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Issue 169

10
STEPS TO
LOW-LIGHT
SUCCESS



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Chris Packham on photographing birds

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© Karl Taylor

“Product photography may look unattainable, but it’s nowhere near as tricky as it seems”



The appeal of a stunning portrait knows no bounds; it’s alluring, captivating and keeps us going back for more. On p26 we’ve pulled out all the stops to bring you an essential guide to capturing people, including tricks for posing your subject and knowing what kind of light to use.

It can be tempting to pack up the camera when the light fades, but you’d find yourself missing out on a wealth of breathtaking scenes. On p36 you’ll find 10 steps to achieve low-light success in your landscapes, from exposure bracketing to getting the most out of higher ISO sensitivities.

Product photography may look unattainable, but it’s nowhere near as tricky as it seems. On p48 we bust the myth and show you exactly how to shoot high-end shots, with plenty of step-by-steps to keep you going.

If you want to hear from the pros, on p20 Chris Packham has spoken to us this issue about the inaugural Bird Photographer of the Year competition, as well as his passion for wildlife photography. Over on p78 award-winning aerial photographer Timo Lieber showcases his awe-inspiring sky-high captures.

As usual, we’ve put plenty of kit through its paces this issue, including the Canon EOS 760D on p98, the Panasonic Lumix FZ330 on p102 plus tons of software, lenses and accessories. Head to our downloads website at www.filesilo.co.uk/digitalphotographer to get hold of all the test shots, as well as tutorial files and free Photoshop goodies.

It’s been a pleasure to see such incredible imagery grace our online gallery, so be sure to share your own photography with us at www.dphotographer.co.uk!

Enjoy the issue!

Philippa Grafton, Deputy Editor

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Cover images
Main image © Dreamstime
Inset image © Jeff Lewis

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Advertising
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Email: digitalphotographer@servicehelpline.co.uk
☎ (UK) 0844 848 8407
☎ (Overseas) +44 (0)1795 592 862
13-issue subscription (UK) – £52
13-issue subscription (Europe) – £70
13-issue subscription (ROW) – £80

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Printing & Distribution
Southernprint Ltd, 17-21 Factory Road, Upton Industrial
Estate, Poole, Dorset, BH16 5SN

Distributed in the UK, Eire & the Rest of the World by:
Marketforce, 5 Churchill Place, Canary Wharf, London,
E14 5HU (www.marketforce.co.uk)
☎ 0203 148 3300

Distributed in Australia by: Network Services (a division of
Bauer Media Group), Level 21 Civic Tower, 66-68 Goulburn
Street, Sydney, New South Wales 2000, Australia
☎ +61 2 8667 5288

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After several
years' experience
as a pro portrait
photographer in

Australia, Features Editor Matt Bennett
turns his expertise to high-end product
photography over on p48. He also
speaks to Nikon ambassador Leon Neal
about how to make it as a photojournalist
in such a competitive industry on p70.



TOM CALTON
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Professional wedding
photographer and
Digital Photographer
regular Tom Calton

is back this issue on p56 with a creative
project on capturing the glitz and
glamour of Hollywood in your portraits.
Discover how to use just two flashguns
and a simple home setup to create a
high-end professional look.



LAUREN SCOTT
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Keen to inject some
life into your low-light
captures? Over
on p36, freelance

journalist Lauren Scott is on hand to
explain how in 10 easy steps, from
exposure bracketing to using filters to
capture the light. Don't forget to share
your own shots with us online at
www.dphotographer.co.uk!



CHRIS PACKHAM
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chrisspackham.co.uk

Television presenter
and keen wildlife
photographer Chris
Packham has spoken

to us this issue about his involvement
in the Bird Photographer of the Year
competition, what he's looking for as
judge of the awards, as well as how he
got his own start in photography. Turn to
p20 to find out more!



BEN DAVIS
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With a professional
career photographing
portraits, there's
nobody better to

talk us through the art of capturing
personality than Ben Davis. Over on p26
he goes through the benefits of hard
versus soft light, how to expose correctly
for skin tones, as well as advice on
making the most of depth of field.



TIMO LIEBER
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timolieber.com

Aerial photography is
one of those genres
that holds an infinite
appeal, largely down

to the fact that it provides such a unique
viewpoint on subjects. This issue we've
spoken to award-winning photographer
Timo Lieber about his sky-high captures.
Turn to p78 to see his stunning abstract
images that will make you look twice!



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© Ken Wilson

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© Jeff Lewis

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© Seb Krzeminski

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Chris Packham



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Canon EOS 760D



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Tranquil tides

Amateur landscape photographer
Ken Wilson captures the serene
and still

Loch Leven, Scotland

"A calm day together with a bright sky and wonderful
reflections provided this ideal landscape subject.
Cropped to create a pleasing perspective with
colour and levels adjusted using Photoshop"

All Images © Ken Wilson



Top
Southport pier
"An iconic structure brought to life by the sunset, dramatic sky and pool reflections. These lighting conditions were a critical factor"

Above
Godrevy lighthouse, Cornwall
"A well-defined lead-in line to the lighthouse in the distance was essential in this composition"

Opposite-top
Vintage Staithes
"Staithes is a seaside village in North Yorkshire. This composition appealed to me because the scene had character buildings"

Opposite-bottom
Gateshead Millennium bridge
"A complex exposure, which had to be enhanced using HDR software and Photoshop to give a balance"

Ison



Website address:
www.kenwilson.photography/index.html
Day job:
Retired

Long-term ambition:

To achieve a more professional approach to photography by creating more vision, style and cohesion into my work.

How long have you shot digitally?

Well over ten years now.

Have you been interested in landscape photography for long?

My interest in landscape photography stretches back some 35 years as I had access to a darkroom and was able to experiment and print off my own images. The challenge of landscape photography has always appealed to me because of the ever-changing weather conditions and finding that unique location.

What's in your kit bag?

Nikon D90 and D40X, 10-20mm, 70-300mm, 55-200mm, 18-55mm, SB-700 Speedlight, Vanguard Alta Pro 263 Tripod, 1-stop and 2-stop square graduated filters, 4-stop square ND filter.

What's the most important thing to consider when shooting landscapes?

It's all about preparation [and] visiting locations beforehand. Checking the lie of the land and the best vantage points, knowing the sunset and sunrise times for that time of year. If a coastal seascape is planned, knowing about high and low tides. It is also important to monitor the weather forecast and make sure you have the appropriate clothing as it could be a long wait before the right conditions come along.

What advice would you give to aspiring landscape photographers?

Make sure you have researched the location. Whether the best time is to catch the sunrise or sunset. Trial the scene at different times of day and weather conditions. Make sure your composition covers the golden rules of foreground interest and appropriate lead-in lines as composition is key to getting the best of a scene. Understand your camera's functions in order to get the correct and balanced exposure and last, don't be afraid to experiment.

What editing tricks do you use on your shots?

I always shoot in RAW format, which gives me the best opportunity of controlling the results of the final image. My main software for manipulation is Photoshop, combined with other software that allows me to create HDR photos by joining images with different exposures in a single image that preserves the shadows and highlights.



YOUR IMAGES



Above

Flofoto



Image title:
Damp and dapper
DP Gallery address:
Flofoto
Destination wedding

held at the Olowalu Plantation House in Lahaina, Hawaii. The trip was filled with hot, sunny days, apart from the wedding day itself... Our gloomy circumstances added an unexpected sophistication to the day.

Opposite-top

Graham Borthwick



Image title:
Sydney rush
DP Gallery address:
Gborthwick
This shot aimed to

balance the rushing light trails of the traffic and the calmness of the urban lighting; this was one of my favourite shots of Sydney.

Opposite-bottom

Michael Atkinson



Image title:
A West Park
summer morning
DP Gallery address:
darlo2k3

The image was taken not long after sunrise at West Park, Darlington [in August]. It was the single poppy standing proud of the other wild flowers, bathed in the morning light, that really caught my eye.



STORY BEHIND THE STILL



Photographer: Paul Zizka

Website: www.zizka.ca

Location: Canadian Rockies

Type of commission: Personal work

Shot details: Canon EOS 5D Mark III with 15mm lens at f2.8, (a blend of two exposures at 8 seconds and 1/2sec) and ISO 2500

About the shot: “With its extensive ice curtains, ghostly trees and rocky overhangs, the Haffner Creek canyon in Kootenay National Park is a truly magical place,” explains professional mountain landscape and adventure photographer Paul Zizka. Winter had settled in and only a few weeks before he’d scouted out the location for ice climbing photography at night. “Even though the sky was heavily overcast I was overwhelmed by the possibilities. If the stars came out, the results could be fantastic. Eventually we got phenomenal conditions and went back to spend the evening experimenting.”

Zizka tried out a variety of lenses and locations within the canyon itself, but this was the image that ended up working best, shot with a Sigma 15mm lens to give a truly immersive view. “I liked how the fisheye provided a sense of place – of being in the depths of the canyon,” he adds.

“The Moon had just disappeared beyond the rim, but still shone an eerie glow, and the inclusion of two galaxies added to the surreal feel of the scene.” The final result is a clever blend of two exposures, ensuring that the ice surrounding the climber wasn’t blown out. Zizka was well-equipped with headlamps, a Gitzo GT 1541 tripod and a quick-release ball head and captured the main exposure at eight seconds, with another frame for the detail in the ice spanning just half a second. “We shot for a couple of hours in rather frigid temperatures, but the frozen fingers were well worth it!”

Right

Ice dreams

As part of a series of night-time climbing photographs, this image alone has received multiple awards. It includes two galaxies – the Milky Way and Andromeda





Leica unveils the affordable M Typ 262

The new Typ 262 has a lower price but still focuses on the essentials

Leica has unveiled the latest addition to its digital rangefinder camera range in the form of the Typ 262, joining the M, M-P (Typ 240) and Leica M Monochrom (Typ 246). The German manufacturer is well known for high price tags, but this new full-frame camera will be their cheapest and arguably most straightforward model yet.

While the Typ 262 features a 24-megapixel CMOS sensor akin to the other M models, it notably excludes video recording capabilities. A more important omission for many users will be the Live View feature, meaning that even though the model is outfitted with a three-inch LCD monitor, photographers will have to rely on the optical rangefinder to compose and shoot with.

These exclusions seem odd in the present-day camera market, but they all nod to Leica's famous analogue classics, though this approach won't suit everyone's tastes, of course. In the official release, the company explains that the Type 262 puts a "focus on the functions essential for photography, combined with clear and intuitive handling."

The body is uncluttered and compact, with a top plate engineered from aluminium giving it an overall weight of 600g, around 100g lighter than its sister models. Even the menu itself has become leaner, consisting of only two pages. Settings such as white balance and ISO should be rapidly accessible at all times, thanks to an

extremely logical button layout on the back of the camera.

One element that hasn't been simplified is the shutter itself, however. The M line is well known for its discreet nature, but in addition to this model's unobtrusive aesthetics, there's also an extra-quiet shutter cocking system, which the company says is barely audible in single exposure mode. It's worth noting that Leica has said that, in continuous mode, the Leica M (Typ 262) has the same sequential shooting speed as its sister model, offering up to three frames per second.

This latest release is the most affordable of Leica's M-series cameras, but it still retails for a substantial £4,050 (approx \$6,110). The Typ 262 Leica-M is available now.

Top Simple concept

Leica said the camera "consciously offers less than is technically possible" focusing on what is essential

Above Intuitive handling

Controls such as the white balance and ISO can be controlled via dedicated buttons on the back

Right Timeless design

The new model borrows elements of design from the original Leica M9, with a reduced logo size



GOING BESPOKE

Leica has expanded its la carte programme, offering users of the Leica M (Typ 240) a range of personalisation options. There are plenty of finishes on offer, to enable photographers to create a camera that's unique to them.



More new releases...

SPECIALIST BACKPACK FOR DRONES

Manfrotto's new D1 backpack is an all-in-one carry system that's been designed with quadcopters in mind. The propellers sit outside the bag, but there's also room for a DSLR, laptop and tripod.



WIDE-ANGLE PENTAX OPTICS

Ricoh Imaging has revealed the HD Pentax-D FA645 35mm f3.5 AL [IF], for its 645 medium-format Pentax camera. Newly designed with a nine-blade rounded diaphragm, it's got a minimum focusing distance of 0.3m.



LASTOLITE PORTRAIT ACCESSORIES

Along with adding three new collapsible backgrounds to its range, Lastolite has unveiled the Ezybox Speed-Lite 2, a compact, collapsible softbox that measures just 22cm. It can be used on or off-camera.



Science photography celebrated in brand new competition

Underwater capture named winner in the Royal Society's inaugural competition



Bert Willaert's unusual photo of a group of tadpoles silhouetted against a bright blue sky has been named as the overall winner in the first ever Royal Society Publishing photography competition. The award itself was set up to celebrate the power of photography in communicating science.

The biologist behind the winning frame captured it while snorkelling in a canal in his native Belgium. Describing the method behind the shot, Willaert explained that "clear water is hard to come across in the part of Belgium where I live. When I noticed these common toad tadpoles in the crystal clear canal I wanted



© Bert Willaert

to capture the chance encounter from their perspective. To conserve the natural world I think drawing attention to the beauty of these ordinary moments in our own neighbourhoods, including our own backyards, is particularly important. I believe people will only conserve things when they know it exists."

The Royal Society Publishing photography competition was launched earlier this year by two of the Society's biological sciences journals. There were three categories to enter overall and the shortlisted images span a stunningly diverse range of subjects from a school of tropical fish to a baboon lost in thought.

**Above
Tadpoles overhead, overall winner**

Willaert used a Canon G12 camera in a Recsea underwater housing, relying solely on natural light. Afterwards, he tweaked the contrast and saturation

New drone enables hands-free footage

HEXO+ is dubbed as a self-flying aerial camera



Testament to the ever-rising popularity of aerial photography, an autonomous drone, the Hexo+ has just been released, the first of its kind in the US market. The device can take off, follow and frame its user, all the time shooting with predetermined camera movements.

The big pull for this product is the ability to capture footage hands-free, after initiating the HEXO+ using a smartphone application, which should make it a big hit with action and sports users. Furthermore, the drone is compatible with most GoPro camera models, can operate at an impressive altitude of 16,000ft and has a maximum speed of 45 mph.

According to professional snowboarder and cofounder Xavier de Le Rue, "HEXO+ was built with outdoor adventurers in mind, allowing



hexo+

them to live in the moment and not behind a lens." The product was initially backed by a Kickstarter campaign last year and was fully funded in under an hour.

The company has also attained the certifications necessary for bringing HEXO+ to market and it's the first autonomous drone with complete certifications from the Federal Communications Commission (FCC), Conformité Européenne (CE) and Industry Canada (IC). Find out more at hexoplus.com.

**Above
Aerial filming made easy**

The bright drone has a library of 12 pre-programmed camera movements that can be fine-tuned

In other news...

More snippets of photo news from around the world



EPIC PHOTO CONTEST RETURNS

Red Bull's Illume Image Quest is now open for 2016 entries. There are eleven categories, including an inaugural Mobile section. More than €60,000 in Sony photography gear is on offer for the winners. Visit www.redbullillume.com to find out more about how to enter.



PHOTOSTORY GETS NEW FEATURES

MAGIX has released the latest version of its advanced slideshow software, Photostory 2016 Deluxe. The latest iteration includes tools to sync images to the beat of a song. 4K, HD and 3D formats are supported, as well as 360-degree videos.



AMBITIOUS TIME-LAPSE FOOTAGE

Triggertrap brought together photographers in five cities including London and New York for a series of ambitious time-lapse events. Over 65,000 photographs were captured, which have been condensed into a three minute film, LapseWorld. Watch it at www.triggertrap.com/lapseworld.

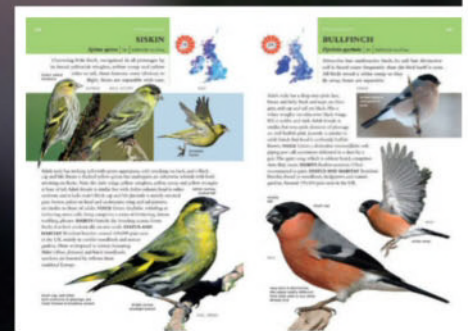
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Below
Know your market

Sterry stresses that it is fundamental to be knowledgeable about not only your subject, but also the market you are trying to sell to



WORKING ON THE WILD SIDE

Wildlife photographer and author Paul Sterry discusses making a living as a photographer and standing out from the crowd

All images © Paul Sterry

Photography has always been a competitive business and the digital revolution has not made things any easier for professionals or for those aspiring to make a living from it. Technology that allows one photographer to take amazing shots is available to countless others. Of course, artistry will always lift an image to a new dimension, as will technical skill. And in the genre of wildlife photography, field craft and an understanding of the subject are also key factors. But if you want to make a living from photography, it helps to understand how publishers and other image purchasers actually use images so you can give your image collection added value... Concentrate on subjects about which you are passionate – play to your strengths and above all, know your market and adapt to it.

Natural history is the dominating passion in my life and I have been fortunate enough to be able to combine this interest with photography. My photographic career began in the Eighties... Back then, the wildlife photography world may have been a small one, but the market was

fiercely competitive. Simply taking good photographs and promoting them in their own right was not going to make me a living. I had to play to my strengths: a broad knowledge of British natural history, my love of writing about the subject and my ability to identify correctly as well as photograph a wide range of wildlife... Producing photographic identification field guides seemed an obvious route to follow and a relationship with the publishers Collins evolved.

I have had to adapt in order to survive. My first field guides were produced in the days of film, with my involvement limited to writing the text, supplying slides to the publisher and checking proofs at the design stage. But technology moved on and the changes affected the way I took photographs, the means by which books were created and the expectations of publishers and the book-buying public. I embraced digital photography



PRO BIO

A lifelong interest in natural history and an academic background in biology stood Paul Sterry in good stead when he embarked on a photographic career more than 30 years ago. With more than 50 books to his name, he is an established author and runs the specialist photolibrary Nature Photographers Ltd.

www.naturephotographers.co.uk

with open arms, but I also had to learn new skills: being able to manipulate and optimise images for print became essential, [and I] had to understand the processes involved in book production to avoid making fundamental mistakes with image workflow.

There will always be a demand for people who can produce stunning photographs backed up by accurate and informative text. And I hope there will always be a market for printed books, including field guides. But the appeal of electronic books is undeniable and this is a market that needs to be considered by aspiring photographers; self-publishing is a

commercial model that works for some. Stick to subjects which you are passionate and knowledgeable.

Paul founded the Bird Photographer of the Year awards, and is a preliminary judge. To enter, visit www.birdpoty15.picturk.com.

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Birdwatch

Passionate photographer and television presenter Chris Packham discusses judging the inaugural Bird Photographer of the Year awards and all things wildlife

Right

Technical proficiency

As well as creative flair, Packham and his fellow judges will be looking for technical prowess and the ability to capture a well composed and exposed image

All images © Chris Packham



Naturalist Chris Packham is perhaps best known in the UK for his long-standing career as a television presenter, hosting such shows as *Springwatch* and *Autumnwatch*, but he's every bit as passionate about wildlife photography as he is about the wildlife itself. In this interview, he reveals why blue tits are his favourite subject and what he'll be looking for as a judge of the 2015 Bird Photographer of the Year.

What was it that attracted you to serving as head judge of the 2015 Bird Photographer of the Year awards?

It's an exciting opportunity... It's being run by the British Trust for Ornithology. I'm a great champion of the British Trust for Ornithology, they are globally one of the leading monitoring organisations that we have. They have gone through a great period of transition, in terms of the way that they communicate effectively to the public the data that they collect – they're presenting that in a far more accessible way than ever before. They're using all sorts of state-of-the-art technology and tracking devices to learn more about birds more quickly than has ever been done before and they've had some remarkable successes with Chris the cuckoo.

I'm a very keen photographer myself, I always have been, since the mid-Eighties. We tend to overlook things that are in our own backyard – I spend most of my time photographing blue tits, to be quite honest with you, I think that if they were a rare, little, exotic rainforest bird, people would travel all over the world to see them and it would be a great coup to see them, but we take them for granted – and we know that's a fallacious thing to do. We used to take sparrows and starlings for granted, but we don't do that anymore.

When it comes to photography, home is where the heart is. There are good reasons to try and take good photographs of British birds – very sadly, a large number of them are in trouble and if we can highlight their plight through attracting people to look at photographs of them then, again, we're achieving several objectives here.

There's quite a few photographic competitions that I'm involved with and have been for some time, [but] I'm really excited about this new one, it's focusing very specifically on birds. In the UK they do attract more attention than any other type of fauna that we have, we spend a huge amount of money feeding birds in our gardens, so I'm hoping a few people are going to lean out their

window with their mobile phone and snap something sexy, basically.

What advice would you give to someone entering the awards?

