

FINAL CUT PRO X

CTV Training

(version 10.1)

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Final Cut Pro X Layout: The Final Cut Pro window has three main areas

Browser: Access all the source media you import.

Viewer: Play back clips and projects.



Magnetic Timeline: Edit your movie in this area.

1. The **Browser (Left box)** is where your projects and video clips can be accessed



Click here, just below the **Browser**, to access the **Library List**.

2. The **Magnetic Timeline (Bottom box)** is where you put clips to make storylines—it's where the editing takes place (if you press *Shift+Command+8* the **Audio Meters** will appear at right)

3. The **Viewer (Right box)** is where you view what you've created on the **Timeline**



Click here, just below the **Viewer**, to access the **Inspector**.

Essential Keyboard Shortcuts

General Shortcuts

Command+N = New Project

Option+N = New Event

Command+9 = Show Background Tasks (like rendering, sharing, etc.)

Command+Q = Quit Final Cut Pro

Editing on the Timeline

Command+Click on any file to select or deselect it in addition to already selected files

Command+A = Select All Clips

A = Selection tool

B = Blade tool (cuts clips on the timeline)

Command+Z = Undo Change

Command+Shift+Z = Redo Change

Command+X = Cut Selection

Command+C = Copy Selection

Command+V = Paste

Command+D = Duplicate

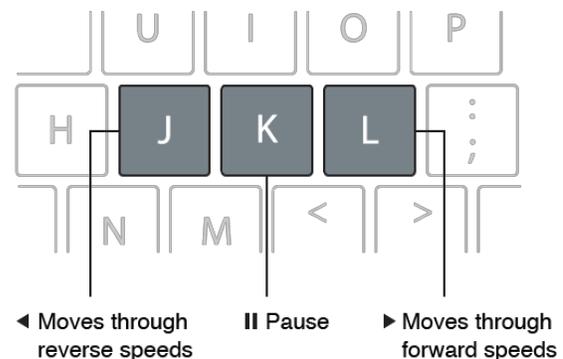
Delete = Delete Selection

Home = Go to Beginning of Timeline

Command+(+) = Zoom In

Command+(-) = Zoom Out

Shift+Z = Zoom to Fit Storyline



Playback

J = Reverse (press multiple times to increase speed; hold *K* while pressing for half speed)

K = Stop Playback

L = Forward (press multiple times to increase speed; hold *K* while pressing for half speed)

Spacebar = Play/Pause

Command+Shift+F = Play in Fullscreen

Resources

Ø Final Cut Pro X Tutorial - Izzy Video (2 Hours and 39 Minutes of Informative Video)

<http://www.izzyvideo.com/final-cut-pro-x-tutorial/>

Ø FCPX Overview - Final Cut King

<http://finalcutking.com/training/final-cut-x/>

Ø Training Library - Larry Jordan

<http://www.larryjordan.biz/category/articles/final-cut-pro-x/>

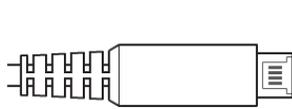
Ø Final Cut Pro Tutorials - fcp.co

<http://www.fcp.co/final-cut-pro/tutorials>

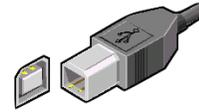
Backing Up Your Media

Before anything else, you need to put your files on the hard drive.

1. Make sure your external hard drive is plugged into your computer. The hard drives at CTV can be plugged in with **FireWire 800** or **USB type B**--make sure you get the right cable from us!



FireWire 800



USB type B

2. Take your SD card from the camera and plug it into your computer



SD Card

3. Transfer the entire contents of your SD Card to your hard drive (this will be a Quicktime file named "Private" that looks like this):

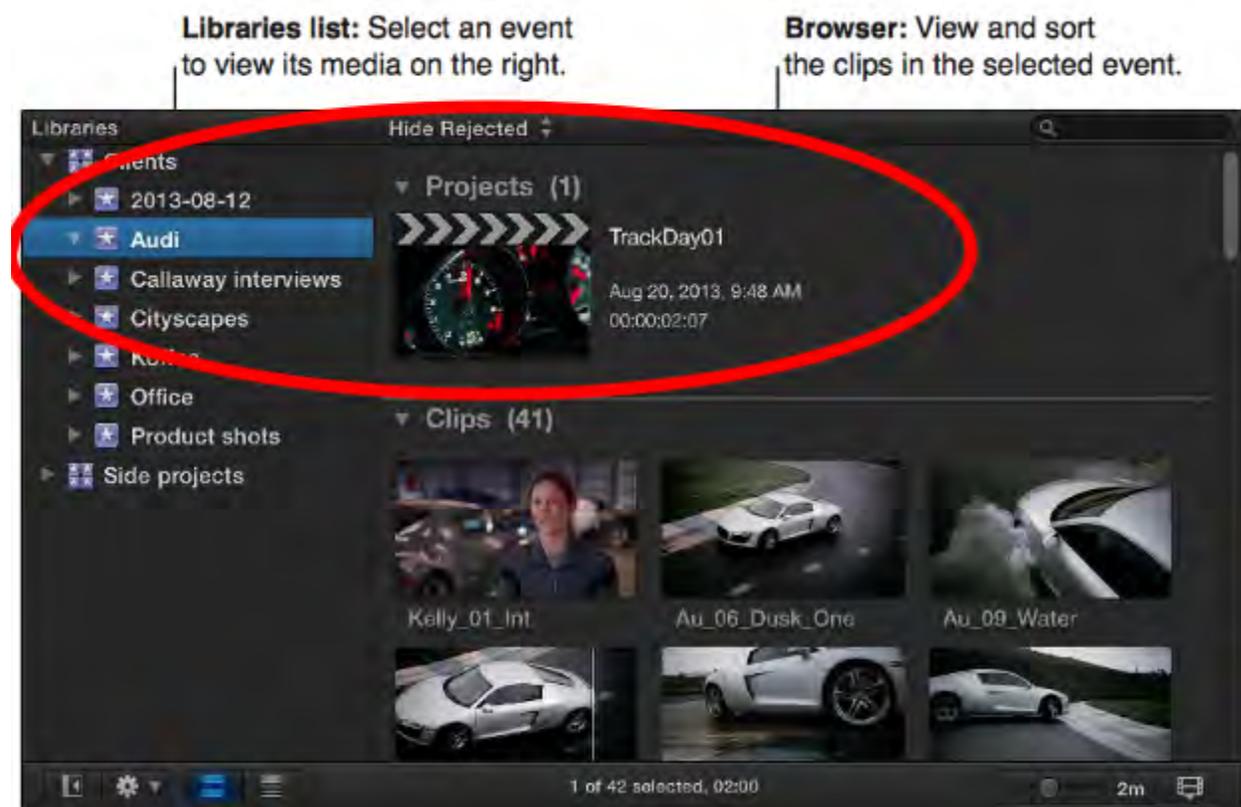


Name: PRIVATE
Kind: AVCHD Content
Size: 48.4 MB
Created: Today 9:18 PM
Modified: Today 9:18 PM
Last opened: Today 9:18 PM

