

# SEFM *Lockdown*

*Issue 2*

## Important Message to Club Members

From your Chairman

We live in exceptional times. COVID-19 is a massive catastrophe for a socially-based club such as ours. I have decided that this is the right time to write about the future direction of the club alongside Geoff's latest Newsletter.



Even without the virus, our membership has been falling and fewer films have been made. We all enjoyed and appreciated the series of practical evenings organised by Geoff and Ken, but how many of us were then inspired to use that technical knowledge to make more films?

In normal times we would have had an AGM to discuss these matters. The AGM will not take place this year and as long as there is no objection from members, the current committee are happy to continue in their current roles until a new AGM can be held.

This season would normally end on July 13th. Wyburns School is of course not currently available to us as a meeting place. We are awaiting confirmation from the school but it is likely that the school would not risk our return until next year, in case there is a second wave of the virus. On this basis the committee will be looking for an alternate venue.

For a couple of months Geoff Partridge has been hosting video

conferencing sessions on Zoom. He has recorded some of these sessions (if anybody who has not participated is interested in seeing how they run then just contact him). He has emailed everybody separately with advice on joining these meetings and 12 members have logged on. I would like to thank Geoff for all his work in administrating this new branch of the Club.

Up to now these Zoom meetings have not been structured as Club meetings. In the foreseeable future this will be the only way we can now run the club. We do not think it will be possible to use Zoom to stream films from members PCs so we plan to make more use of the Club's YouTube channel so that members can share their films in a private group. Over the next few weeks the committee will be planning next year's Zoom based programme. We would welcome ideas from everybody on subjects for these socially distant, future meetings. There is no reason why the Zoom meetings cannot continue throughout the next three months during the normal closed season.

I know there are a few members who will not be comfortable with this new approach and have no wish to be involved in video conferencing. We hope to keep those members informed about Club activities by means of social media (Facebook and Club Website) and Geoff Partridge's excellent Newsletter.

It is important that you do not feel excluded from the debate on how the Club now moves forward.

So I welcome any ideas and suggestions that can keep us going because without the involvement of all members the Club could fold.

So I hope you all enjoy the Newsletter and can find some time to make a small contribution to the next edition. Whilst we are restricted in our own film making projects let's keep in touch and look forward to a time when we can all get together and start making films.

Geoff Woolfson - Chairman

# From the Editor

Welcome to the second issue of [SEFM Lockdown](#).

Firstly, I would like to thank Geoff Woolfson for his opening letter.



We have had some great weather over the last month and I have been busy in my garden removing my pond, which I had made out of concrete. This left a hole in the ground, but when I dug the hole for the pond I had used the soil to raise another part of the garden. So I moved it back again. My garden has a lot of heavy clay so, together with the broken up concrete, I also used some of this to fill a 4 yard skip.

Why remove the pond? I have come close to falling in it a couple of times recently and it was difficult to keep the pump and filters clean. It was also losing water. I fear I have left a couple of frogs homeless, although there were some around before I built the pond.

The weather has now changed a bit and I can justify some time indoors to put this issue together.

Our Zoom meetings have continued on a weekly basis and we have had a go at making a film. More on this in a later issue.

Due to finger trouble, forgetfulness and technical issues, the last couple of Zoom meetings have not appeared on YouTube. Apologies for this.

I have increased the font size and line spacing in this issue to make it easier to read on smaller screens.

I would like to thank all those that have contributed to the first two issues and for readers feedback.

Geoff Partridge - Editor

## In this issue -

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# The Ramblings of a Movie-maker

By Don Mouatt

Part 2

Picture - Don, Royal Signals

*(Editors note: 2020 is the 100th anniversary of the Royal Corp of Signals.)*

Having made what was undoubtedly a brilliant film about searching for the Yeti (see part 1) I rested on my laurels for the rest of my posting to Blackpool. I probably shot some other masterpieces but for the life of me I cannot remember any of them nor for that matter do I know where they are. For some strange reason my family couldn't either.

The former is not quite true because at that time I possessed one of my boyhood treasures, lots of toy soldiers, some lead and others plastic. I also had a few similar scaled artillery and armoured pieces. Anyway I made a film (no sound) of a battle moving the soldiers and tanks forward a little, each movement being filmed for a two frames take. I also painted a drinking straw grey and puffed cigarette smoke through it to look like the end of a barrel of a gun when firing. That involved a slightly longer take and I had to make sure that my face did not appear in the picture. The ensuing explosion was made by wrapping some sulphur and potassium nitrate in slightly buried toilet paper, setting it alight and cutting the resultant clips at an appropriate point. The only trouble with the whole film, apart from a lack of sound was that although I could move the infantry forward or backward they managed to do so without actually moving their legs. In the end I did not complete it because of those reasons. Apart from the satisfaction of achieving some creativity the whole thing was a complete waste of time.

In 1970 I was posted back to work in London but as neither myself or my wife wanted to live there we went in search elsewhere. My wife fancied Sevenoaks although she had never been there nor had she any connection, Just liked the sound of it, I think. After looking around for something suitable we realised that the location was unaffordable. One large Victorian house we visited had piles of logs stacked in the hall, something I have never seen before nor likely to in the future.

