



Providing Top Gear

From camera hire specialists Electra

Earlier this year camera hire company Electra and sister company light grip specialists Off Trax came on board as GTC sponsors. The team at Electra has for the last 12 years been supplying camera equipment to Top Gear, itself a recipient of several GTC Awards for its innovative and exciting camerawork over the years. Paula Connor from Electra describes how this partnership with the programme works.

Top Gear has been on our TV screens in one guise or another since 1977, and when it relaunched 12 years ago, Electra was asked to supply the camera equipment. The Series One presenters, Jeremy Clarkson and Richard Hammond, were joined a year later by James May, who replaced the original third presenter Jason Dawe, and that has been the line-up ever since. Now, more than 20 series later, Top Gear consistently ranks among the highest viewer ratings in the UK and is sold to TV broadcasters globally, attracting around 380 million viewers worldwide.

The petrol-head presenters' genuine passion for all things motoring, as well as the crew camaraderie, are all part of the show's huge popularity and longevity. Add to that, exotic locations, explosions, crashes and general adolescent pranks and it's easy to understand the programme's ongoing appeal.

So, as main camera kit supplier for both location and studio shoots since 2002, what does supporting the production on their far-flung and often madcap shoots entail for Electra?

Reliability and versatility

With challenging schedules and a vast variety of climates to cope with, the crew needs always to be able to hit the ground running with everyone confident that each piece of kit will work, the way it should, for as long as it is needed to.

For some time now, the team's camera of choice has been the Sony PDW-F800, paired with lenses from the Canon ENG range, including the remarkable HJ18 x 28 super telephoto. Robust, reliable and easy to use, the Sony F800 is the perfect tool for filming onboard anything from car boots and roofs, to boats and bikes, in locations as diverse as the North Pole to Bolivia or deepest Africa.

The Canon C300, Sony PMW-F55, Sony NEX-FS700 and ARRI ALEXA have all complemented the kit lists on recent shoots. As you can imagine, in remote destinations, it's essential to have everything you need at all times. A vital addition on all Top Gear kit lists is a good selection of harnesses and clamps as often the only suitable place to shoot from is the roof of a car, or maybe a dolly track will need to be laid across rocks next to a scarily fast river. Whatever the conditions and available space, the crew has to come up with a solution while not jeopardising life, limb or kit. As one of the camera team says: "We're all about trying to stay one step ahead of the game... it's just that often we don't know what that game is going to be!"

Top Gear crew members are a special breed, who have quite literally travelled the world, been in sticky situations and experienced many high-adrenaline adventures. Most have worked on the several seasons of the show and many are ex-Electra camera assistants trained in-house at our Brentford premises. Current regulars include cameramen Ben Joiner, Iain May, Casper Leaver, Toby Wilkinson and Will Churchill, and assistants Chris Dunford and Nick Lawton. Recently they've also been joined by Electra in-house camera assistant Will Antill.

When not globetrotting with Messrs Clarkson, Hammond and May, this team can often be found beside a track shooting performance cars, or making high-end car commercials for other high-profile production companies.

Extreme conditions

For Series 21, which aired in early 2014, Top Gear brought us gems from Camp Bastion, Lake Como, Belgium, Ukraine and UAE, followed by the 'Christmas Special' from Burma (or Myanmar) – which actually aired in March. Overseas shoots are scheduled over several weeks, sometimes many months in advance, and filming for Series 21 started back in September 2013, with the first overseas segment located at Lake Como in Italy. Four full camera kits, with F800s and C300s, grip, sound and lighting gear left the UK in two Electra vans. These were scheduled to meet the production team and presenters at the northern end of the lake with two locations on the hit list.

First up, the team was to film a 'race' between Hammond's Alfa Romeo 4C and Clarkson's Gibbs Quadski (an amphibious quad bike). In convoy, with the camera car in the lead, Hammond drove along the picturesque west side of the lake. Shooting from the rear tailgate of the camera car, they tackled some narrow roads with Hammond barely squeezing through in places in the Alfa. Over the years the crew have worked out a few favourite ways to mount the kit for the best perspective. Camera cars with split tailgates are always used as this allows the camera to be mounted in the rear boot space either on short legs or a Hi-Hat attached to a lens box. It's also not uncommon for the guys to make use of a sunroof with tall legs extended through, or even (Health and Safety permitting) a roof rack. As you might imagine ratchet straps are essential on these occasions.

