

On-location lighting under inspection

Lighting on location is a hallmark of modern photography, with a wide range of portable product out there to do the job. **Adam Duckworth** takes nine outfits for a spin to see what they can offer

WORDS & PICTURES Adam Duckworth

THE ability to sculpt, control and manipulate light has long been one of the key attributes of a true professional photographer. If you know what you're doing and you have the right tools to hand, this mixing of soft and hard light for dramatic effect, to create a flattering portrait or evoke a mood, is often the key to creating images that have a lovely three-dimensional look that no amount of Photoshop trickery can replicate.

Until not very long ago, using artificial light on location was the preserve of the well-off pro, armed with an arsenal of studio lighting kit, softboxes and some means of generating power to run everything in the field. That's all changed now and in some style: first we saw the

price of flash in general start to come down as the effect of much more affordable Far Eastern imports started to be felt. Then came the Strobist phenomenon, with the ability to take the hotshoe flash off the camera and use it on location. Softboxes, umbrellas, honeycombs and gel kits to suit hotshoe-style flashes seem to pop up every day, and very effective they can be too.

However, with this portability comes a compromise. Hotshoe flashes just don't have the power of bigger studio units, which can be a huge issue if you're trying to use them outside on a bright day - especially if you want to combine them with a softbox or some other light-modifying tool. Used at or near full power their recycle times can be long and, if you

continue to fire for extended periods, they'll have a thermal cut-out and give up, or even melt!

However, for those that love flash outside but find themselves frustrated by the limitations of flashguns, there is another way: studio-style flashes that accept proper, grown-up accessories but are powered by long-lasting battery pack systems, and these are exploding in popularity.

Every manufacturer seems to do it their own way, and at lots of different price points to suit most pockets. Is there such a thing as a 'best system' and what should the professional be looking to spend to get something that can do a decent job and still be reliable? I called in nine of the top kits out there and decided to give them a head-to-head test on a bike shoot.



LEFT: Until quite recently artificial light on location was something reserved for the wealthy pro but times are a changing, and there is now a huge variety of portable products available

Lencarta Safari 600

£639

Optional extras:

- Second head: £139
- Ringflash: £199
- Extension cable: £50
- Power rating: 600W-s
- Contact: Lencarta.com

Lencarta is the new kid on the block for battery-powered lighting systems. The British company has its kit made in the Far East, which is why it can offer such low prices compared to its rivals.

Chinese imported flash kit has not got a great reputation, but in our test the Lencarta not only never missed a beat, but was consistently the most powerful 600W-s head, probably thanks to its highly effective reflector. While its recycling time was not quite as fast as some of its rivals, it still came pretty close.

Its exposure consistently was the same as its rivals - always within a tenth of a stop. Impressive stuff. And it comes with a standard S-type bayonet head so will accept many different accessories.

The only real issue is the questionable build quality; the battery door is flimsy, you have to pull on a bit of cord to pull the battery out and the charger unit doesn't inspire confidence. The head doesn't feel particularly well built, and the connections are not the best quality. However, Lencarta insists it has not had a single failure.

There's no in-built radio remote, but there



are two output sockets that will allow you to run a second head. And at just £139 on top, my recommendation would be to buy one!

Overall this is quite an impressive performer, and all at a very reasonable price.

Our test aperture: f/29

Rating: 8/10

Lencarta Safari Li-On 600

£799

Optional extras:

- Second head: £199
- Ringflash: £199
- Ringflash diffuser: £15
- Power rating: 600W-s
- Contact: Lencarta.com

This is the brand new top-of-the-range Lencarta battery pack flash, the model above the standard Safari 600. It also has a 600W-s rating, but is a more advanced product all round.

It's a more modern-looking unit in both the pack and the flash head, and features asymmetrical power delivery through its two output sockets - 400W-s to one head and 200W-s to the other. It has a greater adjustment range than the older Safari and an LED modelling light that's brighter than the one on the rival Elinchrom Quadra system.

It also has a more modern Lithium battery - hence the name - and this is smaller than a lead-acid battery and lasts longer. But there is a trade off, and the power output of the L-ion unit is not quite as high as the standard 600 unit. Our tests showed it to be almost two-thirds of a stop less powerful, which is still good, just not as impressive as the super-bright Safari 600.