I will be looking for innovative and imaginative photographs. If I see anything of the like that I've seen before – it could be brilliant, it could be beautifully lit, it could be technically excellent – but it's got to offer me something new. I'm looking for people to use their imagination and they might be doing that in terms of creativity, in terms of where and how they've photographed the bird, it could be technological, they could be using a piece of equipment that's not normally used to photograph birds, it could be a species and the context of it – a juxtaposition of a bird, which is very rare, but in a very urban landscape or something like that – something surprising and new.

I think that, from my point of view, the technical aspects have to be of a required standard, but they are always going to be second to the impact that I get from the photograph. I want to see a photograph and instantly think "wow, I wish I'd taken that" or "wow, I wish I'd been there to see that."

Photograph the birds that you like most, because you will respond to those and your affinity for them should, if you're able to transfer that, come over in your photograph. Ultimately, that will contribute towards taking an original, unique image, if it's a personal response to something.

They don't have to always be beautiful. I think they can be striking and sometimes they can be confrontational or they can be upsetting. It's about that impact... The whole frame is important – you can't have a remarkable bird, in beautiful light with some really tatty or distracting background – the whole image is important, every pixel counts, so you've got to be very careful about your framing and understand that. Just because it's beautiful doesn't mean it's going to say anything, it doesn't mean it has impact – sometimes you can read into a photograph and see a story there or a plight or a problem – or a success. You're expanding the scope of your ability to communicate with people, and that's exciting.

Below

Instant impact

As head judge Packham will be looking for images with an immediate wow factor

Opposite-top

Telephoto success

Packham favours working with his 500mm Nikon lens, isolating his subject as much as possible

Opposite bottom-left

Behavioural study

Entrants should consider capturing images that demonstrate a clear sense of the bird's true behaviour

Opposite bottom-right

Creatures in context

"Subjects have never really been the be all and end all for me – it's about the impact of the whole picture"

BIRD PHOTOGRAPHER OF THE YEAR AWARDS 2015

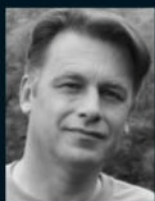
To be in with a chance of winning the top prize of £5000, visit birdpoty15.picturk.com. The closing date is Saturday 9 January 2016.





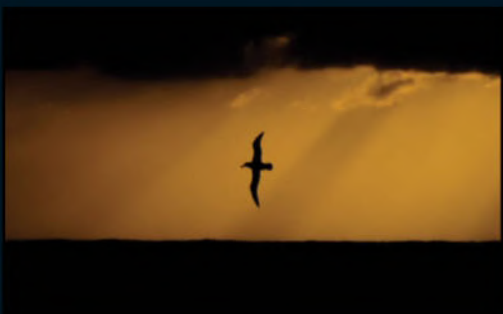
“The technical aspects have to be of a required standard, but they are always going to be second to the impact”





Chris Packham's top five tips for bird photography

- 1 Don't allow familiarity to breed contempt** There's beautiful subjects just outside your backdoor. Don't get preoccupied with the exotic.
- 2 Use your imagination in advance of taking the photograph** Think about the subject, think about what you're trying to say about it, what you're trying to achieve. Critically analyse that and think about it for some time... So that when the subject turns up you've done all your homework in advance – you're not snatching at an opportunity.
- 3 Use what you've got and understand the capabilities of that** You can get a brilliant photo on a mobile phone these days. Obviously you can't get a little bird a long way away on a mobile phone, but there are other photographs that you can get accomplished pictures of.
- 4 Think about how you could enhance your images** Can you increase the contrast? Can you pull the blacks up? Can you make it a bit more punchy? It's all part and parcel of what you're trying to say with that image so it's not job done... [Saying that,] don't be tempted to turn everything into something that looks like it's come off of a Pixar cartoon.
- 5 Never, ever, ever compromise the health, well-being, ecology and behaviour of your subject** It doesn't matter how desperate you are to get the photograph, even if you are photographing things at home, you don't compromise them. The subject is always more important than the image. When you accept that, it actually puts you in a better place to get that image, because the image will be more real... The ethics of taking the photograph always have to come first.



Above
Silhouette success

One of Packham's favourite techniques is the use of silhouettes to create a more graphic depiction of his subjects



“The fact that perfection is unattainable makes it all the more alluring”

In another life would you have been happy to just be a professional wildlife photographer?

That's what I did when I left university. I bought some camera equipment and the only reason I got into television was to pay for my stills photography. In those days it was film, transparency film was expensive and so was the equipment – I didn't have any money... I needed a car and fuel. The reason I started working in television, as a camera assistant, was purely to sponsor my wildlife photography. And now, a lot of the time that I'm working, I'll be somewhere and I'll be thinking “I'm very, very lucky to be here, I'm enjoying my job, but I wish I could just use my camera.” Several times a year I go off on shoots and I obviously do things at home and it's been a great passion, because it's uncompromising. It's you, a piece of equipment, which you've tried to master and you've got one opportunity in the entire history of the Universe to record a tiny fraction of time and get everything right.

Is there such a thing as a perfect photo?

I've never taken a photograph I've been pleased with and I think that that's important for me because, if I did, then what would I

do next? I want to continue to improve my photographic abilities and techniques for as long as I live so when other professional photographers send me pictures and they say “what a brilliant photo.” I think, “well, I bet I could find a mistake with it.” And, if it's that brilliant, what are you going to do tomorrow? Because you should always be able to try harder and get better pictures and I think that's what I strive to do. I never really find [photography] very rewarding – I find it sometimes a quite depressing and frustrating process, but the challenge never goes away, of trying to get a better picture every time I pick up my camera. But that's quite satisfying – the fact that perfection is unattainable makes it all the more alluring. What you're trying to do is just get closer and closer to it all the time, but ultimately the last picture I take on Earth will hopefully be a lot better than the first picture I took, it's never going to be perfect. **DP**

Above
Blue tit

One of Chris Packham's favourite subjects to photograph is the blue tit, a bird that he says people would travel to see and photograph if it weren't native to the UK



“Emily,
I like where
you’re going
with that,
but this
time I want
you to
think visceral.”

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PERFECT *your* PORTRAITS

Learn how to capture better people pictures with this detailed guide to the skills the professionals use

Portraiture is hugely popular among photographers and it's no surprise that many of the first serious photographs ever captured were of portraits.

No doubt a big part of its enduring appeal is the fact that portraiture is incredibly difficult. No matter how beautiful or how full of character someone's face is, capturing a truly compelling photograph of another person is by no means easy to do.

This is largely down to the fact that great portraits of people require such a wide range of skills. It's necessary to have not only photographic prowess – involving focusing, metering and framing – but also the ability to put a subject at ease and capture them in the most flattering or intriguing way possible.

Portrait photographers also need to have an expert understanding of lighting and be able to edit their images to just the right degree.

Getting all of these elements right requires flexibility and a good understanding of an arsenal of different techniques. Skin, for example, is difficult to light and edit to perfection, while the perfect framing isn't always immediately obvious, especially when incorporating an environment into the portrait.

Often, the difference between a decent portrait and a very good one is quite subtle and comes down to the mastery of some specific details. Over the next few pages, you'll discover how to apply these to your own portraits to perfect them.

Left

Portrait perfection

Producing stunning images of people isn't as easy as it seems, but the advice on these pages will help you iron out common problems

Control depth, create drama

Take control of the depth of field to capture your best ever people pictures

A powerful portrait always forges a connection between the viewer and the subject. There's a variety of ways you can help focus attention upon your model, but mastering the depth of field is top of the list. Working with a narrow plane of focus is the best way to instantly isolate your subject in the frame. "I prefer a shallow as possible depth of field and shoot wide open at all times if I can," says professional portrait photographer James Brokensha (www.jamesbrokenshaphotography.co.uk). Doing this will feather all distraction outside of this tight band of focus, rendering it as a pleasing blur, often referred to as bokeh.

Shooting with a wide-open aperture isn't the only way to maximise the background blur; lens choice has a lot to do with it too. The greater the magnification of the lens, the more the background blur is magnified, which is why telephoto lenses are considered better than wide-angle glass for portraiture. It's not just that you'll get better blur with a longer lens, but your image won't be prone to as much distortion either.

"Focus becomes much less forgiving with such a shallow depth of field, so I always check my images on the LCD and examine the sharpness of the eyes," advises Brokensha. For the most part, the eyes want to be the sharpest part of the frame, as it's to here your viewer will first be drawn. It's not always possible to keep both eyes pin-sharp with the aperture wide open, so to create the strongest possible image you need to position the focal plane over the nearest eye.

Keeping the focus accurate can be a real challenge and mere millimetres make a big difference. It's tempting to focus first with the central AF point and keep it locked while the composition is fine-tuned. This method fractionally alters the distance between your lens and the area you want to be held sharpest. Instead, it's best to use the active AF point that's closest to the focal centre of your subject to minimise these shifts and keep the eyes sharp.

The other challenge is working with flash and fast apertures, as you run the risk of overexposure. Jersey-based photographer Seb Krzeminski (www.500px.com/sebkrzeminski) recommends you "use a neutral density (ND) filter to reduce the amount of light reaching the sensor while keeping a shallow depth of field," which gives him the best of both worlds.



2x © Ben Davis

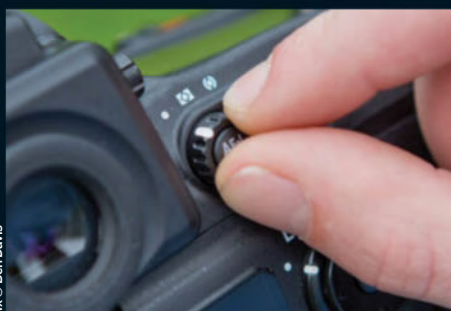
● **Focus on the nearest eye** The viewer is automatically drawn to your subject's nearest eye, so this needs to be the sharpest part.



● **Check your focus** Setting the plane of focus over the eye furthest from the lens creates a more uncomfortable feel to your portraits.

Get great skin tones

Use your camera's spot metering system and exposure compensation controls to deliver perfectly exposed portraits



4x © Ben Davis

1 Spot meter With your camera in Aperture Priority, dial in the maximum aperture and switch your camera to spot metering. Now you can take a precise exposure reading from a specific area.



2 Focus Point Point your active AF point at the subject's cheek and your camera will select the shutter speed. Press and hold the Exposure lock button. Half press the shutter to set the focus, then recompose and shoot.



3 Check it Take a look at the LCD and check the results. If your subject has fairer skin you'll need to dial in +1 stop of exposure compensation to stop your image from underexposing.



LOCK EXPOSURE

Most DSLRs feature a button on the rear that allows you to lock and hold the exposure. On a Nikon, it's the AE-L button and on a Canon it's the star button. Press and hold this after you've metered to keep the exposure set.

© James Brokensha



© Seb Krzeminski

Left

Use a ND filter

To prevent overexposing the image with a wide open aperture, you can use a neutral density filter to restrict the amount of light that goes into the lens

nski

Above

Compose correctly

"The biggest challenge of shooting with apertures below f1.8 is keeping the eyes the sharpest part of the image," says portrait snapper Seb Krzeminski

Top

Open your aperture

Pro photographer James Brokensha set his aperture to its maximum setting of f1.8 to create a narrow plane of focus and pleasing background blur

TECHNIQUES

GING EYES
The most effective ways of engaging a viewer is to include eye contact

RELAX
Setting your subject at ease will create engaging poses packed with confidence

ALL ABOUT ANGLES

A different perspective can have a dramatic impact upon your shot. Framing from a high angle will make your subject look submissive and vulnerable. Use a lower angle and instantly your subject will look dominant.

© Martin Castein

Strike a pose

Discover how to direct your model to create interesting and flattering poses

Not everyone loves being in front of the camera, but it is easy to help people look their best with a little thought towards their expression and posture. Before you come to direct poses though, you need to put your subject at ease. "It's vital to establish a good rapport, as an awkward portrait will instantly deter the viewer," says photographer Martin Castein (www.martincastein.com). "I usually sit and have a coffee together first, then we're relaxed and working together is easy."

Even if there's no need to break the ice, it's still important your subject feels relaxed, as it will shine through in the pictures. Give encouragement and positive feedback and as you go along show your model the shots on your camera's LCD screen – confidence is vital.

A good pose always starts with the feet, even if they're not included in the composition. To avoid more awkward and tense poses, don't get your subject to point their feet towards the camera, as you would for a police mugshot. Instead, ask them to direct their toes to a 45-degree angle across the camera. Their hips and shoulders will follow suit, which is instantly slimming and automatically creates a more

Master portraits on location

Use a larger depth of field and include the background in your portrait to provide context and personality



🔗 **Environmental portrait** To make an environmental portrait work, you need the location and any props to help tell the story of your subject.



🔗 **Involve the background** Use a mid aperture of f11 to keep the background from blurring completely and compose the frame to include clues about your subject's life.

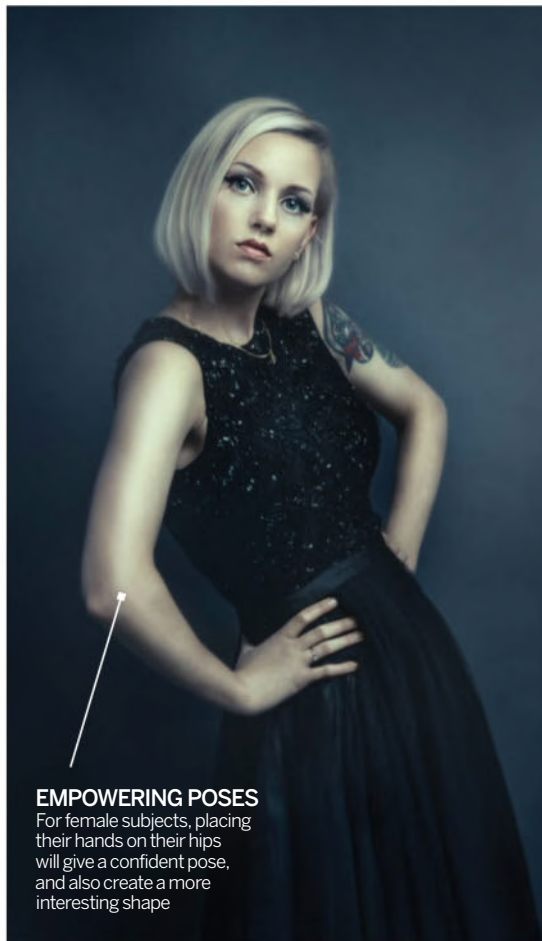
2x © Ben Davis



MALE SHAPES

Ask your subject to bend his elbow or fold his arms. It'll make him look more muscular and enhances a flattering male shape

© Martin Castein



EMPOWERING POSES

For female subjects, placing their hands on their hips will give a confident pose, and also create a more interesting shape

© Martin Castein



TELL A STORY

Your subject's pose can communicate lots of things, for example, pulling on the coat collar can give a chilly impression

© Seb Krzeminski

interesting shape. You can also create more dynamic poses by asking your model to stand with their legs crossed, or with one foot in front of the other.

Men and women suit different poses from each other. Men usually want to look bigger, so folding the arms increases the apparent size of the chest, as well as making the biceps look bigger. For women, a hand on the hips can imply confidence and power, whereas hands towards the hair or face creates a more intimate tone. It's important to think about

where the hands fall if you want to capture a more polished shot. Keep them busy, even if they're tucked in pockets, tugging on clothing or clasping the other arm.

Eye contact also makes a big difference with the mood of an image. If your subject is looking into the lens, it helps to create a direct connection with the viewer. You'll create quite a tense, confrontational pose if your subject's face is square-on to the camera. Instead, a slight tilt of the head or glance across the shoulder makes a gentler pose.



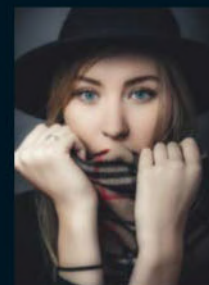
• **Make a connection** Asking your subject to look directly into the lens will create a powerful portrait that instantly engages the viewer.



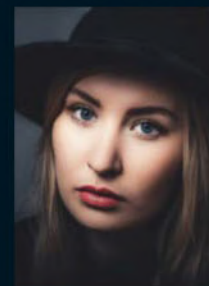
• **Look away** If your subject is looking past the camera, it creates a sense of mystery and intrigue and also makes for a more thoughtful and private atmosphere.

Anatomy of a pose

Pay attention to all the different components of a pose to create more striking portraits



• **Keep hands busy** Hands can convey messages and enhance the narrative of a portrait. Get them doing something to add an extra element of interest to your shot.



• **Consider the expression** Your subject doesn't have to always crack a smile when they face the camera. More thoughtful expressions can be more engaging.



• **Create shapes** Ask your subject to cross their feet, slightly twist their hips or drop a shoulder, it'll produce a more interesting body shape and stance than casually standing there.

3x © Ben Davis

Master the light

Learn the tricks used by top professional photographers to add depth and drama to your portraits

A key ingredient to a powerful portrait is emotive lighting. The character of the light plays a huge role in determining the mood of your shot. Soft light is considered to be more flattering and implies a gentle tone; whereas hard light is more aggressive, adding drama to the image. It doesn't matter if you prefer natural light or a studio setup, light still behaves the same way, so the same skills apply wherever you shoot.

As a photographer, you choose if the light will be diffused, directed, filled or flagged. Soft light is the first port of call for any flattering portrait. It's characterised by feathered shadows, with a smooth transition between light and dark and no specular highlights on the skin. The softness of the light is dictated by the size of the light source. If a light source is bigger, its shadows are softer, as the light spans a greater angle across the subject. Smaller light sources are harder, as it travels in a more singular direction.

There's all sorts of ways photographers can make their light sources bigger. If you're working with studio or flash light, then you need to diffuse it through something like an umbrella or softbox, as this will increase the

apparent size of the light source. If you're working with on-camera flash, bouncing the light from a white wall or ceiling will equally give you a bigger light source for softer light. You can even diffuse direct sunlight, by using the inner translucent skin of a 5-in-1 reflector.

Once you've decided how hard or soft you'd like your light to be, you need to choose the angle it comes from. We spoke to award-winning portrait photographer Martin Castein about this: "I think having directional lighting is the key. If my light has no direction and is just flat, then I will get a flat image. Directional lighting will bring drama and feeling to my image and that 3D feel."

Even subtle adjustments to the angle of the direction of your light will have a dramatic impact upon your portraits. Lighting your subject from one side will create a split-lighting effect, which is used for more brooding or masculine images. Directing the light from above and in front tends to be more flattering and is considered more feminine, as it emphasises wrinkles and blemishes less. The key is to be open to experimentation, as that's always the best way to learn what works best for you.



**Above
Hard light**
The direct light of an undiffused flash creates strong shadows with a hard edge and creates more specular highlights on the skin



**Left
Soft light**
Soft light has been diffused so it has a wide spread; this gives a gentle feathered edge to shadows and is generally more flattering

2x © Ben Davis

Make use of colour Consider the colour combinations in your portrait and how you can use them

Colour is often taken for granted in photography, but it's as much a key element of composition as shape, form, lines, texture and space. Making the most of colour can have a huge effect upon your images, so it's worth paying close attention to the hues in your frame as they can transmit all kinds of information, including emotions. Red can be romantic, happy, energetic or optimistic. Cooler colours like blues tend to invoke a more tranquil, relaxed and placid feeling.

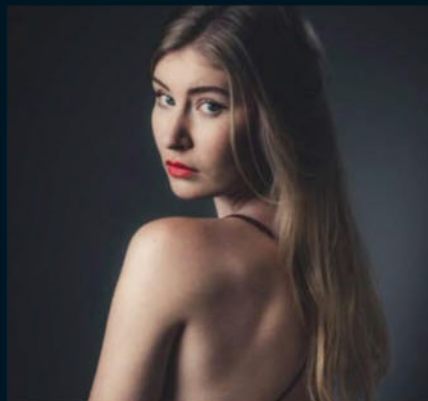
Bold, saturated colours make a big impact, especially when the composition is kept uncluttered. You should try to avoid using too many colours though, as they'll begin to clash and distract from your subject. Start off by experimenting with shades of the same dominant colour, you'll find that simplicity often works best, especially when framed against a quiet and neutral background.

How you light your images has an impact upon how saturated the colours are. More direct light produces more contrast, which in turn makes colours

more vibrant. Whereas really flat light – like a heavily overcast day – has a very low contrast, making the colours more muted. You can also adjust the colour intensity and tint afterwards when you edit your shots.

Below Go neutral

A muted background is the perfect canvas for a splash of colour – this shot lacks a dominant colour



Right Add colour

The simple addition of a bright red coat enhances the other reds in the image, and transforms the shot



2x © Ben Davis

MODIFY THE LIGHT

Seb Krzeminski's preferred light modifier is a beauty dish: "I use a white dish for less contrast and usually soften it even more with white fabric diffuser. I like that round catchlight in a eye"

COLOUR WHEEL

The colour wheel shows the relationship between the colours of the spectrum. Those opposite each other – like yellow and blue – are complementary and work well together. Contrasting warm and cool colours is eye catching.

