

# Editing Home Video on a PC

## DIGITAL AND ANALOGUE

Presentation by  
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## 4 STEPS

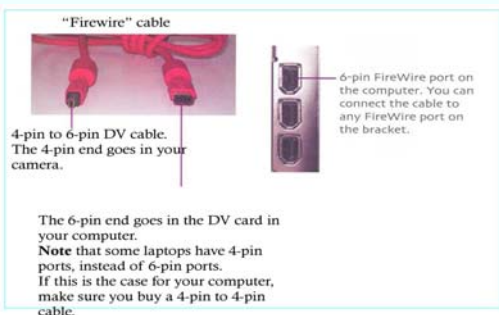
1. **“Capture”** your video from the camera to the PC.
2. **“Edit”** your captured video with software that can adjust sound volumes, insert fades and dissolves etc.
3. **“Rendering”** prepares your video to be printed in the format you choose.
4. **“Print”** your edited video in your chosen format.



## 1. CAPTURE - DIGITAL VIDEO

With a DV Camcorder the type of “Capture” card that you need in your PC is a “Firewire” card, sometimes known as an IEEE1394 card. You will also need a “Firewire” cable to connect your camera to the PC.

## CONNECTING CAMERA TO PC.



Microsoft have built some “Firewire Plug & Play” capability into Windows ME and Windows XP, at - “Programs” - “Accessories” - “Windows Movie Maker”.

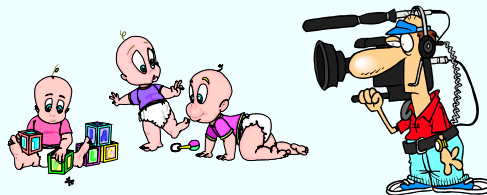
We will be looking more closely at “Windows Movie Maker”, as this program is likely to be available to you with no further outlay.

However there are limitations to the output capabilities of Windows Movie Maker so most people choose to buy a "Firewire Card/Editing Software" bundle.

There are many such programs available and the quality has improved enormously over the last five years.

For the really serious editor, a graphics accelerator card takes a lot of stress off your PC.

## CAPTURING ANALOGUE VIDEO



As analogue video was recorded with an older technology, it has to be "Digitised" before it can be stored on the hard disk, then edited, rendered and burnt.

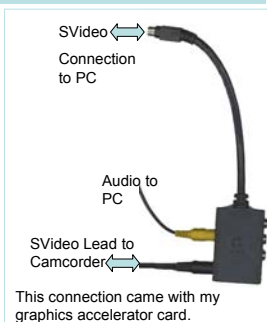
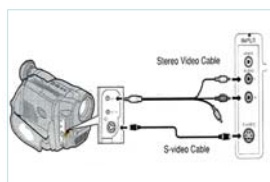
There are some very new breakout boxes on the market that are compatible with all analogue and DV video equipment.

These range in price from approx. \$200 to \$2,000

The cheapest way to convert analogue footage to digital may be through your capture or Graphics card.

Connect your Analogue Camcorder via an **S-Video** connection and the audio via your PC's soundcard.

## ANALOGUE CONNECT TO PC



There is a range of video cards with Video In – Video Out (VIVO) connections. Check your manual to see if your card has these connections.

This method requires a reasonably fast processor,

1.5 GHz or higher,

and a lot of memory,

512 MB of RAM is recommended.

There are some problems with converting analogue to digital.

When capturing uncompressed video, the main problem lies in the sheer volume of data. This will put a strain on all but the most competent systems. On the other hand, if you capture to say, MPEG, this may compromise quality as not all frames are able to be processed.

So the higher the quality, or movie resolution, the more likely your system will be to start to “drop” frames, giving your video a “jerky” effect. Therefore you may have to compromise quality to obtain a smooth frame rate.

However an editing program will give you several options for capturing the film at various settings.

It will pay you to “capture” and “save” a small section of film at different rates to determine the effect that suits you.

You may be able to convert your old analogue tapes using the video-in ports of a DV Camcorder. Simply record your analogue footage to a DV tape, then transfer this using a “Firewire” cable to your PC.

I have never done this and it does assume that you have a DV Camcorder at your disposal, and that it has a video-in port.

## EDITING

**All the following remarks apply to both digital and analogue as the analogue video has been digitised on capture and is now treated exactly the same as digital.**

Editing is either the best part or the most frustrating depending on how creative or patient you are. But.....

h'mmmm

Before you begin, think about the audience who will be watching your masterpiece.

Very few people will willingly watch home video, especially if it rambles across two continents. Keep that one to watch with your travelling companion.

During your trip you probably had lots of highlights. These are the ones to edit into a great video.

Editing digitised video is called non-linear editing as against linear.

Linear editing is what you do when you remove the commercials from a TV programme. Or when you simply remove the sequence you filmed of the floor and your feet, when you forgot to turn the camera off.

## NON-LINEAR EDITING

With non-linear editing you can change the sequence around to make the video more interesting, or add pieces in the middle to make the video “story” flow better.

It is important at this stage to have some ideas about the direction your video will take, and it's a good idea to have a beginning, a middle and an end mapped out.

You can removing unwanted sections, crop and split clips, add transitions between events, add titles and credits, include a soundtrack if you wish, and finally add music.

And remember the golden rule.  
“Keep it short and if possible -  
snappy”



## RENDERING

This is a process carried out by your video editing programme, that basically prepares your video for the type of outcome you intend using, and gives you options of compression, frame size, data rate etc.

The finished video cannot be made into a tape or DVD without rendering it first.

## PRINTING

Your editing program should allow you to print your video in your preferred medium such as CD, DVD or tape, or the rendered video can be imported to a burning program capable of burning video.

## BURNING YOUR DVD

Some of these programs allow you to insert menus with multiple choices if you want to put more than one video on the one disc.

Although DVD's will not have a long shelf life at least you will be able to update your precious memories at a later date.

