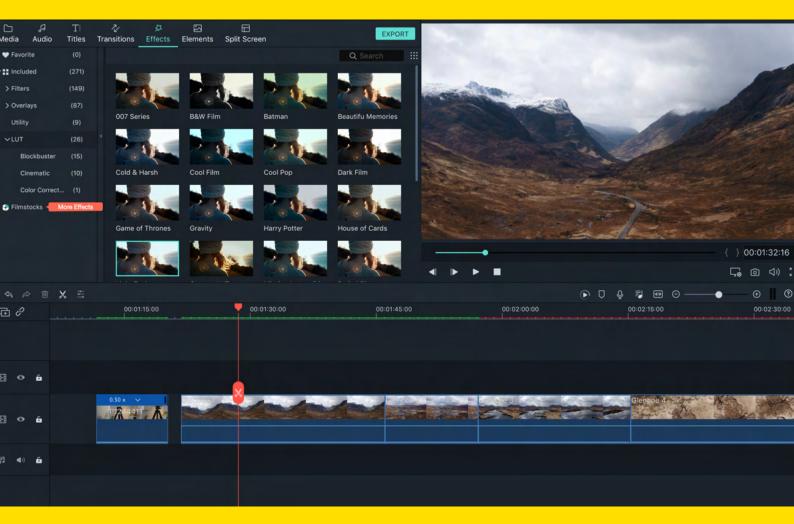


AN INTRODUCTION TO, AND COMPARISON OF, VIDEO EDITING SOFTWARE





### IDENTIFY YOUR NEEDS

Editing...a necessary evil or the best part of the creative process?!

Confession time...back in the day, editing felt like a bit of chore! A decade later however, not only is it one of the most rewarding parts of the creative process, but one of the most important parts. You see, an understanding of what you can do in your edit defines not only how you edit but ALSO how you shoot.

Everyone's needs are different however, so for some, \$299 Final Cut Pro X might be a necessity where as for others, free iMovie will more than suffice.

In this guide we breakdown the key features we look for in editing software to help you identify your own needs and wants. On the next page we summarise the key features of 6 popular video editors.

### SOFTWARE COMPARISON

Software Price Operating System	Apple	Apple iMovie Free Mac	Wondershare FilmoraX \$69.99 Mac/Windows
	Final Cut Pro X		
	\$299.99		
	Mac		
Green Screen	Yes	Yes	Yes
Proxy Editing	Yes	No	Yes
HEVC/H.265	Yes	Yes	Yes
Masking	Yes	No	Yes
Lens Corrections	Yes	No	Yes
Audio EQ	Yes	Yes	Yes
Audio Noise Reduction	Yes	Yes	Yes
Video Stabilisation	Yes	Yes	Yes
DVD Authoring	Yes	No	Yes
Colour Tools	Yes	Yes	Yes
LUT Support	Yes	No	Yes
Screen Recorder	No	No	Yes
Split Screen Presets	No (1)	Yes	Yes
Picture In Picture (PIP) Presets	No (1)	Yes	No
Motion Tracking	Yes	No	Yes
Optical Flow	Yes	No	No
Multicam	Yes	No	No
360 Support	Yes	No	No
Smooth Time Remapping	Yes	Yes	Yes
Keyframing	Yes	No	Yes
Video Noise Reduction	Yes	No	No (1)

	Adobe	PowerDirector	Blackmagic
Software	Premier Pro	19 Ultra	DaVinci Resolve
Price	\$20.99/month	\$99.99	Free
Operating System	Mac/Windows	Mac/Windows	Mac/Windows
Green Screen	Yes	Yes	Yes
Proxy Editing	Yes	Yes	Yes
HEVC/H.265	Yes	Yes	No
Masking	Yes	Yes	Yes
Lens Corrections	Yes	Yes	Yes
Audio EQ	Yes	Yes	Yes
Audio Noise Reduction	Yes	Yes	Yes
Video Stabilisation	Yes	Yes	Yes
DVD Authoring	No	Yes	No
Colour Tools	Yes	Yes	Yes
LUT Support	Yes	Yes	Yes
Screen Recorder	No	Yes	No
Split Screen Presets	No (1)	Yes	No
Picture In Picture (PIP) Presets	No (1)	Yes	No
Motion Tracking	Yes	Yes	Yes
Optical Flow	Yes	No	Yes
Multicam	Yes	Yes	Yes
360 Support	Yes	Yes	Yes
Smooth Time Remapping	Yes	No	Yes
Advanced Keyframing	Yes	Yes	Yes
Video Noise Reduction	No	Yes	No