USE A REFLECTOR

When working with natural light, position the Sun behind your subject to create a halo effect, and use a reflector to bounce light back onto your subject and lift shadows

REMBRANDT LIGHTING

Named after the Dutch painter who favoured the effect, the lighting is high and diagonal, creating soft shadows with a triangle of light on your subject's far cheek

USE WINDOW LIGHT

Sunlight diffused through a large window is perfect for indoor portraits as it acts like a giant studio softbox, giving soft shadows and square catchlights in the eyes

Edit like a pro

Use Lightroom or Adobe Camera Raw to remove blemishes for truly flattering results

Every portrait you take can be altered, improved or enhanced with the tools on offer in post-processing software. Even a gritty, warts-and-all-type image will benefit from a little manipulation. It's important to master these techniques, so you can make your people pictures as powerful as they can be.

"Post-processing is the darkroom of the 21st Century," states portrait pro Seb Krzeminski. He uses Adobe Camera Raw

in Photoshop and likes to concentrate on improving the skin of his subjects to make it smoother and free from blemishes. Both the Spot Removal tool and the Adjustment Brush – available in both Lightroom and Adobe Camera Raw – are fantastic tools for making the skin appear smoother.

It doesn't stop with the skin, though. The eyes often benefit from some subtle adjustments too, whether that's some simple

sharpening, enhancing the colours of the iris or lifting shadows under the brow. Knowing a few simple processing tricks will improve your portraits leaps and bounds.

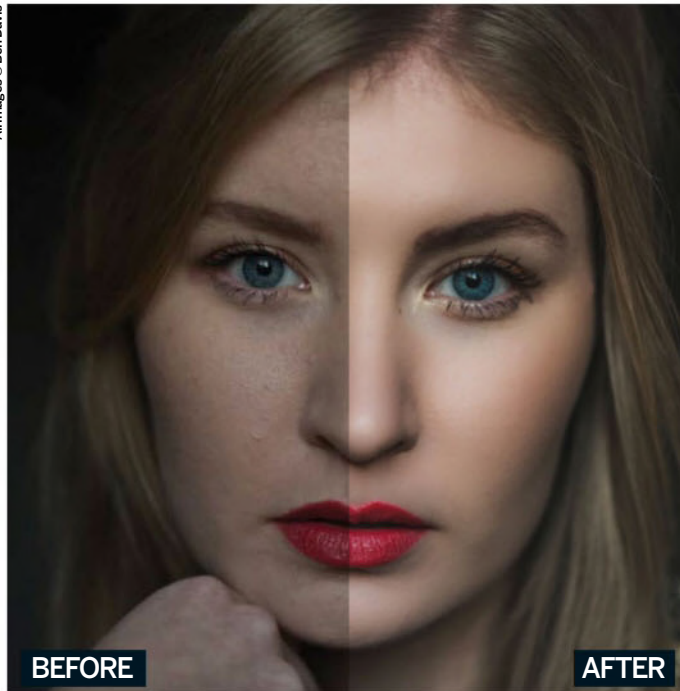
It's possible to take the processing too far and create an unnatural and unrealistic version of your subject, and some people are uneasy with too much retouching. But with some control and clear vision of the end result, it's easy to create truly engaging portraits.

DP

All images © Ben Davis

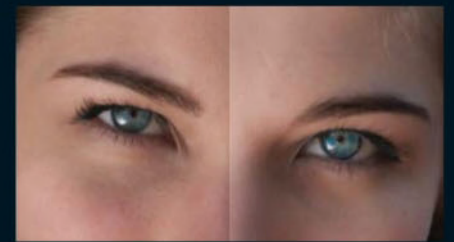
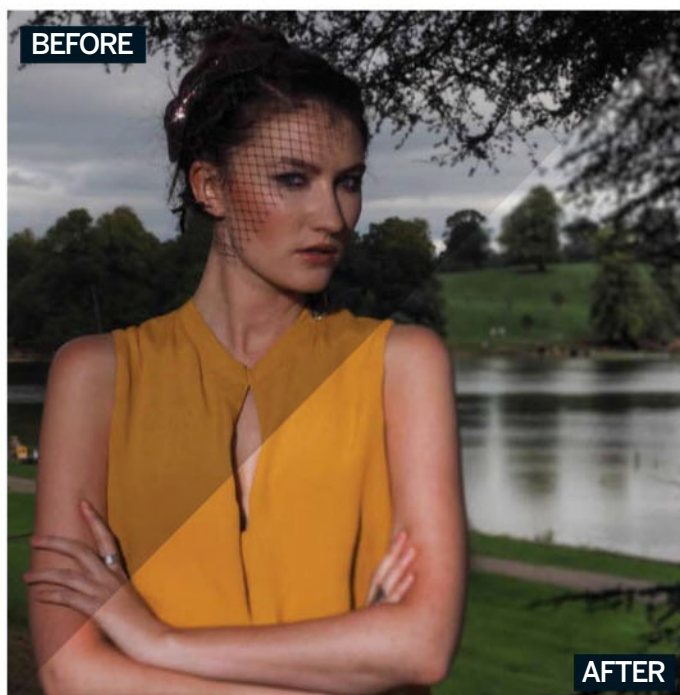
SMOOTH SKIN

A quick and easy way to smooth over blemishes, pimples and wrinkles is to use the Adjustment Brush and paint a localised adjustment over the skin. Lightroom comes with the Soften Skin preset, where Clarity is set to -100 and Sharpness to 25.

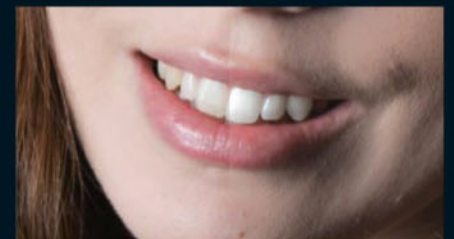


ADD BLUR TO THE BACKGROUND

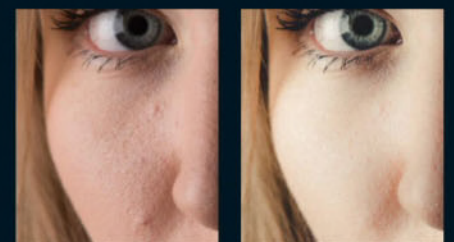
A blurry background can enhance your subject. If your background isn't as blurry as you'd like, use the Radial Filter tool with Sharpness set to -100, and draw an ellipse across your subject's face. To increase the blur effect, Ctrl/right-click on the pin and choose Duplicate.



🔴 **Make the eyes shine** Zoom in and select the Adjustment Brush. Choose Iris Enhance from the Effect menu, or increase Exposure to 0.35, Clarity to 10 and Saturation to 40. With Auto Mask ticked, paint over your subject's eyes.



🔴 **Brighter smile** Anyone can have bright white teeth with a little post-processing. Use the Teeth Whitening Adjustment Brush in Lightroom, or set Exposure to 0.40 and Saturation to -60 and with Auto Mask ticked paint over the teeth.



🔴 **Remove blemishes** Select the Spot Removal tool and set the tool to Clone. Adjust the size to suit and then click the blemish you'd like to remove. If Lightroom doesn't automatically select a suitable source area, you can manually adjust it.

CREATE THE IMPOSSIBLE

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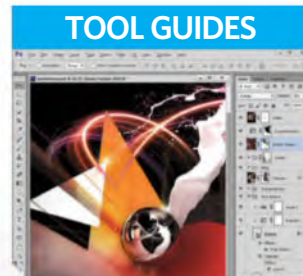
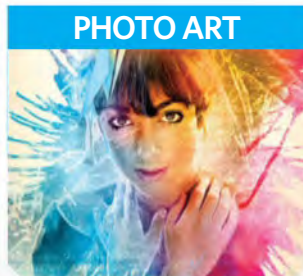


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10 steps to low-light success

LOW-LIGHT PROFESSIONALS

Discover the work of photographers Jeff Lewis (www.jefflewisphotography.ca) and Alex Noregia (www.alexnoregaphotography.com) over the next few pages. Both low-light masters provide extensive workshops and photo tours in exquisite locations across the world and you can find out more on their websites.

Discover how to take your best ever landscape shots even when the Sun has left the sky

When the days get shorter and the nights draw in, it's easy to feel limited by your shooting options and neglect the wonders that the great outdoors offers. There's no doubt that capturing landscapes in low light can be a tricky business, but when executed well the results can be truly captivating.

Low-light photography is about much more than just shooting at night, especially as far as landscapes are concerned. Whether you're passionate about sweeping vistas, seascapes or the urban environment, read on to discover our top tips for successful captures from visible light to complete darkness. There's no such thing as the perfect time to take photographs, and by embracing low light you'll

find you're able to shoot for longer – watch as the scenes before you transform rapidly and magically into something even more stunning.

Over the next few pages we'll take you through the different ways to expose a scene, as well as how to meter shots for precise and accurate illumination. Aside from exposure, one of the main challenges of low-light photography is focusing. Stacking is a great technique for extending a scene's depth of field and we'll show you how to perfect it with plenty of hands-on advice.

Low-light photography can push the limits of your equipment, not to mention test your skills, but it's an exciting challenge. Take heed of our essential steps before you begin, and get ready for some captivating results.

Above **Burning Bow**

This was "one of the most vibrant sunrises" photographer Jeff Lewis has ever witnessed, captured at Bow Lake, Banff National Park

© Jeff Lewis

1 Master manual exposure

When the light levels drop, take full control of your camera settings

Though it can be daunting to switch to Manual mode, the greater creative control that it brings is undoubtedly worth the extra effort. Even though lighting can change rapidly across a landscape, the pace of the genre is usually more leisurely than for example wildlife and action, making shutter speed the least important element of the exposure triangle.

After you dial the camera to manual, start by considering your subject, as well as the effect you want to achieve, as this in turn determines what exposure setting to choose first. Are you using a sturdy tripod? Do you need to freeze any movement, such as wind or water?

If the frame before you is relatively still and your tripod is stable, then always opt for the camera's lowest native ISO, and allow a longer shutter speed to compensate.

When deciding on the optimum aperture for the scene before you, remember that although it's desirable to have as much of the scene as sharp as possible, depth of field varies from lens to lens and should be wide enough for the available light.

Unlike Aperture Priority, you'll need to adapt settings continuously when working manually, especially during the transient illumination of the golden hours. Shoot in Live View mode,

turn on the histogram function and quickly check the exposure before firing the shutter. This can become particularly important in high-contrast situations that might otherwise fool your camera's in-built meter, clipping detail that can't then be recovered at the editing stage later.

Below-left

Aperture priority

While the image isn't poorly exposed, the shadow detail is overly dark, and a stop of extra light would help

Below-right

Manual mode

In manual exposure, an extra stop of light was added, taking the exposure time to 30 seconds



1 Prioritise one setting Begin by setting a low ISO and an aperture of f11 or narrower, then change the shutter speed for a correct exposure. Tweak settings depending on the available light.



2 Meter with ease Evaluative metering, called Matrix metering on Nikon systems, takes measurements of light intensity across the whole frame, so it's generally the best one when shooting rapidly changing landscapes.



3 Use the histogram Shoot in Live View and activate the histogram function on the screen. Pay attention to any highlight or shadow detail that's being clipped, and adjust the exposure to avoid this.

FRAME IN ADVANCE

Arrive to your shooting location earlier than you need to and use the extra time to scout out possible elements of foreground interest, such as rocks, trees or fences.

It can be trickier to pick out visual anchors once the light is fading.

2 Frame the scene

Exclude areas of darkness through lens choice and composition

When you've got a certain composition in mind, choosing and using the right lens is imperative to realising your creative vision. Although sweeping wide-angled vistas are the most characteristic of this genre, there are plenty of times when using a telephoto lens can be much more effective, particularly when you want to exclude large areas of darkness in your shot.

As you move gradually from wide-angle focal lengths to a telephoto view, you'll equally include less of the scene in the frame and end up with a more concentrated view. In overcast low-light conditions, particularly where the sky lacks interest and visual appeal, experiment with a mid-zoom to eliminate the sky from the frame altogether.

Purposely creating a composition to avoid dark areas might sound odd, but sometimes it's simply impossible to meter effectively across a whole wide-angled scene. Think carefully about the scene before you and decide which parts are more interesting, zooming in on the more photogenic areas, or moving closer to the subject yourself if using a prime lens. If you are in doubt, take two photos of the same scene using two different focal lengths and compare the impact that each has on the eye.

While there's nothing wrong with using longer focal lengths in terms of composition, remember that telephoto lenses are much more prone to camera shake than their standard counterparts. Enable Mirror Lock-up to avoid camera shake and always use a self timer or release when firing the shot.

Left Telephoto

Hone in on more interesting detail by using a telephoto lens and exclude unnecessary darkness

Top Wide angle

Wide-angle shots can lose their impact when there's no distinct focal point, especially during darkness

© Josh Felise

© Lauren Scott



© Torrey Gleave

Left

Mirror lake

Keeping the camera still in low light is absolutely essential for achieving pin-sharp and professional-looking results

Handhold with confidence

Keep your stance sturdy when shooting without a tripod

Avoiding soft results when hand-holding your camera is a challenge, but not impossible, and requires you to distribute your weight evenly on both legs. Keep one hand on the lens, and use the other to hold the camera and press down the shutter.

Pull your elbows in tightly to the chest for greater stability, and exhale fully before you fire the shot to avoid any added camera shake.



3 Aim for stability

There's more to using a tripod than you think

Although lugging around a sturdy tripod sometimes seems like a hindrance, it can also mean the difference between an average shot and an epic one. Keeping steady means sharp results, but using a tripod for stability involves more than just extending the legs and mounting the camera straight on top.

Provided you have the time, try to adopt a more methodical way of setting up your tripod in low-light, deciding upon your rough position and viewpoint before worrying about the support itself.

When you've settled on the composition, extend your model and point one of the legs towards your subject, so you're able to stand between the other two legs and avoid knocking it over.

In landscapes such as rocky coastline, it can be hard to make sure the weight of the camera is evenly distributed, but ideally the central column should be vertical and perpendicular to the ground. A spirit bubble will help with this, and can be bought cheaply if you don't already have one built in to your tripod.

Generally the middle column is the least stable, so it's best to avoid extending it unless you really have to. On unstable ground or very windy conditions, add stability by hanging a weight from the column.

While setting up a tripod properly might seem tedious and unnecessary, it's a great way to make you think more carefully about each composition. After repeating the process a few times, you'll soon find it becomes instinctive.



1 Position the legs Get into your rough shooting position and extend the tripod legs equally. Point one of the legs towards your subject and then stand in between the two back legs.



2 Keep it level Make sure the centre post is vertical and perpendicular to the ground. On unstable ground, this might mean altering the height or angle of one leg, using spiked feet if appropriate.



3 Add weight In conditions such as high wind it's desirable to stabilise the tripod. Bury the legs in sand, or you could even add a camera bag to the central column to weigh it down.

4 Find your focus

Switch to Live View and manual modes for the most precise results



1 Set the scene Navigate your DSLR's shooting menu and enable Live View. With the camera locked onto a sturdy tripod, get into position, zoom to frame the scene and compose the shot. Switch to Manual focus.



2 Activate Live View Press the Live View button, then move the white rectangle across the part of the scene you want to focus on – the horizon. Use the magnify button several times to zoom in on the screen.



3 Make it sharp Rotate the focal ring on the lens slowly until your desired focal point becomes tack-sharp. Once focused, press the shutter, taking care not to knock the focus ring. Zoom in to the test shot to check focus.

A tripod is the first step for pin-sharp captures, but it's also crucial to focus your scene correctly and getting sharp shots in dark conditions is often tricky. Low-light levels can cause autofocus systems to struggle, particularly in telephoto lenses where the depth of field is already limited. In these situations, it's best to switch to Manual focus and do the precise work yourself.

When using the viewfinder, first calibrate the dioptre for your eye to ensure that the image you'll see is as sharp as possible. Generally however, you'll find that it's far too dark to see through accurately, and that using Live View mode is much more dependable. Turning up the brightness level on your camera's LCD screen can help you to judge the correct focal point, but be careful not to overestimate the exposure levels at the same time.

Many higher-end lenses have a lens scale that shows you the distance you're focused at, and while this is partly a remnant from the older, manual days of photography, it's a useful way to judge whether the focus is

correct provided you know the distance of your chosen subject.

Although going manual is generally more precise, there are times when automatic modes will work just as effectively. To give your lens the best chance, find a bright spot such as the Moon or a streetlight that's a similar distance away from your subject, or aim the focal point at a high-contrast area in the frame.

Below

Golden timing

About half an hour before sunrise and before sunset is the perfect time to start shooting, shown in this vibrant example over Peyto Lake, Banff National Park

ADD SOME ILLUMINATION

It can be hard to visually distinguish between objects in the dark, but using a torch to shine light on your subject will help to give your eye something to focus on. This is also useful when the lens hunts in autofocus.

© Jeff Lewis



5 Guarantee sharpness

Discover the technique of focus bracketing and make every shot count

Although the technique of bracketing is commonly associated with exposure, it can also be thought of when focusing a scene. No matter how carefully you check your camera's screen in the field, there's still room for human error, but by capturing several images at varying degrees of focus, you'll have the option to choose the most successful after the shoot, when you are able to review the results on a larger display.

Focus bracketing means slightly altering the focus by rotating the focal ring on the lens. Assuming your camera is tripod-bound, it's much easier to move the focus ring. The first stage of this technique will always be to set up the composition and framing of the shot.

Switch your lens to manual focus and magnify Live View to focus on where you think the sharpest focus is, then take a first shot. The next step is simple; turn the ring ever so slightly to one side, take a shot and then back to the middle and the other way, shooting another frame each time you make a change.

There's no rule as to how many frames to take, but you'll need to cover increments of focus across your entire point of interest. Focus bracketing does give you more images to sort through at the editing stage, but it also provides a certain peace of mind and avoids the frustration of finding a soft image that would otherwise have been perfect.

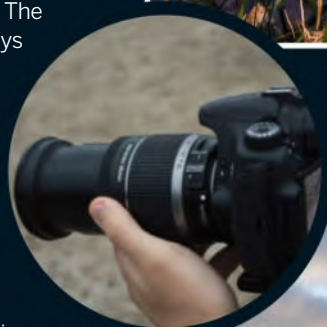
Inset

Move it gently

The results from focus bracketing several images can be barely perceptible, but can be the difference between an average result and a stunning one



© Torrey Gleave



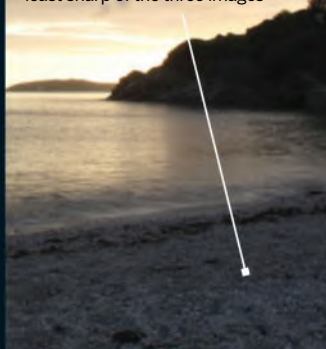
Above

Get the focus right

Guarantee sharpness in your captures by using focus bracketing. Alter the focus in your image with the focal ring

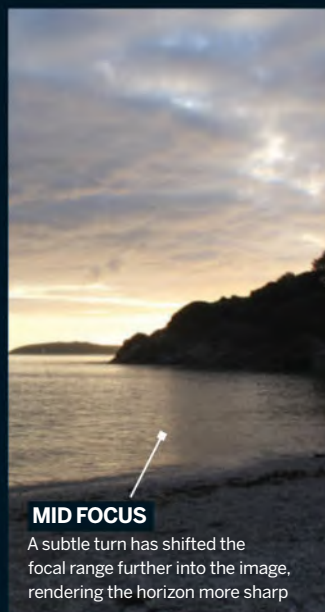
FRONT FOCUS

The focal ring was turned slightly to the left, and the horizon line is the least sharp of the three images



MID FOCUS

A subtle turn has shifted the focal range further into the image, rendering the horizon more sharp



FAR FOCUS

The focus on this shot is the furthest away, rendering the horizon and the headline most sharp



6 Meter with precision

Understand how to treat different light conditions and perfect your exposure

Low light is a fairly vague photographic term, encompassing a myriad of different conditions you could find yourself in out in the field. Although it's hard to quantify the exact amount of illumination in any given scene, there are roughly three different types of low-light conditions.

The first occurs when there's still daylight present in the scene, but you're positioned in shadow and have a high-contrast situation to deal with. Avoid metering for the area you're in, as this usually results in blown-out highlights,

and conversely, metering for the highlights, as this will render your location overly dark.

Ideally, take several readings from different elements in the scene and choose an average exposure value from these. Use a zoom lens to hone in on several subjects, meter, note the exposure and zoom out again to compose the shot, this will make the process easier.

When presented with the second stage, near dark, the period occurring before sunrise or after sunset, the exposure will be swiftly developing. Try switching to spot metering and

take a reading from a middle-toned portion of the sky away from the Sun.