As a child I had happy memories of having holidays in Leigh-on-sea where my father had built a houseboat on Leigh Creek, After the war all the houseboats had to go and my father sold his for £100 which was quite a lot of money then. The houseboat was built to float up and down with the tide but the new owner had it towed across to the Medway. At least that was the plan but unfortunately it sank halfway across. Anyway we looked around Leigh where I knew houses were then more affordable and found my present one. I have now lived in it for 50 years come this August. It had at one time been a private maternity home. Apparently the matron or whatever she called herself would not let the husbands in to see the newborn child and of course the mother.

By this time I had discarded my old Boots cine camera in favour of a

Russian Quartz one which was superior but not wonderful and was still without sound recording. I had however also bought a Noris Synchroner projector which allowed a recording on a reel to reel sound recorder to be in sync with the projected film. This was quite good for up to say 10 minutes or so, I continued to use this for several years in one way or another.

One of my early films on moving to Leigh was a holiday one on a boat cruising along for a week on the Thames. The holiday was a bit of a disaster in that on the first day out the engine caught fire and we had to be towed back to the boat station. That same night whilst sleeping aboard at the boat station a storm caused water to seep down from the deck to our bed. The following day on a different boat we resumed our holiday and I was subsequently able to get some reasonable film material.

A few months after the holiday I saw a notice advertising a film show by The Westcliff Cine and 35mm Club (now SEFM) at what was the then Southend Library. I had heard of them but did not join because I assumed that the members were all very good film makers and well above my standard. However one of the films shown was the winner of the Hilton Cup holiday competition which covered a similar holiday to mine on the Thames. When I saw it I thought and I still believe rightly that mine was better and perhaps there was room for me in the club. At that show I sat next to a person I did not know, Paul Mercer but we got talking and both of us decided to join the club.

One of the early films that I made after joining the club and showed was animated and entitled "Pilot officer Prune VC" who spotted a U boat whilst on operations in a hot air balloon and whilst looking down accidentally fell out and plunged downwards. During the fall he transformed into a bomb which destroyed the submarine. It lasted about 9-10 minutes and I drew and painted on somewhere over 2,000 cells against various backgrounds a task which took me a couple of years. I built a camera rostrum with lights and each segment of the film was of two frames duration. Thus to get him walking etc. at least one cell per shot had to be exchanged and the background possibly wound along a little. I think the main claim to this cartoon was that I probably strained my eyesight as I had to wear glasses a few months after it was finished. When the film was shown

at the club I got an accolade from the then club President that “I showed promise” something I remember being said about my masterpiece “In search of the Yeti” I can’t remember where PO Prune came in the club competition. Probably just as well I don’t know what became of that film.

I think my breakthrough in becoming a bit better in film-making was when I purchased a Canon 814 and made a film about Trafalgar Square. I was later to purchase an even better one the Canon 1014 and also a sound recording Canon model. I was working very close to the Square and used to go out and film most lunch times. One of the sequences involved a bloke (a workmate) with a little box brownie and a tripod. He went through a number of motions before finally taking a photo of Nelson at the top of the column. When he clicks the camera to take the shot there is a lot of noise and Nelson starts to fall backwards. This is preceded by shots of people including a toddler looking up at Nelson. One of the onlookers was a policeman who obliged me. It was not until afterwards that I noticed a very nearby notice stating that tripods were forbidden. Another actual sequence was of hundreds of pigeons chasing a boy who was scattering bird food. This was an actual event, not staged. I also remember that because of redecorating in nearby Adelphi House where I was then working I had temporary use of a large room which looked out on Big Ben. On one occasion when it got dark early I set up a tripod to film Big Ben and the surrounding area and recorded a couple of frames every five minutes so that lights and other movements which in real time took a few hours unveiled themselves in a very short time. I hoped that my Director who was on the same floor did not come in. He didn’t and although the sequence turned out OK I never used it because it did not really fit.

If there is a further News letter I will recount the making of a few films that Paul Mercer who I had met in Southend Library collaborated in making some much better films.

# Seven Iconic Techniques in Filming

By David White

We all see those iconic filming techniques in regular use both on the big screen and small. For most viewers they pass them by without paying too much attention to the details of exactly what is going on, but the techniques used certainly draw us into the story. It is not always clear who first used certain cinematic techniques but we can see which ones are particularly loved by which directors. Here I look at some of these techniques and share my research to discover more.

1. The Dolly Zoom – used to create that fear factor, that unsettled feeling to tell you something bad is about to happen. The shot is an optical illusion caused by zooming in or out on the camera lens whilst tracking forward or backwards on a track. The end result being the foreground appears to stay static whilst the background enlarges or decreases in size depending on direction of zoom and travel.

It is also known by some as the Vertigo effect as it started in Hitchcock's 1958 film *Vertigo*. It requires a decent length track and zoom lens to pull it off to best effect which probably explains why it wasn't in use earlier. It is said the technique was first conceived by Romanian filmmaker Sirgiu Huzum but it was Irmin Roberts, a Paramount second-unit cameraman, in Alfred Hitchcock's film *Vertigo* that brought it main stream.

Steven Spielberg made use of it in *Jaws* and *ET* as did Martin Scorsese in *GoodFellas*, in the latter to give the feeling of the world closing in on Henry as his paranoia takes hold.

