



What's in the kitbag?

When a photographer looks at the world of video, the first question is what extra gear they need to buy. We ask those who have made the journey what's required

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THE INTRODUCTION of an HD video facility on DSLRs a few years back seemed suddenly to open all sorts of new doors, but the reality was, all that was being presented was potential. Simply switching to video mode didn't make you a moviemaker, but it did throw up some very interesting opportunities.

Over time many professional still photographers have explored further and managed to make a very successful transition into the world of moving imagery. So, what exactly do you need over

and above the kit you already have to set up a successful video side to your business? More importantly perhaps, how much will it cost? And how can you avoid making costly mistakes investing in the wrong kit?

Who better to answer those searching questions than photographers who have already made the move? We talk to three businesses firmly established in both camps and ask them to throw open their kitbag, to show us what's in there. Read on to discover how you too might make the right choices when looking at this compelling new area of the business.



Dan Dunkley: DanD photography + Video

A freelance commercial, architectural, editorial and corporate photographer/cinematographer based in the north of England, Dan Dunkley works for corporate organisations, architectural clients, magazines, education, health and healthcare, science, industry and construction, and with design and PR agencies on their marketing campaigns.

What made you move into video?

I started out as a still photographer and began to move into motion work about three years ago. I think it was a natural progression for someone like myself: I got excited, like a lot of other photographers at the time, by what you might call the Canon EOS 5D Mark II video 'wave' that kicked in, although I was, and still am, a Nikon shooter, so that made things difficult.

My reasons for embracing video are personal and financial. Personal in that I enjoy learning new things, and financial in that offering video for clients widens the net of potential commercial work in an increasingly cluttered field.

Basic skills that decent still photographers possess often translate to motion work: composition, lighting, understanding light, creativity and knowing what makes a good set-up.

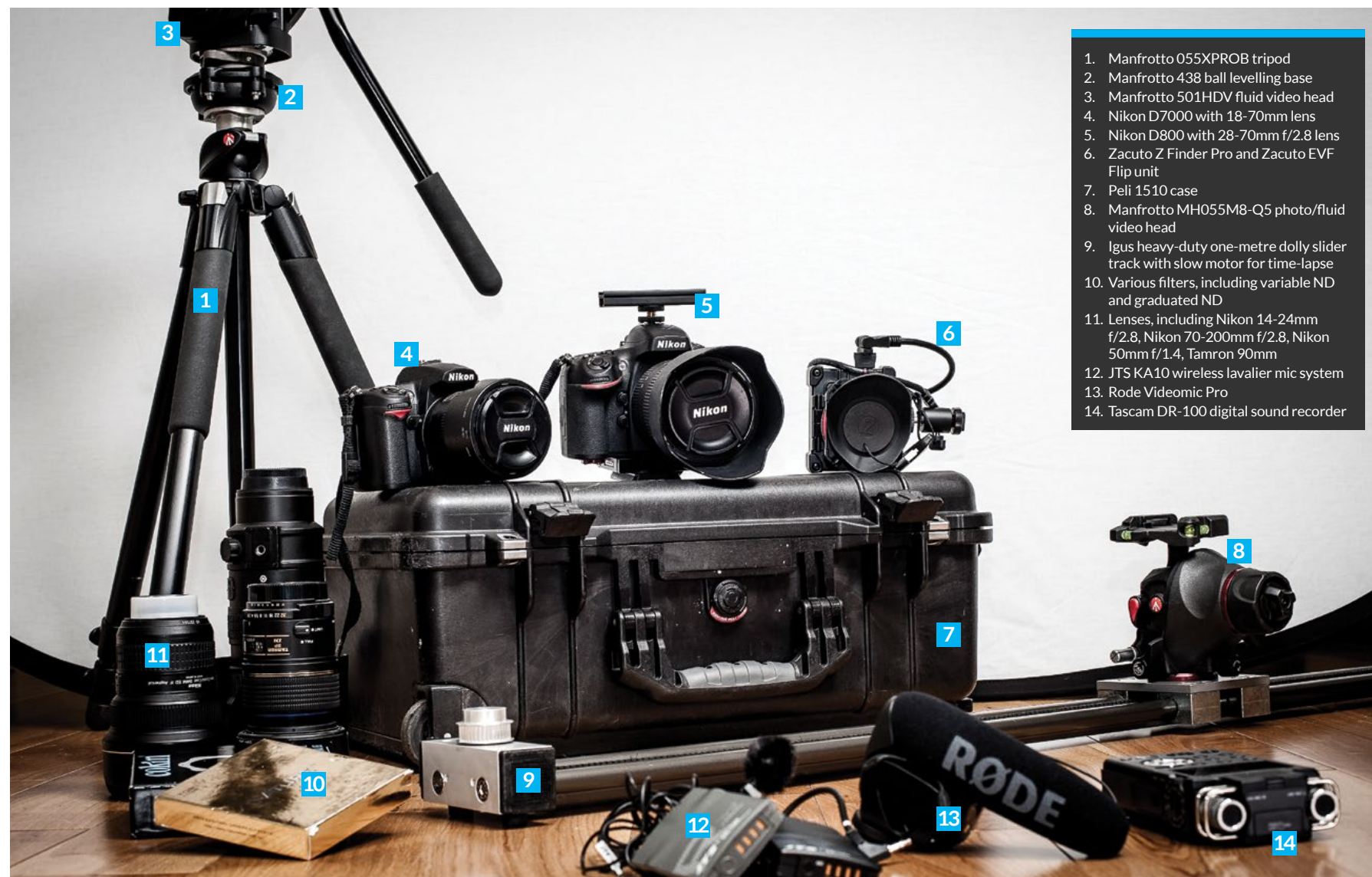
What's your current split between still and video work?