While complete dark is the most obvious term of the three, it still presents metering challenges, the most common being the camera's tendency to overexpose scenes. Establish where your mid-tone should be and again use spot metering to take a reading.

While each landscape requires some level of experimentation and creative judgement, as long as you check for lost detail using the histogram, you should still have editable results.

METERED FOR THE HIGHLIGHTS

In this snowy sunset shot, it would be pertinent to take a meter reading from the highlights, paying particular attention to the right of the histogram



© Alex Noregia

ILLUMINATED SHADOW AREAS

Use spot metering and take a reading directly from your subject when it's surrounded by a large area of darkness



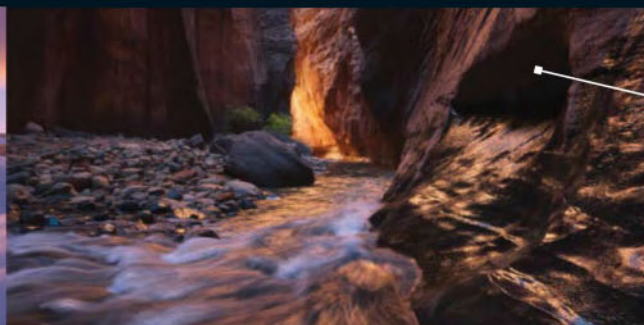
© Jeff Lewis

SILHOUETTED SHADOW AREAS

It's not always possible to capture the full range of detail in a scene and silhouettes can become a creative choice



© Jeff Lewis



© Alex Noregia

METERED FOR THE SHADOWS

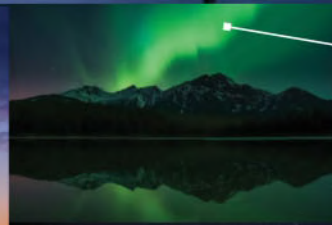
This darkened canyon could easily be underexposed, making it the best practice to meter for the shadows and check the left of the histogram



© Torrey Cleave

METERED FOR THE MIDTONES

The lighting in this scene is fairly balanced, and metering for the midtones would produce an attractive result



© Jeff Lewis

LONG EXPOSURE IN COMPLETE DARK

In complete darkness it's necessary to employ a much wider aperture, while still generally metering for the midtones in the scene



© Lauren Scott

ARTIFICIAL LIGHT

When adding in torchlight or flash, Aperture Priority mode will adjust the shutter speed accordingly to suit the environmental light levels

7 Use exposure bracketing

Increase your chances of a perfect capture by taking several frames at once

In much the same way as focus bracketing, exposure bracketing means firing off several shots of the same scene, usually three, using a different shutter speed for each. It's a good technique to use in situations where it's hard to judge the correct exposure and greatly increases your chances of getting at least one shot that's exposed in the way you want. What's more, you'll have the option of merging the shots in software afterwards to create an image with a high dynamic range (HDR).

The first way to bracket is to select Manual mode, set your required aperture, then take one shot with the exposure indicator at 0 on the scale, and a further two at +1 and -1 by changing the shutter speed.

Another easy and more automated method is to enter Aperture Priority mode,

again dialling in your preferred f-stop, but locating the Exposure Compensation section of the shooting menu. Bracket the shots with careful consideration to the scene at hand, for example if the lighting is more extreme you might wish to over and underexpose by two stops instead of one. Should you only want to increase the exposure, use the navigation pad to choose 0, +1 and +2.

HDR images always divide photographic opinion; when overdone the results can appear fake, but when achieved with subtlety the results can be truly striking. Once you've captured your series of frames, you'll need to decide how you want to merge them.

Inset

Bracket the scene

The camera will take three shots in auto exposure bracketing. Select the number of stops to over and underexpose by



UNDEREXPOSED

CORRECTLY EXPOSED

OVEREXPOSED

Underexposed

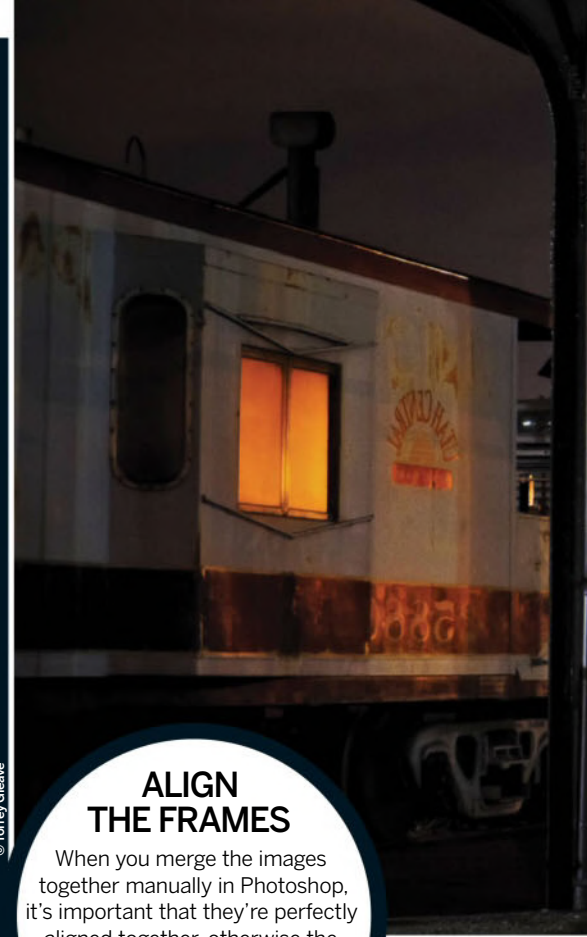
Underexposing the scene captures the highlight detail of the artificial lights, where they were blown out in the other two.

Correctly exposed

Although the camera metered for the midtones, the shot is still overly dark, and needs longer exposure in the shadow areas.

Overexposed

The most balanced exposure of the three, this shot has clipped highlight detail in the very bright artificial lights.



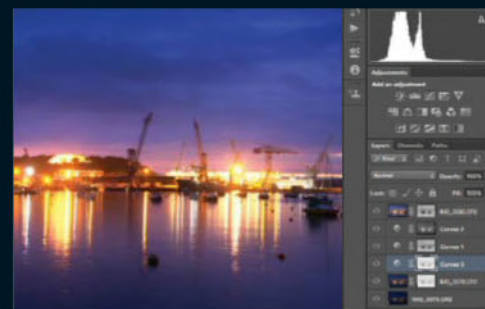
© Torrey Cleave

ALIGN THE FRAMES

When you merge the images together manually in Photoshop, it's important that they're perfectly aligned together, otherwise the final result will be blurred. Select all the layers, then go to Edit>Auto-Align Layers.



1 Merge using HDR Pro Using Photoshop's HDR Pro command is a quick way to combine multiple exposures. After the images have been aligned and the white point set, it's possible to control the output.



2 Merge manually using layers If you open each image as a separate layer then layer masks need to be added and adjusted. It tends to take longer than using Photoshop's HDR Pro tool, but gives more control.



Above
Urban appeal

Man-made landscapes also have plenty of low-light appeal, as shown by image-maker Torrey Gleave (www.500px.com/Torrey)

8 Balance the light with filters

Add quality glass to your accessory bag and perfect your exposures

Although low-light landscapes are heavily associated with the golden hours, when illumination is soft, low-contrast and subtle, there are times when you'll need to balance a high-contrast exposure, for example a bright sky at sunrise against a darker foreground.

Graduated neutral density filters can become your greatest tool in these conditions and they're available in different strengths, as well as hard or soft transitions. In environments such as the coast where there's

a definite horizon line, it's best to opt for a hard grad. Where there's a less definite transition between the sky and foreground, for example in a wooded glade, using a soft grad will produce a subtler effect.

There are plenty of options on the market, but drop-in filters offer much more flexibility than the screw-in variety, as the darker portion can be positioned more accurately over the sky in your composition. This option also enables you to combine more than one filter, so that

you can adapt to plenty of lighting conditions without having to splash out on several different holders.

You'll need to carefully meter your scene, using Manual mode to establish the exposure difference between your foreground and sky. Point the lens at the foreground, noting down the exposure and then repeat this process for the sky. Once you know the exposure difference between the two areas of the scene, you'll be able to select the correct filter density.



1 Get into position Mount the camera onto a tripod and decide upon the rough position you're going to be shooting. Turn round the dial to select Manual shooting mode and attach the filter holder.



2 Meter the scene Take two centre weighted meter readings by pointing the lens towards the sky, and then the foreground. Take a shot for each and review, noting the exposure difference between the two.



3 Position the filter Aim to choose a filter that will correct the exposure difference to within a stop. Turn Live View on, then slide down the filter until the darker portion covers the sky.

9 Avoid camera shake

Ensure your images are blur-free and prevent movement when you fire the shutter

Even despite the best efforts to mount your DSLR on a sturdy tripod, if you move the camera body even slightly when you press the shutter button, the final image will still become frustratingly blurred. Fortunately, there are plenty of ways to avoid touching your camera at all while firing off a sharp shot.

The camera's self-timer mode is the most simple option, with two or ten second delays being standard. For more precise timing, it's definitely worth investing in a cable release or remote shutter release and these vary in price and functionality as much as any camera accessory.

When purchasing a cable release, put some thought into the length you'll need; too

long and it's likely to become a trip hazard, whereas too short and you'll be limited to where you can stand in relation to the camera itself. Remote controls have the obvious advantage of being small and wire-free, but as most work via an infrared beam, bear in mind that you have to point them at the front of the camera, which can again limit your shooting position.

In a world geared around the internet, it'll come as no surprise that there are also plenty of apps on the market that enable you to use your smartphone as a camera remote. Although this generally relies on your

model being Wi-Fi equipped, accessories such as CamRanger's Wireless Camera Control actually create a Wi-Fi network that your iPad or iPhone can connect to.

INVEST IN FEATURES

While cable releases can be easy to trip over in the dark, when using infrared you need a line of sight between the transmitter and receiver for them to work.

Instead, look for a remote that uses a radio frequency link.



1 Use a remote Using a cable release or remote eliminates camera shake, but also means a shot can be fired at a precise moment for a precise duration.



2 Activate self-timer When working in low light without added accessories, the camera's self-timer mode is a useful way to reduce the chance of camera shake.

© Jeff Lewis

Left Last light

This shot captures the last light of the day over Amethyst Lake, Jasper National Park, Canada



10 Use a high ISO

Crank up your camera's sensitivity when shooting in low light

Thanks to the revolution in modern sensor technology, it's now possible to shoot at exceedingly high ISOs with relatively little noticeable noise creeping into your images. For low-light situations when your DSLR is tripod-mounted however, it's generally more favourable to choose a longer exposure time than a high ISO.

Most DSLRs have a long exposure noise reduction option and when activated, the camera takes two pictures using the same exposure time for each, except one is the normal or light frame, and the second is a dark frame that's captured with the shutter closed. In essence, the camera compares the two frames, and subtracts noise from your scene using the dark frame as a reference. One obvious downside of this method is that it doubles the exposure time of each shot, making it impractical for shots such as star trails, or when the light is fading and you need to work quickly.

In fields such as astrophotography, where you don't want to capture star movement and therefore want to limit the exposure time, boosting the ISO to 3200 or more isn't uncommon, and High ISO noise reduction is another camera function to consider using.

It's possible to choose the strength of this feature, but many low-light photographers prefer to turn it off completely and reduce noise at the post-processing stage to retain more control. The results can be subjective, so take time to experiment with the mode on and off, discovering the best practice for your workflow and camera model.

DP

Right
Pushing the boundaries
Jeff Lewis used an exposure of 241 seconds and ISO 2500 to capture this beautiful display of auroral colours in Canada



© Jeff Lewis



1 Long exposure noise reduction This mode can be used when the light isn't rapidly changing, you have plenty of time, and you're not limited to shooting at brief intervals.




2 High ISO noise reduction This shooting option reduces high sensitivity noise, but some users also notice a drop in detail when it's turned up to its highest strength

TECHNIQUES

MASTER PROFESSIONAL PRODUCT PHOTOGRAPHY





Learn how pros who shoot watches, earrings and beer for a living create stunning shots to help sell products

For many people, photographing products doesn't go further than taking some quick photos when preparing to sell an unwanted item online. Anyone who has ever tried to take this task any further than simply taking a snap with their smartphone against a relatively neutral background will know how difficult product photography actually is. Part of the problem is the fact that, superficially, product photography can look relatively easy; after all, you have complete control over your subject – it won't refuse to cooperate, suffer a bad hair day or lose interest in the shoot after half an hour. Surely, with some carefully placed studio lights, a bottle of beer or some jewellery can't be difficult to photograph effectively?

However, it's a really difficult genre to get right and mistakes are easy to make. Satisfactorily emphasising the shape of a perfume bottle or ensuring that there are no reflections on an expensive watch takes skill, patience and the ability to problem solve, but it's hugely satisfying when you capture a completely successful product image that's well lit, well exposed and shows off the item's three-dimensional form to its best advantage. Over the next few pages, you'll discover how the professionals ensure that they are able to create stunning product images worthy of high-end advertising campaigns.

Left
Time, patience and practise
Capturing stunning product images takes time a lot of dedication, meticulously refining small details of the lighting and general setup

© Double Exposure Photographic



© Karl Taylor

SET UP A STUDIO SPACE

Take a closer look at the essential grounding needed for strong product photography shoots

Professional product photography demands more than basic DIY setups. The wrong setup, a flawed working environment or inadequate kit will have an inevitable knock-on effect of limiting what you can achieve, as professional product photographer Karl Taylor (www.karltaylor.co.uk) explains. "The first [consideration] is having the right workspace... Although you can work from a relatively small space for some product photography, the more room you have the better. Even shoots for quite small products can end up with a significant footprint once you have seven lights, panels and props in place."

The next consideration has to be camera and lenses. There is no camera that's wrong for product photography as such, and the camera you use depends on the output you have in mind. Some favour a high-resolution sensor for pro results. "[I use] medium format cameras and lenses like Hasselblad or a digital back on a view camera like a Linhof," says Taylor. "For advertising and product images there can be no room for compromise in image quality and in my opinion 35mm just doesn't cut it for this type of work... My most commonly used lens on my H5-50 is the 80mm."

Mark Scadding, of Double Exposure Photographic (www.dephotographic.com) says that he and his colleague Will Paltridge favour tilt-shift optics. "One of the most

important pieces of equipment we own as product photographers is our Nikon 85mm PC Tilt Shift Lens," Scadding explains. "This is our work horse, our go-to lens in the studio for a few important reasons – its primary function is to allow us to control and tilt our focus exactly where we want it. The products we shoot come in all shapes and sizes and this lens ensures our focus is always where we want it. Its secondary function is the ability to shift and correct the perspective of an object.

This is especially important when we want to see a bit of the top of an item while retaining correct vertical perspective. We use the 85mm focal length so that we retain realistic perspective overall – the only time we change this lens out is if we need a more creative or wider angle to add excitement."

A studio camera stand is the next bit of kit on Karl Taylor's list.

"[You need a] very solid studio stand.

These are usually a mono stand like those from Foba or Cambo." Lighting is another key consideration. "[It's important to have] high-quality repeatable, consistent lighting," says Taylor. "I use Broncolor Scoro packs because of their huge power range, exposure consistency and colour accuracy in every 10th of an f-stop change in power... Finally, [you need] lighting modifiers. These might be very precise ones like projection attachments or small fresnels, but often [are] self-made scrim panels."

KEEP IT DUST FREE

Mark Scadding recommends the use of white cotton gloves for product photography. "We make sure the items we shoot are very clean, dust free and don't have our fingerprints all over them... It saves us lots of time [later]."



© Karl Taylor



Above
Studio stand

Most product photographers swear by stands such as these and consider them to be an integral component of what they do. This is a Cambo UST stand

Top
Rim lighting

"You have to carefully control rim lighting and flags so that you don't get flare in the camera, as all the light is facing camera. This was combined with one small picolite with a spot projection attachment"

Top-left
Spoons on black

"The shot is very simple and uses a 30x120cm Broncolor softbox horizontally placed behind the subject. This light source is then further diffused with Lee Filters diffusion material"

Photograph products on location

All images © Chris Lomas



You may not always be working in a studio environment, as photographer Chris Lomas explains

"I was commissioned by Gleneagles Hotel to photograph a new luxury luggage collection. The plan was to use the backdrop of the hotel for five product shots to be printed in a brochure placed in each of their luxury rooms and used for large displays... It was clear what we needed – [to] emphasise the luxury feel... With high-quality lighting and props. The challenge was to photograph in the hotel while paying guests were staying there. We had a clear brief that with guests paying up to £420 per night, disruption was to be kept to a minimum. The guests were the priority, not us!"

The biggest challenge that Lomas and his team faced was the main image of some products at the entrance to the hotel.

"The featured photograph of the hotel entrance had to be photographed at 12.30pm before the new guests arrived. Therefore, we had one and a half hours to build the lighting set and style the shot. Thankfully, I had two of the best designers from London, an assistant, two members of staff and a dog trainer to help me. I knew that the light at midday would be poor, so I had brought plenty of lights and I planned to light the inside of the foyer so we had a nice warm glow coming from the windows and revolving door. However, location photography always throws up constraints. When you are staying at one of the world's most luxurious hotels, guests are always going to arrive early. We therefore lost time as each arriving Bentley meant we all had to move [everything], including the camera, tripod and dog! This is, however, precisely the pressured environment I like to work in, as this is when you have to sharpen your creative approach. I therefore suggested shooting the entrance again at night and retouching the warm ambient interior lights into our daytime photo. Ten hours of retouching were required after the shoot to combine four of the best photographs and adjust the colour palette to match a late-evening light source."

• The final result

The final approved photograph for print and advertising, including retouched elements from four different photographs... The daytime shot is combined with night-time interior lights. The highlight on the horse riding shoes is airbrushed in and all colours are shifted to match a late evening scenario for shot. The client liked the romance of guests arriving late evening.



Above Lighting setup

This image shows Chris on location capturing the images of the main entrance of the hotel



BEFORE

Below Before retouching

The actual final photograph achieved on the day before any retouching. It shows hotel, hunting dog, GE holdall luggage and props

Inset Retouching notes

The retouching requests for areas to work on for final shot required for print



AFTER

THINK METHODICALLY

Professional product photographers have to be able to produce the right results no matter how difficult the subject is to shoot

One of the biggest challenges that professional product photographers face is the task of capturing products that have surfaces that are difficult to light. "The most difficult items to photograph are those that have reflective or mirror finishes," explains Mark Scadding. "The reason objects with these properties are difficult is that you are essentially photographing what they are reflecting. To be successful with this type of work it's important to take the time to understand what is being

reflected, and control the lighting on those surfaces, which in turn makes a big difference to the final look of the image." Karl Taylor agrees. "I find it's usually those with a more logical and scientific approach, rather than an arty approach, that do well," he says. "My approach with all product photography is very much a problem-solving one, I look at the challenges and try to figure out all the solutions that can be accomplished in camera. Photoshop is my last resort and used where

the laws of physics have to be broken or for final polishing."

Taylor says that jewellery often presents challenges. "The gloss metallic surfaces reflect everything in the studio," he explains. "You can overcome this by surrounding the object with large soft lights, but this lighting is often inappropriate for gem stones in the object, which need a more aggressive light to add sparkle. [So] combining the two types of light is the key to success. Other [problematic] items include liquids and glass for similar reasons, but there is also the added problem of translucency and keeping those elements looking 'alive'. The smaller something is the more challenging it can be; I shoot a lot of small objects from luxury watches to hearing aids and they all pose their own challenges."

Scadding explains that, "Although we spend time getting this right, it is possible to go too far – often the best reflections are the most natural and you can get better at photographing tricky objects by just paying attention to the way the object naturally reflects what's immediately around it."

Left

Simpler subject

"This shot doesn't have gem stones so can be accomplished with mostly large banks of gradated light"

Below

Bright and beautiful

Product photographers find that small, reflective subjects, such as these rings, are consistently hard to capture



© Karl Taylor

KEEP IT LEVEL

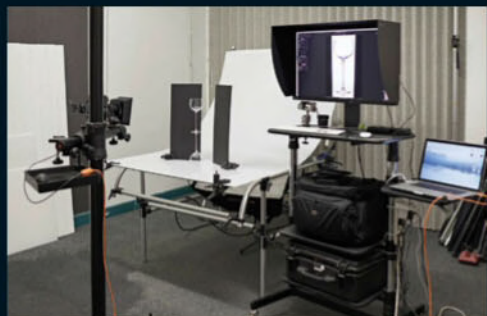
Try to keep everything as level as possible while you are shooting so that you do not have any sloping surfaces that need to be corrected later in post-production.

