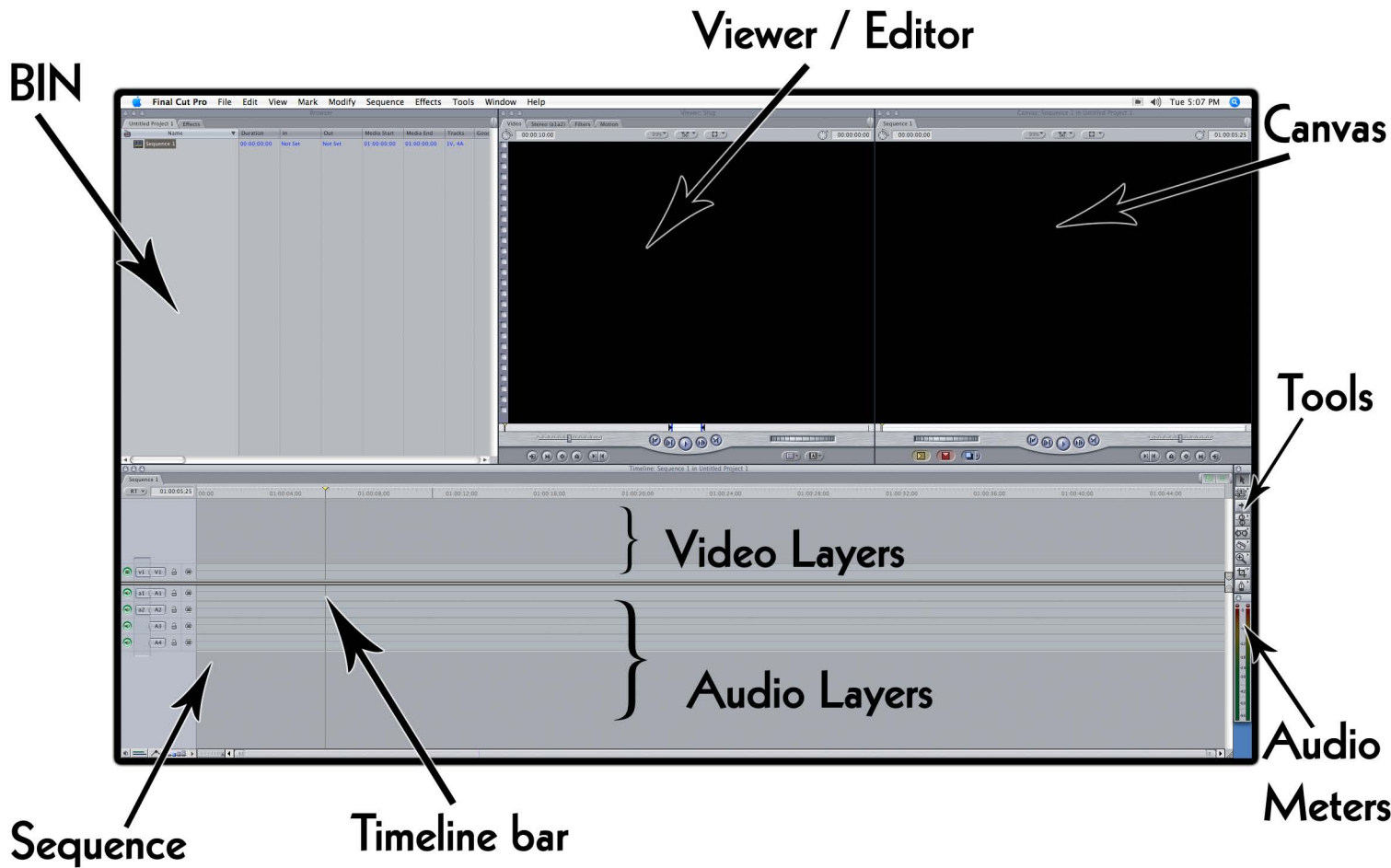
3) On the left toolbar choose the computer icon that says "Meyer 1154." Choose either the "work" drive or the "Meyer Storage" drive and make a **Personal Project Folder**, a folder with your name or project title. It is extremely important you set your scratch disk everytime you work in FCP. If you don't, your work might be saving to someone else's files. And could be deleted without your knowledge.

Click "choose" on your Project Folder and then press "Ok" To set the scratch disk.





Final Cut Pro



BIN: This is the project window where all your files are placed once captured or imported. It is called a bin after a physical bin that editors use to throw their film strips into while they were editing. You can create more sequences in here for more videos. You can also create more bins (folders) to organize all your content.

SEQUENCE / TIMELINE: This is where you will work on your project. The sequence works linearly from left to right and plays any content in the sequence and displays it in the canvas window at the point of timeline bar. When completed, everything in the sequence will be exported as your final video.

CANVAS: The canvas displays any content in your sequence. Any video displayed here corresponds to the video files placed on the video layers in your sequence. Use this video to your advantage when editing in the editor / viewer.

TIMELINE BAR: This shows the exact frame that is being displayed in the canvas. When you press play you see the timeline bar move as it displays each frame continuously in the Canvas window.

VIEWER / EDITOR: This is the window where you will edit your clips. When you double click any clip, whether it is in the BIN or the SEQUENCE, that clip will go to the viewer window and you can edit the features of that specific clip in this window. Ex: Using the motion tab you can change its SIZE, ROTATION, etc..