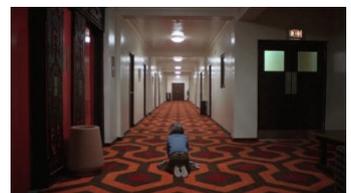
If you don't have the equipment to create the technique in the field, and whilst it won't be as good, you can create a Dolly Zoom in post-production if you have decent resolution film quality to allow post zooming, details can be found on following link:

[https://www.youtube.com/watch?v=h1QKFnzISPw&feature=emb\\_logo](https://www.youtube.com/watch?v=h1QKFnzISPw&feature=emb_logo)

2. The Panning Whip Shot – use this to create a sense of urgency and to quickly take attention from one character or movement to another. This shot is a simple panning at speed from one character to another so the eye is concentrating on one person (or action happening) and very quickly moves across to another actor taking the viewer’s attention from one event/person quickly to another.

This was often well used by director Paul Thomas Anderson and the technique also took away the need for a cut by, in effect, the pan becoming the cut itself. Often accompanied by the actor’s head or eyes moving in the direction of the pan and that being the start of the camera’s movement.

3. One-Point perspective – Stanley Kubrick used this technique of having a series of differing frames all having the same single point of perspective – see example shots below. When people talk of a Kubrickian style they usually mean this one-point perspective shot. It is also the use of very balanced shots with the left and right sides of the shot being in perfect symmetry often with the movement on the exact centre line e.g. a curtain opening on that exact vertical central position to reveal action behind again balanced around the central vertical line.



4. The Dutch Angle Shot – simply having the camera at an angle and a way to convey drunkenness, disorientation, confusion or maybe desperation. This method is explained fully by the following you tube video.

[https://www.youtube.com/watch?v=R9FUEScjB1U&feature=emb\\_logo](https://www.youtube.com/watch?v=R9FUEScjB1U&feature=emb_logo)

The Dutch angle has been in use since early cinematic days going back to the start of the 20th century but exploded into mainstream use in the 1990s and early 2000s appearing in many films including Mission Impossible and hundreds more. Overuse or using for the wrong reasons can create the wrong feeling altogether and should not be used to make a boring shot more interesting as many directors have fallen into the trap of doing.

5. The Close-Up Montage – a series of rapidly changing close up shots often used to build tension or to gear the viewer up for the main shot by infilling necessary detail in doing so. Edgar Wright (Shaun of the Dead, Hot Fuzz) was an exponent of this style of shot and talks about his methods in the following video.

<https://vimeo.com/85311313>

6. Long Tracking Shots – a technique of having a long running single shot tracking the action as it goes. Often used by Alfonso Cuarón including in his film Gravity and many others. One shot in Martin Scorsese's GoodFellas takes the viewer from the actors getting out of their car, across the road, into the building, down stairs, along corridors, through several doors, turning corners into and around the kitchen, around another corridor, through one more door and into and around the restaurant. The single shot lasts over 3 minutes but works perfectly with ever changing scenery making it interesting viewing despite its length.

Want to know more about this technique then it is explained in this video:

[https://www.youtube.com/watch?v=mkVYpzyJvG8&feature=emb\\_logo](https://www.youtube.com/watch?v=mkVYpzyJvG8&feature=emb_logo)

7. The Low Angle Shot – it is what is says on the tin, a shot taken from a low angle and often used to make the subject look more powerful or intimidating. A lot of Darth Vader shots were taken

from a low angle for this very reason. Quentin Tarantino made use of the low angle trunk shot to good effect in *Reservoir Dogs* – see shot below – to create that power and fear from a low angle looking up with the camera appearing to be inside the boot of the car.

# Zooming and Focus

By Geoff Partridge

In David's article, the section on the Dolly Zoom, reminds me of an issue that is common with the lenses on a lot of cameras. The problem is that when you focus on your subject and then zoom in or out, your subject doesn't stay in focus. This is known as a *varifocal* lens.

On my SVHS camera, from the late 80's, I had the ability to change the lens, and it came with a zoom lens designed for video as opposed to still images. I was able to focus accurately because I could zoom into the subject, focus, and then zoom out without having to refocus. That was because it was a *parfocal* lens.

Another issue is *breathing*. As you change the focus on a varifocal lens, there will be a slight, but noticeable change in the image framing. This is minimized in a parfocal lens.