### **OUR RECOMMENDATIONS**

### FINAL CUT PRO X

\$299 lifetime licence Mac only

If you have a Mac and are looking for professional software then FCPX is great in our opinion. Thanks to its clean, intuitive user interface, it's super fast to edit with FCPX. At \$299, it's expensive but includes all the features you will need for pro-level editing. In the 8 years we've been using it, we have enjoyed a constant stream of upgrades to the software with no extra payment required.





#### FILMORA 11

\$69.99 lifetime licence Mac & PC

We are big fans of Filmora 11. This established, refined software is a pleasure to use compared with more traditional editing software. It's stripped down enough to be super user-friendly for beginners yet is packed with professional features like proxy editing, video stabilisation, lens corrections and advanced colour tools. In our opinion, this is one of the best value video editors on the market.



#### **iMOVIE**

FREE Mac only

Great entry-level software with plenty of room to grow with the likes of green screen and picture-inpicture functionality. Definitely a great starting point for Mac users.



### **OUR RECOMMENDATIONS**

### **PREMIERE PRO**

\$20.99 / month Mac & PC

Industry standard editor from Adobe most commonly compared with Apple's FCPX. Does everything you could want from an editor, especially considering it's seamless integration with Adobe After Effects (motion graphics/FX software). Expensive though and not available as a one-time payment. When packaged with After Effects it's in the region of \$50/month. For PC owners who can't use FCPX, we recommend taking a look at the next two options before committing to Premiere Pro.



FREE TRIAL

### **POWERDIRECTOR 19**

\$99.99 (lifetime licence) Mac & PC

Very impressive software with some of the highest specifications as you can see on our comparison charts. Extremely established with a considerable library of support materials online. 'Ultra' version with fewer features is also available for \$99.99. Available on Mac as of 2021.





FREE TRIAL

### **DAVINI RESOLVE**

FREE / Mac & PC

Extremely powerful video editing software with probably the best colour correction/grading options out there. Not the most user-friendly software it has to be said but put in the hours to learn it and reap the benefits. Plus, amazingly, it's free!



FREE TRIAL

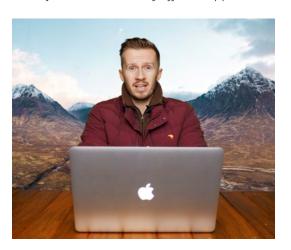
ONE

# Chroma Key

## Surprisingly simple and available with most editing software!



Before the chroma key effect is applied.



After the chroma key effect is applied.

Green screen (chroma key) functionality allows you to 'key out' the green background in a classic weather forecast type setup. It's surprisingly easy to do if you have a well illuminated green background.

Place your green screen clip on the primary storyline and place a background photo under it on the timeline (see below). Apply the chroma key effect and the software will remove all the green pixels to reveal the background photo underneath.

Watch our green screen tutorial HERE!





Photo of Glencoe placed under the primary storyline in FCPX

TWO

# Proxy Editing

## Computer struggling? You could buy a new machine OR better still, save your cash and do proxy editing!

Video editing is about the most CPU intensive activity you could ask of your computer. Often things start out okay when you import footage but add some effects and transitions and things can start to grind pretty quickly.

Rather than spend a small fortune to upgrade your computer every couple of years, proxy editing is a better option. It's very simple - the editing software creates lower resolution duplicate video files that are used solely for the purpose of editing on the timeline. Come the time of export, the original high resolution files are pulled back in for the highest quality output.

The only drawback is the extra hard drive space required to store the proxy files but these can be deleted once the project is finished.

THREE

## HEVC/H.265

Worth checking your editor supports this file format if you have a GoPro action camera or a DJI drone.