Lencarta claims the Discovery is not only a great battery unit but can also be a replacement for mains-powered studio flash as it can run off mains via its battery charger.

Once again, we had no problems with reliability



but the build quality isn't the best. It feels like a cheaper unit - and it is. Significantly cheaper than a Ranger Quadra, but not as well built, compact or sophisticated. And if you add in the price of an extra head, spare battery and wireless triggering system, that price gap narrows.

Our test aperture: f/22

Rating: 8/10



Elinchrom D-Lite it 2 Explorer kit

£846

Optional extras:

- Upgrade to 400W-s heads, £72
- 100cm Octabox: £210
- 44cm beauty dish: £96
- Power rating: 250W-s
- Contact: TheFlashCentre.co.uk

Not sure whether to go for mains-type studio flash or battery-powered location flashes? You can have both, in the case of Elinchrom's D-Lite it 2 Explorer kit.

Essentially, this is the D-Lite 2 kit of regular mains-powered flashes, but it also comes with the Innovatronix Explorer XT SE battery pack. You charge the battery pack up from the mains, then just plug the D-Lites in with their normal mains sockets. As the Explorer is essentially a sine wave converter, you can use it like a regular 240v household supply on location to plug in your laptop or any other devices you like. It's a heavy pack - the most bulky on test - but it's still the only one that will let you boil a kettle on location!

At under £850, the kit offers great value. You get two complete D-Lite 250W-s heads which have in-built remote control receivers, a transmitter, two small softboxes, two stands and carry cases for the stands, heads and the Explorer battery pack, too.

Heads of just 250W-s are adequate but not spectacular, and their flash duration is not especially quick. Paying an extra £72 gets you a pair of 400W-s heads instead - a worthwhile upgrade although they will run the battery down quicker.

The heads are much smaller than rival Bowen's Gemini heads and they also offer the photographer full digital control.

Our test aperture: f/13

Rating: 7/10

GEAR Location Lighting Round-up

Quantum Qflash T5d-R with Turbo 3 battery £1326

Optional extras:

12x12 foot softbox £70

FreeXWire radio set £360

Qflash Pilot set and receiver £654

Power rating: 150W-s

Contact: www.flaghead.co.uk

If you're after the smallest, lightest and easiest step up from using your hotshoe-mounted flashgun, you'll like the Quantum Qflash.

It's like a hotshoe flash on steroids, powered by a small battery pack that you could easily carry over your shoulder. And if you're used to your camera's own TTL flash control then the Quantum is the only pack-style system that can offer full functionality, with the added benefit of a radio trigger. They now even sell a special cable that allows you to mix and match your maker's own flashes. To top it all off it's well made, robust and recycles fast.

But its similarity to a hotshoe-mounted flash and its integration with your camera's own TTL system is also its downfall; that, and its high price tag. As it doesn't have a proper speeding-type bayonet, you're stuck with using Quantum's own range of pretty small modifiers. Even if you could marry it to a big softbox you would have to say that, at 150W-s, it would hardly be powerful

enough to keep up.

It's also complicated to use, with confusing instructions and lots of different plug-in receivers, dedicated camera hotshoe attachments and more to buy and learn.

If you want full radio TTL control you need the flash, battery pack and Pilot transmitter and receiver, and together they will cost you a hefty £1980 - all for a 150W-s flash.

Our test aperture: f/16
Rating: 6/10



Bowens Gemini 250R Travelpak kit £1469

Optional extras:

Upgrade to 500W-s Pro heads, £542

Gemini Remote control: £92

100cm x 100cm softbox: £244

Power rating: 250W-s

Contact: Bowensdirect.com

Unlike rivals Elinchrom, which offers three different battery-powered location flash systems, Bowens only offers one, and it's not a purpose-designed battery system like the Rangers, which offer a degree of outdoor ruggedness and weatherproofing.

The Bowens' Gemini 250R Travelpak kit is a direct rival for Elinchrom's similar D-Lite kit, which is to say that it's essentially a pair of regular 250W-s mains-powered studio lights, plus a separate battery pack that replaces the mains pack on location.