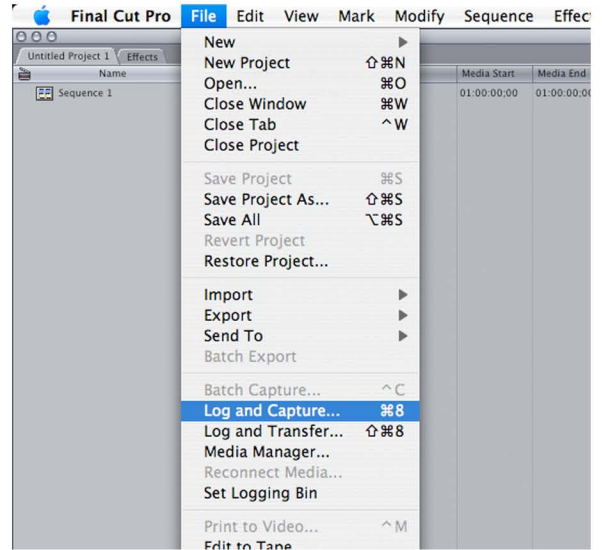
TOOLS: This is the sidebar that contains all the tools. The arrow tool at the top is the default tool.

AUDIO WAVEFORMS: Show the waveforms for the audio being heard at the moment.



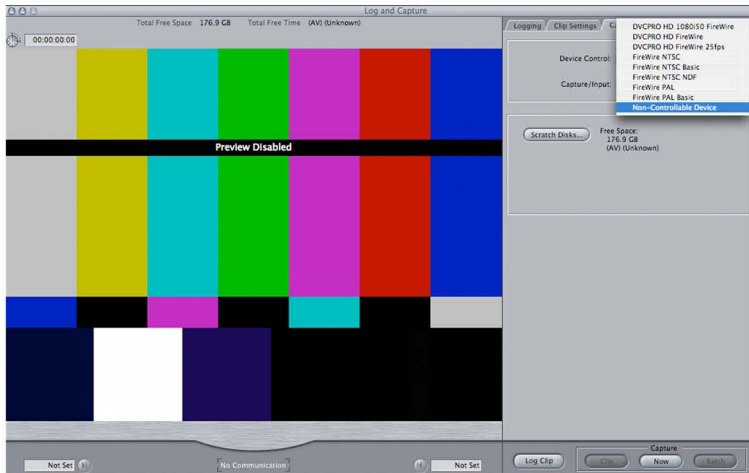
Importing Video

Open the "Log and Capture" window by going into the File / Log and Capture.



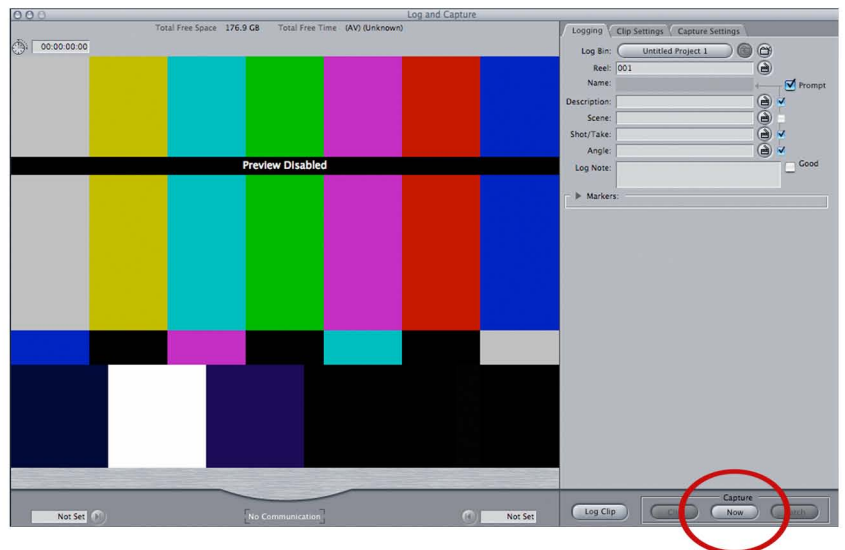
If you are using the VHS or an analog camera, then click on the "Capture Settings" and choose "Non-Controllable Device"

The stop button, play button, etc... should disappear and it should say "no communications" on the bottom



Now you should be ready to capture If you are using the VHS or an analog camera, play the video and click on the "Now" button under "capture" on the bottom right corner of the screen. If you are using a digital camera, you can use the controls in the window to play the video, then hit "now" under "capture."

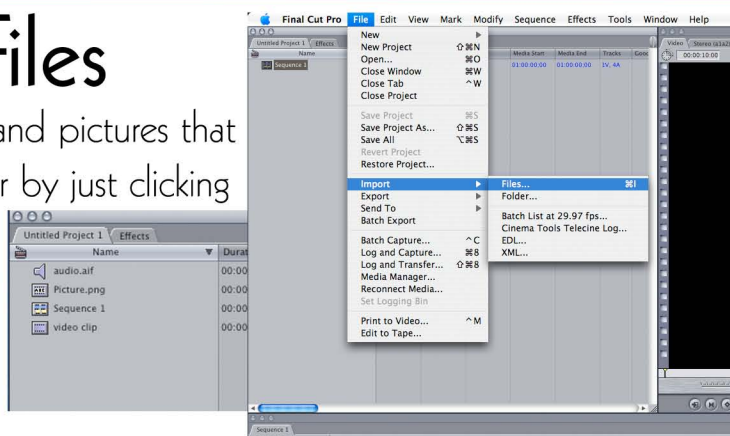
When you are finished with a clip, hit escape and repeat as necessary.