© Double Exposure Photographic



Photograph glass

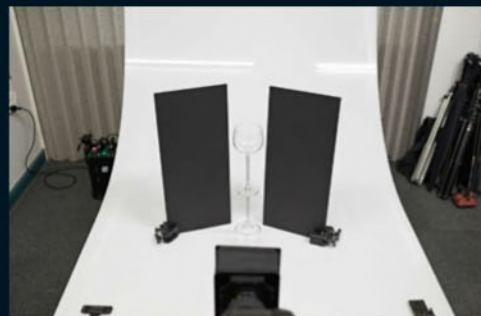
The Double Exposure Photographic team demonstrate how to capture pristine images of this difficult subject



1 Create the setup Two black card flags either side of the glass, the Manfrotto product table and our camera, stand, and tether station. Note the curve of the product table to eliminate a horizon line.



2 Use two lights This photograph shows that we only used two flash lights to make the image. Positioned behind the infinity curve of the product table, they are providing backlight, which keeps the reflections away.



3 Add black flags To highlight a clear object against a white background we use black strips, or flags. These help reduce flare, add contrast and add a thin and attractive black reflection to the edge of the glass.



4 Keep it clean To save hours of retouching dust and scratches in Photoshop, we clean our products really carefully. This is Mark with cotton gloves and a small air blower cleaning the products. Quality glassware helps too!



5 Add reflections We add more black flags. This image shows Will holding more black card, and a long thin black cylinder below and above the glass. This adds black reflections in the top and bottom of the object.



6 Alternative look To photograph glass on black, we simply place black card behind the object, and use white pieces of card to fill in and add white reflections. Here, we've completed the low-key image setup.



Left
Glass on white
This is the final image of the glass captured against a white background for a nice high-key effect

Right
Low key effect
By simply changing the card used, the Double Exposure Photographic team was able to create a low key version of the image.



Capture action

The Double Exposure Photographic team demonstrate how to capture action



1 Shoot tethered This photograph shows the whole bottle splash studio setup. With white acrylic either side of the bottle, the three main lights, our studio stand and how we shoot tethered. The wallpaper is our background.



2 Add a snoot This close up shows the metal plate with the product on top, this stand has a small footprint so we can get the acrylic in close, which diffuses the light. You can also see a light with a snoot.



3 Create a glow This is Will placing a bottle shaped piece of silver paper behind the product, and moving the snoot to the side to bounce light back through the glass. This gives the bottle an overall glow.



4 Shoot in sync To make the main images we synced to the flash packs with a cable. We switched to Pocket Wizard to get the liquid splashes. This radio transmitter and receiver allow us to work at very high shutter speeds.



5 Adjust the snoot Again we moved the snoot, this time to generate an interesting background highlight which we later dropped into one of the chosen splash images. We elevated the light, and angled it down slightly.



6 Add a reflection We thought it might be nice to have a small reflection on one image, so we used some black acrylic underneath the product and made a separate image. We will use this later in Photoshop.



7 Prioritise one setting This photograph shows the bottle and the shallow tray we used to make the liquid splashes. It is great to carefully drop the bottle into and to catch some of the water that was thrown.

Right Final splash

This is the final result after carefully merging several different frames together to get the perfect image



GET CREATIVE

Product photographs can be given much more impact by incorporating action

Once you've mastered capturing well-exposed, well-lit and well-composed images of static products in the studio and on location, there's a good chance that you will want to take your product photography to the next level by creating images that are more dynamic. Some product photographers make this sort of photography a major part of what they do, as Karl Taylor explains. "I'd say this is my forte and in recent years I've become known for flying liquids or paints. I love the dynamic of freezing high-speed action and revealing aspects that can't be observed by the human eye [and] I think most viewers find fascination in absorbing the detail in a 1/15,000th of a second capture."

Taylor has specialist kit that enables him to produce these ultra-fast flash durations. "All of my high-speed photography is captured in camera and it is achieved through specialist lighting such as the Broncolor Scoro pack, which allows me to shoot with a flash duration of 1/15,000th of a second, which is fast enough for most things. Sometimes, you can invoke a sense of motion simply by positioning items on rods that are invisible from the camera point of view and these floating items elicit a sense of motion simply because of their position. A sense of motion can also be produced by combining high-speed flash with a longer exposure so that you have both a blur and a frozen element; to do this successfully I combine a very fast flash duration with continuous HMI lighting, which is the same daylight colour balance as the flash. If you did this with the modelling lamps in the flash then you'd have an unattractive colour shift from the motion blur to the sharp parts of the image. Photoshop can be used to add motion blur quite effectively, but this isn't really something I do."

DP

2x © Karl Taylor

Above Combine images

"This is a good vindication of my minimal Photoshop and maximum photography ethos"

Right Whisky collision

"The trick here was to have two glasses smash at exactly the right place in the frame... This took many attempts"







Use flash for modern portraits

Discover how to capture glitzy Hollywood-inspired portraits in your own living room



Have you ever watched a Hollywood movie and wished you could capture the glitz and glam of tinseltown in a portrait? Well, what if we told you that you could do just that, all from the comfort of your own home? All it requires is a clever bit of lighting, a willing model as well as the right clothing and props to make it appear convincing. If this sounds like a challenge, then think again as it's actually incredibly simple to pull off and with our easy-to-follow step-by-step guide we'll show you exactly how it's done from setup and shooting, to adding the finishing touches in Photoshop.

Before you get started you'll need to make sure you have the right gear, most importantly a camera and a lighting setup. If you don't own a set of studio strobes, then a pair of flashguns works just as well. You'll just need to make sure you have a way of firing them off-camera, so investing in a set of inexpensive radio triggers is a must. You'll also need lighting stands to allow you to easily position your lights. Once you have the necessary gear, take a read of our guide to get started.

Left

Stunning glitz

Capture the glamour of Hollywood at home, with a simple two flash setup and some quick editing steps in Photoshop

What you'll need

- Camera
- Two light stands
- Two flashguns
- Wireless radio triggers
- Light modifier (softbox, umbrella, beauty dish etc.)
- Photoshop

Shooting steps

1 Set up your camera Start off by switching your camera over to Full Manual (M on the mode Dial) and dial in a shutter speed of 1/125sec. Set the Aperture to around f8 and the ISO sensitivity to the lowest possible setting. Set the White Balance setting to the Flash preset.

2 Activate your flashguns To mimic the lighting setup we've used, you'll need two individual light sources, but if you don't have two you can simply use one instead. Start by inserting a fresh set of batteries in to the flashguns, then set them to Manual mode. Dial the power output to 1/2 power.

3 Use wireless triggers Arguably the easiest way to fire your flashguns off-camera is by using a set of wireless triggers. Attach the receivers to your flashguns and the transmitter to the top of your camera. Turn on all the units and make sure that they're all set to the same frequency channel.

4 Position your light stands Erect two light stands and attach each flashgun to the top. Now, position one stand in front and slightly to the side of your model, making sure the light is pointing down on to their face. The second stand should be setup to the opposite side and just behind them.

5 Use a modifier If you have one available, attaching a light modifier to your main flashgun is a great way to soften the light hitting your model's face for a much more flattering result. We've opted for a beauty dish, though a small softbox or even a shoot-through umbrella would also work well.

6 Take the shot With your lights and model in position look through the viewfinder and take a shot. Review the image on the rear screen; if the shot is too bright, reduce both of the flashgun's power outputs to 1/4sec and try again. If it's not bright enough, increase them to full power.



The setup



BUDGET BACKDROP

Shooting in front of a set of black curtains is a simple way to create a studio-style background on a tight budget

RIM LIGHTING

Positioning a second to the side and slightly behind your subject will create a rim lighting effect that will help them stand out against the dark background

PROPS

Giving your model props to interact with will allow them get in to character more easily for better results

Light modifiers

Improve the quality of light by using a handy diffuser

Firing a flashgun or studio strobe without a light modifier can often produce harsh, unflattering results and will cast strong shadows across the face. To remedy this, professional photographers attach light modifiers to the front of their studio lights in order to diffuse the light to produce softer results. There are a multitude of different diffusers available, but the most common choices are softboxes, beauty dishes and photographic umbrellas. Although all modifiers work in a similar way, they will produce varying results depending on their size and shape. If you wish to use a light modifier with off-camera flash, you'll also need to purchase a suitable light bracket.



Editing steps

1 Remove blemishes With your image opened up in Photoshop, start off by grabbing the Spot Healing brush from the toolbox and carefully brush over any spots or blemishes on the model's skin.

2 Dodge the eyes Choose the Dodge tool from the toolbox and set the Range to Highlights and the Exposure to around 5%. Now, brush around the pupils of the eyes to brighten them.

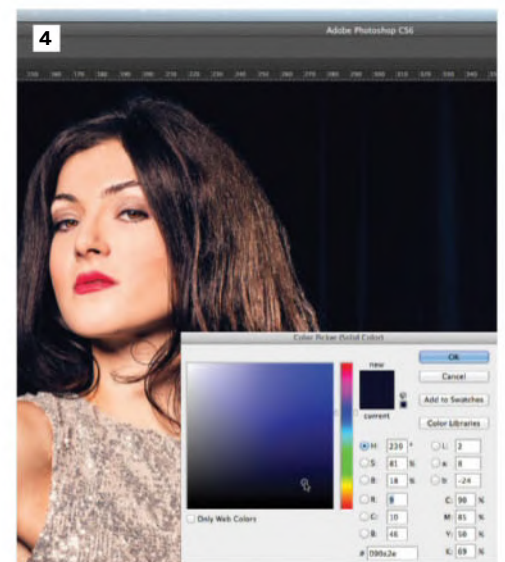
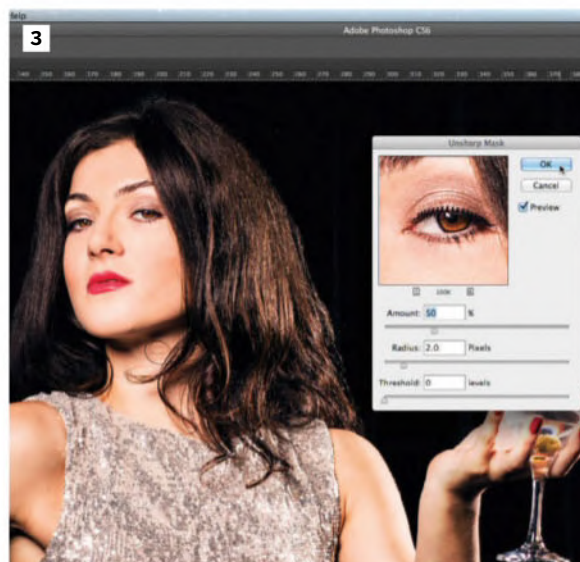
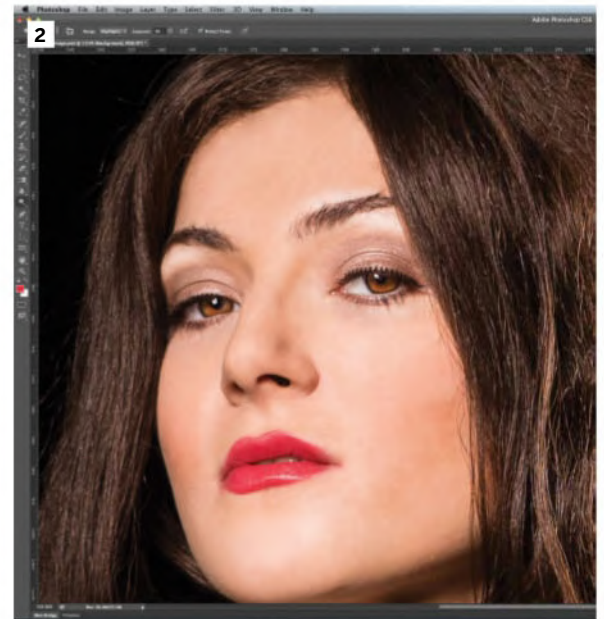
3 Sharpen the shot Head up to Filter>Sharpen>Unsharp Mask. In the window that appears, set the Amount to 50%, the Radius to 2px and the Threshold to 0 Levels. Click OK to confirm the changes.

4 Add a vintage colour effect Go to Layer>New Adjustment Layer>Solid Colour and pick a dark blue colour. Change the layer's blending mode from Normal to Exclusion, before reducing the Opacity to around 50%.

Below

Enhance with Photoshop

Using Photoshop we're able to quickly remove blemishes, enhance details and finish with an attractive colour effect to make our final image much more appealing



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Hyperfocal focusing explained

Learn how to maximise depth of field to obtain front to back sharpness in landscape images



Although it's not exactly a rule of photography, landscape photographers usually like to keep everything sharp from the foreground, right through to the far distance.

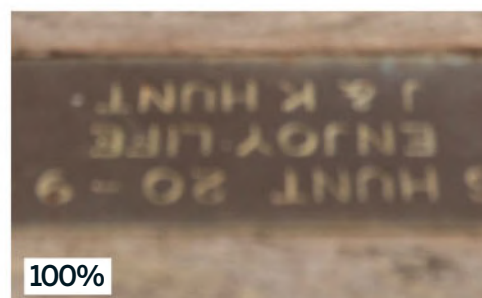
Achieving such depth of field depends on the lens you use (the wider the angle, the more depth of field you inherently have), the aperture you set (the smaller the aperture the greater the depth of field) and where in the scene you focus.

When choosing where to focus, many photographers use the rule of thumb of focusing a third of the way into the scene. While this works well in many instances, it is not very precise. If you have a foreground interest very close to the lens, you need a more accurate method – which is where the hyperfocal distance comes in.

Hyperfocal distance theory is quite complex, but the practice is actually very straightforward. Put simply, for every combination of focal length and aperture, there is one focusing distance, which generates maximum depth of

field – the hyperfocal distance. If you set focus on the hyperfocal distance, everything from half that distance to infinity will be sharp. It's that simple.

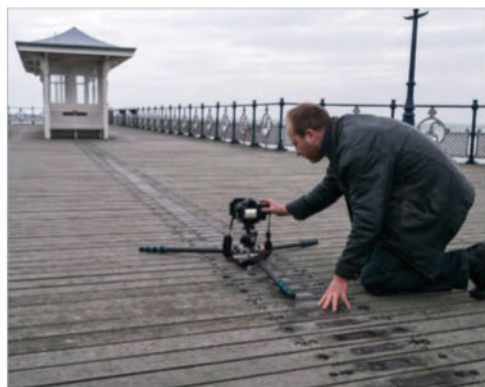
So, how do you find out what the hyperfocal distance is? Well, you could do complicated mathematical calculations – or use a pre-prepared chart or smartphone app.



BEFORE

Focused a third of the way in

Even using a wide angle lens, setting a small aperture and focusing a third of the way into the scene doesn't keep the foreground sharp



1 Compose your shot Pay particular attention to the foreground interest when composing your shot. Getting in close and low to the foreground with a wide-angle lens puts more emphasis on this part of the frame.



2 Select a small aperture You need to be able to set the aperture manually, so put your camera in Manual (M) or Aperture Priority (A or Av) mode and select a small aperture such as f11 or f16 to increase depth of field.



FINAL IMAGE

Focused on the hyperfocal distance

Focusing on the hyperfocal distance delivers front-to-back sharpness with detail just inches in front of the lens recorded crisply



3 Switch to Manual Focus It's important that you can choose exactly where in the scene to focus, rather than letting the camera decide and that focus stays locked on that point. So use manual, or back button focusing.



4 Calculate the hyperfocal distance Use a chart or smartphone app to calculate the hyperfocal distance for the focal length and aperture. Remember to choose the correct format, as sensor size is part of the equation.



5 Choose where to focus Distance scales on lenses are not always accurate, so choose a point in the scene at the hyperfocal distance and focus there. If possible, use Live View for greater accuracy.



6 Shoot and review It's possible to misjudge distances, make focus errors and so on. After taking the shot, review the image and scroll around to check there is sufficient sharpness in the foreground and background.

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Add effects in Lightroom

Use Lightroom's sliders and masks to transform ordinary landscape shots into vibrant captures



A good landscape shot should bring out the green of its grass, the blue of the sky and filter the other colours cohesively. It can be difficult to shoot a landscape that brings out the brightness and saturation of its settings, but luckily, it's easy to edit such a shot in Lightroom.

The sliders to the right-hand side make it easy to edit colour and control tone. It can be

fun to play around with hue and shade, but it can also be easy to oversaturate your image or tweak the colouring too far. As much of editing a picture to make the colours really pop is about toning down the brightness and keeping all the tones unified and natural looking.

Check out how to improve a landscape shot and experiment with your own; tweak this basic guide to tailor any shot.



1 Import your image Import your image into Lightroom using the left-hand tab. Pick a landscape that looks lifeless and dull, but make sure it's one that has colours worth bringing out, such as this green verge.



2 Preliminary edits Begin the editing process with some basic tweaks to temperature. To bring out the vibrant shades, warm the image and slide the sliders to the right to bring out the yellow and magenta.



Above
Before the edit

Images with both land and sea can be fun to edit, as you can bring green and blue tones out of each



3 Up the saturation Give a touch of Vibrance and Saturation to your shot by sliding the former to +5 and the latter to +20. Increase the Clarity too; you'll notice all the colours in your picture start to shine brighter.



4 Tweak the hues Now you can go deeper with individual colour preferences. Fine-tune the greens to give the grass a lush look and turn the blues of the sea to more of an aquamarine.



5 Alter the tone Head to the Split Tone sliders. Add a yellow highlight and a blue shadow. This will bring out both the sea and the Sun; keep the balance central and the saturations low for more subtlety.



6 Add a little clarity Sharpen your image with the sliders. Turn the Amount to 150, Radius to 0.5, Detail to 100 and Masking to 70 to bring out the detail in your picture and make the colours pop even more.



7 Focus the colours Use Camera Calibration to tweak the colours a little more. Here, you can focus all the brightness of your picture; turn the blues, reds and greens to create a more cohesive shot.



8 Mask a little To finish, click the Mask icon. Add more brightness to the shine on the sea to complete the image and position across the horizon so that the sky doesn't become too overexposed.

AFTER

After the effect

A well-edited landscape should look bright and lush, but not too oversaturated with contrasting tones and colours



Create stunning HDR portraits

Give a cinematic overhaul to your portraits using Camera Raw and some basic tweaking of levels



Often, we're drawn to the cinematic splendor of photography. Taking a picture worthy of the big screen is a skill, but actually transforming existing shots with HDR makeovers is a lot easier: it's a creative project too and one that you can really revel in the detail of.

High dynamic range photography is moody, striking and understated. Transforming an ordinary photograph into HDR can bring out the ruggedness of a subject, the drama of a backdrop and whole new tones and exposures. It's easy to manage in Camera Raw too and by tweaking sliders and tones, you can re-imagine your shots as meaner masterpieces. The HDR effect can add an edge and grittiness to a relatively average and flat starting image.

Let's take a look at how to apply an HDR effect to an image; remember male subjects suit the gritty textures of the style, and this is a technique that works equally well for both colour and monochrome pictures.



Above
Before the effect

The original may be quite a flattering portrait, but a lot of character could be drawn out simply by adding an HDR effect to the shot



1 Alter temperature and tint Before you edit your image it's important to gauge the look you want to go for. Alter the Temperature and Tint sliders slightly to decide on whether you want it to have a warm or cool look.



2 Play with the tone Next down from the basic colouring adjustments are the tone controls, which include Contrast, Exposure, Highlights/Shadows and Whites/Blacks. Hit Auto and adjust then turn up the contrast.



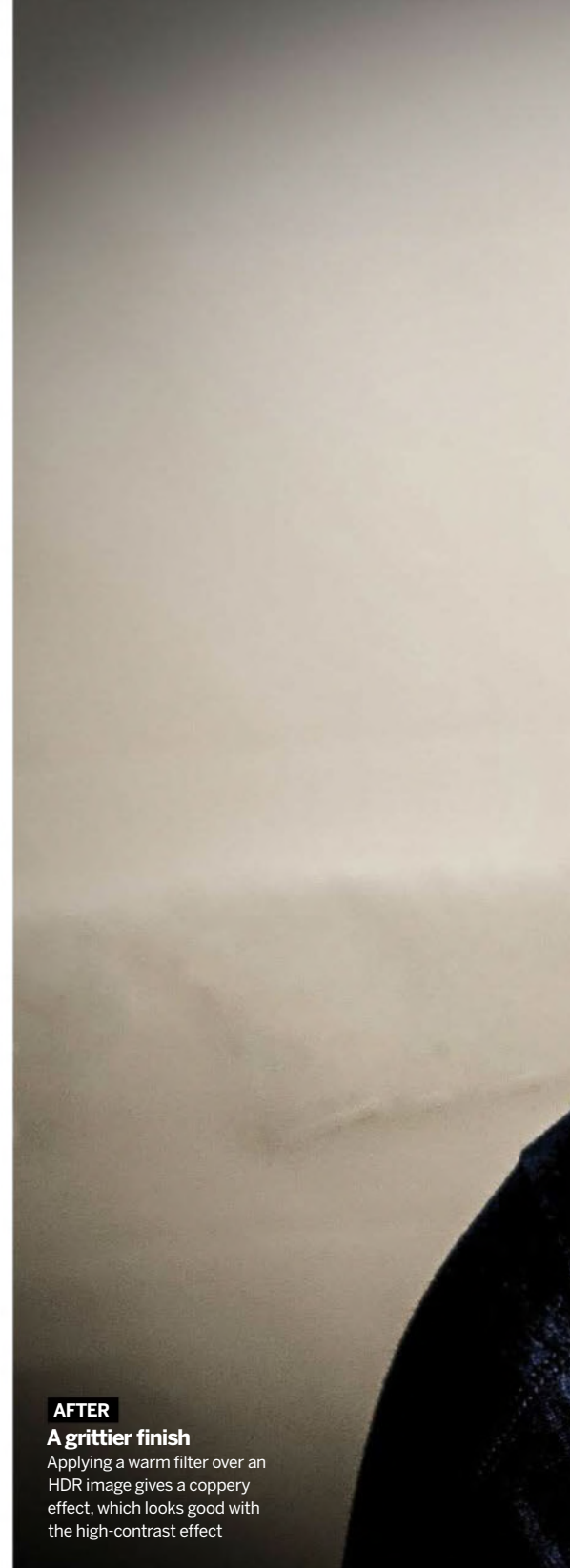
3 Increase the clarity Turn up the Clarity, as this will make your picture clearer when you sharpen it. You may also wish to turn up the Vibrance and turn down the Saturation; this works on monochrome shots too.