Compared to the Elinchrom, the Bowens seems more robust and comes with a softbox and umbrella instead of two smaller softboxes, and a nice carrying case complete with its own trolley. However, there are no wireless radio triggers and only one reflector.

The Bowens heads seem twice the size of the D-Lites, but offer nice easy knobs to adjust instead of a digital keypad. While the battery Travelpak is probably a third of the size of the Explorer pack



that comes with the D-Lites, it can only be used to power the Geminis. The lighting performance of both systems was virtually identical but the recycle time on the Bowens was slower. Bowens does accept widespread S-type bayonet accessories and standard 7mm umbrellas, though. However, there's no escaping that the Bowens kit is £623 more than the Elinchrom kit, which is a big difference.

Our test aperture: f/13
Rating: 6/10



Elinchrom Ranger Quadra A kit £1489

Optional extras:

Spare battery: £126

ECO Ringflash: £330

40cm x 40cm softbox: £84

Power rating: 400W-s

Contact: TheFlashCentre.co.uk

Tiny flash heads smaller than most hotshoe flashes, a 400 W-s output and a kit that includes a spare battery and a radio triggering system - it's easy to see why Elinchrom's Ranger Quadra system has won awards.

For under £1500 you get one power pack, with a spare battery, two heads, two cables, a Skyport radio remote, charger unit and fitted carrying case.

The Quadra may not have the ultimate build quality of its more robust big brother, the Ranger, but it's proved to be reliable, to have plenty of power and be relatively light at just 3kg for the pack.

It can run two flash heads with the power split asymmetrically between the two output sockets or, using just one socket, you can choose from up to 400 W-s power or lower power but very short flash durations down to 1/6000sec. Unlike many pack systems, the output is adjustable to a very low 8.2W-s.

The pack has an inbuilt radio trigger that can be made to sync faster than most wireless triggers if used with a new Skyport Speed transmitter. It can also learn pre-flashes from other manufacturer's flashes to sync with them, too.

The Quadra also has a bright LED modelling lamp that's daylight balanced - good for video. The biggest problem is accessories; unless you buy Elinchrom's specific but very limited Quadra range, you'll need to splurge an extra £70 per head for an adapter ring that will let you use full-size Elinchrom-fit accessories.

Our test aperture: f/18
Rating: 9/10

Lumedyne Signature 400W-s Deluxe kit

£1752

Optional extras:

Large battery: £276

Second head: £282

19" Octabox: £74

Power rating: 400W-s

Contact: TheFlashCentre.co.uk

Lumedyne don't go for fancy electronics or flash packaging. What you get is an American-built, industrial-quality lighting set that's pretty small and portable with no frills. There's no inbuilt radio receiver or fancy pre-flash learning mode or even a digital readout. You have to turn a big knob on the pack to adjust power and plug in your own wireless sync device. So remember to budget extra for that.

But there is lots of power. Although the Signature kit we tried was rated at 400W-s, it consistently put out almost two-thirds of a stop more power than other systems, mainly due to the performance of its reflector.

Fitting accessories is not great. Lumedyne do some of its own, like a small Octabox, but really it's best to use a dedicated Chimera speedring and to use Chimera's own top-quality softboxes.

What is good is the pack's adjustability, a seven-stop power range with an adjustable 'trim' between stops. And you can buy bigger batteries to give more flashes; in fact, the whole system is modular. However, the Lumedyne was the only pack on test



that occasionally misfired for no apparent reason.

It's quite pricey but is solid, should last and is easily repaired if things do go wrong in future as it uses readily available industrial components.

Our test aperture: f/22
Rating: 7/10

Elinchrom Ranger RX Speed AS kit

£2034

Optional extras:

Upgrade to A Head: £72

Skyport RX remote control with adapter: £221

Second S head: £504

Power rating: 1100W-s

Contact: TheFlashCentre.co.uk

Elinchrom's full-size Ranger kit is the most powerful unit on test, boasting an impressive 1100W-s. Although not quite up to the same beautiful build quality as the Profoto, it offers unrivalled power for its price and size.

It has two output sockets, split one-third power to one and two-thirds to another if you use both outlets. That's like having one 733 W-s head and another at 366 W-s, which is more powerful than the majority of proper mains-powered studio kits, while a full 1100W-s out of a single head is plenty of power to fill even the largest softboxes or dishes. Flash duration is also very fast, down to a claimed 1/5120sec if you use the faster optional 'A' head.