All importing is real time.

Importing Other Files

You can import other video, music, and pictures that are somewhere else on the computer by just clicking on File / Import / File or Folder

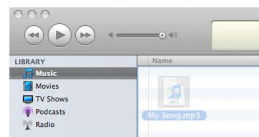


Importing MP3 Music

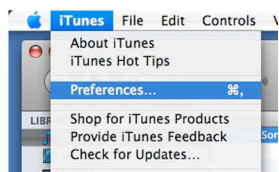
Final Cut Pro can play MP3s but it doesn't like to. MP3s are compressed and sometimes get distorted when edited in FCP. The best song file to use is a WAV or AIFF. If you have an MP3 file open up itunes.



Click and drag your MP3 into Itunes



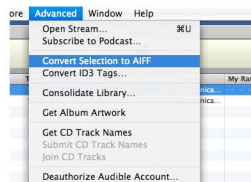
← Once in itunes select the track and go to iTunes / Preferences.



When the window opens up, click on the "Advance / Import tab. Change the encoder to AIFF



Click "OK" in the Prefsences window. Click on your desired MP3 in itunes. Go to "Advance / Convert Selection to AIFF."



A new AIFF file will appear in itunes. Hold down



Control and click on the itunes AIFF file. on the drop down menu that appears choose the "Show in Finder" option. A folder will appear and your finished AIFF file will be highlighted. Click and drag the file into your **Personal Project Folder**. and then import it into FCP.

Importing Music from a CD

If you are importing Music from a CD. Insert the CD into the drive. The CD appears on the desktop. Double Click the CD. All the files on the CDs are AIFF files. Click on your desired track number and drag it to your **Personal Project Folder** and than import it into your FCP project.





Final Cut Pro

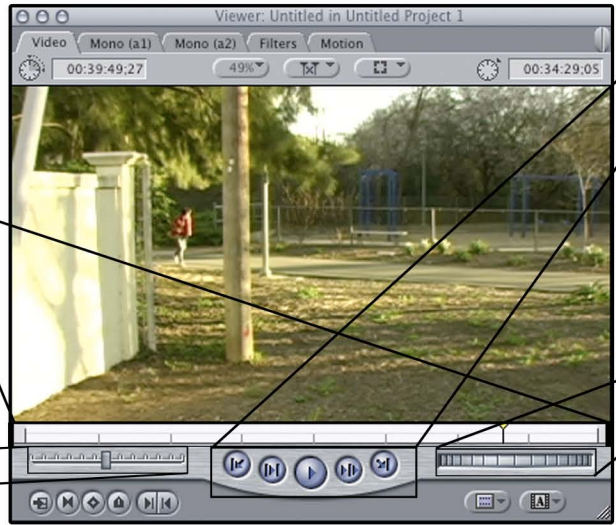
Editing: In & Out Points

Basic editing starts in your bin.

Double click a video clip in your Bin that you want to cut. Once double clicked, it will appear in the viewer. Scroll through the clip to find where you want to start your edited clip for your sequence.

These tools below can help you look through your clip:

This is your clip timeline. Click and drag the timeline bar to quickly view your clip

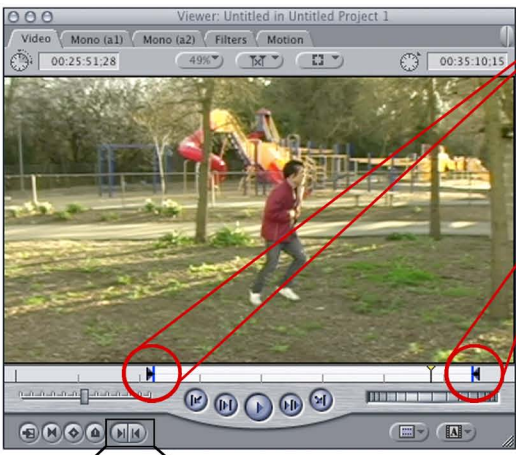


These are simple play and stop buttons. Watch your video and stop it when you find what you are looking for.

This allows you to fastforward or rewind while viewing your video you can go slowly at 1/2 normal speed or twice as fast.

Use this dial to skim through your video frame by frame

Once you find the section of the clip that you want to drag down to your TIMELINE / SEQUENCE, click the "Mark In" Button. (Hotkey is "I")



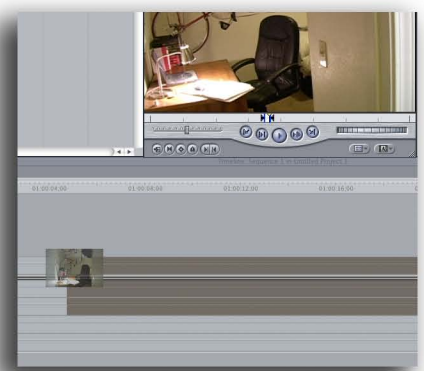
A blue bar will appear with an arrow signifying the beginning of your new clip. All footage previously will be grayed out. This signifies that the previous footage will not be shown.