It's currently about 70 per cent stills and 30 per cent video. The video side of my work is increasing though, and I plan to push this side of things further this year. I also do time-lapse production, which is a hybrid of stills and video work, and is pretty specialised in its own right in terms of gear and approach.

Tell me a little more about your gear.

As mentioned already I chose Nikon for stills. The Nikon D3 was my main weapon, and the Nikon 'holy trinity' of f/2.8 pro lenses, plus various other primes and lots of other Nikon-specific gear (speedlights etc) meant I was tied into the Nikon platform, as I'd invested a shedload of money.

I held out until Nikon released the D7000, which was my first real introduction to HD/SLR video, just a couple of years back. Prior to this I had shot some video using more dedicated traditional video cams (Sony and Canon), but my serious move into video work went along



1. Manfrotto 055XPROB tripod
2. Manfrotto 438 ball levelling base
3. Manfrotto 501HDV fluid video head
4. Nikon D7000 with 18-70mm lens
5. Nikon D800 with 28-70mm f/2.8 lens
6. Zacuto Z Finder Pro and Zacuto EVF Flip unit
7. Peli 1510 case
8. Manfrotto MH055M8-Q5 photo/fluid video head
9. Igus heavy-duty one-metre dolly slider track with slow motor for time-lapse
10. Various filters, including variable ND and graduated ND
11. Lenses, including Nikon 14-24mm f/2.8, Nikon 70-200mm f/2.8, Nikon 50mm f/1.4, Tamron 90mm
12. JTS KA10 wireless lavalier mic system
13. Rode Videomic Pro
14. Tascam DR-100 digital sound recorder

with my HD/SLR progression and subsequent gear acquisition.

These days I'm working with the Nikon D800 because the Nikon D7000 has quite a few shortcomings in terms of its video capability. This gem of a camera is what I'd been waiting for. It's the go-to DSLR for many architectural still photographers due to its massive medium-format challenging sensor and great dynamic range. And that full-frame sensor coupled with decent glass produces very nice video as well.

Other kit includes a range of Nikon lenses, a variable ND filter and graduated ND filters and a solid Manfrotto tripod with two Manfrotto heads. For my video work I have a Tascam DR100 sound recorder, a JTS KA-10 wireless lav mic system, a Rode video mic pro, Zacuto EVF flip and Zacuto Z Finder Pro, rig, rails, follow focus and matt box, a half-metre Glidetrack slide, a one-metre heavy-duty Igus rail slider and slow motor and

LED video lights. Plus Brinno TLC200 f/1.2 time-lapse cam units, which I use for long-term time-lapse projects.

Why HD/SLR rather than dedicated video cams?

Mainly because of the quality and lovely shallow depth-of-field ability that HD/SLRs offered for the price. Suddenly you could produce moving images with a filmic look and feel for a few grand, something that would have cost more than £20k to produce before. Hollywood, major filmmakers and TV were also using the gear, so it seemed stupid not to join in.

That's not to say that HD/SLRs are foolproof. For a start they limit you to very involved shoots and set-ups, and any 'adaptive' filming is difficult and unpleasant to do. The limitations include a recording time limit of around 20 minutes, while autofocus is nigh on useless, so you're limited to full manual. It's why I use the Zacuto EVF

system, since it has a great peaking facility to help nail focus.