The heads take full-size Elinchrom accessories that are readily available from a variety of manufacturers, but watch for its 7mm umbrella shaft hole, 1mm smaller than the majority of brollies. The Ranger is rugged and well sealed against the elements.

It comes in a kit with a fitted case, spare battery and umbrella-type softbox. If you want to add a Skyport radio remote kit it will cost you an extra



£221, although it can be triggered via most remotes and has a built-in optical slave.

Biggest issue is price and size of the pack with its old-school battery. At 8kg it's no lightweight.

Our test aperture: f/32
Rating: 8/10



Profoto Acute B2 600 Air S kit

£2725

Optional extras:

Zoom reflector: ££90

3' x 3' softbox: £300

5' Octabox: £570

Power rating: 600 W-s

Contact: Profoto.com/uk

If you really must have the very best kit that will last a lifetime, then look no further - the Profoto is it. And, scarily, the Acute B2 that we tested is their bottom-of-the-range kit! They offer the pricier yet more powerful Pro range, too.

The Acute B2 basically differs from the bigger units as it only takes one flash head. Every bit of the kit oozes quality, from its zoom head to its super-strength power cable and the latest lithium ion battery. It even comes in a classy case.

The light output is consistent and powerful at 600 W-s, and the unit features the inbuilt Profoto Air Sync triggers, which are currently the fastest you can buy. These will give you the fastest possible flash sync speed with focal plane and leaf shutters.

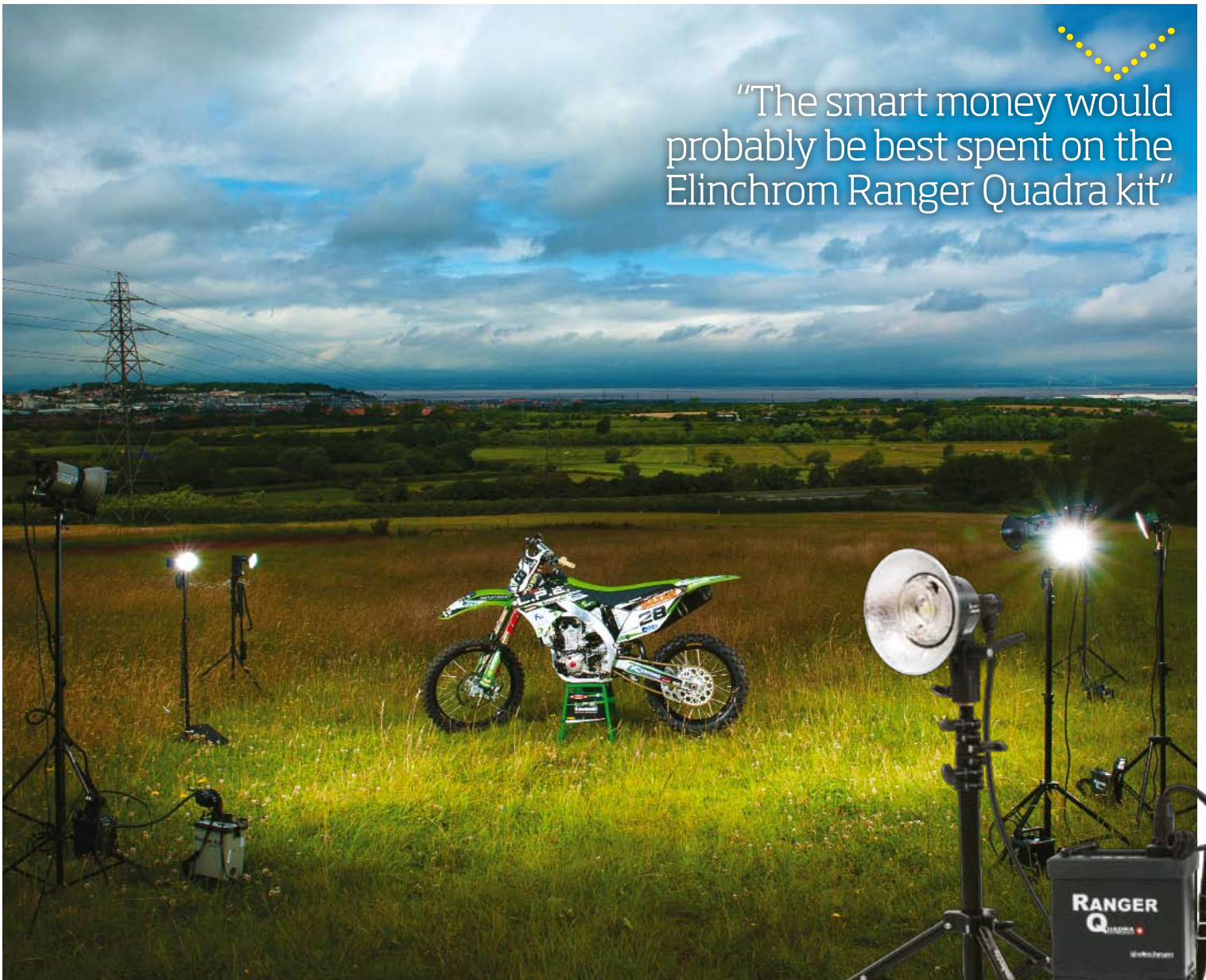
The unit gives very short flash durations, recycles quickly and the battery weighs just 3.6kg and provides power for up to 200 full-power flashes. There's a built-in optical slave, too although, like all optical slaves, this isn't so effective when used outdoors.