Next, Do the same for the end of the clip. Go to the place where you want to mark the end of your clip. Then click on the "Mark Out" Button (Hotkey "O"). The blue bar on the right will signify the end of the clip. The grayed out area will not be shown.



Mark In / Mark Out

You have now already done a basic edit of your video clip. Click on the video in the viewer and drag it down to your sequence. Do this several times and you already have a rough cut of your video!!





Final Cut Pro

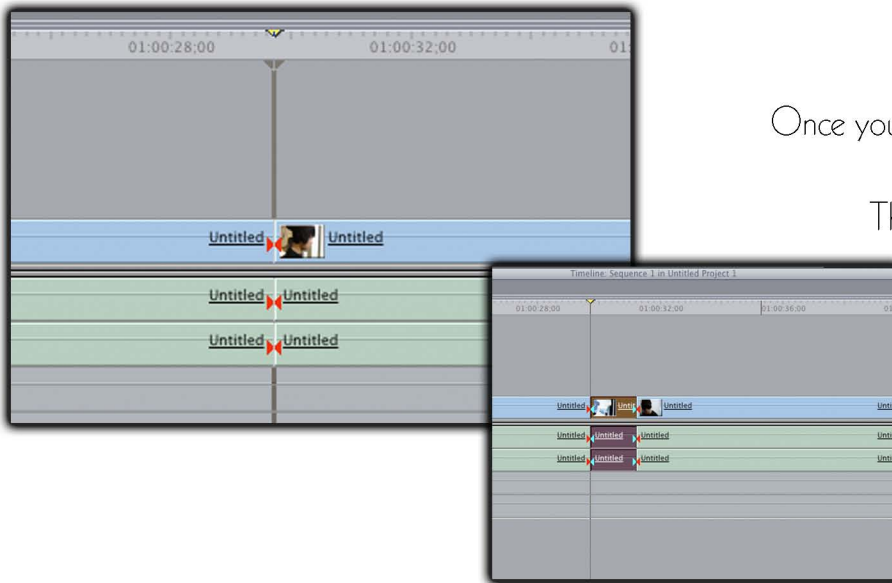
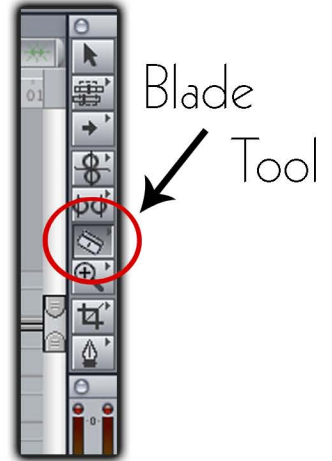
Editing: Cutting

You can still trim your footage down once it is in your sequence.

Go to the tool bar on the right side of the Sequence and choose the blade tool.

The blade tool is a tool that will split a clip into two halves. This is useful so you don't have to drag down two of the same clips and trim both of them.

After you have selected the blade tool, move to the Sequence and put your mouse over the spot you want to split.

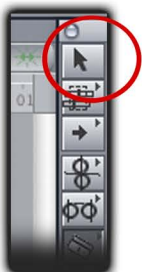


Once you're ready go ahead and click.

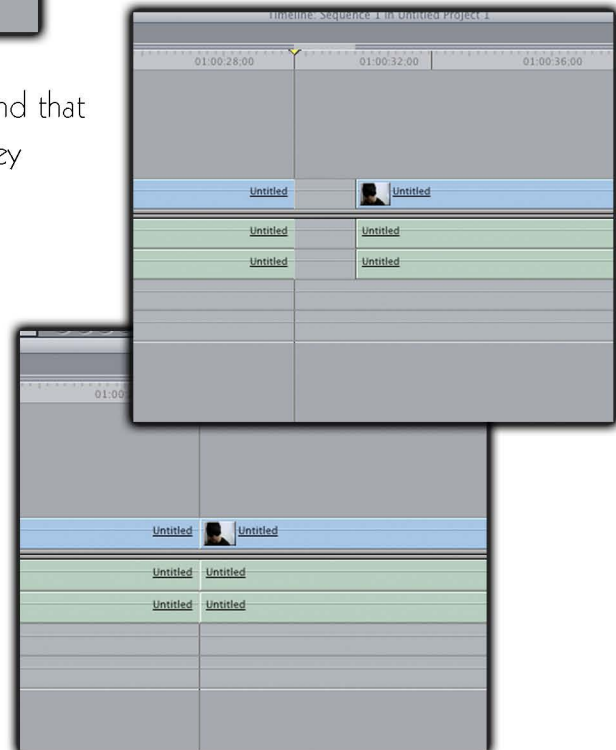
This should cause the clip to split at that point.

If you want to cut out a certain section, then make cuts around that and press delete. There are two types of deletes. The delete key besides the "=" key (commonly known as the backspace key) will only delete that section of the clip

On the other hand the delete key under the "home" and "end" keys will not only delete the clip but also close the gap.



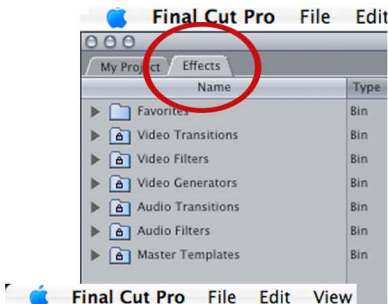
Remember to go back to the arrow key when you are done cutting



Transitions

People often use transitions to make clean changes between clips. Transitions to display an effect while changing from clip to clip.