This YouTube video demonstrates this -

<https://www.youtube.com/watch?v=vnj4pNQRkn8>

## Web Cameras

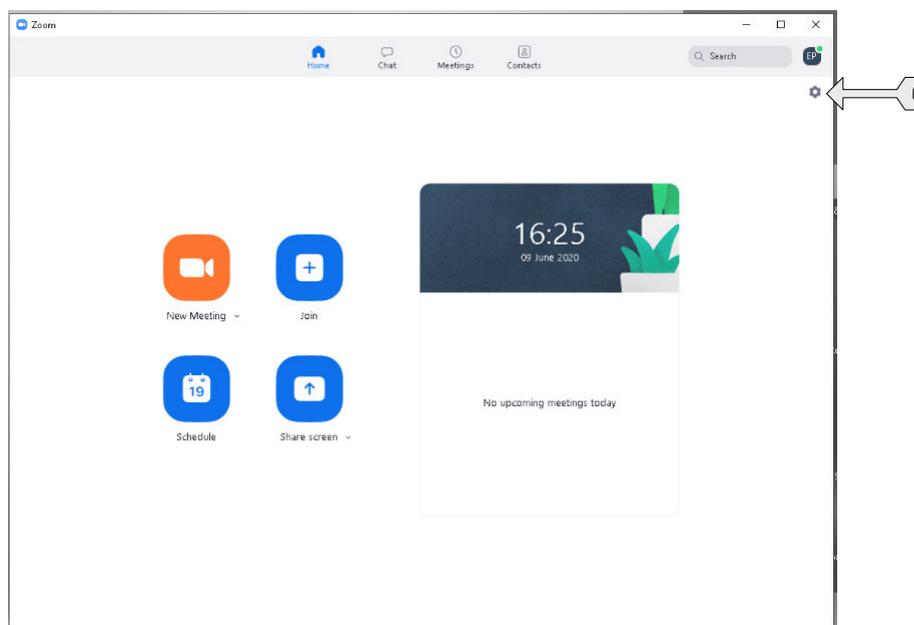
With all the people using Zoom, Skype and other video meeting solutions, web cameras seem to be in very short supply and most of the better known makes, e.g. Logitech, Microsoft, are only available to pre-order. There are quite a few obscure makes available, but some prices have been increased well above normal prices. Some may not even work on Windows 10, so be sure to check the specs.

# Zoom Meeting

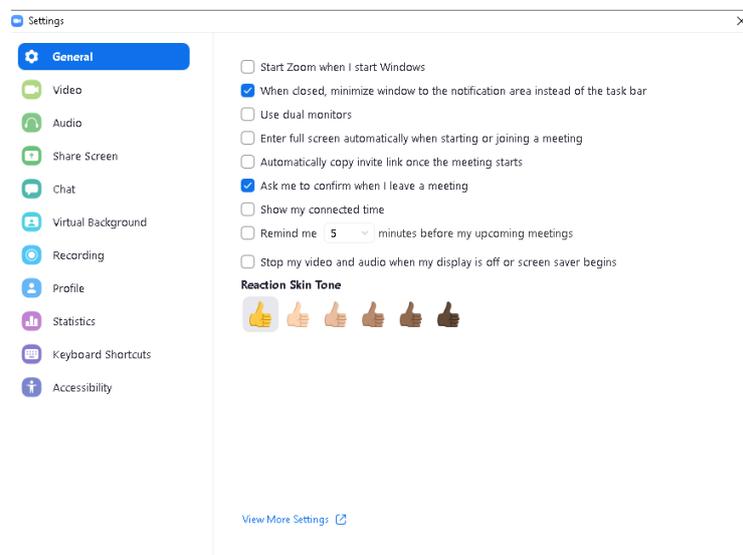
By Geoff Partridge

Although we have been using Zoom for some time now some of you may not have looked at your settings. This is best done before joining a meeting. This is based on the desktop version of zoom.

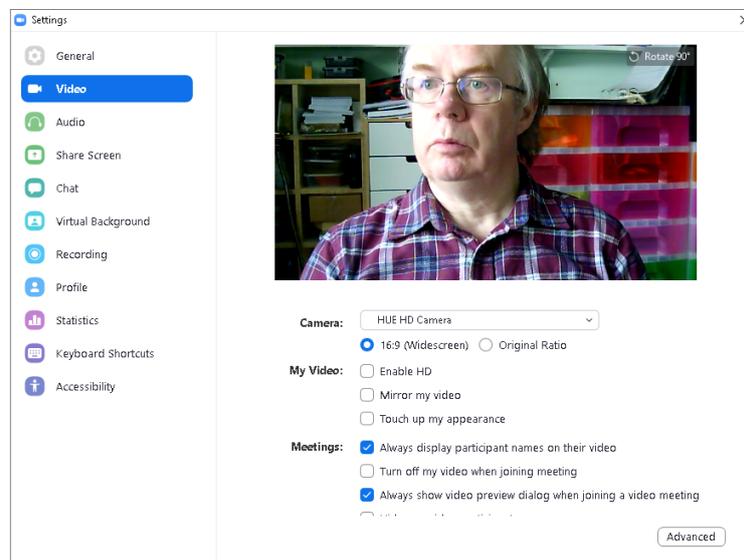
If you start the zoom app you should get the following screen -



If you click on the settings symbol (arrowed) you will open the settings window -

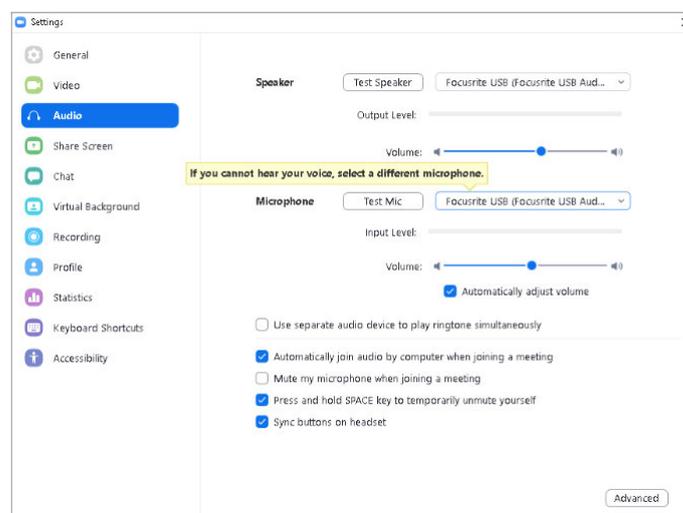


On the General settings, unless you have dual monitors, I would leave the settings as they are. If you have dual monitors, and select them on this page, you can have the gallery view of attendees on one screen and the active speaker on the other.