Eject your SD Card (forgetting this step can sometimes cause problems). Now you can start in **Final Cut Pro X**. Open the program by clicking on this icon:



Creating Libraries, Events and Projects



First you need to create a library--at CTV, you always want to save to your external hard drive.

1. Access the **Libraries List** if it is not yet open
2. Go to: File > New > Library
3. Find your external hard drive under “devices” and select it
4. Now type “[LastName][FirstName]” next to ‘save as’ and click “save”

Your library will appear on your **Libraries List** and under it will appear a new event.

5. Rename your event by pressing *Enter (Return)* on your keyboard
6. Type the name of the project you’re working on and press *Enter* again

Now, we’ll create your project.

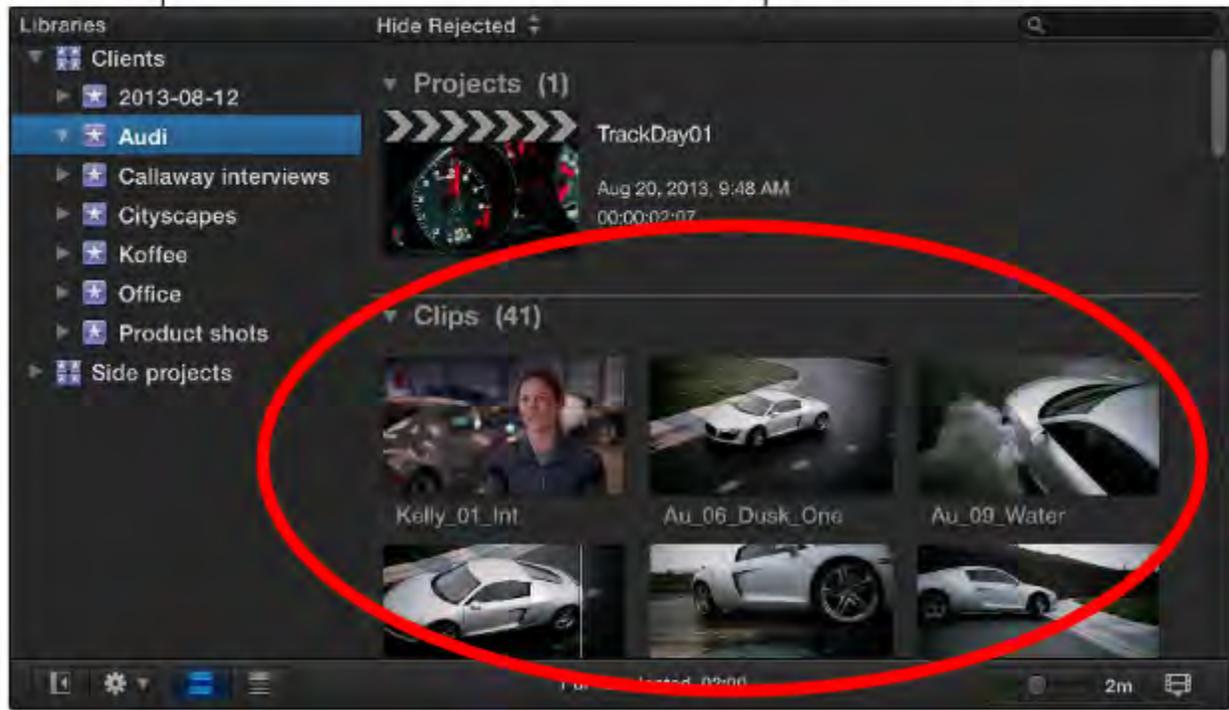
7. Go to: File > New > Project (or or *Control-Click* on your event)
8. Under “Project Name” type the name of the project you’re working on
9. Under “In Event” select the event you just created
10. Click “OK”

Note: There is no manual “save” feature--Final Cut Pro X relies entirely on autosaves. If you ever need to make a copy of a project you can *Control+Click* on it and select “Duplicate Project.”

Importing Media

Libraries list: Select an event to view its media on the right.

Browser: View and sort the clips in the selected event.



Now we're ready to import our video files.

1. Go to: File > Import > Media...
2. Select your hard drive, find and select the video clip or clips you want to use (you can *Control+Click* on additional files to select more than one clip)
3. Click "Import Selected"

Make sure that "Add to existing event" is checked.

4. Click "Import"
5. Your clips will appear in a new section, underneath your project(s)
6. If you need to import more files, you can access this same screen by pressing *Command+I*

An even easier way to do this is to drag them directly from **Finder** to the **timeline**--they will be automatically imported into the current project's event.

1. Arrange the windows onscreen so that you can see both **Finder** and **Final Cut Pro X**
2. Drag your file from **Finder** onto the **Browser** or **Timeline** in **Final Cut Pro X**

Note: A photo can be imported this way, and will become a still-image clip with a length of 1 minute. This clip will act like any other clip, and can be shortened or lengthened.

Timeline Basics

It is important to know, before you start, that the **Timeline** reads from left to right. When you put your **skimmer** (the line that moves across the **Timeline**) on the left and press play, it will move to the right, while showing you (in the **Viewer**) what you've created so far.

Adding and Arranging Clips

1. First drag the clip you want to use from the **Browser** to the **Timeline**

Final Cut will place the clip onto the center track (or, as Apple calls it, the “**primary storyline**”), and all the way to the left. The **primary storyline** will serve as the main track of your project. This feature (“magnetic timeline”) is unique to Final Cut Pro X.