Meanwhile, Clarkson was charging across the surface of the lake in this 30-mile race to the far southern end. With some of the lake pretty choppy in places, and the Quadski

capable of speeds of up to 40mph, this was to be as tough on the camera mounts as it no doubt was on Clarkson's rear. The closing shot, in true Top Gear style, was of the warning sticker on the Gibbs machine: "Normal swimwear does not adequately protect against forceful water entry into rectum or vagina" – perhaps little wonder then that the GoPro mounted on the handlebars was last seen sinking slowly to the bottom of the lake!

In fact, water proved to be a regular challenge on Series 21, with the next stop on the tour a wet Circuit de Spa-Francorchamps in Belgium, where Clarkson would drive the McLaren P1. With the centre of Belgium a similar distance to Leeds, together with ongoing challenges such as flying with lithium-ion batteries (see 'Flying with batteries' box), the sensible option once again was to drive the kit to the location. So, the crew loaded a tandem of Electra vans and headed west to the Euro Tunnel for their three-day Flemish filming at Spa. Three F800 kits were called for this time around, along with a tracking vehicle fitted with a Russian Arm (operated by Off Trax's very own Jonathan Dennis) plus a Belgian helicopter team.

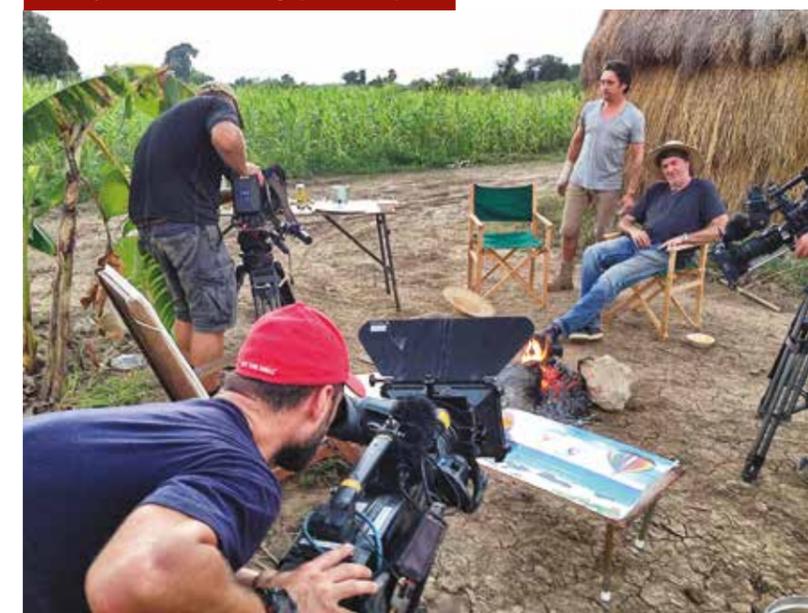
Despite its top speed of 217mph and the rain-saturated circuit, the McLaren P1 was kept in shot and in focus by the expert hands of the crew, with just a little help from a Spintec Rain Deflector. The high-speed gyroscopic effect of this clever deflector clears rain from the field of view and will even create a vacuum that clears snowflakes to the side. About the size of a matte box, it's a really useful addition when you're shooting in the rain, particularly so when, as in the case of a tracking vehicle, you don't have the opportunity to wipe rain droplets from the front element.

Yet more man-child antics would be shot in Dubai when Hammond took a £350,000, 3.7-tonne Mercedes G63 6x6 through the swimming pool of Yas Waterworld after test driving it across the Empty Quarter of the Arabian Desert. The swimming pool sequence was mainly looked after by Extreme



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Iain May and Nick Lawton lining up - Burma Special





Clarkson tries his hand on Ben Joiner's camera



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Facilities who supply minicams and other specialist cameras for the production (see 'High Fliers' in *Zerb* issue 78).