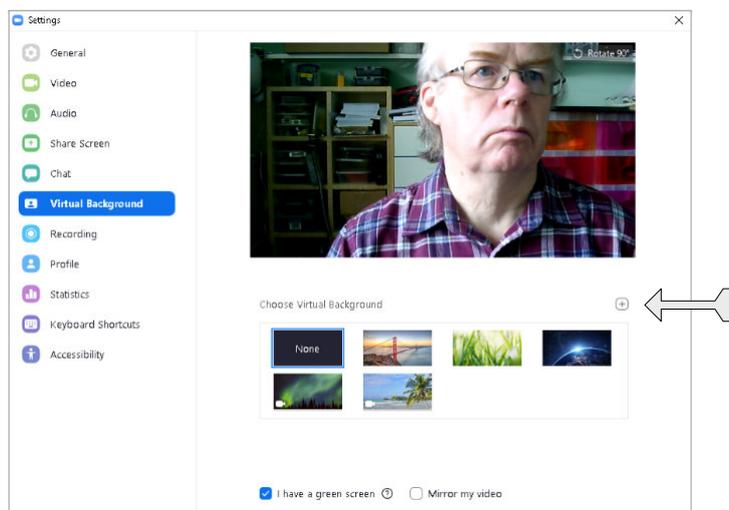
If you have multiple cameras on your computer, you can select the desired camera under the video settings. Try out the *16:9* and *Original Ratio* settings and decide which is best. Also try the *Enable HD* setting, but only enable if you have a good broadband speed. You may also find that mirroring your video works better for you, but beware if you are using a virtual background as that will be flipped as well.

I have not seen any effect of the *Touch up my appearance* option.



The Audio settings let you select and test your microphone and speakers, and adjust the levels. You need to uncheck *Automatically adjust volume* to manually set the microphone level.

The only other setting I would worry about is the Virtual Background.



You can add an image or video clip as a background. You do not need a green screen to do this. Make sure *I have a green screen* is unchecked if you do not have a green screen.

I do not recommend using video as it can be distracting and degrade the performance if you have slow broadband.

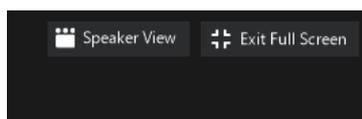
You can choose one of the default backgrounds or add your own by clicking the + sign (arrowed).

I recommend preparing your background image and setting size to 1920 px by 1080 px.

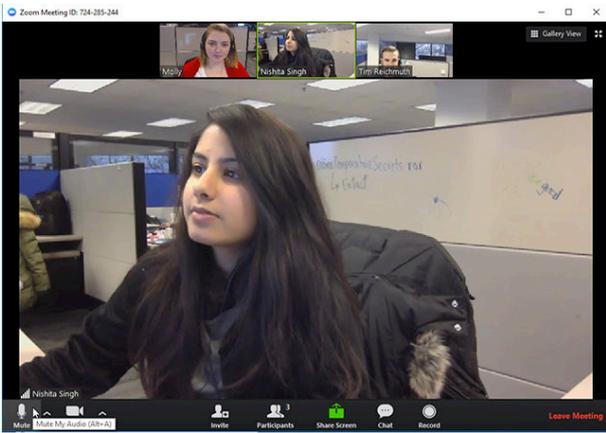
Closing the settings window will save the settings and this should be the same each time you start zoom, but I always check my video and audio settings before starting or joining a meeting.

When you have joined a meeting there are some onscreen options that are worth pointing out.

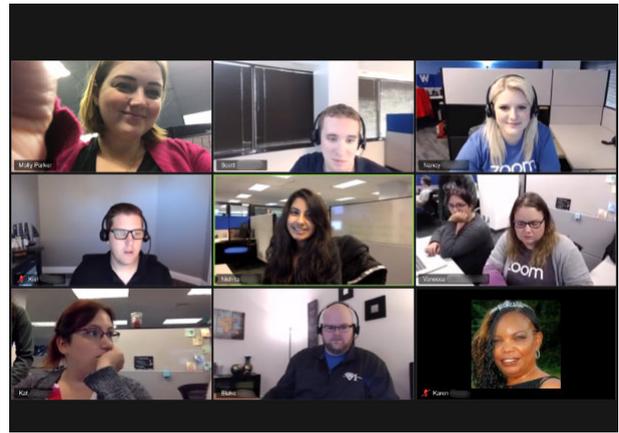
On the top right of the screen you should see these two options -



The right option will be *Exit Full Screen* or *Enter Full Screen* and is self explanatory. The left option will either say *Speaker View* or *Gallery View*. This has led to some confusion. If it shows *Speaker View* you are actually in *Gallery View*, and vice versa.