High efficiency video coding (HEVC/H.265) is an advanced video coding standard capable of delivering high quality video with smaller file sizes. Whilst H.264 remains the most commonly used standard, GoPro and DJI are using this codec with some of their cameras so it's worth checking that your editing software supports this file format if you have one of these cameras.

FOUR

# Masking Tools

## Advanced creative opportunities (but not essential for many users).

Masking tools allow you to layer two different video files and then cut out a section of the top layer to reveal what is underneath. Professional editors allow custom shape masks to be created in addition to the ability to feather the edge of the mask.

Whilst entry-level software may have masking features, it may restrict the masking to predefined shapes.



Check out this video to see how we use custom masks in <u>FCPX</u> to remove unwanted objects from the table!



Masking is certainly a more advanced editing technique that you don't need to concern yourself with if you are starting out. That being said, <u>Filmora</u> does a good job of integrating masking effects in a user-friendly, accessible way.



ABOVE: Screen capture of Filmora's shape mask tool

FIVE

## Lens Corrections

### Own an action camera? You're going to need lens corrections!



GoPro headshot before FCPX de-fisyeye effect is applied.

Barrel distortion (fisheye) is particularly common with the wide-angle lenses found on action cameras and drones. Sometimes it's not that noticeable but it can distort the features of the face (as you can see to the left) and if there are straight lines in your frame (e.g. the patio doors in the photos below), it can be desirable to remove the curvature in your editing software.

Having lens corrections built-in to your editing software is much more convenient than processing the file in a 3rd party software or tracking down a de-fisheye plugin.

In the example below we used <u>Premiere Pro</u>'s built-in GoPro lens distortions to straighten out the shot's perspective.



GoPro headshot after FCPX de-fisyeye effect is applied.

Look at the straight lines in the patio doors...



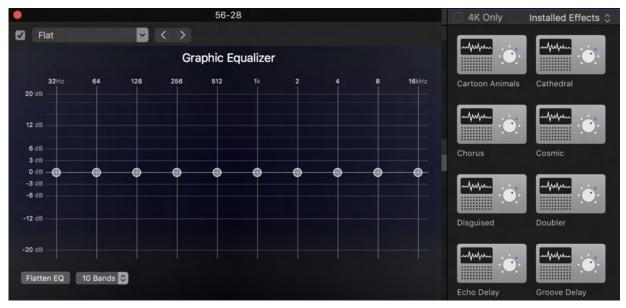
Before lens correction

After lens correction

SIX

## Audio Equalizers

#### It's not just about the video!



Some of the audio effects available with FCPX

Whilst your priority for video editing will in all likelihood be precisely that...video editing, spare a thought for the audio in your project. All editing software comes with basic audio control but if you're looking to do anything more creative then do check if your software meets your expectations. Personally, we rarely used anything but the most basic of audio controls with the exception of the following - audio noise reduction.

SEVEN

## Audio Denoiser

#### A life saver!

A common problem when recording audio is unwanted background noise, e.g. air conditioning hum, wind noise, road noise etc. Some video editors have an audio denoiser that helps remove these unwanted sounds. It's been a life saver for us on more than one occasion!

EIGHT

## Video Stabilisation

## Turn jittery handheld footage into smooth cinematic footage!

By automatically cropping in on a video and repositioning the clip accordingly, video editing software can remove unwanted shake in footage by way of post-production video stabilisation. It's great for smoothing out handheld footage to give a more cinematic result. We also regularly use it on gimbal and drone footage that *is already* smooth but just needs that extra bit of help to make it super glossy.

Traditionally an advanced feature reserved for the likes of FCPX and Premiere Pro, video stabilisation is now quite common on most editing software. It's not always a miracle cure but used correctly, it's one of the most valuable tools in our editing workflow.

NINE

# DVD Authoring

#### Rapidly becoming a thing of the past...

If you do plan to create DVDs of your projects then do check if your software supports this as it's rapidly being phased out of circulation. Nowadays most TVs will allow you to plug a USB thumb drive into the back and play video files directly into the TV. We would recommend this method as the picture quality is much higher.