Is it important to have lightweight kit?

Very much so. I rarely use an assistant and for some assignments I travel by train, so weight and portability are important. A wheelie Peli case, backpack and tripod case can achieve everything I need.

How do you approach a typical video production?

It's very similar to still photography in many ways, in that it depends on the client. Some have clear ideas of what they want, and I work with them to bring it to life. This may involve a certain amount of storyboarding, shot lists

and pre-production meets. However, some clients just know that they want something, but they don't really know what, and are looking for you to come up with everything. This is ok to a degree, as the creative aspect is one of the main things I deliver, but I prefer to work with clients who have an idea of what they want and, more importantly, a realistic understanding of what's likely to be involved, and what it's worth!

Can you tell me a little more about your time-lapse shoots?

It started with a client request as part of a long-term construction project I was producing stills and video for. I'm completely self-taught in every single aspect of photography and film, so I thought 'it can't be that hard, can it?' I just read up about it and then practised.

Do you usually work on your own?

I'm a crew of one, so by default I'm director, director of photography, cinematographer, cameraman, soundman and editor. It suits the work I do, but if I want to grow I may have to rethink this. For talking heads or interviews though, I'm usually with someone from the client who drives the questions and helps with that side of things. To do this alone along with everything else is difficult and not fun.

What kind of clients do you attract?

I've just completed a big long-term video and time-lapse project (18 months) for a construction client, and another shorter time span, but longer and more involved final short film, for another construction client, so you could say a pattern is developing.

Do you carry out your own editing?

I do all my own video post-production and editing and use the full Adobe Suite: Premiere Pro, After Effects and even Lightroom for certain aspects of time-lapse production. I also use a program called LRTimelapse, which is a specialist

third-party bit of time-lapse software that integrates with Lightroom.

Video post-production takes time. A day's filming will require at least one full day's editing, usually more. Still photography involves a lot of post-production work, but video takes it to another planet. This needs to be charged for, and often the editing time will be the largest chunk of the fee.

I was lucky that I'd used Premiere Pro before I started on my own HD/SLR projects, so I had a bit of a head start. Video editing/post-production is a steep learning curve, and I think the time and effort required to do it well is what puts some photographers off embracing video. I also think editing is a skill in its own right, and not everyone can do it even if they wanted to. You have to be able to see the bigger picture, and tell an engaging story with the often limited footage you have. That's not always easy, especially with subject matter that could be considered a bit dull.

Can you give me an idea of how much you charge for a video production?

Without going into specifics I find pricing video work a breath of fresh air compared to pricing commercial still photography, which is without doubt the worst part of being a commercial photographer. I price my still work with licensing, and usage is often the main factor that makes up the cost. Explaining this to clients is increasingly difficult, and I lose work because of it.

With video, the usage is usually limited to the client's website, so it's much more straightforward to cost up. I think the type of video I do has a shorter shelf life than stills too, so it's easier to fairly pitch and price to clients.

For video I tend to base cost mostly on time and so it's a case of charging for the filming and then the editing and post-production work.

» www.dandphotography.co.uk



"I prefer to work with clients who have an idea of what they want and of what it's worth!"



Elliott Corke: HexCam

After qualifying as a marine biologist from the University of Wales in 1998, Elliott Corke spent time as an outdoor pursuits instructor and then 11 years teaching secondary science and biology – all good experience for a career flying miniature multirotor helicopters used to shoot aerial stills or video. After acquiring the relevant qualifications and registering with the CAA (Civil Aviation Authority) to operate commercially, Elliott set up Hexcam with his wife Lucy in May 2012.

Tell me more about these amazing flying machines.

Multirotor aircraft (tricopters, quadcopters, hexacopters and octocopters) have been around for a while, but until relatively recently were difficult to fly and fairly unstable. The development of several professional level flight controllers, the 'brains' of the machine, has made flying easier, introducing stability control, GPS assistance and return-to-base features for safety in the event of signal loss. Combined with brushless camera mounts that have been developed over the last year or so, this gives an

amazingly stable platform for both photography and video.

Flying for still photography is much easier than flying for video. With video, careful flight path planning is required, particularly when working with a separate camera operator on the larger machines. Higher quality footage is obtained by turning off the GPS assistance, as that tends to want to hold the machine in position meaning that you get faltering movement instead of smooth flight. So a pilot who is good at still photography may not necessarily be as good at flying for video.