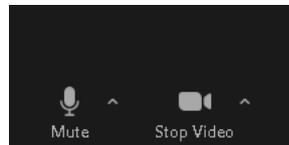


Speaker View



Gallery View

On the bottom left of the screen are the microphone and camera controls -



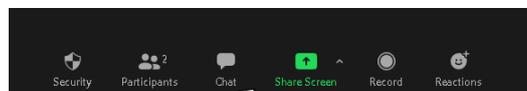
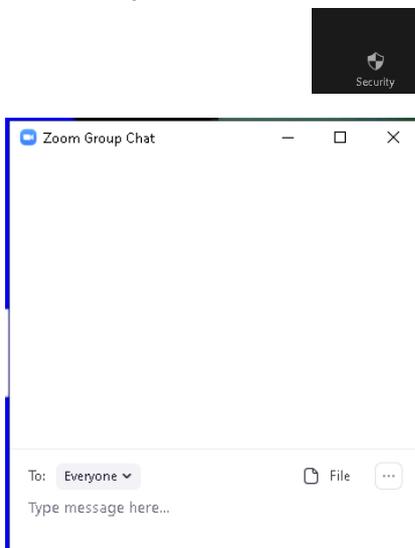
By clicking on the symbols you can mute or enable your microphone and stop or start your camera. The up arrow beside each symbol lets you access the audio and video settings during a meeting.

There are tutorials, including for iOS and Android devices on the Zoom website -

<https://support.zoom.us/hc/en-us/categories/200101697>

### Don't have a web camera or microphone?

You can still use Zoom to watch the proceedings and join in using the Chat facility -



Click on *Chat* and the window on the left will open. You then type your message or question, followed by return.

Hopefully someone will spot it and relay your message to the group.

# OBS Studio

# Open Broadcasting

# Software

By Geoff Partridge

Not long after finding out about Zoom I discovered another piece of free software that can be used to live stream to YouTube, Vimeo, FaceBook Live, and many other services.

It can also be used for recording to a file for later viewing or upload.

Open, in this context, means it is *open source software*. This means that the original software is available for anyone to modify or add to, to meet their own requirements. Many of these modifications are incorporated into the main version of the software, and the add-ons become freely available. These add-ons are often know as *plu-ins*.

One such plug-in allows OBS to act as a virtual camera, which can be used to provide video to programs such as Zoom or Skype.

Most of you will ask why on earth would I want to do that?

Imagine a scenario where you were presenting a topic within a Zoom or similar meeting and you had the following sources of image or information to show -

Yourself onscreen

- Another camera showing a lighting setup.
- A video clip
- A number of still images
- A website page
- Some Powerpoint Slides

We have all attended talks where the presenter has had to mess

around switching between applications, going backwards and forwards between them, and so on. It often looks unprofessional.

Add to this trying to do it on Zoom, you add to the issues. One problem is that when you share your screen, your own image has gone and it is no longer clear whose screen you are looking at.

OBS allows you to build scenes with several sources -



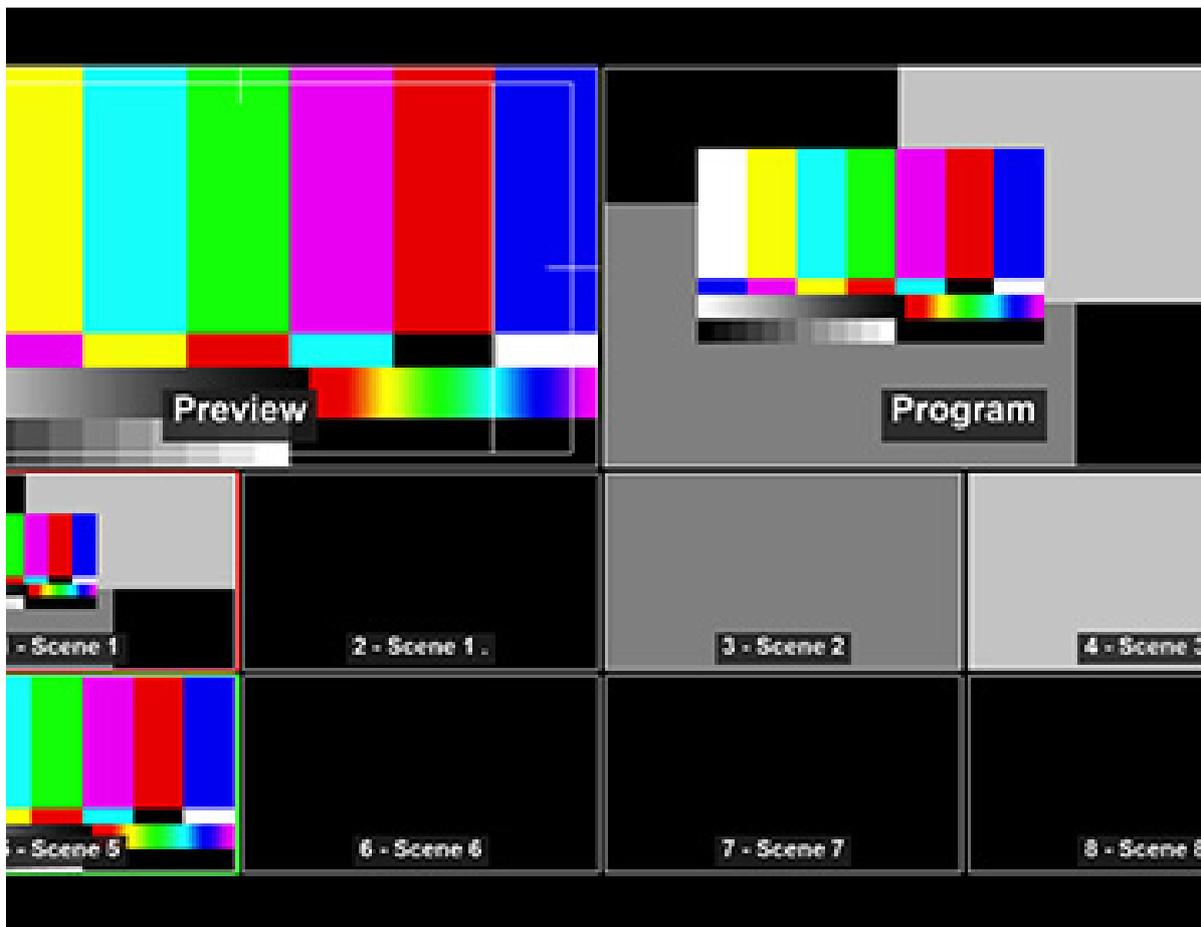
The above screenshot has three sources -