2. You can add more clips to your **primary storyline** by dragging them from the **Browser** to the center track, to the left (before) or to the right of (after) clips you've already placed
3. You can also moved around clips that have already been placed to rearrange them
4. Video clips placed above, or audio files place below, will connect to the **primary storyline** and be visible during playback--these are called “connecting clips”
5. If multiple videos are place on the same frame on the timeline, the video on the top is what will be seen

Note: if you want to move a clip on the primary storyline, it will move connected clips and audio files. If you need to move clips on the primary storyline without moving connected clips, you must hold down the Grave Accent key (`), which is above the *tab* key.

Deleting Clips

1. To delete a clip, select it by click on it and press “delete” on your keyboard
2. Any clips you've connected to the clip you deleted will also be deleted, and any clips you've placed to the right of the clip you delete will move toward the left, replacing the deleted clip

Note: if you hit the delete key above the arrow keys, you will leave a “gap” in your storyline. “Gaps” allow you to leave an empty clip where the clip you deleted used to be, so that connected clips are not deleted and the clips to the right of your deleted clip will not move. This is useful for some advanced users, but may be confusing for beginners.



Zooming In / Out

You can zoom in or out on the timeline, allowing you to edit with more precision or to see everything at once.

1. To zoom in press *Command*+(+)
2. To zoom out press *Command*+(-)
3. To change the view so that all clips are visible, press *Shift*+Z

Solo Selected Clips

If you want view only a single clip or set of clips in the **Timeline**...

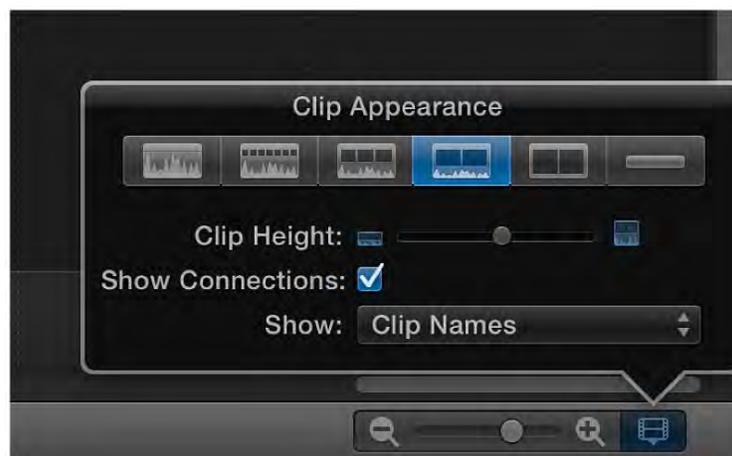
1. Select the clips you want to isolate and click the Solo button in the upper-right corner of the timeline
2. When a clip is isolated by the Solo function, the button will turn yellow, and nonsoloed clips will appear in black-and-white.



Adjust Clip Height

Sometimes you may want to change your view of clips (for example, if you need to view the audio levels of a track all at once).

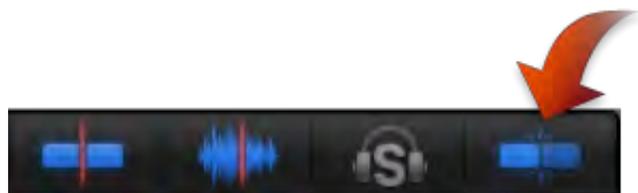
1. To do this, select the Clip Appearance button in the lower-right corner of the **Timeline**.
2. Try out different views to see what will work for you now, and what you may want to use in the future. You can also adjust clip height from this window.
3. You can change this view at any time.



Snapping

Snapping is a function that allows you to automatically align clips by aligning them next to each other. If you ever need to turn snapping off (for example, if you need to adjust a clip by only a few frames)...

1. Press the Snapping button in the upper-right corner of the **Timeline**
2. If you only need to turn off snapping for a moment, you can also hold down the *N* key while making your adjustment--once you let go, snapping will turn on again



Editing Video

To edit your video, you will need to know how to add and arrange items to the **Timeline** (see *Timeline Basics*, above). This section will discuss techniques unique to the video aspect of editing in Final Cut Pro X.

Note: FCPX renders automatically as a background task, so you don't need to worry about it.

Selecting a Range

If you want to add only a portion of your clip to the **Timeline**, you can select a range of your clip in the browser.

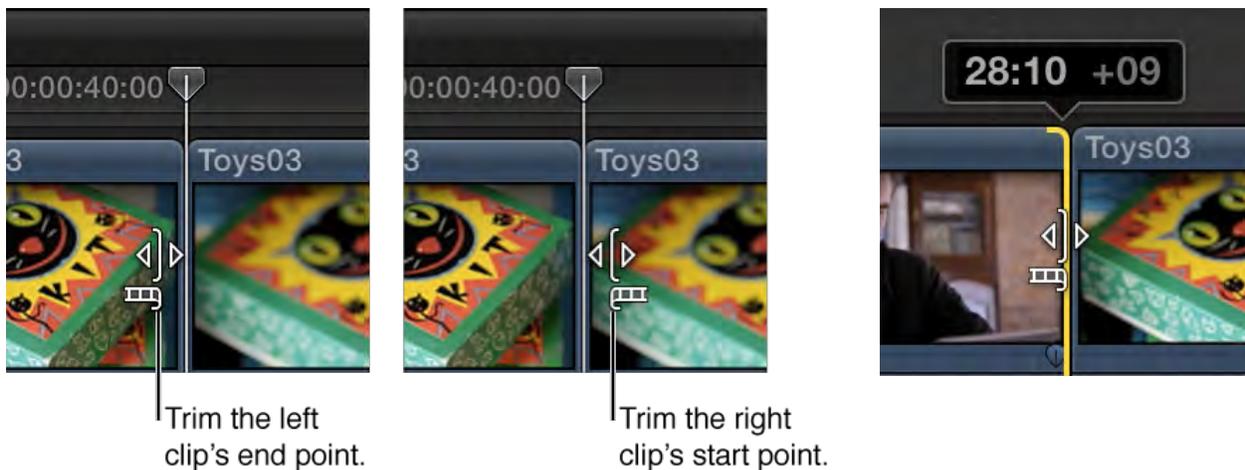
1. Drag your cursor from the beginning of the desired footage to the right, until you reach the end of the desired footage
2. You should see a yellow border appear around the range you've selected
3. You can now move that range to the **Timeline** as you would a normal clip.

Note: there are other ways you can select a range, including the Range Selection tool and using ins and outs (the "I" key and the "O" key).