4 Touch up the shadows Next, darken the shadows slightly by using the Tone Curve. This will give even more contrast to your image and set a moodier tone. You may wish to turn the Highlights down by about 10 too.



5 Sharpen Head to the Detail section of Camera Raw and use the sliders to sharpen. Zoom in using Cmd/Ctrl+ making sure that there is plenty of detail in your subject's face and that you reduce all noise.



AFTER

A grittier finish

Applying a warm filter over an HDR image gives a coppery effect, which looks good with the high-contrast effect



6 Add a touch of colour Move to the next tab along and tweak the hues. Build on the initial colouring that you selected in the first step to increase the saturation of the skin and alter the colour of the eyes or clothing.



7 Finalise the tone With everything almost complete on your HDR portrait, move back to the Tone Curve and choose Point to tweak the tone once more. Use an S-shape curve for a more contrasted, moody feel to the piece.



8 Complete with a vignette Now, go to Lens Corrections and choose Manual from the top tab. Head to Vignette and use the sliders to enhance the focus on the subject in the picture.

Find success as a press photographer

Agence France-Presse staff photographer Leon Neal reveals how to make your mark in such a crowded field

All images © Leon Neal

Press photography is a notoriously competitive field to work in, with agencies having largely replaced staff photographers. Working as a freelancer is a common path, as finding a long-term staff position isn't easy and you can never be assured of its permanency. According to Leon Neal (www.leonneal.com), there's more to it than taking great photos. "Working on the coverage of a major news story demands a whole list of attributes beyond the ability to patiently wait for hours on end, talk nonsense with your fellow photographers and know where all the local toilets are," he explains.

"This may seem a no-brainer, but it pays to develop your brand and work at getting your name out there to the industry through social media and websites," he says. "This is obvious for the freelance photographer, but equally important for those lucky enough to have a staff position. As with everything in life, nothing is set in stone and if you were to find yourself suddenly turfed out of your secure job, the last thing you'll want to do is begin building an online presence from scratch. The issue of seeing yourself as a brand, while somewhat pretentious, deserves consideration when deciding on how you will promote yourself. Too many of a certain type of picture in your portfolio may result in you becoming known for only one area. If this happens, make sure it's the one that you actually want to work in!"

Neal says that it can be tempting to keep looking over your shoulder when working in such a competitive field and to even try to emulate the work of the successful photographers, but he advises that this can be a fallacious approach. "It pays to keep an eye on how other people have covered a story, but if you find yourself consistently emulating the 'successful' pictures that you see, you're

at risk of losing your own identity. To set yourself apart from the rest, be brave and try to recognise your style and develop on it. If a publication or company has hired you, they hired you partly down to how you shoot, so nurture that rather than becoming a clone."

You should also avoid the inevitable temptation to "follow the pack," instead aiming to think for yourself as much as possible.

"There's a time and a place for herd mentality and only experience will teach you this. The thing to remember though is that sometimes there is only one picture to be had, while at other times everyone is just shooting the same picture because it's the easy one. When I first

became aware of AFP, I knew that it would be a company that I would love to work for due to their history of trying to find the different viewpoint. The mentality of looking for a new angle is something that I try my best to remember when covering any story. Sometimes, the picture that matters isn't the headline person, but how the people around

are reacting, or what's happening behind the scenes while the main event is taking place."

Having an ability to see the big picture is vital. "It's easy to get caught up in the chase to get *the shot*, but sometimes a story is more than a single image. When covering an event, such as an election, it would be easy to think that the only image that counts will be the eventual winner, but sometimes, being sent to cover an element that at first glance seems weak can produce very strong content. I used to say that newspapers are more than just a front page and the same now applies for online galleries. While it's great to get the defining image, don't overlook the wider story and its implications during your coverage."

A big part of this is in how prepared you are for any eventuality. "It's safe to say that you have absolutely no idea what you will face on

Opposite-top

Diverse dayjob

Leon Neal explains that one of the best things about working as a press photographer is the wide range of events that you get to work at, from a major political event to the Brit Awards

Opposite-bottom

Be prepared

It's very important to be prepared for any eventuality, as you may find yourself photographing a subject that you weren't anticipating

Meet the pro



Get to know Nikon ambassador and professional press photographer Leon Neal

Successful pro photographer and Nikon ambassador Leon Neal is the man to ask when it comes to discovering how to build a career in press photography. After a number of years in the music industry, I moved to press photography and was lucky enough to win a scholarship at *The Times* newspaper through their Times, Tabasco Young Photographer of the Year competition. Aside from giving me an idea for my twitter name (@tabascokid), it gave me a great springboard into news photography.

After working with *The Times*, I went freelance before securing a staff position at Agence France-Presse. I am based in London covering general news and have covered stories including the Libyan revolution, the Royal wedding of Kate and William, the London riots and the Winter Olympics in Canada and Russia.



LEON NEAL'S NIKON KIT

"The D4s is fast, brilliant in low light, has great focus capability and does everything that I ask of it. Some see the 24-70mm as a workhorse lens, but that would only be true if you had Frankel attached to your plough. It's fast, sharp and does the job perfectly. The Coolpix A is the hidden gem in the Nikon range... With RAW files that you can push and pull to your heart's content. Brilliant."



any given day," Neal explains. "It pays to be ready for anything, or at least have the gear that can get you out of a problem in a scrape. It's impossible to carry everything from your photography cupboard that you could need, so over time you'll work out what is worthwhile cramming into your Thinktank Shapeshifter. Aside from obvious things like a range of lens focal lengths and cameras, you have to think to emergency situations and consider jeweller's screwdrivers for loose camera mounts, batteries for flash units and, one of my favourites, pre-torn strips of gaffer tape on your lens hood, ready to save the day. It saves carrying the whole roll and you can forget about it until disaster strikes!"

Owing to the level of competition, it's very important to make yourself available and try to take on any work that you are offered. "While we like to think that it's due to our incredible creative abilities, when a picture editor rings a freelance photographer out of the blue, they're desperate. They need a photographer to say that they're set and ready to go with no questions or stipulations. If you can be this person, you'll soon begin to make your way up the list of freelance photographers that a desk will call upon," says Neal.

Of course, it can work the other way, too. "Before securing a staff position at Agence France-Presse... Following a successful meeting and after agreeing to use me for future assignments, one major national newspaper called me three times, but on each day I was already booked by others. After three attempts, I never heard from them again, despite all of their initial interest."

Your ability to impress in a meeting is as vital as your photography. "It's possible to be the world's greatest photographer, but still struggle to get work if your interpersonal skills are weak. The percentage of time that you actually spend pressing the shutter release compared to the time that is spent meeting people, waiting for jobs to begin and generally networking is tiny. Whether you're putting a subject at ease during a portrait shoot or dealing with press officers and media handlers, if you're approachable, you'll be approached. As soon as you start becoming hard to deal with, you'll soon find that the phone stops ringing."

Don't neglect to put forward ideas to a picture desk off your own back. "A picture desk is, more often than not, in a constant state of photographic 'plate-spinning' with accreditations to arrange, diaries to check, features to organise and assignments to budget for. Because of this, the actual time spent thinking about creative and sexy projects that will captivate the reader is low. Really low. If you want to get noticed and get regular work, bring them the pre-planned project, gift-wrapped and ready to shoot. If you can find that paragliding shepherd that's willing to allow



"When you press the shutter release will dictate how the world interprets a story"

you to follow him for two days as he minds his flock from the air, then you're already halfway there. Plan the days, budget the assignment and get it all ready to go. Ringing an assigning editor with all of these boxes already ticked will earn some serious brownie points. Having said that, don't tell them everything about the idea, as you don't want them stealing [it]!"

"In previous decades, a photographer could be just that; a person who only makes photographs. Now, with budgets shrinking and demand for shifts and jobs greater than ever, it pays to set yourself apart from those who only have the one skill-set to offer. I started my blog purely as a way to teach myself to write in an editorial style and have since found that my employer will ask me to write for the official AFP blogs from larger stories. Also, while I'm no Ridley Scott, I regularly supply AFP with video footage from larger events or features that I'm covering. Both of these add

to the overall package and make you a more desirable employee to have on board."

Last but by no means least, make sure you enjoy what you do. "When you look at the daily life of a press photographer, it can be seen from two very different viewpoints. The pessimist may just see long hours, winter conditions and heavy equipment. However, the optimist will look beyond that to see the incredible variety of working environments and experiences, the opportunities to witness momentous events first-hand that others only read about and the chance to work in a creative and exciting industry. It can be a little mind-blowing when you first realise that you are being paid to provide the 'eyes' to readers around the world. How you compose your shot and when you press the shutter release will dictate how the world interprets a story. With that power comes a huge amount of satisfaction that no other job can provide." DP



D4/D4s training with Nikon

Get the best from Neal's chosen camera with Nikon School

The Nikon School in London runs a wide range of different courses, some of which are thematic while others look at specific Nikon cameras in detail. If you own a Nikon D4 or D4s – or are considering buying one –

then the Mastering the D4/D4S training day on 29 January 2016 is for you. Discover how to control the camera, get the best results from its pro focusing system and much more. Visit www.nikon.co.uk/training.



**THINK
CREATIVELY**
Task yourself with the challenge of taking more creative shots, considering ways to capture an event that your competitors may have overlooked or ignored.

Opposite
From the other side
Photojournalists get to show stories from angles and perspectives that may have never been seen before

Above
Telling stories
Images that seem to really tell a story or an reveal some kind of subtext are an important component of a press photographer's stock-in-trade

Right
Creative captures
The ability to produce an image that grabs people's attention and makes them look twice is a key skill for press photographers to master



Career advice

Freelance writer and photographer Claire Beveridge shares advice from her experience in working with both stills and motion

Am I ready?

I've been an amateur photographer for a few years now and have really intensified my learning over the past few months by attending courses, building my portfolio and making contacts. I would love to give up the day job and photograph full time. Am I ready to go freelance?

Bob Long

There's never a perfect time to go freelance. It all depends on how confident you feel. If you've got a good roster of contacts and paid work lined up – work that's enough to pay the bills, at least – then think about giving up the day job and freelance full time. However, you could always ask your current employer about flexible working hours or going part time first in order to test the water.

Freelancing can be tough, so make sure you're fully prepared to take on all it throws at you. Brush up on your bookkeeping skills, know what you can and can't claim as expenses and make sure you run yourself like a professional business would.



Above
Shooting corporate headshots can be very lucrative for freelancers, especially if you strive to stand out from the crowd by taking creative shots



How do I find more work?

At the moment I'm working in commercial photography, but would like to add more strings to my bow and branch out into film and video. What's the most important method of breaking into this industry?

Gary Mitchell

For me, it was a combination of the age-old cliché of perseverance and hard work. I started out shooting videos and shorts for my friends (often pro-bono or for a minimal fee) in order to build up my experience. Each time I got a paid job, I invested that in better equipment

and my business model overall. I networked across the South, building on my contacts and said yes to everything that came my way – even if it meant working long and difficult hours. There's no one way to break into video, but proving your worth and working hard is a sure-fire way to get noticed on the circuit. If you're not experienced with shooting film, take up a course to brush up your skills.

Above
Working hard to build relationships and your contact list is key to finding more work

Challenges

I'm fairly new to photography and currently work as a junior picture editor at a local newspaper. My dream is to eventually build up enough experience to freelance full time. I understand that it can be tough. What challenges have you faced along the way?

Laura Smith

One of the main challenges is keeping on top of an ever-evolving industry. With more and more photographers out there to compete with, some businesses and individuals take advantage of the situation and cut photography budgets. Be aware of the value of your work. Doing a mate-rate or a freebie for is okay; but be sure that you're getting plenty of exposure if you provide your imagery for free. And stay positive! It can be challenging

not knowing where your next pay cheque is coming from, but keeping a positive attitude will help you along the way.



Above
Keep on top of the ever-evolving industry and be aware of the value of the work you produce

The big question

Video executive Gavin Alexander shares his experience of working in a fast-growing business



What's it like being an in-house photographer for Crunch Accounting, a fast-growing startup?
It's really busy, as you can imagine. Every day is something different –

everything from headshots for our CRM system to little shareable video ads, to sit-down interviews with people from our industry. We're really big on visual content so there are lots of requests from all over the company.

How do you manage the content needed?

I'm a one-man operation so I've always got to keep my skills sharp across the whole spectrum of photo [and] video content. Some elements we can't do internally so then it's about finding the right place to outsource – for example we have a local recording studio we use for voiceovers.

Aside from that it's just about prioritising. What does each department need, and when? I split my time between projects, but every so often a huge job will come along that demands all my time. Right now we're working on what we're calling an experimental video that will dominate our homepage, so I'm investing lots of time to make sure it's top-notch.

Do you see more companies moving audiovisual in-house?

I'm not sure about in-house, but the demand is definitely through the roof at the moment. Mobile video is going to be massive over the next few years.

Top

It's really important to keep your skills sharp and kit in good workable condition

Above

Prioritising is essential when you are constantly in demand – share your time between projects

Left

Every day will bring something completely different, you could be on location or in a studio

Film using movement

In the third of our six-part video series, you'll discover how cinematographers use movement in digital film



In the first two parts of our series we looked at how professional digital film cameras, such as those offered by Blackmagic Design, and pre-production planning can improve your digital films. We now turn to movement, and how, with good composition, it can be used to strengthen a video's narrative.

Moving the camera while filming helps to change the rhythm and the pace, as well as directing the viewer's attention. Photographers who've recently made the transition to video can, quite often, be identified by the lack of camera movement in their work. When there is camera movement, it's often executed badly. So, whether you are looking to reveal specific

details in a transition between scenes, or simply follow action, moving the camera can increase the overall production value of your story. Mastering movement is vital if you want to take your digital film projects to the next level.

A popular accessory employed by cinematographers is a slider, which enables ultra-smooth and professional-standard panning segments to be captured. "I like slider movements," says director of photography (DP) Daniel Peters (www.danieljohnpeters.com). "But I prefer them for

revealing shots [establishing shots] – so you're using it to show the viewer a new room or a new environment – things like that."

One of the best things about sliders is that they can be fairly compact accessories that can create a big impact, producing the sort of effect that would once have required a dolly track. "I was really surprised with the sliders, by what an impact they can have, even though they're small," says pro photographer James

Jebson (www.jamesjebsonphotography.com). Peters concurs. "When I bought my first slider, it was massive," he says. "I soon realised that I didn't need a slider that big. People don't know you're using a little slider as they can still create a big movement."

Three-axis gimbal stabilisers, meanwhile, can be extremely useful

for walking shots when shooting with cameras such as the Blackmagic Cinema Camera. "If you walk handheld and then you walk with a gimbal, [you'll notice] a massive difference," says Peters. "You're able to rotate as well, because it's so smooth." The downside is that the investment involved in this equipment can be significant, but hiring the kit is a great alternative.

If you are in doubt about where to start with movement or your budget is limited, the best option for beginners is a monopod. Daniel Peters describes these as "portable and effective" for video, enabling "steady movement." James Jebson says that a monopod also offers the advantage that they are not as restrictive as a tripod can be.

Head back next issue, where we'll take you through all you need to know about audio.

Below

Try a monopod

If you want to start capturing movement without the problems of handholding, a monopod is an excellent starting point

Opposite

Gimbal in action

Cinematographer Daniel Peters makes use of gimbals in order to capture movement in his commercial shoot for JD Gyms

THE DUTCH TILT

Experiment with your slider – a diagonal movement can be employed, or the camera can be rotated while it's being pushed along the slider to create what's known as a Dutch tilt effect.

Manfrotto MVS060A slider

HEAD OPTIONS

This slider is shown here with the Blackmagic Cinema Camera mounted on a 500 fluid video head. Different options are available, though

SMOOTH MOVEMENTS

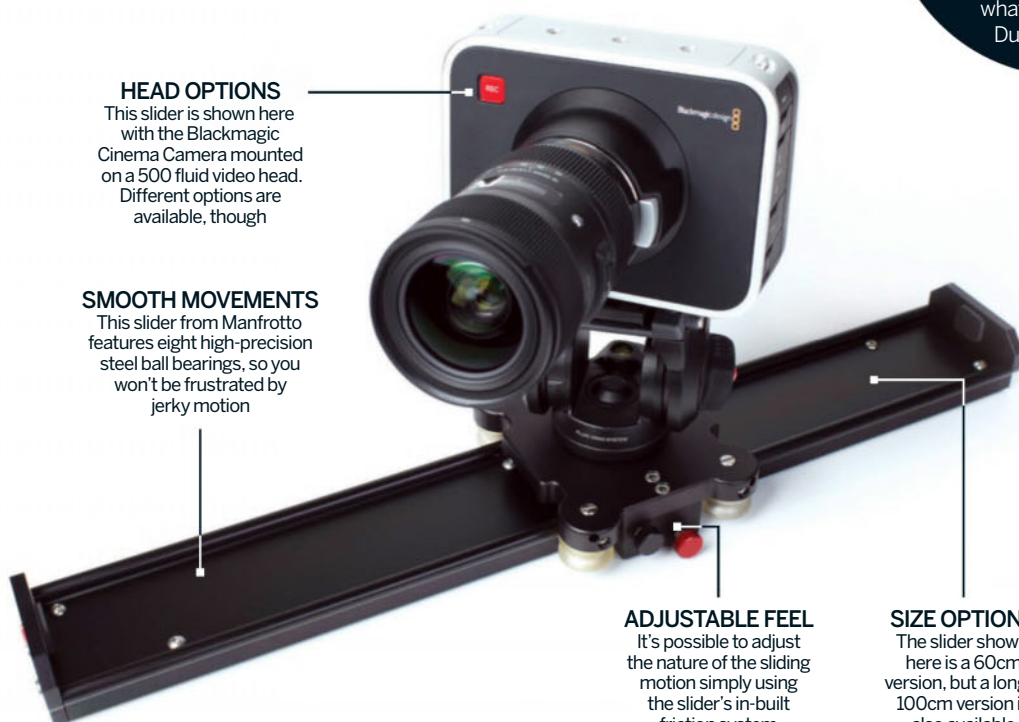
This slider from Manfrotto features eight high-precision steel ball bearings, so you won't be frustrated by jerky motion

ADJUSTABLE FEEL

It's possible to adjust the nature of the sliding motion simply using the slider's in-built friction system

SIZE OPTIONS

The slider shown here is a 60cm version, but a longer 100cm version is also available



Get set up
for filming

PORTABLE AND POWERFUL

Most gimbals are designed to be easy to transport yet capable of supporting heavy cameras and lenses

MANUAL VERSUS MOTORISED

Some cheaper models are completely manual, but many cinematographers favour motorised options

SOLID SUPPORT
When you are capturing footage with a moving camera, a three-axis gimbal offers you a huge amount of stabilisation