- A background image
- A still image in the middle
- A cropped image from my webcam, bottom right.

Multiple scenes can be created and sources can be reused in different scenes. E,g, the webcam could be displayed full screen, uncropped, without affecting how it appears in other scenes.

If you watch YouTube tutorials, equipment reviews, etc. You will often see this technique used.

So with OBS you can put together all elements of your program and can switch between scenes by double clicking a mouse button.



The OBS screen above shows 8 scenes at the bottom, a preview of a scene selected from below, and the program which is the current scene being recorded or output. A single mouse click on a scene will preview it, a double click sends it to the program output,

Essentially you have your own TV studio in a piece of free software.

The software can also be used as screen capture software. E.g. You could record it to capture a YouTube video.

Ideally, if I use it to input to Zoom, I would use a second monitor. One to display Zoom and the second for OBS.

I should mention that OBS has pretty good green/blue screen capabilities.

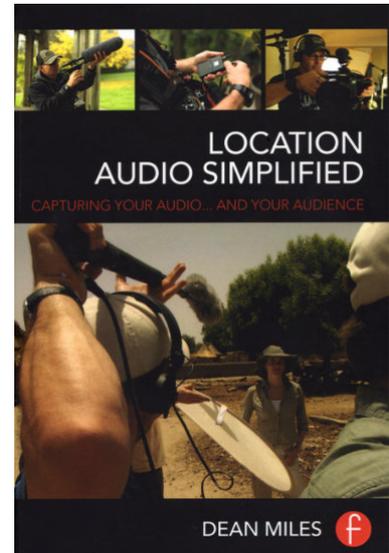
If we get to the point that we can restart the club, but circumstances prevent some members attending in person, this software may be a way of letting them participate remotely.

There are plenty of YouTube videos covering OBS.

# Achieving Good Audio

By Graham Gardener

I thought I would share a small gem of information I came across whilst browsing through my copy of Location Audio Simplified by Dean Miles. The book was published in 2015 and is a little dated regarding equipment but the principles remain very relevant.



Whilst I was preparing my script and planning to film my contribution to our lockdown project, I came across a dilemma about the audio. I have two cameras, an SLR which is capable of 4K video but not very flexible in terms of audio, and a larger bodied camera which is an excellent allrounder. However, I have not been able to use the latter for nearly three years, so I decided to use the SLR as it's easier to operate.

I have a small RODE microphone for the SLR and although it's a huge improvement on the internal microphone, I thought I could improve on the sound quality from a microphone mounted on the camera, which, in my opinion, would be too far from the sound source. Using the camera's internal microphone was simply not an option because of its limited quality.



Over the last 30 years I have assembled a collection of external microphones but the one thing they nearly all have in common, is the need for phantom power, which the SLR doesn't have. This was the first issue I needed to resolve but I had a few options so it was just a matter of selecting the most suitable work-around. As my actor (me)

was to remain in the same sitting position throughout the sequence, I opted for a wired Lavalier microphone against a wireless version.

A Lavalier microphone works at its optimum when placed close to the sound source, which is perfect for interviews. Although fairly discreet, you NEVER see one in a drama but for our short sketch this would probably be acceptable. However, I wanted to experiment with some ideas inspired by my book.

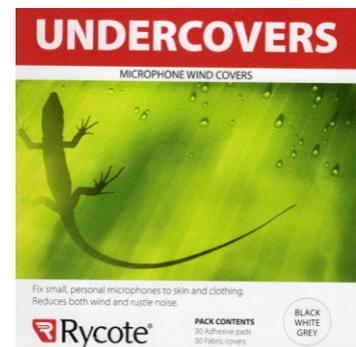


Tie clip microphones come with (as the name suggests) a small clip to attach it to clothing. However, a Lavalier microphone is very susceptible to noise caused by clothing movements. To avoid this, the clips are usually designed to hold the microphone head a short distance from the fabric. This works very efficiently but add a small furry wind gag, and it's a little too obvious to call discreet.