Trimming with the Select Tool

Another way to deal with excess footage is to trim off the beginning or end of a clip.

1. Make Sure you have the Select tool turned on (press "A")
2. In the **Timeline**, move the cursor to the beginning or end of the clip you want to trim
3. The cursor will change into a trim icon, indicating which clip edge you have selected
4. Drag the start or end point in the direction you want to move the clip, to make it longer or shorter



Note: FCPX uses "nondestructive editing," which means that as you edit your project, the original footage is not being changed. This takes up more space on your hard drive, but allows you to access the original footage should you need it.

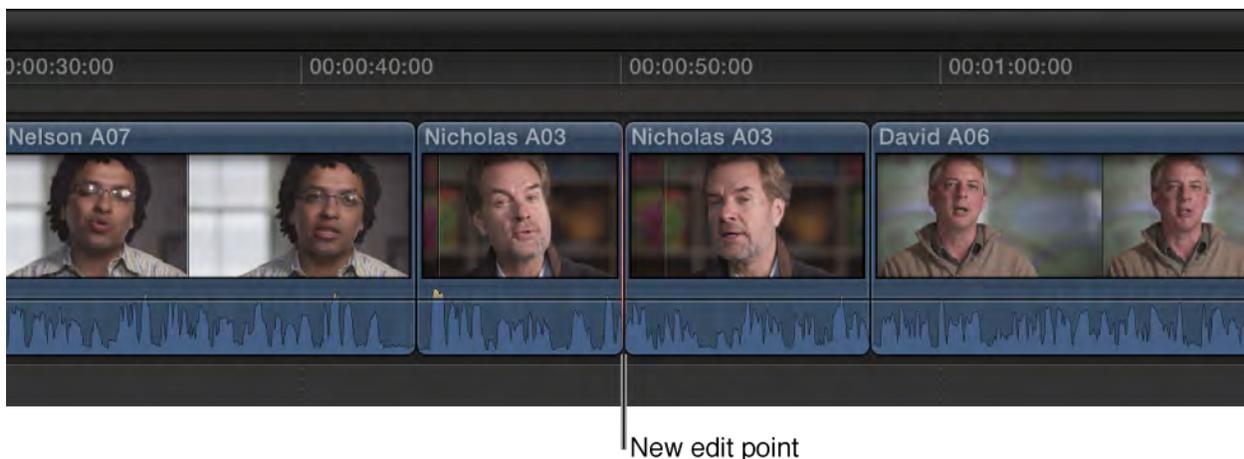
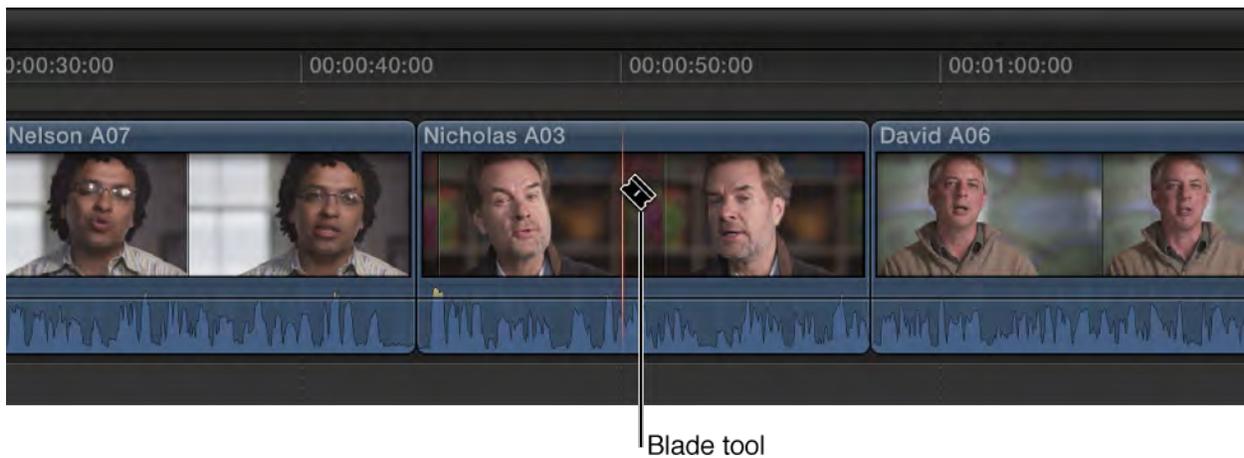
Making Cuts

One way to get rid of excess footage is to make cuts using the Blade function.

1. To use the Blade function, choose the Blade tool from the Tools pop-up menu under your **Browser** (or press “B”)
2. The cursor will change to look like a razor
3. Move the **Skimmer** to the clip you want to cut and find the specific frame you want to cut--now click
4. You can return to the Select tool by using the Tools pop-up menu or by pressing “A”
5. Now you can move or delete the section of the clip you don't need