What permission do you need to operate?

To operate commercially in the UK, businesses or individuals must register with the CAA for a Permission for Aerial Work licence that details your machines and how you are allowed to operate in UK airspace. To get that permission pilots must have carried out one of two qualifications that the CAA accept as proof of pilot competence, either the RPQ-s or the BNUC-s. The qualifications both cost around £1300 and a further £113 or £226 to register with the CAA depending on the size of your aircraft. The business also has to submit an Operations Manual to explain who they are, what aircraft they are using and how they will operate safely.

ABOVE Elliott's company HexCam specialises in shooting aerial stills or video, using miniature multirotor helicopters from Versadrones.

RIGHT TOP AND BOTTOM Part of Elliott's job involves deciding what combination of aircraft and camera best suits the brief from the customer.

1. Versadrones folding hexacopter
2. Brushless gimbal for lightweight cameras
3. Sony Alpha NEX-5R
4. Lithium polymer batteries for the hexacopter
5. Lithium polymer battery charger
6. Protective gear for work on building sites and other high risk areas
7. Transmitter: This allows me to control the aircraft as well as the camera
8. Seven-inch LCD with sun screen and video receiver

As part of the permission, pilots and businesses agree to hold public liability insurance, keep logs of all flights, adhere to the relevant sections of the Air Navigation Order (basically, the Highway Code for aircraft) and produce risk assessments and site surveys for every operational flight. The permission of the landowner where work is carried out must also be obtained for every operation. As standard, operators are allowed to fly 500 metres horizontally from themselves and up to 122 metres altitude, and there are additional restrictions in some areas, such as near airports and central London.

What gear are you using?

The Irish-based company Versadrones produces all the aircraft I use operationally and has been really

"With aerial footage camera stability is more important than quality"

helpful right from the start, enabling me to get up to speed very quickly. I use GoPro Hero 2 and 3 cameras on the smallest aircraft and Sony NEX-5R and NEX-7 CSCs. I have tried various lenses but enjoy using the Sigma E-mount 19mm and 30mm lenses as they are very lightweight and good value, something that's a serious consideration when your equipment is 120 metres up in the air.

With aerial footage we've found that camera stability is more important than camera quality. I have seen people flying lovely cameras but the footage has been ruined by the use of a poor quality mount. Lightweight cameras such as the Sony NEX-7 and Panasonic GH3 can give great HD video that sits well alongside higher quality ground-based cameras. For example, we used NEX-7 aerial footage to complement Canon C100 ground footage on a project this summer and it worked really well.

To carry the heavier DSLRs, such as the EOS 5D Mark II or 1D C we use heavy-lift octocopter rigs that are always twin operator aircraft. The heavy-lift octocopter produced by Versadrones has been used on film projects in Kenya and Malta already, and can carry a camera payload of up to 6kg. I'll be using one in Dubai shortly to carry an EOS-1D C for a film project.

Each aircraft has a video downlink from the camera to a seven-inch monitor or goggles on the ground, allowing the pilot and camera operator to view what the camera is seeing in order to frame shots. Images, however, are stored on the camera. We can also trigger the shutter or start and stop video, but that's it, so careful set-up is required on the ground to take into account the light conditions at altitude.

What's an average session like?

Once we have a customer brief we then have to decide which aircraft and camera combination to use to get the best results. This may entail working with other operators, such as Rotarama which was the first business in the UK to have permission for night flying and specialise in heavy-lift rigs. We then risk assess the project to see if we need extra permissions. Wind is the main weather factor that can reduce footage quality. Our aircraft can fly in up to 18mph winds, but video quality tends to begin to degrade over about 10mph.



Our first international project was filming the first ever Tour du Congo cycle race in the Democratic Republic of Congo in June 2013. More recently, we have begun to offer flight training for new entrants to the industry and to act as a trainer for Versadrones. I am also now the UK legislation Representative for the Sub 20 Organisation (www.sub20.org), which is a UK industry body that anybody who operates sub-20kg aircraft commercially can join.

Each set of batteries gives between about ten and 15 minutes flight time, which is generally more than enough when working on film or TV projects as takes tend to be very short and a lot can be achieved with good planning. We carry several spare batteries and can recharge them on site.

When we arrive we carry out a full site survey, cordon off areas if necessary and brief anybody who is going to be in the flight area, and we'll also carry out a series of pre- and post-flight checks.

What kinds of clients are you attracting?