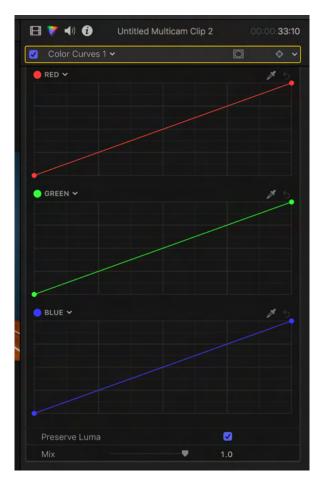
TEN

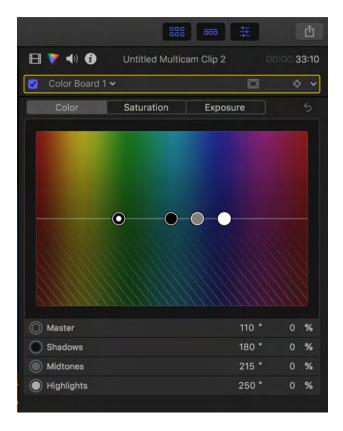
## **Colour Tools**

### An enormously complex (and arguably over-complex topic)...best to keep it simple!

Colour correction and colour grading are essential stages in the video creation workflow but they are not substitutes for filming well in the first place! As such, please don't get distracted in this enormously complex subject!

Look for basic colour correction tools like contrast, saturation and white balance adjustments. After correcting your footage you can then think about the grade, or 'look'.





Adding a creative colour grade to your project is a great way of finding your style. Our suggestion is to take screenshots of films you like and see if you can emulate their look. Are the blacks crushed or faded? Is there a colour cast in the image, e.g. an orange tint in the mid-tones or a bluish tint in the shadows?

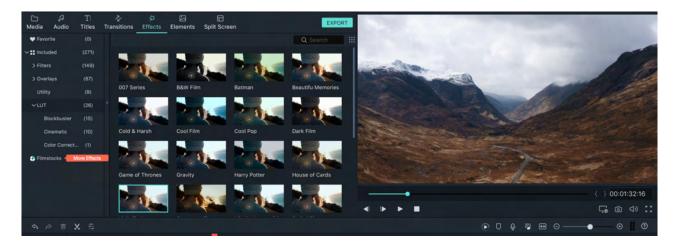
It can be quite difficult to create these looks yourself, hence the popularity of LUTs, our next tip.

ELEVEN

# LUT Support

## A bit of a phenomenon (or fad you could say) over the last few years but very useful nonetheless!

Look-up-tables (LUTs) are a one-click way of colour grading video footage. They are great fun and can produce some great results too. For increased chances of success, apply to good quality, well exposed shots that have, if required, already been colour corrected. Below you can see the selection of LUTs available in Filmora, named after blockbuster movies like *Harry Potter* and *Game Of Thrones*.



LUTs are also very useful when it comes to creating your own presets to speed up your editing workflow. Taking our YouTube videos as an example, the photo on the bottom right has our own LUT applied. Rather than grade each video we shoot, we simply apply our custom LUT.





Before After

TWELVE

## Screen Recorder

### Really handy for creators but not present in higher end software for some reason.

Hardly a deal-breaker when it comes to choosing your video editing software but having a built-in screen recorder is super handy especially if you are a YouTube creator. We regularly film the screen when doing YouTube tutorials but it's not an option in FCPX for some reason.

If you are using a Mac then Quicktime has a screen recorder but it's one more step and would quite simply be easier if it was built into the editing software.

Presumably perceived as a more consumer-end tool, this is one of several areas where the mid-range software beats the pro software in our opinion.



Filmora features a very handy screen recorder.

THIRTEEN

## Split Screen Presets

## Another handy feature not present in higher end software.

In researching various editing software, coming from a background of FCPX, we were pleasantly surprised by the number of time-saving features that entry-level and midrange software had that the pro-level software didn't. Split screen presets are one such example. Sure, you can manually create a split screen effect using transform, crop and masking effects but it takes time and when it comes to editing, anything that saves you time is only a good thing!