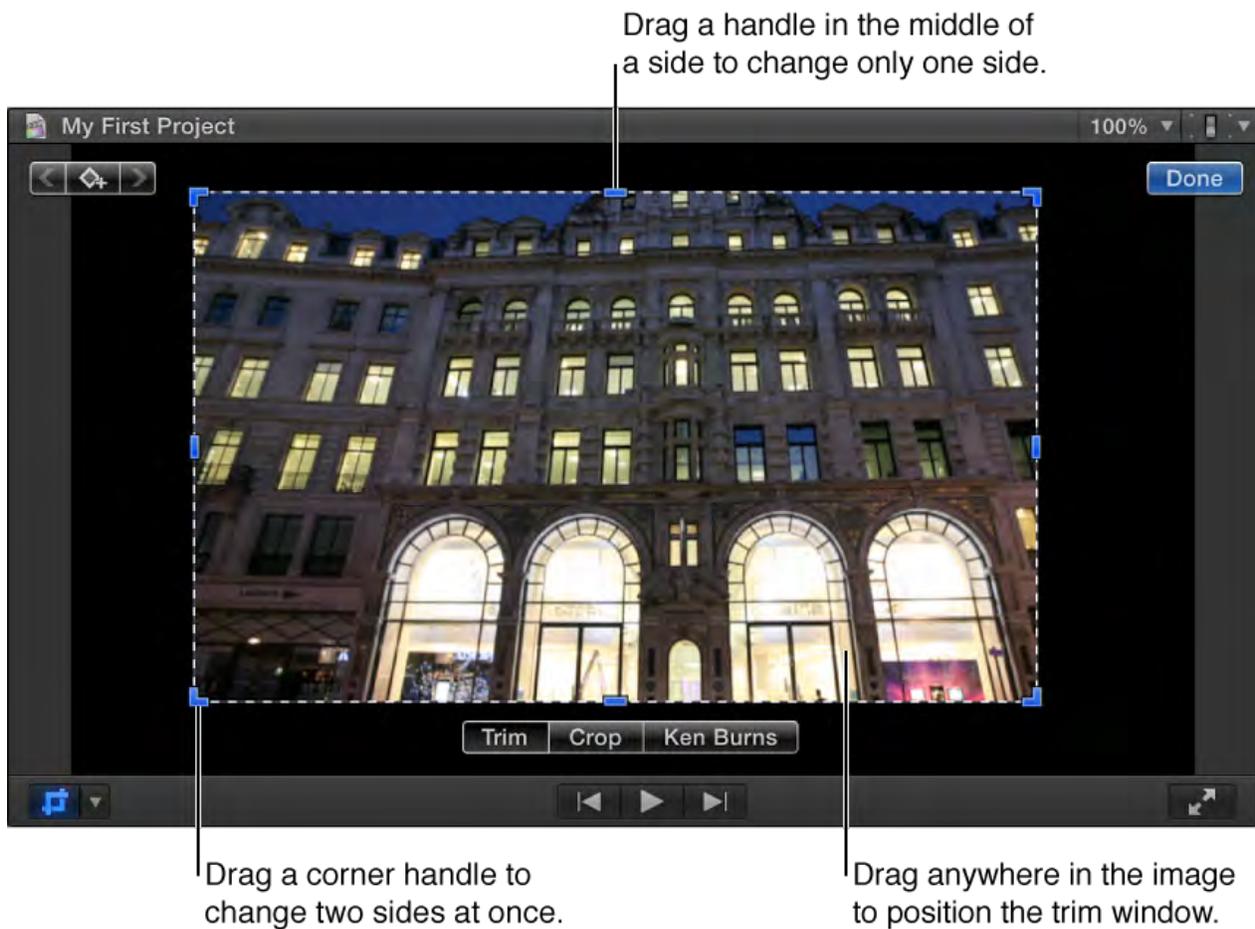
Note: If you want to cut all the clips at a specific time, you can press *Command+Shift+B*.



Trimming

Trimming allows you to remove part of your picture. This is useful when you want your video to take up half of the screen, and other video, pictures or text to take up the other half.

1. Click on the Transform/Crop/Distort button under the **Viewer** and select “Crop”
2. Your **Viewer** will change to a smaller screen with buttons underneath--select “Trim”
3. Drag the sides or corners to change the part of the screen you want to be visible
4. You can use the transform button to drag the trimmed video where you want it--to do this click on the Transform/Crop/Distort button under the **Viewer** and select “Transform”
5. Now drag the video to the desired location on the screen



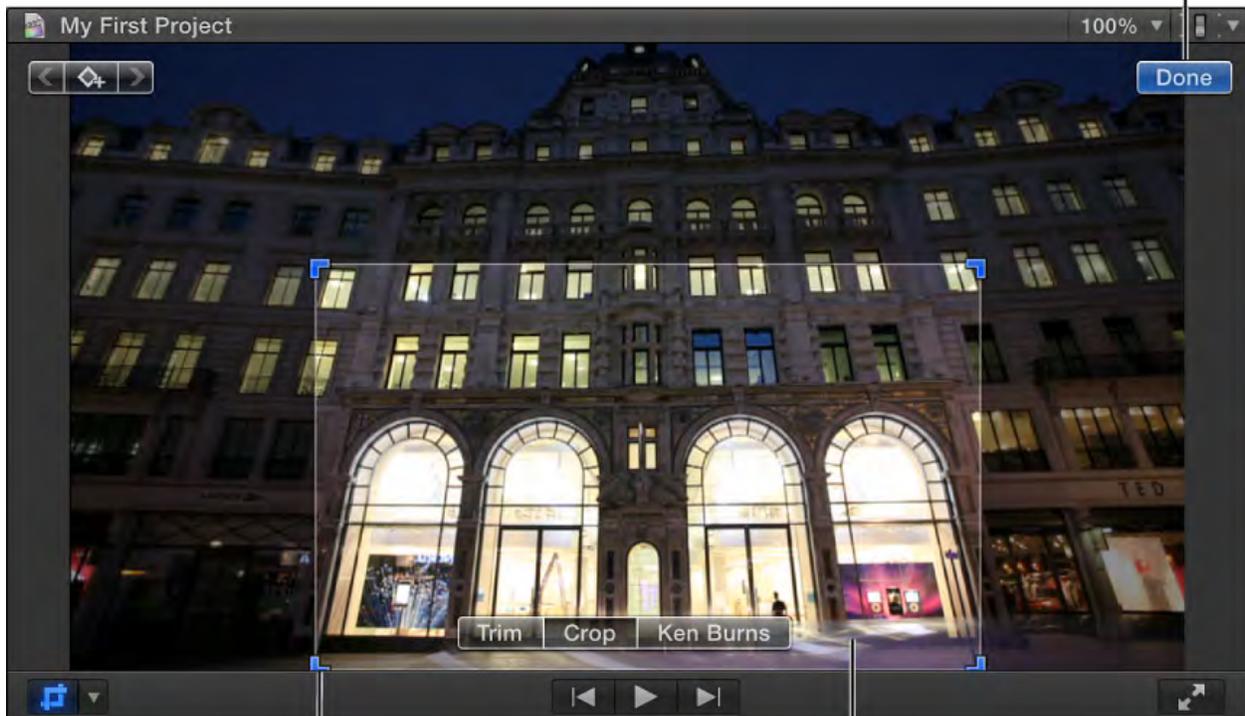
Cropping

Cropping allows you to zoom in on a part of the image and remove the edges. This is useful when you want to exclude something on the edge of the screen or get a closer view.

WARNING: when you crop your image, your clip will lose resolution and look grainy. The further you zoom in, the worse your video will look.

1. Click on the Transform/Crop/Distort button under the **Viewer** and select “Crop”
2. Your **Viewer** will change to a smaller screen with buttons underneath--select “Crop”
3. Drag the corners to change the part of the screen you want to be visible

Click Done to crop the image and expand it to full size.