To do this, move the two clips you want to transition between to the center of your screen.

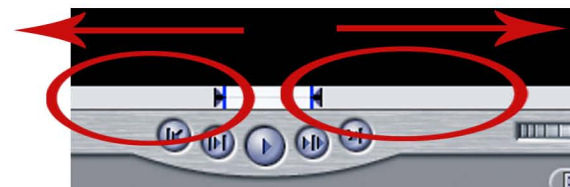


At the top of the bin there is a tab that is called [Effects]. After clicking the effects tab Click on [Video Transitions]. In this folder there are lots of different transitions to choose from. Once you choose one, click and drag it down to the cut between the two clips.

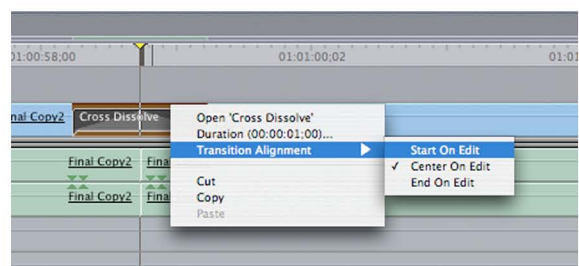


If done correctly, it should look like this:

In order for transitions to work, there has to be spare footage in the original footage that is before and after the clip cut in the sequence.



If a clip does not have enough footage before or after you can ctrl + click on the transition and select transition alignment from here and can change your transition to start on cut, middle of cut, end of cut.

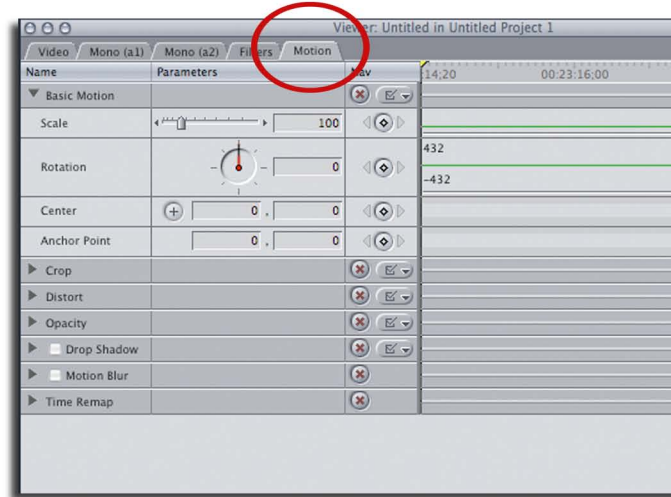




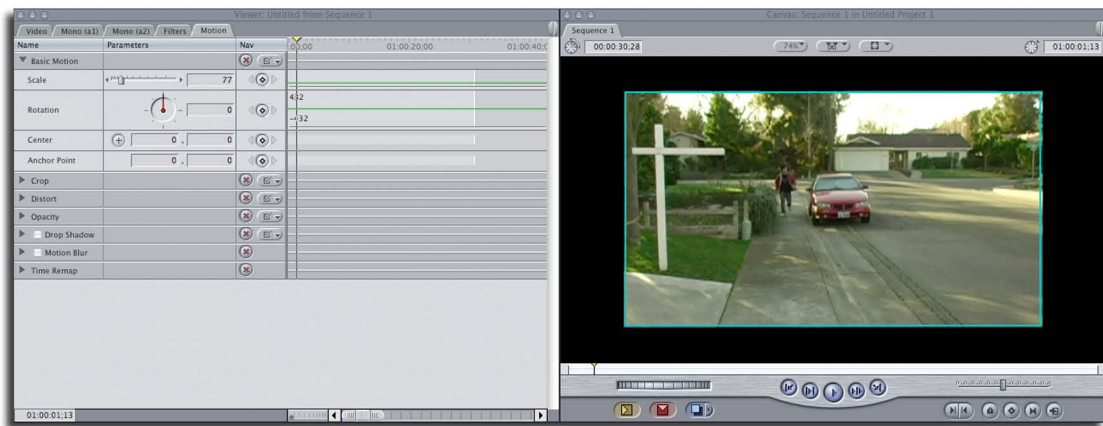
Final Cut Pro

Motion Tab

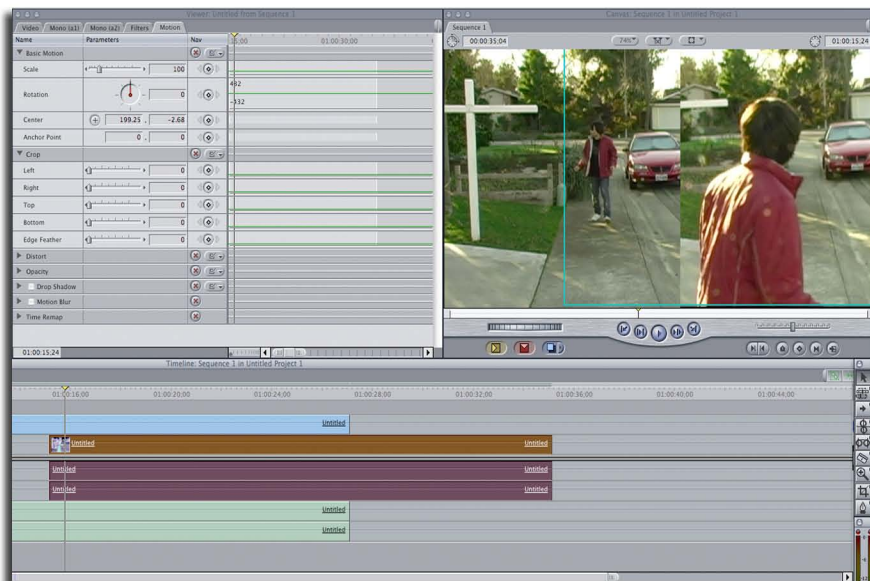
The Motion Tab is located in the Viewer / Editor window. The Motion tab refers to all the video effects you can do to every video clip. This includes text, regular video, images, anything that is visible on a video layer can have it's motion effects changed. These are general effects.