It's also true that the likes of FCPX and Premiere Pro have plugin packs available for purchase that increase the functionality of the software but (a) the good ones cost money, and (b) we've added 3rd party plugins to FCPX in the past that have crashed the software. So for the purposes of this discussion we are comparing editing software on a like-for-like basis.

Below you can see an example of split screen presets in Filmora.



FOURTEEN

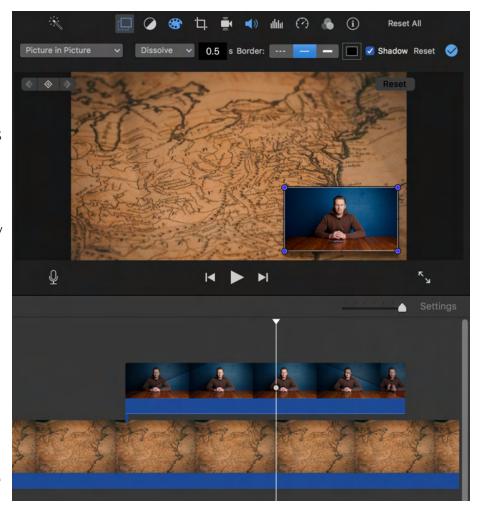
## Picture-in-picture (PiP)

## ANOTHER handy feature missing from pro software.

Much like split screen effects, picture-in-picture is simple enough to do with transform, crop and mask tools but if you're doing it regularly, this is a cumbersome way of doing things.

Free iMovie has a great PiP preset which I really wish they had incorporated in \$299 FCPX!

Once two clips are stacked, video overlay settings become available. Here you can select Picture in Picture and position and scale the uppermost clip. You can even make creative choices about border



thickness and drop shadow. <u>PowerDirector 19</u> also has a really useful PiP designer. Again, presumably perceived as a consumer-level feature, whilst there are plugins that can be used with the more advanced software, it would be nice if PiP was incorporated (in our opinion!).

FIFTEEN

## **Motion Tracking**

## Advanced functionality for seriously polished edits!

Motion tracking follows the path of elements within the frame so that you can 'attach' text for example to those elements. In the example below, the movement of the drone was tracked and the words "Mavic Mini" attached so they rise smoothly on the screen along with the drone itself.



SIXTEEN

## **Optical Flow**

#### Advanced slow motion effects.

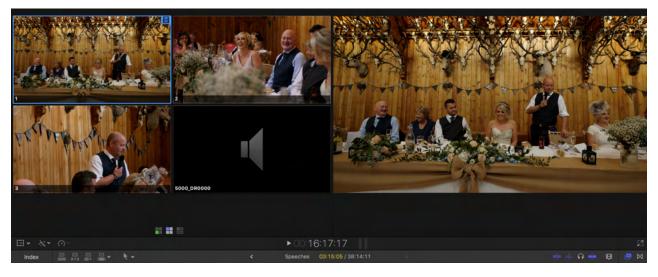
An advanced feature whereby the editing software creates new frames during slow motion footage so as to avoid jumpy looking video. This allows the footage to be slowed down to as much as 1% of the original speed. This effect was originally achieved with an expensive plugin called Twixtor but FCPX incorporated its own version called optical flow. Results can be mixed but when it works it can be quite amazing.

SEVENTEEN

## Multicam Editing

## Essential when editing music videos, weddings, events etc.

An advanced feature that allows you to edit multiple angles of the same thing at the same time. An example would be filming a concert from three different angles. A multicam editor will automatically synchronise the 3 angles by matching the audio waveforms of the individual clips. Once this is done, you can play the multicam clip, viewing all 3 angles simultaneously, cutting between the angles accordingly. It's a very efficient way of editing such a project.



Multicam editing is the main reason we settled on FCPX as our preferred editing software. In the above example, we have 45 minutes of wedding speeches filmed from 3 angles. Without multicam automation it would be necessary to manually try and match the individual clips - a tedious and time-consuming process.

When it comes to editing, simply play the multicam clip and the 3 screens on the left will play simultaneously. Each time you want to cut to a different angle, click on the desired screen and the cut will be made. This allows for almost real time editing of such a project. It's an amazing productivity gain so if you are editing such footage then you NEED multicam editing!