Drag a corner handle to change the crop window's size (but not its aspect ratio).

Drag anywhere inside the image to position the crop window.

Note: If you are unhappy with these changes, you can change them back using the same tools.

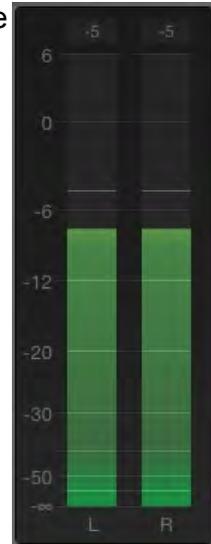
Editing Audio

Making sure your audio sounds good is crucial to creating a professional-quality video. This section will help you arrange and modify your audio so that you can do just that.

First, make sure your audio meters are showing. If they are, they will be on the lower right of your screen, to the right of the **Timeline**. If they are not:

1. Go to: Window > Show Audio Meters

You want to make sure your audio levels stay at or below 0 dB on your audio meters--if they are peaking above that (you will see orange and red on your audio meters) you should adjust your volume (see below).



Audio Waveforms

Audio waveforms are visual representations of the actual sound. An audio waveform's amplitude and length change according to the underlying sound's volume and duration. A short, loud sound such as a drum beat has a sharp, peaked waveform, whereas low-level crowd noise has a lower, more uniform waveform. These properties make it easier to find specific edit points when trimming clips or keyframing effects.

When editing in Final Cut Pro X, you'll see audio waveforms in two ways:

1. Audio portions of video clips
2. Audio-only clips

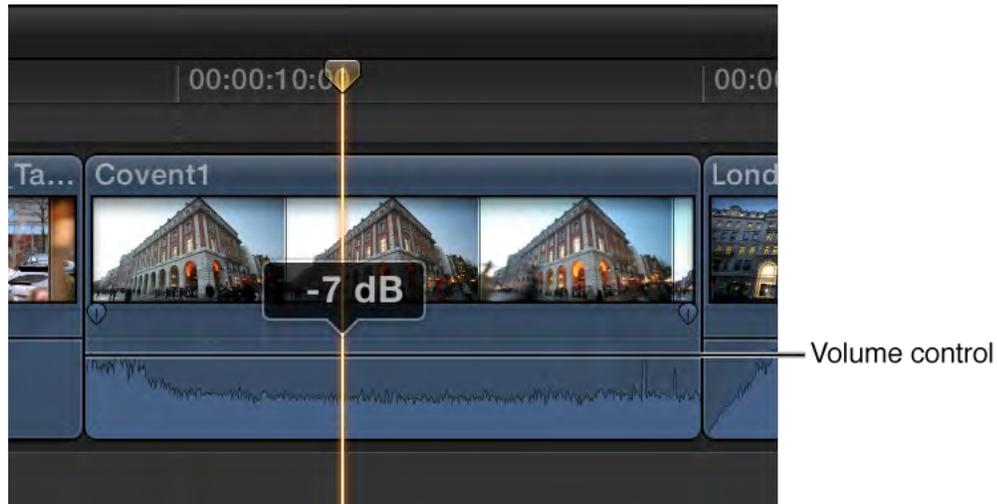


You can detach audio from a clip to create separate video-only and audio-only clips by *right-clicking* and selected “detach audio”.

Note: Do not delete audio even if you do not need it, just turn the volume down. It may help you later on.

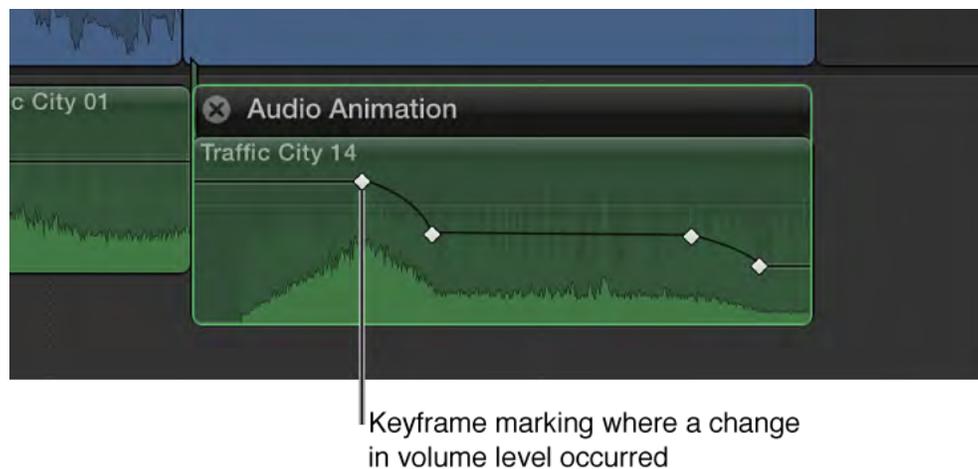
Adjusting Volume

1. Adjust the audio line by dragging the volume control line up or down
2. You can also press *Control*+*(+)* and *Control*+*(-)* to adjust the volume by +1 or -1 dB increments (if multiple clips are selected, the volume is adjusted for all clips)
3. Your waveform will change to reflect your volume adjustments



Keyframes

1. To adjust specific sections of the audio, hold "*option*" and *click* on the volume control line to make keyframes (will appear as white diamonds)
2. Move the keyframes you've created up/down to change volume, or left/right to change when and how long the volume change will take effect.