One solution is to use Rycote adhesive undercovers but these can be a little fiddly and in my experience, not particularly reliable. As an alternative, my book suggested a moleskin patch but as I didn't have



any, I tried gaffer tape and also fabric surgical tape, which is similar to Elastoplast. I was pleasantly surprised with the results from both and there wasn't much difference in audio quality but the fabric tape was the most successful



as the visual evidence of the gaffer tape was slightly more noticeable. The trick to making the microphone discreet is to attach it to the inside of the clothing where the fabric from the garment also provides a crude wind shield. In the video you would need to be extremely observant to notice evidence of the microphone and in the two photos you can see how it was attached to the inside of the polo shirt. Note that the microphone is pointing downwards. This is a common practice to reduce sibilance and popping and is almost universally adopted for presenters. You may experience wind noise in anything greater than



a gentle breeze when used outside and it might not work if a lot of movement is involved. So, it won't be suitable for all situations, but it worked for me!

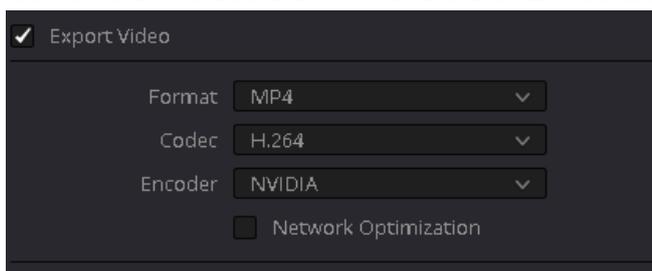
To hear an audio demonstration on YouTube, [click here](#). If you preview the video clip on a tablet or smartphone, please use headphones to appreciate the audio comparisons.

## Reducing Rendering time with Davinci Resolve Studio

By John Ford

The major differences between the free version of Davinci Resolve and the Studio version boils down to the use of the Video Graphics Card's (VGC) Graphics Processing Unit (GPU). The free version relies on using the Central Processing Unit (CPU) of the system motherboard. The Studio version however, unlocks the power of the GPU for video rendering and is especially useful when working on the Delivery Tab to render the output of the finalised film.

Switching to the Delivery Tab shows on the left-hand side a Render Settings Panel with a number of pre-sets and the ability to set your own output format. In the section headed Export Settings the third selection box down is titled Encoder. This often appears set to Native



and will instruct the software to use the CPU for rendering. Under the pull-down arrow however is another choice. In my case, using a Nvidia card, the choice is Nvidia. This tells

the software to use the GPU on the Nvidia card to do the heavy work on video rendering and reduce the load on the CPU. Using this setting can reduce the rendering output time by 50% and can be a considerable time saver when rendering 4K videos. If you have purchased the Studio version of Davinci Resolve, do not forget to select your video card GPU when rendering your final video output and save some valuable time.

# Choosing a camera for stills and video

By Geoff Partridge

Some time around 2008 I had a Canon HV30 video camera and a Canon 350D DSLR with a variety of lenses. On a trip to Southwold, in Suffolk, I was planning to do a walk of about 3 miles. I decided to take the video camera and to leave the DSLR in the car to save carrying too much weight. I also took my video tripod. After taking some footage from the harbour wall, I changed my mind and returned to the car and swapped from video camera to the DSLR, which wasn't capable of taking video. And this was often a dilemma when I went walking.

In 2010 I resolved the issue by trading in the 350D and buying a Canon 7D together with a number of Sigma prime (single focal length) and zoom lenses. This didn't solve the weight issue so I got into the habit of selecting one prime lens to put on the camera if I was walking any distance. This practice means you have to think more about your position, framing, etc.

At the time, my video was mainly of the snapshot type, i.e. It was for record purposes and not to be made into a film.

A few years later I added a Canon HF G25 to my kit as I became more interested in serious film making. Gradually the DSLR got used less and I traded sold one of my virtually unused zooms - a Sigma 150-500mm.

Then in 2017, when I started filming on the Beeleigh Mill project, I took the plunge and purchased a Panasonic HC-X1 4K video camera.

Then at the 2019 Photography Show at the NEC I had looked at the Lumix FZ2000 bridge camera. I had to ask if they had one on the Panasonic stand as I could not see it among the other still cameras. The exhibitor, said it was on the stand with their video cameras "as it designed with the videographer in mind".

Based on the FZ1000, it has features that make it a good second 4K video camera while also being a good stills camera. I liked the fact that it has built in ND filters, a 1 inch sensor, as in the HC-X1, and virtually the same lens build as the HC-X1. It also does not have the continuous record time limits of the 7D and the FZ1000.

I was sold on the spec, but then there was the question of being able to afford it. The price was £799.

The 7D was hardly being used and I decided to trade the outfit in and approached Wex Photo Video in Norwich.

I listed the equipment I wanted to dispose of online and they came back with an estimate. This was in line with my expectations and they arranged a courier to collect the items. A couple of days later I received an offer which was well above the estimate. I accepted the offer and ordered the camera from them at £799 but, and this is where timing became crucial, I got £200 cashback from



Panasonic.

I am very pleased with the results from this camera and use it mainly for video, especially for handheld work, or where there is not space to use the larger HC-X1. It is also my go-to camera when I want to film more discreetly than the HC-X1 allows.

There are a lot of settings on the camera, as there are on the HC-X1, that I have not used yet. And I still have to hunt through the menus for some of the settings.

From my experience so far, I think I made a good choice.

# Next Month -

Another ...oom, a look at some simple, and free software for making tutorials.

For the technically minded, a look at bitrates, including how Broadcast TV uses them.

Anything else that members contribute.