EIGHTEEN

## 360 Video Support

#### Probably the future...at some point...

We are big fans of 360 video and believe the creative opportunities afforded to filmmakers are only just starting to be explored. What we are not a fan of however is the editing workflow associated with 360 video files.

Typically it is necessary to edit 360 files in the camera manufacturer's app, export the files and then import them into your editing software. For the time being, this remains our preferred workflow however video editors are slowly introducing better 360 editing tools into their software.









NINETEEN

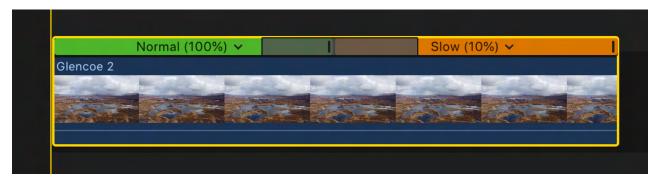
## Smooth Time Remapping

#### A favourite with action cam enthusiasts!

Quickly cutting from real time to slow motion or vice versa is a popular editing technique (think snowboarder doing a jump only for the footage to get really slow when the snowboarder is mid-air).

This can be achieved by simply cutting a clip and slowing down the second section. However the change in speed can be quite noticeable so a more professional look is achieved when there is a gradual transition of speed into the slower or speeded up section.

The screen capture below shows how this smooth transition from real time (100% speed) to 10% speed is depicted on the timeline in <u>FCPX</u>.



TWENTY

## Advanced Keyframing

## Manual control over the placement and timing of effects.

Let's say you want a blur effect to be applied 3 seconds after a clip starts. 10 seconds later you want to increase the level of blur and 15 seconds later you want to remove it entirely. This is achieved by setting keyframes on the effect. Typically a more advanced feature in editing software.



#### TWENTY ONE

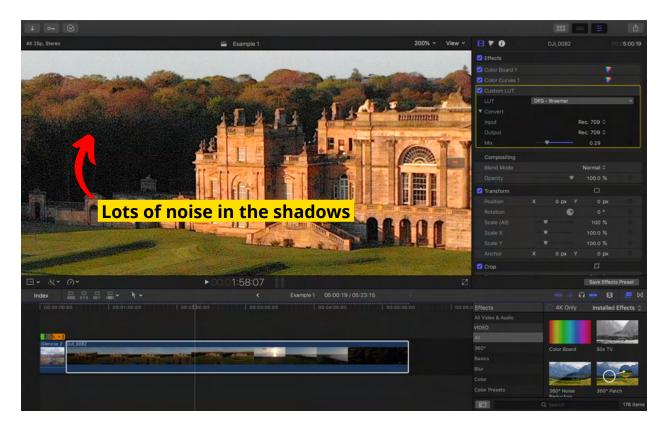
### Video Denoiser

#### Salvage grainy high ISO footage.

Cameras with small sensors (e.g. drone and action cameras) are always likely to produce more noisy/grainy footage than large sensor DSLR/mirrorless cameras. Take a look at the footage below from the Mavic Air and you'll see an example of this.

Matters get exponentially worse if you shoot on an ISO higher than 100 in low light conditions so in the event that you find yourself with grainy footage, video noise reduction can be extremely useful. It's been a life-saver for us in the past but it is extremely CPU intensive and will grind your editing to a snail's pace.

FCPX recently introduced their own video noise reduction but this remains an advanced feature typically reserved for more expensive software.



## It's what you do with it that counts...

In the same way that buying a camera doesn't make you a great photographer, buying editing software doesn't instantly make an expert at editing. The good news is that you can learn editing skills pretty quickly so be sure to keep an eye on our YouTube channel for future editing content.

Also, keep in mind that if you put garbage into your editing software you're probably going to get garbage out so keep building your camera skills as the more you can get right in-camera, the better your films will be!

### Other free software options?

In this eBook we have narrowed down the search to 6 established, user-friendly video editors that we think give you the best chances of success depending on where you are as an editor.

There are of course many other options that may be of interest so here is a list of some others to check out:

- Avidemux Free
- OpenShot Free
- Blender Free
- HitFilm Express Free
- Lightworks Free