The motion tab is where you can change the size of the clip, the rotation of the clip, the Center of the clip in the canvas. When using anything from the motions or filters tab you will have to use the canvas to see how your effects are looking.

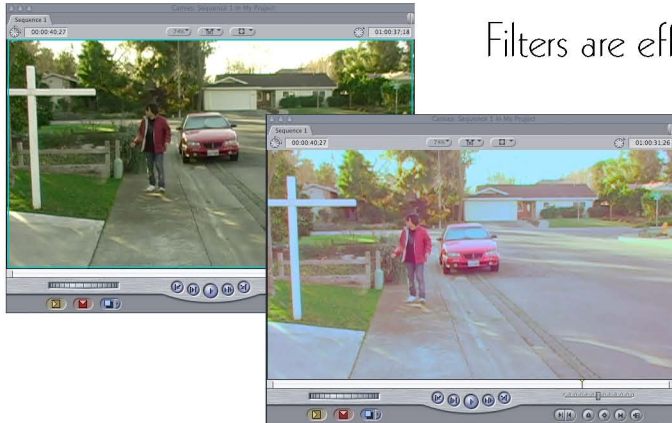


This is a good place to look for a basic effect before going to the filters menu. Here you can find the crop feature which can cut your clip in half.



Combine the effects from the motion tab with several layers of video and you can start to get very creative images on your screen. Take a look at the motions tab and play around with it to see what kind of effects you can make

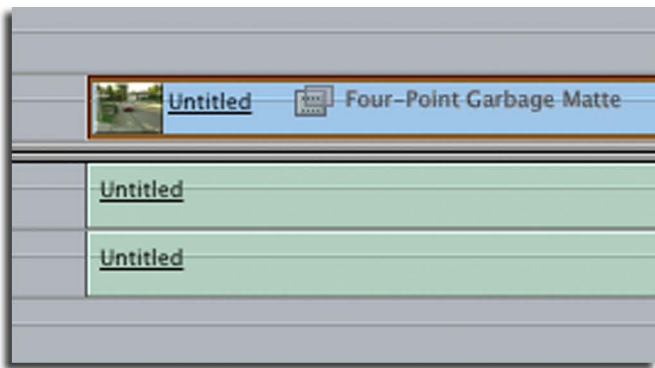
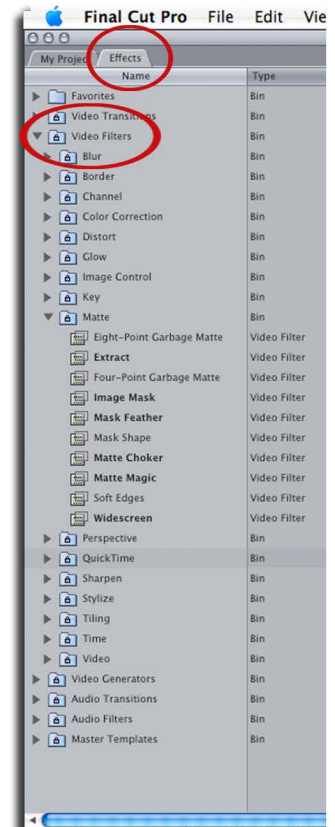
Filters & Effects



Filters are effects that you would filter in or out of a video clip. For an example by applying a color correction filter you can change the saturation and colors of the entire video clip.

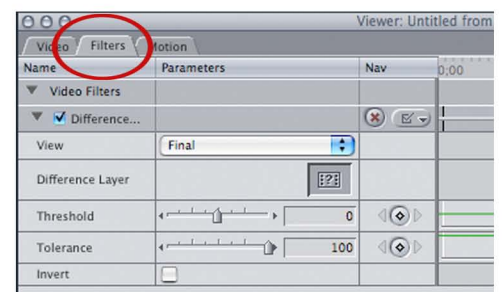
Your filters are located under the effects tab at the top of your bin. Once you have clicked on the effects tab you will find several folders with a lot of different filters under the Video Filters folder.

To use a filter just click on the one you would like to try and drag it over your clip in your sequence.



Once the filter has been dropped on your clip, it has been applied. But for every filter there are several options for editing and customizing your filter.

To customize your filter double click the clip you applied the filter too. This will cause it to pop up in your Viewer / Editor window. At the top of the Editor viewer window you will notice that there is a Filters Tab. Click that and you will see your options for customizing your filter. Each filter does something different and every filter has different options for filtering.



One thing to be aware of is that some filters add their own tab to the top of the Viewer window. The only way to find the filter you need is to

try them out with their effects until you find the one you need.

