

JIM DOES VIDEO

Or a brief Technical Session on video using a DSLR/CSC camera

Essentials

- A camera. Obvious, but actually while this session is about using DSLR or CSC cameras the bulk of the advice also applies to any suitable capture device, e.g. an iPhone
- A microphone. Perhaps not so obvious. Most/all cameras capable of shooting video have in-built microphones. These are best avoided. On some occasions they can be useful but sound quality, handling noise, polar pick-up pattern, etc. is less likely to be satisfactory
- A storyboard. Unless all you plan doing is capturing your children/grandchildren playing you need a good idea of the story you want to tell
- A fast memory card, probably two or more, and high capacity. Video files use a lot of memory
- A spare battery. You'll be using Live View on a DSLR which gets through power much faster than you might think; CSC's might be better but a spare is still worth having
- A reasonably powerful computer; at least a multi-core i5 processor and 8GB of RAM
- Editing software. Apple computers come with iMovie pre-loaded, Windows 10 has something similar within its Photos app. There are plenty of free packages and paid-for software to choose from too

The Camera

- Read the Manual! You might be very familiar with your camera as a stills device but video may well require some familiarisation
- Decide how you want to use the final video. I would recommend shooting at Full HD 1920 x 1080, it's easy to downsize post-edit if that's needed whereas upscaling rarely looks good
- Think about lens choice. For most uses a zoom will be preferable to a prime; a standard zoom of say 24mm - 70mm (full frame equivalent) will be fine for most purposes. Even better if it has a constant aperture
- Auto Focus may or may not work (probably will with a CSC) and if it does the focus motor noise may be intrusive
- Practice, practice, practice. You need to feel confident. While filming make any changes in zoom/pan/tilt etc gently and fluid unless you are wanting a particular effect

Memory

- Fast. You want sustained write speeds of 30MB/s or 60MB/s if you want to record at the highest possible quality. NB: cards usually quote the READ speed as a number which isn't what you want to know. With SD cards look for U3 (minimum 30MB/s); V30 or V60 (30 and 60MB/s) on cards specifically rated for video.
- Large. On my Nikon D750 the maximum movie file size is 4GB; at this point it stops recording but you can restart and make a new file also up to 4GB and so on. At the highest quality this translates to 10 minutes of recording per file
- Quality. Read reviews

The microphone(s)

- The simplest choice: a hot-shoe mounted gun mic. Have a look at <https://www.gear4music.com/Microphones/video/rode>
- To get an appreciation of what difference a good mic makes there is a good video at https://youtu.be/o7J_AkMX8BY
- Camera-mounted mics are only really good for capturing audio from a couple of metres away, to record good audio from further away you need to get the mic(s) as close as possible to the source. There are various options;
 - Radio mics. Various firms, e.g. Rode, offer versions that have the base station mounted on the hot shoe, are battery powered and allow the camera to roam freely. Prices from £190 for this solution
 - Portable audio recorders. These are fairly small, often have stereo mics built-in, and cost from around £85. Note that you will need to re-sync the audio in post production, which may be one of the few reasons to use the built-in camera mic. Some can be mounted on the camera but are not intended to feed audio to the camera
 - A mic on a pole, held by an assistant and wired to the camera







Editing Software

- Try using the editing package included with your computer before looking elsewhere
- Next option is to Google 'Free editing software'. Some is completely free while some can be tried before purchase, e.g. Adobe Premier Elements. You get 30 days with this one
- Read reviews before choosing
- Whatever you decide to try or buy do check the minimum hardware spec needed, e.g. you might find that Intel i5 processors (quite common) are not powerful enough for some. Some years ago I had a custom-built PC running an i7 CPU with a fast system hard drive and two fast media drives, lots of RAM, a high spec graphics card and a dedicated AV in/out board using Adobe Premier Pro. Lovely to use, expensive, and even then it sometimes struggled with complex stuff.

The Storyboard

- Just as some forward thinking is very helpful when making an AV so the same applies to making a video presentation only more so
- Decide what the story is, how it will start, what will make up the bulk of the show, and how you will finish it off. Think of it like a regular TV programme. You will probably want to add, as a minimum, an opening title and a closing credit slide
- Will you be using only location audio or want to add effects, music, voice-overs, etc. Consider recording some 'wild-track' audio
- Think about breaks in recording, many cameras restrict video files to 4GB which can equate to only 10 minutes
- If you've never done one before think in terms of a child's story book, in pictures. You are telling someone else a story so make sure that you get all the main points across. That's where the storyboard comes in, it makes you sure you haven't missed an important part during the shoot

Camera Techniques



To Hold or Not To Hold

- Sorry Shakespeare!
- In my view DSLRs are not the ideal shape for video filming, great for stills but rather awkward for smooth movement. CSCs are better being smaller and lighter as a rule but still have a similar form factor
- While you may be able to use the camera in viewfinder mode I feel it is better to use the monitor for most of the time
- If/when using a tripod it is obviously best to have a video head with fluid damping but a decent stills head can be fine if used carefully. If a three-way version I suggest locking the horizontal axis. It is important to make sure the head is level. That way when you pan the horizon should remain horizontal
- When hand-holding, and unless you're wanting wobbly-vision, try to keep it horizontal side to side; you also want to avoid rapid movements of any sort which can be very disturbing for the viewer.
- Having a manual zoom should reduce the temptation to repeatedly zoom in and out. Nothing wrong with a zoom in or out but do so with a purpose