Apart from the single head output socket, the only other negative points are that the unit takes Profoto's unique range of accessories, rather than more readily available types. Profoto does, however, offer probably the widest range of accessories, albeit at a pro-level price.

And, of course, £2725 for the kit, which includes the Airsync trigger, is not cheap.

Our test aperture: From f/20 to f/25 (depending on zoom position)
Rating: 8/10

“The smart money would probably be best spent on the Elinchrom Ranger Quadra kit”



Conclusion

At so many different price points and hugely varying ways at providing location lighting solutions, it's impossible to pick an overall winner. From super-sized hotshoe-style kits to pukka battery power pack units right through to conventional studio monobloc lights with mains generators, the variety is just too huge.

But they are not all equal. The Bowens and Elinchrom D-Lite kits of basic studio lights with accessory power packs are big, bulky, have no weatherproofing and are just too compromised for serious location use.

For very occasional location use look at the D-Lite 4 Explorer kit for £918 as you get a lot for your money. The best value by far is the basic Lencarta Safari 600. Loads of power, loads of cheap accessories and a total bargain at £639 all-in with a case. It may not last a lifetime, but it is a surprisingly good performer.

If money is no object, there's no contest. Buy the Profoto Acute. In fact, if money really is no object go the whole hog and buy the Profoto Pro range.

But the smart money would probably be best spent on the Elinchrom Ranger Quadra kit. Two tiny but powerful heads, two decent batteries, fitted case, built-in radio triggers, loads of advanced electronics and decent-priced accessories. Good 400W-s output, huge adjustment range, decent build quality, bright LED modelling light and more. If you can stretch to the £1489 asking price, you won't be disappointed.

How we tested them

To test the relative power of each unit and recycle time, we put the fully-charged flash units three metres away from a calibrated Sekonic L-758DR light meter in a darkened studio and triggered the flash ten times in a row, allowing them to fully recharge between pops.

Any flash that could be adjusted or had a different reflector fitted had the standard fitment. However, some flashes – such as the Elinchrom Quadra – come with a wide-angle diffuser as standard, so this adversely affects the measured

power. And some 'standard' reflectors were more wide-angle than others.

For example, the Profoto varied between a reading of f/20 to f/25 by altering the zoom position of the reflector, which is around two-thirds of a stop. A complete stop is half the power, which shows what a huge difference this makes.

We were really surprised by the consistency of exposure across the whole range. None of the flashes were more than a tenth of a stop out on every single exposure.

We also used the flashes on several location shoots to test them in real-world shooting scenarios. The biggest issue was getting them all to sync together for our main opening photo as, outdoors, the optical slaves failed to be consistent. So we plugged in PocketWizard radio triggers to fire all the flashes together and, after a degree of fiddling, everything finally worked like a dream!

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