In the desert temperatures can reach a staggering 54°C and, with 800-foot dunes, shooting fast cars provides great opportunities for dramatic, artistic footage. It also has a habit of propelling a lot of quartz-rich sand up into the air. All Electra cameras are supplied with protective covers for both the cameras and lens front elements as part of the standard kit bag, which thankfully helps keep out most invasive substances, plus over the last 12 years we've learned a few extra tips to keep the kit both safe and fully operational in such corrosive environments. Wet covers, matte boxes and pola filters as standard are a must with *Top Gear* kits. Even the most experienced location cameraman will be surprised at just how far the desert sand can penetrate a Sony PDW-F800:

"We take the kit to some tough environments and expect it to work for 16 hours a day or more, so we do our best to protect the gear as best we can without slowing down the shoot. For our recent trip to the Empty Quarter on the outskirts of Abu Dhabi, the high temperatures and frequent sandstorms were very harsh on the F800s. But taping over the connector ports and seals of the disk door – while not a perfect fix – did mean the camera remained operational and was able to breathe. We'd often soak pillowcases in cold water in the morning, then wring them out and drape them over the camera to help keep it cool. In an ideal world, of course, we'd stop filming when a sandstorm came in but these can also create some of the most dramatic scenes! "

Power supplies

Another requirement is to constantly keep on top of the supply of power, often a major factor in remote places with unreliable electricity supplies. "Often we arrive after a long journey with our four F800 batteries needing charging for the next day, along with 40 odd Motorola walkies, only to find that the local power supply can only handle one battery charger before tripping out. We take shifts, setting alarms to get up in the night to swap batteries over in the hope we will have enough to cope with what the next day may throw at us. In India we boarded an overnight train only to find that the train's power struggled hugely with our expectations so a rather broken night was the result! Experience has taught us that the more we can do to stay ahead power-wise the

Flying with batteries

It's important to remember that all airlines are different, but what we've found most recently with *Top Gear*, as well as other large kit overseas shoots, is that an informative list of all batteries in advance for the production team is really helpful. The production can then submit this to the airline and comply with whatever criteria they have in place. What we do is provide information, including the full description of the batteries, the quantity of each variant, along with watt hours per unit, volts, dimensions and weight.

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Of course, this limits the number of higher watt-hour batteries to the number of passengers flying. With *Top Gear* shoots we usually have several crew members and they are often accompanied by at least one member of production. It does present potential problems if you have a smaller crew flying though.

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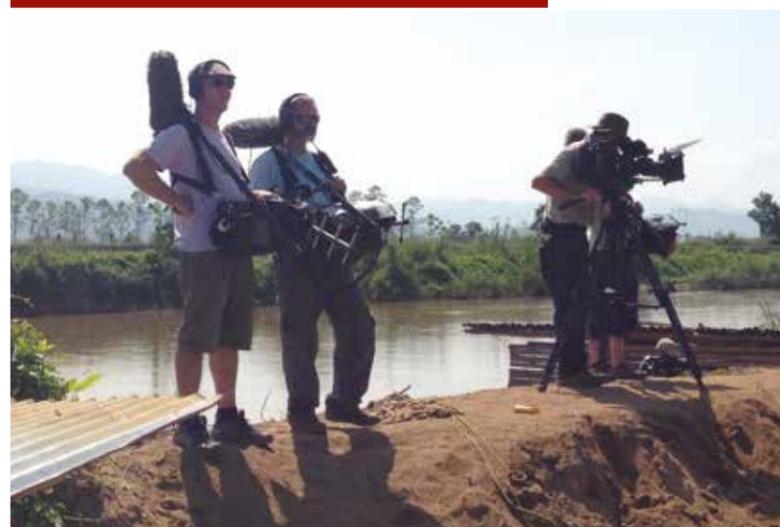
better; we will often wire heavy-duty inverters into our local camera cars (often old and requiring nightly maintenance themselves) to run camera battery chargers during the day."

Dangerous areas

Perhaps the most perfectly timed trip of Series 21 was the road trip from the Crimean Peninsula north through Ukraine. The challenge was to drive small, fuel-efficient cars the length of the country from the Livadia Palace in the far south to the border with Belarus in the very north.