Focus and Zoom

- Your chosen body/lens combination may offer auto focus while recording, but what if it doesn't?
- Use a tripod and focus, if necessary, manually
- Panning, moving, zooming and trying to focus while hand-holding is challenging
- Set-up variations as separate shots and edit together in Post
- When zooming in or out you will probably want to change the framing too

End of Part One

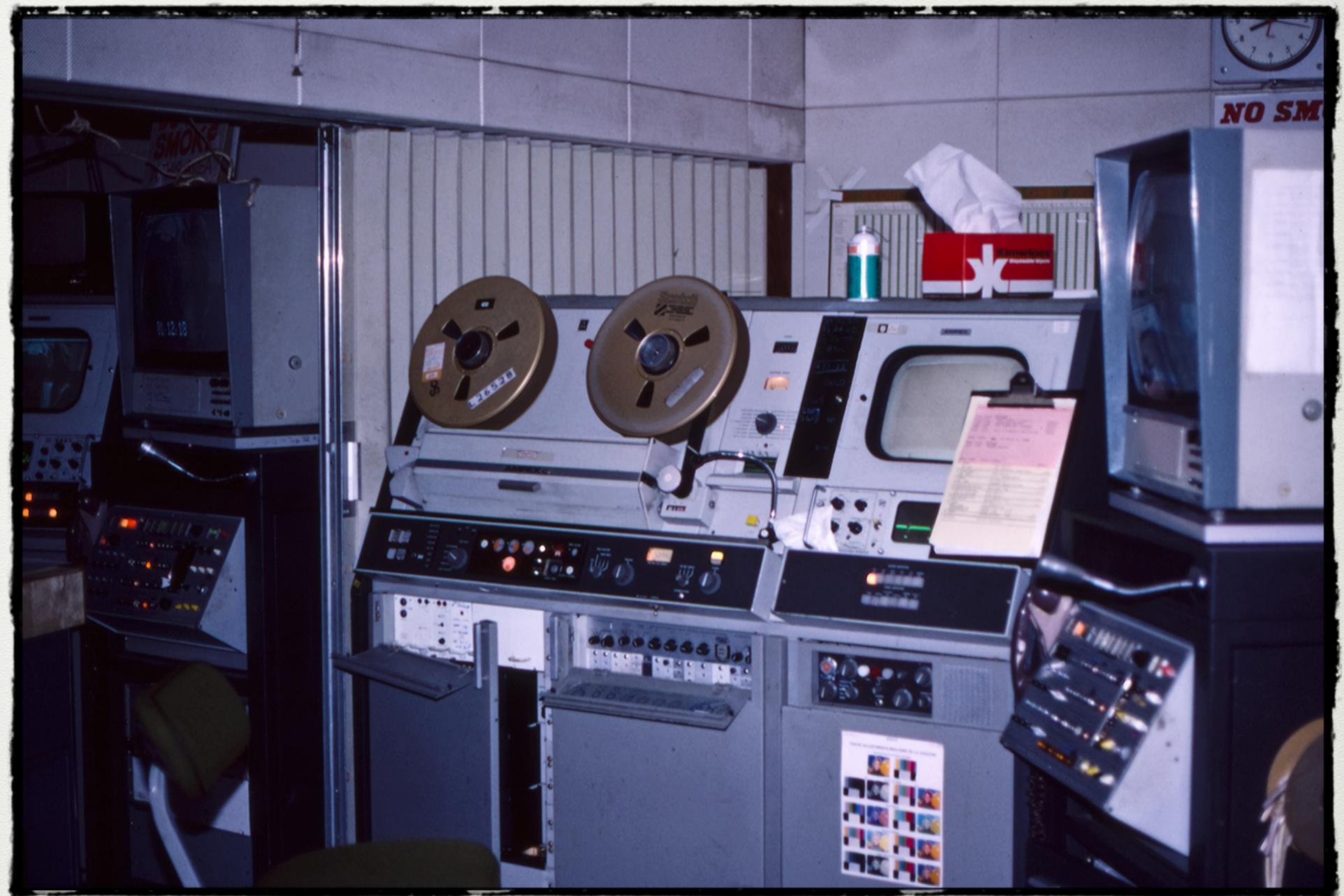
Questions?

Part Two

Demo Shoot

- Short item needed for demo edit
- So - the Storyboard!
 1. Opening shot of fire
 2. Covering WA to include walk away
 3. WA walk into kitchen
 4. Medium CU at sink
 5. CU of fire replacing tank etc.
 6. CU of Remote
 7. MS of working fire

Editing
or
Post
Production



Editing Demo

- I'm using an iMac so this demo is of iMovie but the basic principles are the same even if the approach is different with other packages
- For the sake of simplicity and time I've pre-loaded the material
- Not intended as an in-depth tutorial!