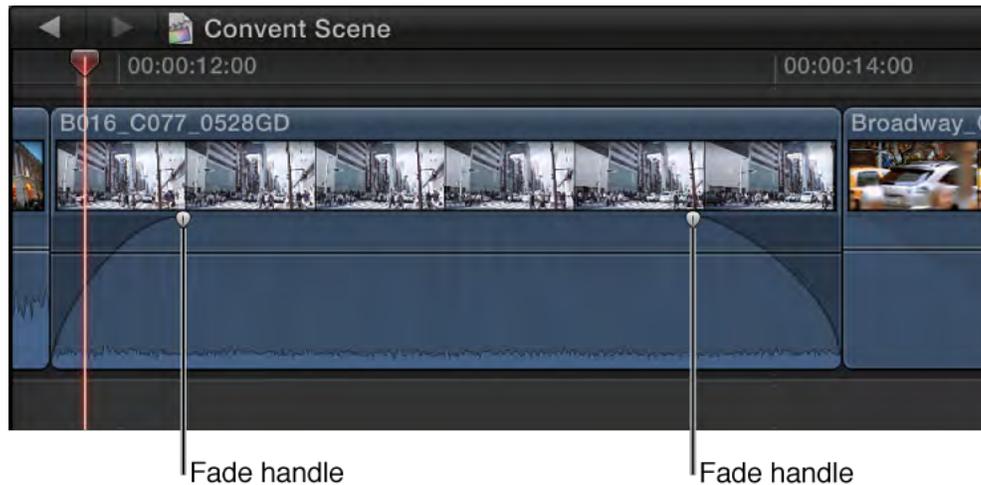


3. To delete a keyframe, select it and press *delete*

Fade-Ins, Fade-Outs

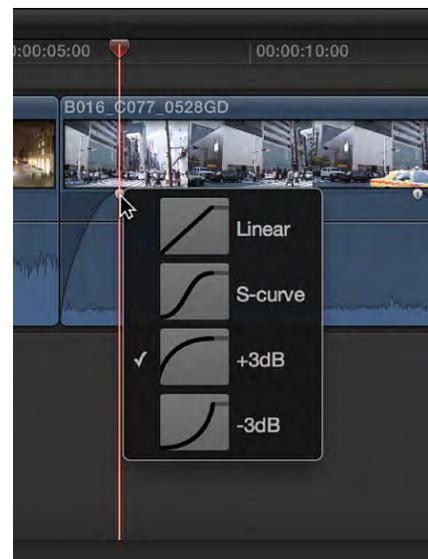
Fade handles are keyframes that are always present at the beginning and end of an audio waveform. They are an easy way to control volume fade-ins and fade-outs on audio clips, or during transitions.

1. To adjust, move the fade handles left or right to change the length of the volume fade



2. *Control-click* on the fade handle to change its shape

- *Linear*: Volume increases/decreases at constant rate
- *S-curve*: Eases in and out of the fade
- *+3dB*: Useful for quick fades
- *-3dB*: Best for transitioning between two clips



Adding Outside Sound / Music

1. Click the Music and Sound button in the toolbar



2. In the Music and Sound browser, select the source of your audio file (if the folder that holds your audio is not visible, drag it into the browser)
3. *Double-click* on a file to preview it in Final Cut
4. Drag the desired sound file or files to the timeline

Recording Live Audio

1. Go to: Window > Record Audio
2. Select an option from the input device menu that results in moving audio meters
3. To adjust volume, move the input gain slider left or right, using the audio meters to judge correct levels
4. To begin recording, press the record button
5. To finish recording, press the record button again

Click the Record button to start or stop recording.



Synchronize Clips

If you have multiple clips from the same scene that you'd like to play together, you'll want to synchronize them--this is only possible if selected clips have audio waveforms.

1. In your **Browser**, select the clips you want to synchronize
2. Go to: Clip > Synchronize Clips
3. A new "Synchronized Clip" will be created in the **Browser**, along with the original clips

Match Audio

If you have two or more clips that need to sound similar to each other (for example, if they were recorded in different environments) you can match the EQ of one clip to another.

1. Select the clip with the audio that needs to be matched
2. Go to: Modify > Match Audio
3. Select the clip with the desired sound
4. In the **Viewer** select "Apply Match"

Adding Titles, Transitions & Effects

To begin, you should open your **Inspector** by clicking the Inspector button on your timeline.



Click the Info button to open the Info Inspector.

A window will open to the right of your **Viewer**. The **Inspector** tool lets you adjust the settings on any component on the **Timeline**, including video, audio and effects. To change which inspector is open, select a button at the top of the **Inspector** window.



Adding Text

1. Select the Titles button on the toolbar to open the Titles browser



2. On the left side of your Titles browser you'll see categories to choose from, and on the right side you'll see preset text-elements to include (opener, credits, lower-thirds, etc)
3. Move your skimmer across individual titles to preview them
4. Find a title you like and drag it onto the **Timeline**
5. In the viewer, *Double-click* on the text to edit it; when finished, select the **Timeline** to finish editing
6. You can change font type and size, spacing and other settings from the Text Inspector
7. If you want to lengthen or shorten the time the text is on-screen, adjust it like a video clip on the **Timeline**

Adding Transitions

1. Select the Transitions button on the toolbar to open the Transitions browser



2. On the left side of your Transitions browser you'll see categories to choose from, and on the right side you'll see transition elements
3. Move your skimmer across individual transitions to preview them
4. Find a transition you like and drag it onto the **Timeline** between two clips, or at the beginning or end of your project
5. To adjust the length of a transition, drag the end left/right on the **Timeline**
6. You can also adjust transition settings from the Transition Inspector

Note: There are some common uses for certain transitions:

- Fades tend to signal an end
- Dissolves often signal a change in time
- Simple cuts (no transition) are always a good way to go
- Flashy transitions like "Flip" should almost never be used on professional video

Adding Clip Effects

1. Select the Effects button on the toolbar to open the Effects browser



2. On the left side of your Effects browser you'll see categories to choose from, and on the right side you'll see individual Effects (audio effects are below video effects)
3. Move your skimmer across individual effects to preview them
4. Find an effect you like and drag it onto the desired clip on the **Timeline**
5. To adjust effect settings, find the effect under the Video Inspector (for video effects) or Audio Inspector (for audio effects)

Note: Transitions, effects and flashy titles are fun, and can be used very effectively. However, don't go crazy--only use an effect when it's crucial to the project you're working on. Nothing says "amateur" like a video with too many effects, and there are too many people using Final Cut Pro X for the preset effects and transitions to ever look unique.