Work with motion

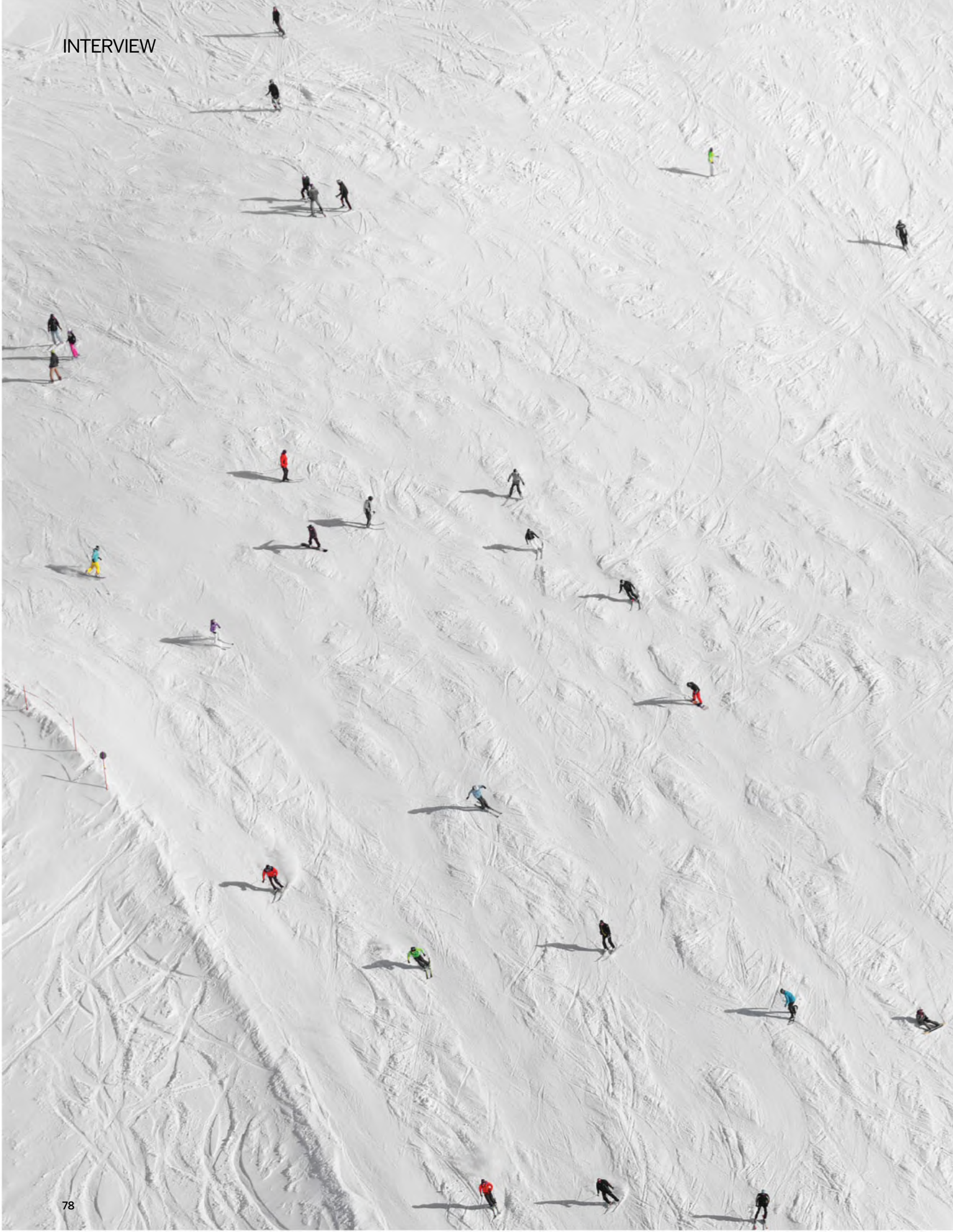
Take inspiration from industry professionals

Peters suggests that newcomers to video take a look at the work of filmmaker Michael Bay, who is known for his use of multiple layers of different types of movement in his footage. However, Peters also says it's wise to avoid including camera movement purely for the sake of it and instead to take a less-is-more approach. "It's good to use [sliders] for a reason," he explains. "The same with Steadicam shots; you don't want to use Steadicam for every shot." To learn more on shooting digital film, from kit advice to movement effects, visit www.dphotographer.co.uk.

GIMBALS IN ACTION

Some styles of footage based around movement can be difficult to capture without a gimbal or Steadicam





Eye from the skies

Meet aerial and landscape photographer
Timo Lieber and discover his stunning
take on our world from above

Right
Alpine runs

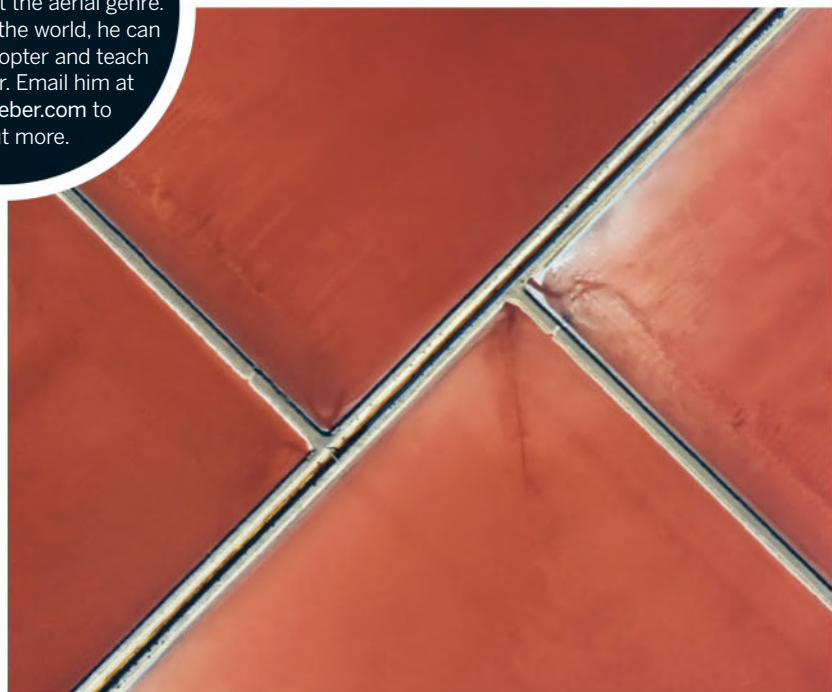
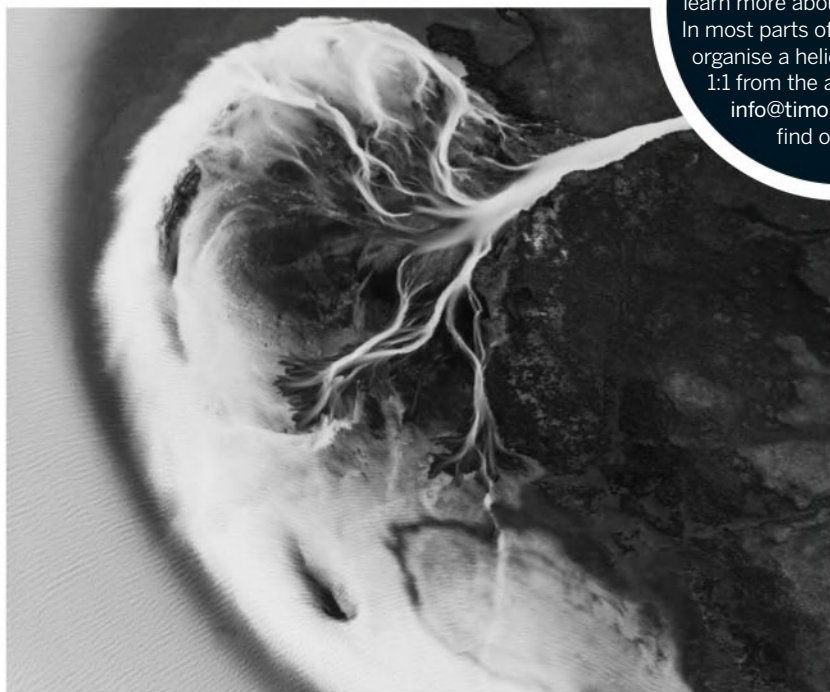
The colour scheme of this series is purposely
minimal, incorporating a simplistic snowy
backdrop, focusing on the fun and chaotic
nature of humans skiing

All images © Timo L



EXPERT TUTORING

Lieber is happy to partner with fellow photographers wanting to learn more about the aerial genre. In most parts of the world, he can organise a helicopter and teach 1:1 from the air. Email him at info@timolieber.com to find out more.



Lieber notes that the style of his work might have changed slightly since its inception. "I started out shooting landscapes as a silent observer of nature's magnificent landscapes, but many of my recent works focus more on the ways and results of human interactions with nature." With frames often made up solely of shapes and patterns, Lieber wants to transcend the boundaries between the figurative and the abstract.

Photographers are always looking for new ways to capture familiar subjects, and the beauty of shooting from the skies is the fresh perspective it can bring, even with subjects that have been seen hundreds of times before from the ground. Is this the reason that Lieber chose to specialise in the genre? "I find aerial photography spectacular not only in [the] way it showcases our world from a unique vantage

point, but also in how resulting photographs demand attention and inspire interpretation... I love to see the surprise on people's faces after they have read the captions."

Lieber's photo series have seen him travel across the globe, spanning continents to capture a diverse portfolio of natural sights. His early work showcases the beauty of vast, untouched landscapes, such as the Arctic Circle and the world's largest desert, and it's the former location he favours most. "I have always been drawn to the Arctic. I made countless trips to Iceland and also spent time in Greenland and Arctic Norway. There is something fascinating about the light and landscape in that part of the world."

Of course, aerial photography is not the most instantly accessible genre, but there is help at hand for those keen to learn and Lieber himself is always happy to share his advice with novices, advocating that they "keep things simple", while also recommending detailed planning ahead of a shoot: "don't waste time once you are airborne", he says.

Aerial photographers have a few different options to consider when it comes to getting airborne. Lieber personally loves photographing from helicopters because of the increase in compositional scope they offer: "It is easier to reach the target and their ability to hover allows [better] framing," he says. "I started aerial photography from small planes and they are perfectly fine, too." Logistics always have to be the first consideration, however. "It depends on the location and the budget," Lieber explains.

When shooting from a helicopter, bits of kit, such as a safety harness, are undoubtedly

some key pieces that Lieber uses frequently. "I mostly use a Nikon D810, but I have also used 80-megapixel medium-format cameras in the past." He explains that the tool of choice depends on the task and subject at hand, as well as the required resolution.

"For the sole reason of image quality, I prefer prime Zeiss lenses over zooms. They are a bit of a pain to use in the air, but I have yet to find a zoom that matches the quality of my primes. I also have a gyro and a little geotagger that tells me exactly the coordinates of each shot. Clearly [these aren't] essential, but pretty cool and helpful if you are out shooting a lot."

A good photographer is marked out by so much more than just his kitbag, and although aerial photography is a somewhat niche field, Lieber doesn't think the skill set pertaining

to actual photography changes in any way with altitude. "The main difference from being on the ground is dependence on the craft's pilot, so choose wisely. I put a lot of emphasis on safety, but you will be surprised how much some pilots know about aerial photography and are prepared to help you

get the most out of your airborne time."

As you might expect, aerial photography is not without its complications. First of all, how do you approach the composition when the view is entirely two-dimensional? Lieber, of course, has embraced these limitations and made them work to his advantage and admits that he loves "the element of surprise that compressing complex landscapes into two-dimensional canvasses offers. The viewer is then left wondering if they are looking at a photograph at all." He has found subtler ways to introduce form and texture in his work, however. "For a more three-dimensional look I use early morning or late evening light to illuminate a scene. There are many ways to achieve the artistic vision."

Maintaining a high enough shutter speed to keep everything pin-sharp is also a constant struggle faced by the aerial photographer. "As a wise man once put it, a helicopter is a thousand pieces of metal trying to shake themselves apart." It can be tricky to balance the exposure when shooting from a fast-moving plane in low light conditions, particularly when trying not to push the ISO beyond a certain level. "A sharp lens is needed so that you can shoot wide open," Lieber shares. "Camera stabilisers [and] gyros can help deal with that, but they are expensive and not essential in a starter-kit."

Lieber's top tips for aerial success



🔍 Outline the specifics

Plan your shoot in as much detail as possible so you don't waste time once you are airborne.

✈️ Pick your aircraft

If you shoot from an airplane, choose a high-wing one, as otherwise the wings will constantly be in the frame.

🔍 Restrict your glass

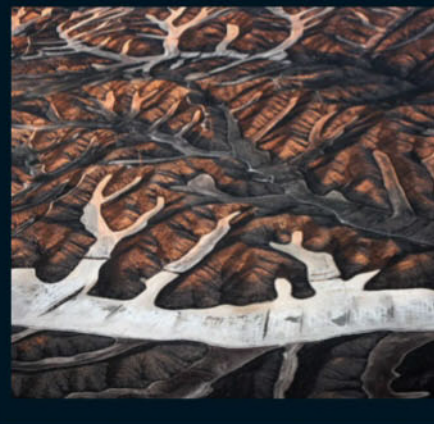
Limit the amount of gear you take into the skies, as it is difficult to change lenses during the flight. These days, I rarely take more than two lenses and I prefer prime lenses over zooms. Let the pilot be your zoom.

📷 Shoot with multiple cameras

If you have two camera bodies, take them both.

🗣️ Be communicative

Keep things safe and talk to your pilot, as they can make all the difference.



Above & opposite-bottom-right

Earth patterns

This series is a showcase of naturally occurring patterns, which Lieber describes as "vibrant, ethereal, rarely seen and rarely appreciated." Each individual image captures a unique combination of colour and light

Opposite-bottom-left

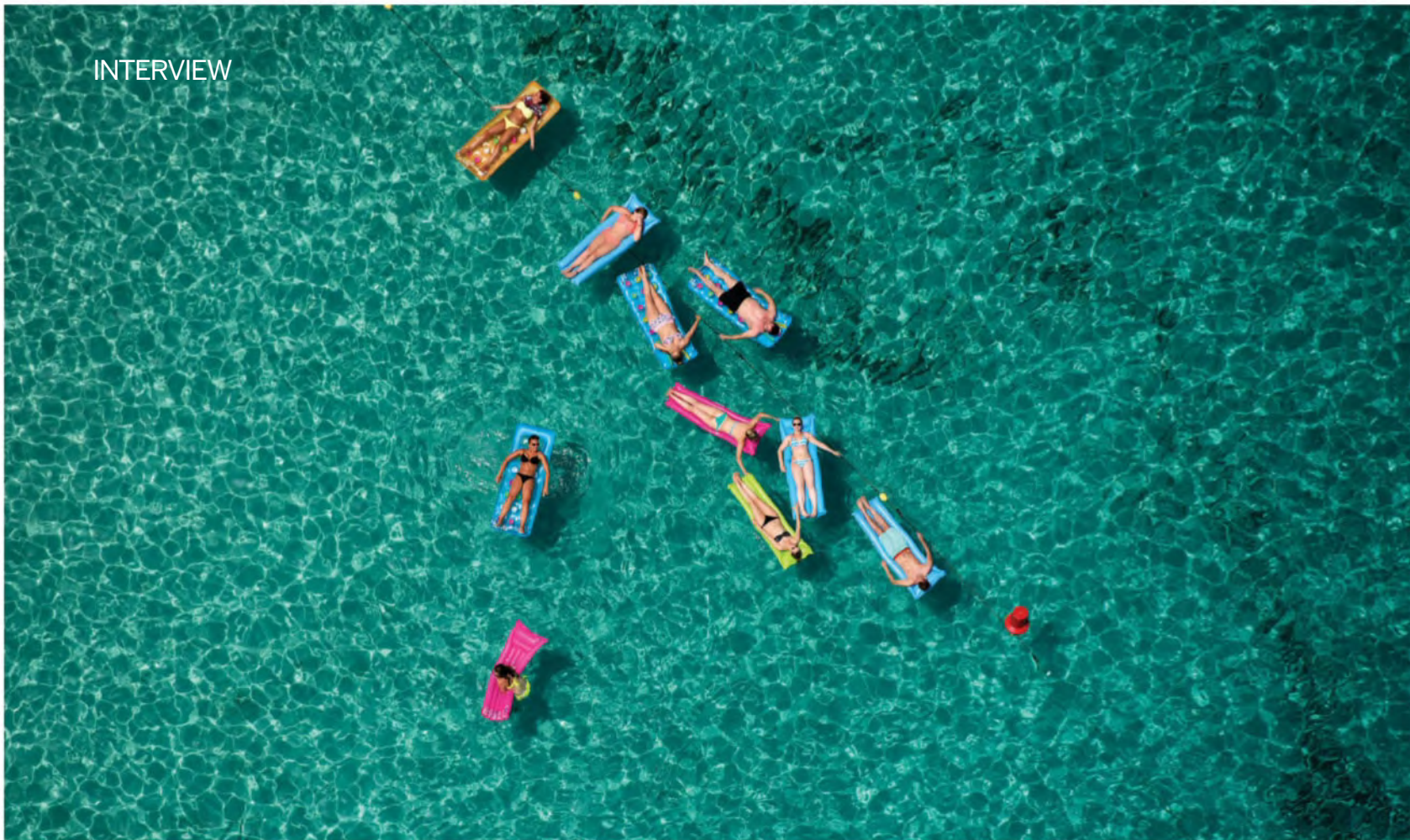
Earth etchings

These black-and-white images document some of "the most beautiful and often remote places on our planet," Lieber says

Opposite-top

Best of summer

Documenting a much more colourful array of subjects, this series explores Lieber's theme of human interaction with nature. He wanted to capture a fun atmosphere of summer activities



In landscape photography, most subjects have been photographed hundreds of times before, but an aerial perspective surely gives rise to making images more unique and possibly even abstract. In the same way as his landscape photography, Lieber first becomes inspired by a theme, then the exact locations and means of capturing the image come after. He enthuses that, "in [the] planning stages, Google Earth is a phenomenal help."

"Feedback from the audience and my collectors is very rewarding and fuels the incentive to create"

It can be hard to break into the photographic industry, but Lieber has certainly experienced plenty of success. His gorgeous awe-inspiring large-scale works have already been widely exhibited in the UK and Europe, and featured in numerous photo contests.

"It is incredibly exciting to see [your] own work on show – be it through competition-related exhibitions like the Wildlife Photographer of the Year Awards in the Natural History Museum or my solo events. Ultimately, feedback from the audience and my collectors is very rewarding and fuels the incentive to create [more]."

It's fair to say that in the short time since picking up a camera, Lieber's career has taken off in a substantial way. He's keen to climb higher though and has plenty of ideas in the pipeline. "I hope I will be able to return to the Arctic at some point next year, [however] finding someone who would be willing to take me to some fairly remote corners seems to be the biggest challenge!"

Below

Abstract beauty

Lieber is continually inspired by the environment, as his latest project makes clear. It explores one of the largest open pit mining operations on Earth

DP

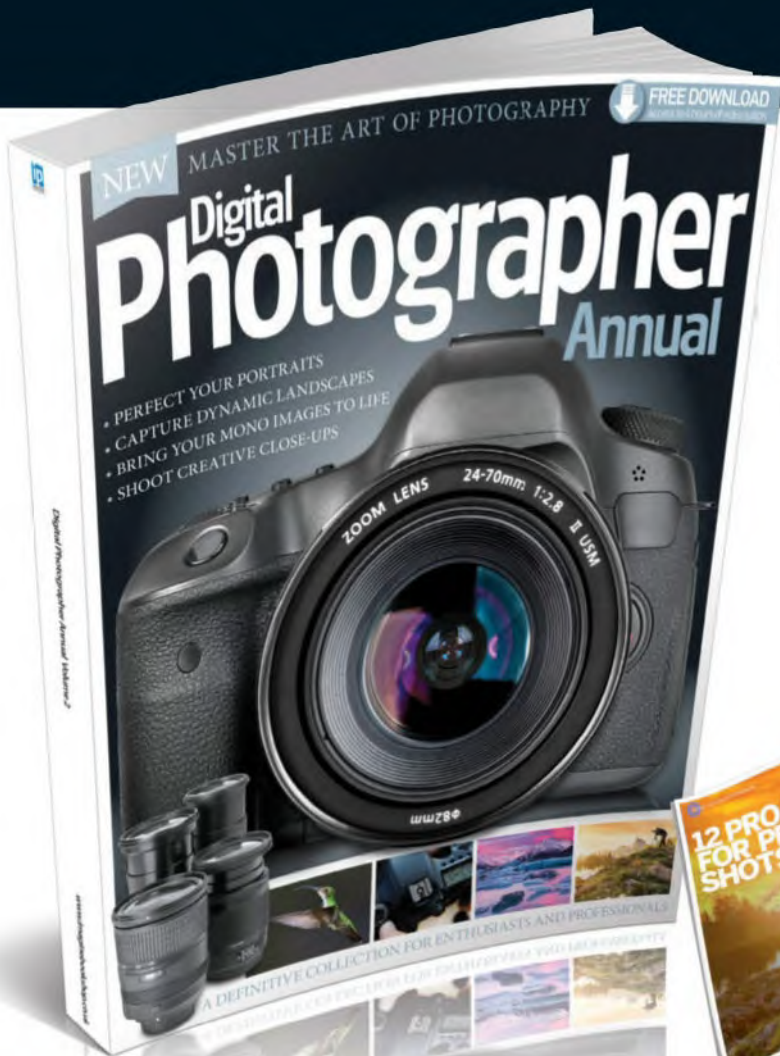
Above

Minimalist magic

Lieber's style is instantly recognisable, thanks to his graphic, minimalist compositions, such as this image of sunbathers captured from above



From the makers of **Digital Photographer**

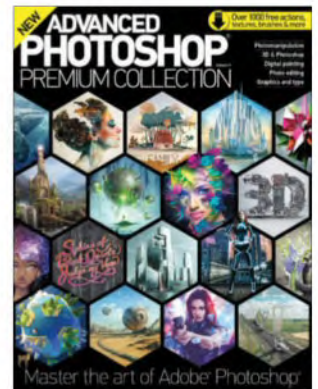
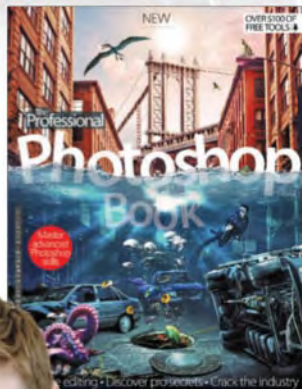
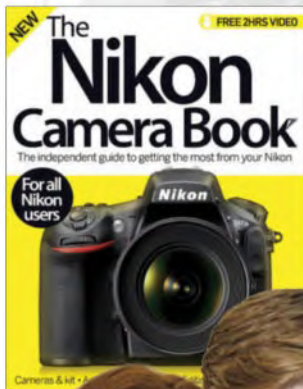


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April 10th, May 8th; Golden Eagle will fly, and perch in carefully chosen natural settings. Jesses hidden for static shots. Controlled flying. Also selection from; Owls, Buzzard, Hawks, Goshawk Max. 8 photographers.