Text & Generators

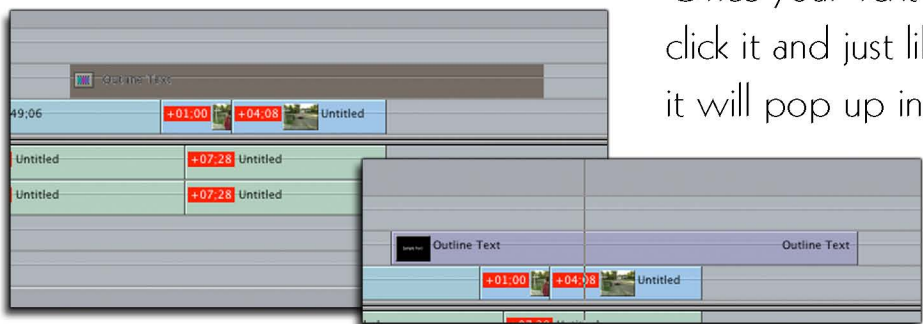
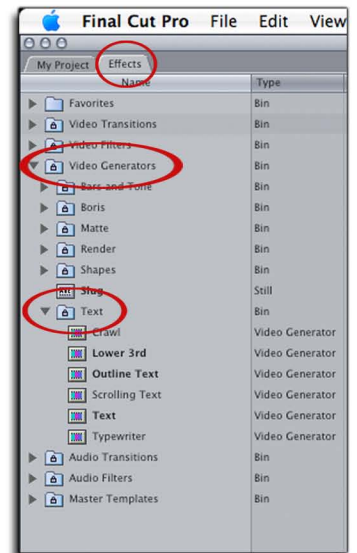
Text is a computer generated video clip. This means that it will be found with other generated video clips. Along with text you can find simple shapes and colors that you can bring into your video.

To start go back up to the effects tab in your editing Bin, but this time, lets click on Video Generators. Under Video generators you will find a lot of different generated video.

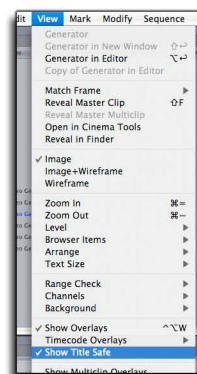
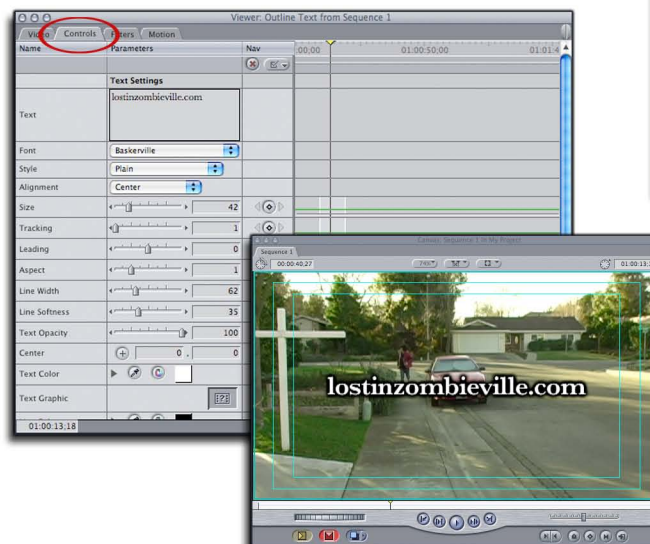
We will be focusing on text which is located in a folder called "Text". Click on the arrow to the left to drop down the menu. here are many options choose the one that will fit for you.

Unlike the video transitions and filters the generators are not applied to a clip already on your timeline. They are their own clip. So drag them to their own layer or area away from your video clips. (you don't want to accidentally delete anything.)

Once your Text is in your sequence double click it and just like your other video clips it will pop up in your viewer window



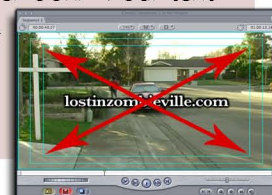
At the top of the Viewer window you will see a Controls Tab that is unique for the Video Generators. This is where you can customize your text.



Helpful Hint:

Under View click to turn on the "Title Safe" bars.

Sometimes on TVs, video gets cut off, so as long as you make sure your text is viewable within the inner box. Your text will be visible.



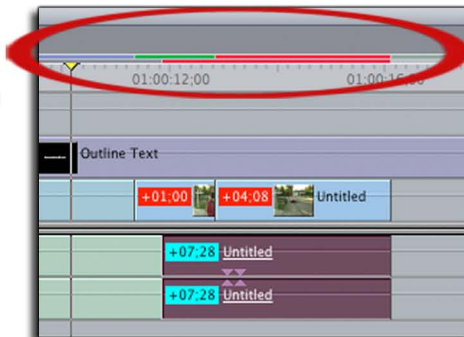
Rendering

Rendering is the process that your computer must undergo to make video viewable. When a lot of filters or transitions are placed on a video clip, Final Cut Pro must render the video. It compiles all of your effects and transitions and creates a new video out of it. You don't lose anything, your old video or old effects are still there.