On an epic road trip like this of more than 500 miles, days away from any camera facilities, the reliability of the gear is paramount. Sometimes the answer is simply to include an additional spare camera body; at other times, budget or

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space constraints don't allow for this. At Electra, we have many regular clients who work in challenging conditions both overseas and in the UK, often away for several weeks at a time. At the end of every major shoot we always have a fair list of maintenance to undertake so that we're ready for the next send-off and can wave goodbye to the kit with a happy heart and clear conscience. We have therefore developed a rigorous routine of checking and testing all kit thoroughly when it returns to us. Any maintenance needed is organised immediately, sometimes in-house or otherwise with the camera or lens supplier's service centre. We don't scrimp on servicing as we consider it to be integral to the service we provide: well-maintained kit saves everybody time and expense in the long run and it really is a false economy to put off a repair, no matter small it may seem at the time. A slight wobble on a button today may mean an inaccessible menu tomorrow.

En route for this shoot the team would drive through the ghostly town of Chernobyl. You may recall the presenters mentioning that the camera assistants filmed this section. It's true! The cameramen were not overly keen to visit this particular tour stop and remained outside the perimeter. Everyone on the call sheet however did attend a Radioactive and Hazardous Substances training session prior to leaving and we were very pleased to discover that neither kit (nor crew) glowed in the dark on their return.

This particular episode proved to be one of the more controversial ones for BBC2 and just 3 months after filming, roughly at the time of broadcast, the Crimean crisis erupted.

The crew's final overseas trip was to be in Camp Bastion, Afghanistan. Crew and kit left the UK for their five-day shoot from Brize Norton in Oxfordshire one grey January day aboard military aircraft. This time, prior to leaving, everyone attended a Hostile Environment and First Aid course to ensure they were briefed correctly for the dangers of this unique and active destination.

With the imminent redeployment of troops from Afghanistan, May took the opportunity to showcase some of the British designed and built military vehicles, getting behind the wheel of a Foxhound and joining the troops on patrol outside the camp perimeter in the hostile desert for a ride in a Mastiff. Perhaps surprisingly, this turned out to be a very straightforward shoot. The Military as you might expect are very organised and really the only special requirement was for frequency information on any walkies and wireless monitoring.

Bridge over the River Kok

As has become customary in the winter seasons, the team again brought us a 'Special', which this year aired in March at the end of the series. This involved a three-week shoot in October and November 2013 and saw the guys travelling through Burma with the goal of building "a bridge over the River Kwai". As the story unfolds, we discover that the river is actually in Thailand... and in fact, in true *Top Gear* fashion, was not the Kwai at all but the appropriately named River Kok.

Once in Burma, with the presenters dressed appropriately for their carriages (Clarkson resembling a coach driver, while Hammond was sporting an egg-stained vest), the whole entourage set off from Rangoon. On this epic two-week road trip through Burma down into Thailand the usual schoolboy antics

were evident on route as they brought down power cables and knocked over market stalls.

With the main location cameras comprising four Sony F800s, a Canon C300 and a Canon XF105 for behind-the-scenes shots, along with the camera and sound crew, accessories and additional peripheral equipment, the party following the presenters was fairly large, as was the number of Electra flight cases. We put a lot of thought into our cases and like to think we've covered most bases. However, there is often a conflict of interests between facility companies, production and crew. We, of course, are most concerned with the kit being safe, whereas the crew and production prefer there to be as few pieces and as lightweight as possible. A good compromise we've found is to provide soft bags for carry-on pieces like cameras, but for anything bound for the hold and the potentially rough ride of the baggage belts, a hard case is mandatory. Lightweight but tough and watertight, Peli cases are frequently the cases of choice, although for some more delicate items you just can't beat a traditional silver metal case. Working so closely with the crew for so many years means we understand each others' needs and often we give them additional soft bags to decant kit into once they reach their destination. However, experience has taught us that it's not just the flight where the kit needs protecting, during this road trip one of the drivers managed to misjudge the road and end up in a ditch!



Jonathan Dennis operating Russian Arm in Spa

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