We have contracts in the construction industry and with conservation groups. We are an approved BBC supplier and have carried out work for *Rip-Off Britain* and the *Flying Archaeologist* as well as work on other independently produced BBC documentaries and for Channel 5 and Sky. We have worked with a number of local production companies and also carried out work for a pop video and renewable energy companies as well as Lotus and a variety of local and national clients.

Are you carrying out your own editing?

I don't tend to edit my own footage unless the customer purely requires shorter cuts from the original footage. I believe people should play to their strengths, and when we require edited projects we work alongside local video company, Fast Forward Media, who edit our footage using a combination of Creative Studio 6, Final Cut Pro and After Effects, to give great results.

What fees do you charge?

Different operators have very different charges, but for us a day's filming with a lightweight camera such as the NEX-7 is likely to be around £750-£1000, while the larger machines are charged at £1200-1800.

Typical rates across the industry are between £600 and £3000 per day dependent on the aircraft, cameras and crew composition. We tend to charge what we feel our footage is worth at the moment. Technology is improving all the time and we hope our 2014 results will be even better than 2013's!

» www.hexcam.co.uk

Douglas Fry: Piranha Photography

A still photographer for 20 years, Douglas Fry embraced video to run in tandem with his existing business, seeing it as a good way to utilise his existing wide range of skills. He is also a hi-fi fanatic, so was already interested in audio with a good working knowledge of microphones and recording devices, and he could see a way of improving on the standard offering for corporate clients. When shooting video Douglas works with photographer Adrian Stone, who runs his own wedding photography site, www.thedreamcatchers.co.uk.

Tell me a little more about the gear you use please.

We use Canon EOS-1D X and EOS-1D Mark IV cameras for their truly excellent low-light capabilities and for the fact that they feature different sensor sizes, which gives us choices on focal length with the same lens. We use Rode video mics for guide audio mounted on top of the camera and Canon prime 14mm, 35mm and 50mm lenses for available light work and 24-70mm and 70-200mm zooms for everything else.

On the audio front we moved on fairly quickly from the smaller popular units from Tascam and Zoom, because we found the battery life to be poor and the preamps a little too noisy for

corporate work. I now use the Tascam HD-P2 and the results are far superior. This is paired with Rode NTG2 and NTG4 mics. We also use the excellent PAG lights which seem to last forever and give out a very nice tungsten light, which is easy to correct when necessary in Final Cut Pro (FCP). Our kit line-up is completed by Gitzo tripods and Manfrotto light stands.

Do you regularly bring in other videographers to help you?

Adrian and I work together on all the video shoots and he does, of course, work independently in his own business as well. For corporate work at a certain level it would be nearly impossible to get a good result working alone because there are too many variables that need monitoring throughout the shoot to make it practical. Depending on the scale of the shoot, other videographers might be brought in for additional footage or cutaways.

Is it important to you to have kit that is lightweight and flexible?

Up to a point, although as there are always two of us on corporate shoots I can bring the lighting and audio kit while Adrian brings along the cameras. This enables us to use heavier and more suitable tripods and larger audio recorders, and we believe that this allows us to achieve better results.

Do you head out on a shoot with a clear idea of the shots you want?

We always make sure we are briefed fully before each shoot. We have a clear

idea of every shot we need before we arrive, and spend time on recce at the venue to fulfil the brief. Obviously some shoots are easier than others, but we've become quite skilled at adapting.

Are you carrying out your own editing?

Adrian does all our editing and syncing up of the sound from the guide audio and the reference tracks from the Tascam, while I prepare and edit the audio on Sound Track Pro. We use FCP and Final Cut Pro X for video on iMacs and MacPros, with SSD drives and 16GB+ of RAM. We can turn work around quickly which is always, in this digital age, a common request

Can you give me an idea of what you charge for a video production?

The 'industry standard' and a good working guide is £1k per minute of finished video.

» www.piranhaphotography.com

1. PAG video light
2. Four-hour battery
3. Manfrotto and Gitzo tripods
4. Ubiquitous MacBook Pro
5. Canon 28-mm f/2.8L lens
6. Canon 70-200mm f/2.8L lens
7. Canon EOS-1D X
8. Canon EOS-1D MkIV
9. Tascam HD-P2 audio recorder
10. Rode video mics
11. Sennheiser HD414X headphones (open back, but comfortable and retro)
12. Rode NTG2 shotgun microphone on boom stand

BELOW Douglas Fry, right, works with fellow photographer Adrian Stone to shoot video for corporate clients.