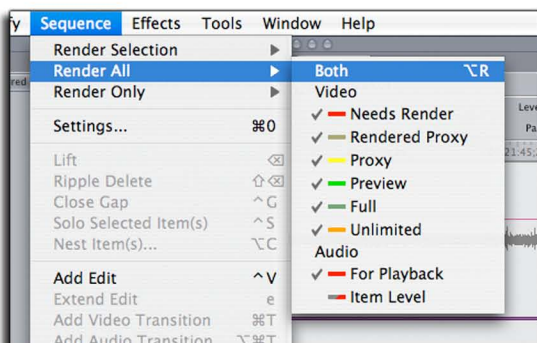
You can tell if your video needs to be rendered because an unrendered sign will pop up in your canvas instead of your video. Sometimes audio will need to be rendered as well. If your audio needs to be rendered you will hear a steady beeping noise instead of your audio. Follow these instructions to render both audio and video.

The other way to tell if something needs to be rendered is to look at the two thin colored bars at the top of your sequence. →

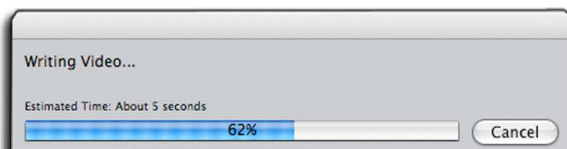
The colors correspond to the clips below them. If you look close enough you will see two bars. The one on top corresponds to the video and the one on the bottom corresponds to the audio.



Blue = No Need to Render
Green = Can View but should eventually be rendered. Now it's kind of blurry.
Red = Needs to be rendered before you are able to see it.



together.



To Render your video go up to Sequence. "Render Selection" renders only the clip you currently have selected. "Render All" renders everything in your sequence. Most of the time you can just go to "Render All" and choose "both" to render the video and audio

It takes some time to render depending on how complex your effects are. However, never be afraid to press cancel. Cancel will stop the render, and you can still view whatever percentage was completed.



Exporting to DVD Studio Pro

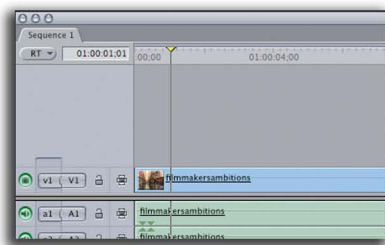


If you will be sending your video to DVD Studio Pro you can skip right to the Compressor chapter in this manual. Compressor is an exporting program for Final Cut Pro.

Exporting for the internet

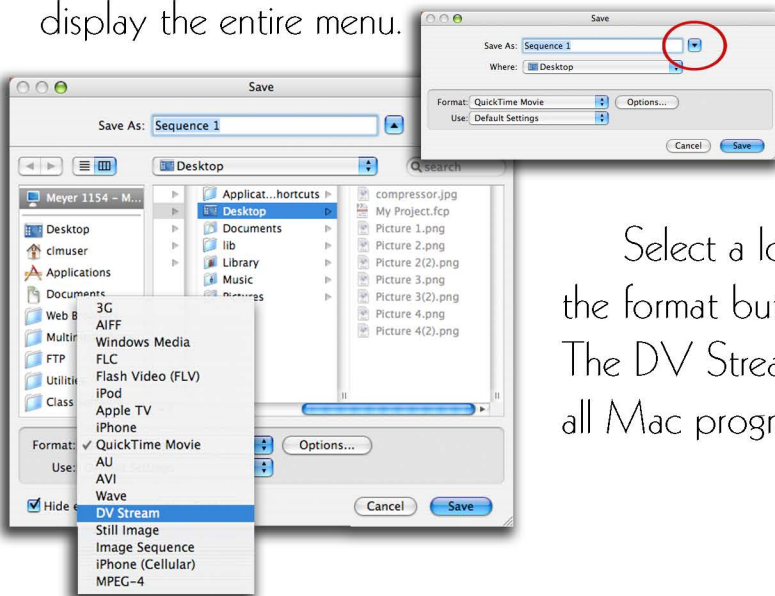
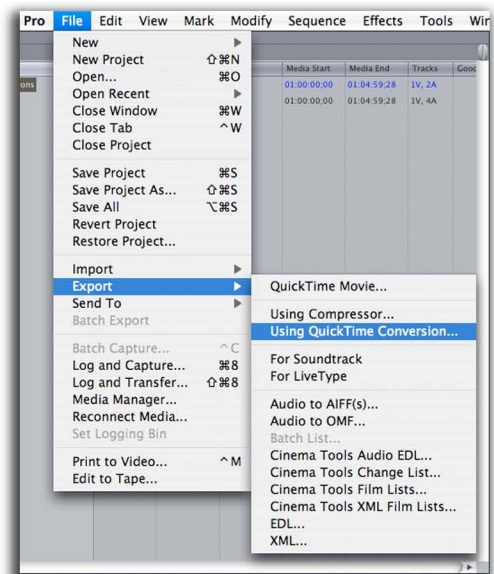
Exporting for the internet is also done through Compressor. Please skip to the Compressor chapter in this manual.

Exporting for Quicktime & IDVD



Make sure that your sequence is selected. Make sure it is the sequence you want to export then go up and select file and Export. The Export Menu drops

down several options. Select "Using Quicktime Conversion". This will open a new window. If you can't see the whole menu click on the drop down arrow to display the entire menu.



Select a location to save it and then click on the format button and choose DV Stream. The DV Stream is a High Quality Format that all Mac programs can read.