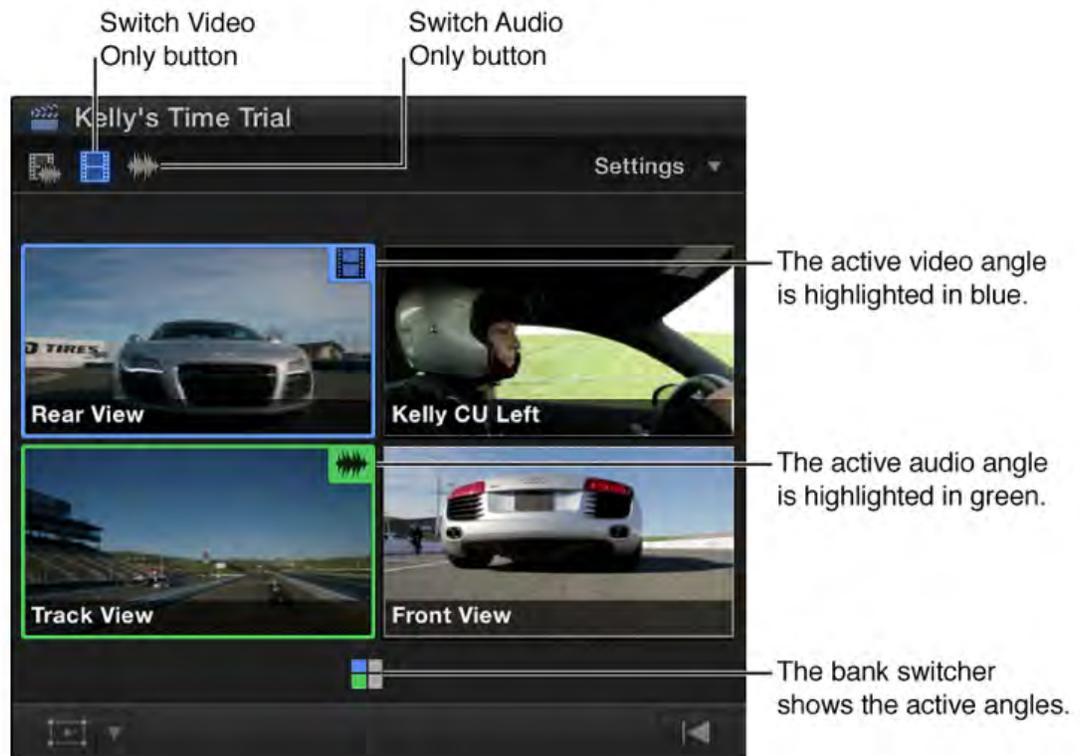
Advanced Editing Techniques

Below are just a few more advanced techniques you might need to use. This is by no means an exhaustive tutorial, but you can of course ask for help if you should need additional assistance.

Multicam Editing

Multicam editing allows you to switch between multiple clips that were recorded at the same time using multiple cameras. Selected clips must have synchronizable audio for this to work automatically.

1. In the **Browser**, select the clips you want to combine
2. Go to: File > New > Multicam Clip
3. Title your multicam clip, make sure “use audio for synchronization” is checked, and click “ok”
4. While playing the clip from the timeline, use the Angle Viewer to select between cameras in your multicam clip



5. You can select to switch between video and audio, just video, or just audio with the Switch buttons in the upper left corner of the Angle Viewer

Keying (Editing with the Green Screen)

Keying is an effect that lets you use the studio's green screen--or another broadly-colored background--and replace the dominant color with another video or image. To do this, it erases the dominant color and makes it transparent. You can then see any video or image placed behind it (underneath on the timeline).

1. Drag the effect called "Keyer" in the Effects Browser (under the category "keying") onto the desired clip on the **Timeline**
2. If you're using the green screen for this, it should automatically detect the color to be keyed, and automatically apply the effect
3. Place the image or video you want in the background below the keyed clip in the **Timeline**
4. If you need to adjust the settings, do so in the Video Inspector

Note: There are many other techniques and functions in Final Cut Pro X. The more you use it and experiment with it, the faster you'll learn it. Don't forget the Undo command (*Command+Z*) and that you can always ask us for help!

Exporting Final Video:

1. Go to: File > Share > Master File (default) or press *Command+E*
2. A box will appear--edit any information (title, description or creator) by clicking and typing
3. Click "Settings" at the top of the box
4. Make sure the Format selected is "Video and Audio" and the Video Codec is "H.264"
5. Click "Next," name your file and then click "Save"

Your file may take some time to export, so don't close the program until it's done. You can check your progress by viewing the **Background Tasks** window, which you can access by pressing *Command+9*. If "sharing" is "Idle" your file should be done.

THE ORDER OF EDITING

1. Put together clips to make sequences
2. Adjust audio levels

This is called a **ROUGH CUT**

3. Add B-roll
4. Add text

This is called a **FINE CUT**

5. Create effects
6. Insert transitions
7. Add music
8. Final audio balancing

This is called a **FINAL CUT**

TIPS FOR GOOD EDITING PRACTICE

Don't Distract Your Audience from the Subject

Most of the time, you want your audience member to forget that someone had to edit what they're watching. This will take you a long way towards creating a professional-quality video. That doesn't mean edit less; it means edit effectively. As you learn how to do this, here are some tips for starting out:

1. Get Good Footage

In order to make a great video, you need good footage with good audio. You can only do so much to fix up a mediocre shoot.

2. Get Good B-Roll Footage

B-roll is the video footage that adds visual detail--this might be an establishing shot of the filming location, detailed shot of the people, places or objects, or footage of people doing actions related to the main story of your film. B-roll is a great way to create transitions, but it's also sometimes necessary to keep your audience visually interested.

3. No Jump Cuts!

A jump cut is when you cut from one clip to another, and the environment doesn't change but the subject has. This happens a lot when editing out sections of an interview. This will be distracting to your audience, so you'll want to soften the transition with a fade or with B-roll.

Changing Camera Angles

When you move the camera between shots, or switch between cameras, you want to make sure that there is a notable difference in the angle at which you're catching your subject. 45 degrees is a good minimum. Otherwise, you'll end up creating a cut that looks like a jump cut, and this will distract your viewer.

Cut on Motion

You'll have more subtlety in your transitions if you tend to cut from movement (like a head turning) to other movement (like a door opening).

Change Focal Lengths

A great way to switch between shots of the same subject is to cut between shots with different distances. For example, you can often cut from a medium shot to a close up without it seeming like a jump cut.

Wipe

If someone or something moves in front of the camera, this is a good time to make a cut--it's a natural transition that will be less distracting to your viewer.

Continuity

Make sure that when you edit two clips together that there are no sudden changes in the subject or environment. You don't want to cut to a clip where your subject is no longer holding her clipboard, the sun has suddenly changed position, or a the minute hand on a clock in the background has moved halfway around (as a general rule, try not to film with clocks in the background unless they serve a purpose).

4. Make Every Cut Intentional

Make sure that every cut and transition you use, you use for a reason. This will help your final product to be focused and concise.