Cheetahs, Lions, Foxes, Birds of Prey, Cambs. £119

April 9th, May 7th; Privileged access to Cheetahs, Bengal Tiger, White Tiger & Corsac Foxes. The Cheetah & Tiger enclosures are not mowed for enhanced photographic opportunities. Private Displays by various Birds of Prey, both static & flying. Jesses hidden for static shots. New Cheetah Cubs for 2015.

Amazing Bat Photos & Learn Fill-in Flash Techniques £139

April 14th, 15th; Oxfordshire. We will concentrate on the Bats first. Take amazing bat photos. Practice fill-in flash on many other wildlife subjects in different lighting conditions. Max 4 persons. We are most happy to lend you a Canon digital camera and flash unit for the day. Indoor exhibits make weather conditions irrelevant.

Big Cats at WHF, Smarden in Kent £155

April 2nd, April 23rd, April 30th; Up close to African Lions, Bengal + Siberian + Sumatran Tigers, Serval, Cheetah, Pumas, Jungle Cat, Amur & Snow Leopards, Black Leopards, Clouded Leopards, Fishing Cat. Large open enclosures. UK's most popular photo workshop. Really special photo opportunities from just inches away. Two sets of Lion Cubs born July & August 2013. Huge natural enclosure. Max 12 clients.

Big Cats at WHF, Smarden in Kent

- Specialist event for just 6 photographers - includes Jaguar £199

March 31st, April 1st, 22nd, 29th; Full day as above, but with additional space at each enclosure. Time is also put aside to review your photos at lunchtime. One to one tuition throughout this very special day. You will see all the animals as above and you will have more personal interaction with the cats. Now including Jaguar.

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Gorillas & African Safari Experience, Port Lympne £155

April 3rd, 24th, May 1st, 2nd; 3 gorilla sessions. No wires, fences or bars throughout the day. Clean backgrounds plus Privileged Access. Photograph at eye level over moat. Huge male silverbacks + family group. Private VIP Safari for 2.5 hours. Rhinos, Wildebeest, Eland, Zebras, Giraffes, Buffalo, Ostriches, various Deer.

Birds of Prey Workshop, Bedford £99

April 16th, 17th; Private flying displays on pre-determined flightpath helps you to focus on birds in flight. Excellent opportunities with carefully chosen backgrounds. Also static shots in outstanding wooded locations. Jesses carefully hidden. This location boasts one of the largest collections of Birds of Prey in the UK. White tailed Sea Eagle, Bald Eagles, Hawks, Owls, Falcons, Kestrels, Buzzards and Long Eared Owl (new).

Foxes, Otters, Wildcats, Badgers & more, Surrey. £145

July 13th, 14th, 15th; Inside enclosures 'til sunset. Also Owls, Snakes, Badgers, Polecats, Weasels, Hedgehog, Harvest Mice & various Deer. This is possibly England's longest established photographic venue. 2 sessions with the foxes, sometimes only inches away from you. Time is spent inside enclosures with Foxes, Otters & Scottish Wildcats. Badgers GUARANTEED. No fences or wires to shoot through for any subject today.

Small Cats Workshop, Welwyn, Herts. £99

April 4th, 5th, 28th; Privileged access to Snow Leopards, Amur Leopards, Pumas, Caracal, Leopard Cat, Lynx, Servals, Golden Cat. As featured on recent series of TV programs on Animal Planet. Small groups. Tuition.

Bass Rock Gannets £225

June 5th, 12th, 20th, 23rd; Private boat. Exclusive use of island for just 10 photographers. 50,000 pairs of nesting gannets on one small island. 4.5 hours photography. Amazing close-ups & fantastic flight shots. Large crate of fish fed to gannets as they dive into the sea. An amazing sight that you will never forget.

Gannets diving off Bass Rock £99

June 24th; Fantastic new workshop for 2014. We sail round Bass Rock without landing on the island. A whole hour of throwing fish into the sea for the Gannets to catch. Amazing diving shots. 1,000 + dives. Tuition.

Farne Islands Puffins (Over 5 hrs photography) £89

June 4th, 11th, 17th, 25th; 20 species of birds. 50,000 puffins. Guillemots, Razorbills, Shag, Arctic Tern colony etc. You will get unbelievably close to some of the species. Get that much sought after shot of Puffins with their beaks crammed full of sand eels. Tips and Tuition. Approximately 5 hours photography.

Pro Birds of Prey Shoot, Bamburgh, Northumberland. £139

June 18th, 19th; Amazing photography opportunities. Hill top views overlooking large extensive valleys and seascapes. Rocks and gorse bushes abound. Golden Eagle, Peregrine Falcon, Snowy Owl, Eagle Owl and Barn Owl will be placed in really natural situations. Jesses will be hidden where possible for those perfect "in the wild" shots. Can combine with Bass/Farne as this location is very close to the Farne Islands.

Pro Birds of Prey Shoot (2), Bamburgh, Northumberland. £139

June 14th, 21st, 27th; New venue. Both the falconer and the birds are different to workshop above. Venues are about 20 miles apart. We will take two of the birds down to an amazingly beautiful, little known waterfall. This will provide a unique backdrop for your subjects. The falls are surrounded by trees covered with mosses and lichens. We will photograph up to 10 different species, mainly British. Maximum 8 photographers.



For more information, please visit the website or call John Wright on 01664 474040 or 07779 648850 (preferred). We will be most happy to discuss any workshop in detail, or to send more detailed leaflets to anyone without internet access. Photographers on Safari, West End Studios, 55 Stapleford Road, Whissendine, Oakham, Rutland. LE15 7HF

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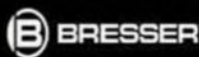
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Pocket-friendly premium powerhouses

A premium compact camera is a lightweight option to ensure you're always ready to grab a great shot



There are times when carrying a DSLR or compact system camera just isn't practical. The premium compact camera segment of the market is extremely healthy right now and there are some fantastic pocket-friendly options available, so you can make sure you always have a quality camera with you – they're also ideal for travelling, going to family events and so much more.

Luckily there's a range of options to suit different budgets and needs, with some really exciting technology being placed into these miniature marvels. With cameras like this, sometimes you'll need to make a compromise of some sort. This group test looks at four different models. Two of them feature a larger, one-inch sensor, which is great news for image quality, but it inevitably means that you can't also have a long focal length lens.

One of the models in the test features a 30x optical zoom, but here the compromise is a much narrower maximum aperture than the others on test, so if you're interested in creating shallow

depth of field effects, or you often find yourself shooting in low light, it may not be quite right for you.

Essentially, it all comes down to what kind of photography you want to do. The test will look at which types of subjects are suitable for each camera and also look at key deciding factors when it comes to making a purchase, such as whether the cameras are easy to use, value for money, and of course image quality in a number of different scenarios.





REVIEWS

Feature packed

The sleek and stylish RX100 Mark III has a lot of enticing features, including RAW shooting and wide aperture lens



SRP: £699 / \$798

Sony RX100 Mark III

An advanced compact with almost all of the advanced features you're likely to crave

Sony has done incredibly well with its RX100 series of compact cameras – they combine versatility with high image quality all packed inside a pocketable body.

Although there's now a Mark IV, the Mark III is included in this group because of its cheaper price – and it still delivers fantastic image quality and great handling despite being the last generation.

There are many interesting features of the RX100 III and using it is a breeze thanks to the high degree of customisation afforded to it – most of the buttons and the quick menu can be changed to whatever you feel is best. There's also a control dial around the lens for changing settings – aperture being the obvious choice, but a host of others are available.

A pop-up viewfinder, once raised from the housing, also switches on the camera. It's a very usable viewfinder, which is particularly helpful in bright sunlight, but is also nice if you prefer to compose with the camera to your eye than via a screen. Speaking of the screen, it's not touch sensitive, which is a shame, otherwise the RX100 III would perhaps have it all, but it does tilt downwards, upwards and forwards though.

Great image quality is all but guaranteed in a wide range of different shooting conditions. Coping extremely well with low-light shooting, there's a great balance of detail and noise in images shot at ISO 1600 and above. The lens opens up to f1.8, rising to only f2.8 at the telephoto end, also making it capable of shallow depth of field effects.



Below
Good all rounder

Capable in a diverse range of situations, but you can't get too close with macro focusing

Small and light

The G9X slips neatly and easily into your pocket while still containing an impressively large sensor for quality



SRP: £415 / \$530

Canon PowerShot G9X

Canon has crammed some great technology into one of its most pocket-friendly PowerShots

The smallest camera on test and it's quite remarkable how Canon has managed to squeeze a large one-inch sensor inside something so small.

Using the G9X relies heavily on the touchscreen, although there are a handful of physical buttons too. You set autofocus point with the screen, alter sensitivity and exposure compensation, as well as navigating through most of the menus, including a handy quick menu, which contains some frequently used settings. A dial around the front of the camera is helpful for changing certain settings (such as aperture when shooting in Aperture Priority mode and Manual).

There's no viewfinder, the only one in the group without one, so if you prefer to compose your images in a traditional way, you may be disappointed with the G9X. The screen also doesn't tilt or articulate, making it less useful for shooting from awkward angles.

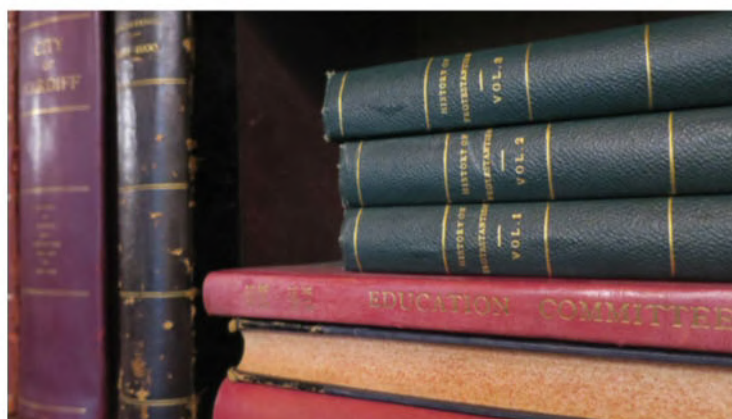
Autofocus speeds are quick and generally accurate, and you can get reasonably close to a subject when macro focusing is activated.

Image quality is fantastic, with the 20 million-pixel sensor and DIGIC 6 processor combination coming together to produce warmly saturated and vibrant images directly from the camera. Low-light shooting offers a good balance between detail and noise reduction, with usable images right up to the top setting of ISO 12800.

Having a maximum aperture of f1.8 enables beautiful shallow depth of field, as well as helping to keep sensitivity down in low light.

Below
Versatile shooter

The G9X is capable of taking on a wide variety of different subjects, but the zoom range is limited



REVIEWS

Retro cool

The X30 is larger than the other cameras here, but it's perfect if you like the traditional old-fashioned style



SRP: £480 / \$499

Fujifilm X30

Retro styling and traditional controls for this well stocked premium compact from Fujifilm

The X30 is easily the largest in this group of cameras, and as such it's unlikely you'll be able to comfortably fit it into a tight trouser or jean pocket – a jacket pocket should be fine though.

What you get as a trade off for such ultra portability is beautiful retro styling and a wide array of dials and buttons that puts all of the controls directly at your fingertips. There's an exposure compensation dial, another at the back for adjusting aperture and shutter speed, while you zoom in and out by twisting the lens itself, which is also how you switch the camera on.

A viewfinder is useful for shooting in bright conditions and gives a clear view of the scene you're trying to compose. A very handy quick menu gives you instant access to most of the settings you're going to want to change often.

The screen, while not fully articulating, does tilt downwards and upwards to make shooting from some awkward angles much easier. The zoom here again is quite limited, but gives a decent enough range for most every day shooting situations.

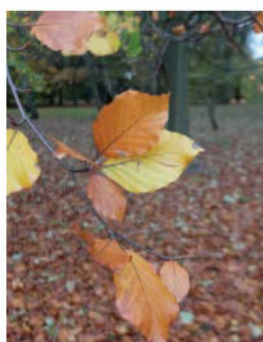
Focusing is quick and accurate, while the smaller sensor facilitates a super macro mode, which allows you to get as close as one centimetre to the subject, ideal if you like to shoot flowers and the like.

Image quality is great in good light, with beautiful colours and lots of detail. As the light drops though, images can be a bit smudgy in places.

Below

Good performer

Daylight shots and the macro focusing capabilities is particularly impressive for a compact



Reaching far and wide

The TZ70's 30x optical zoom starts at a useful 24mm wide angle making it ideal for all sorts of subjects



SRP: £350 / \$400

Panasonic TZ70

A 30x optical zoom brings ultimate flexibility in this well equipped travel compact

The TZ70 has the longest zoom of all in the test, far outstripping the others here with its 30x optical zoom lens. That perhaps makes it more suited to you if you're looking for the ultimate in flexibility when it comes to framing, but of course it comes with compromises.

Unlike the other cameras here, the maximum aperture the TZ70 can achieve is f3.5 at its widest point, while the sensor inside it is also smaller than the Canon and Sony offering. This means that shallow depth of field effects are harder to achieve and low-light shooting isn't quite as good – if you're somebody who mainly shoots in the daylight though, this may be less of an issue.

It's fairly remarkable that a 30x optical zoom fits in camera, which can reasonably easily sit inside a jeans pocket. The camera feels solidly constructed with a grip on the front helping it to feel sturdy during operation. Traditionalists who prefer button controls should be at home here, as there's plenty to choose from – and no touchscreen.

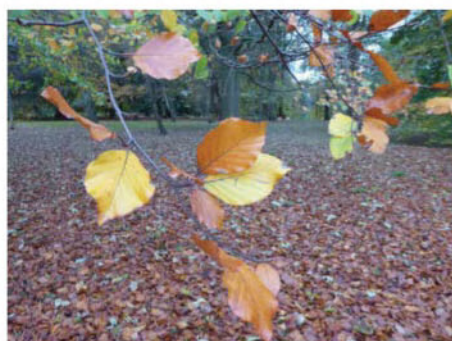
There's a small viewfinder, which although quite small is genuinely useful when bright sunlight makes it a little trickier to see the screen and compose your image.

Images taken in good light and at low sensitivities easily compete with the others on test here, but at higher ISOs, such as ISO 1600 or ISO 3200, there's a little more smudging than we'd like to see at normal printing sizes.

Below

Best in good light

Images are bright and punchy direct from the camera, but images at high ISOs don't fare so well





Sony RX100 ...ark III

Technical specs

Megapixels	20.1
Max resolution	5472 x 3648
Sensor information	One-inch type, Exmor R CMOS
Lens data	Zeiss Vario Sonnar T*, 2.9x optical zoom, 24-70mm (35mm equivalent), f1.8-f2.8
Focus/macro	5cm macro
Shutter speed	Bulb, 30s - 1/2000sec
ISO sensitivity	125 - 25600
Exposure modes	Auto, P, A, S, M, SS
Metering options	M, CW, S
Flash modes	Auto, FOn, SS, RS
Connectivity	USB, Micro HDMI and USBi
Weight	290g with battery and memory card
Dimensions	101.6 x 58.1 x 38.3 mm
Batteries	Rechargeable Battery Pack NP-BX1
Storage	Memory Stick Duo, SD, SDHC, SDXC
LCD	3.0 inch, 1,228,800-dots
Viewfinder	0.39-type electronic viewfinder

Verdict

Features It's got almost everything you could wish for, with the possible exception of a touchscreen for speed ★★★★★

Build quality A solid build and a reasonably heavy weight suggest that you're holding a quality piece of kit in your hands ★★★★★

Handling Customisable buttons, dials and menus make this a very photographer friendly camera to use ★★★★★

Quality of results Performing well in many different situations, colours are vibrant while low light results are great ★★★★★

Value for money This older model offers better value for money. Still pricey, but you get a lot of bang for your buck ★★★★★

Overall ★★★★★

With its large number of appealing features and high image quality, the RX100 III is perhaps the best all-rounder in the test



Canon PowerShot G9X

Technical specs

Megapixels	20.2
Max resolution	5472 x 3468
Sensor information	One-inch, back-illuminated CMOS
Lens data	28-84mm (35mm equivalent), f2.0-f4.9
Focus/macro	31-point AF, 5cm macro
Shutter speed	30 - 1/2000 sec
ISO sensitivity	A, 125 - 12800
Exposure modes	Smart Auto, P, S, A, M
Metering options	E, CW, S
Flash modes	A, M, FOn, FOff, SS
Connectivity	USB, HDMI
Weight	209g with battery and memory card
Dimensions	98 x 57.9 x 30.8 mm
Batteries	Rechargeable Li-ion battery NB-13L
Storage	SD, SDHC, SDXC
LCD	3.0 inch, touchscreen, 1,040,000 dots
Viewfinder	N/A

Verdict

Features A touchscreen, one-inch sensor and a range of shooting modes are appealing – but a viewfinder would have been nice ★★★★★

Build quality Small but perfectly formed, the G9X feels sturdy in the hand, with textured grips adding to the quality ★★★★★

Handling It's a doddle to use the touchscreen and control ring combo, but there are no physical buttons ★★★★★

Quality of results Beautifully warm and vibrant images typical of Canon, and low-light shooting is also impressive ★★★★★

Value for money A tad expensive at the moment, but the price should come down over the next few months ★★★★★

Overall ★★★★★

Beautifully small and compact, it's ideal for those who are looking for ultra portability. You sacrifice a lengthy zoom and a viewfinder though



Fujifilm X30

Technical specs

Megapixels	12
Max resolution	4000 x 3000
Sensor information	2/3 inch X-Trans CMOS II
Lens data	4x optical, 28- 112mm (35mm equivalent)
Focus/macro	1cm super macro mode
Shutter speed	30s - 1/4000sec
ISO sensitivity	A, 100 - 12800
Exposure modes	Auto, P, S, A, M
Metering options	M, S, A
Flash modes	A, FF, SS, C
Connectivity	USB 2.0, micro USB terminal, HDMI output, audio input
Weight	423g With battery and memory card
Dimensions	118.7 x 71.6 x 60.3 mm
Batteries	Rechargeable Li-ion battery NP-95
Storage	SD, SDHC, SDXC
LCD	3-inch, 920k dot, tilt colour LCD
Viewfinder	0.39 inch, 2.360k-dot OLED

Verdict

Features A smaller sensor than some, but RAW shooting, Manual, wi-fi and a viewfinder still make the X30 appealing ★★★★★

Build quality The X30 oozes style and feels very well constructed. The rubberised grips make it feel secure in hand too ★★★★★

Handling Buttons and dials are at your fingertips to make adjustments to settings in a way that traditionalists adore ★★★★★

Quality of results In good light the X30 is very capable, but at higher ISOs in low light, it struggles to compete ★★★★★

Value for money You can pick up the X30 fairly cheaply in certain places, and you get a fair few features for your cash ★★★★★

Overall ★★★★★

Fans of traditional controls may find this more appealing than the other cameras in the test, particularly if you don't often shoot in low light



Panasonic TZ70

Technical specs

Megapixels	12.1
Max resolution	4000 x 3000
Sensor information	1/2.3 inch-type MOS
Lens data	30x optical zoom, 24-720mm (35mm equivalent), f3.3 - f6.4
Focus/macro	BNormal, AF Macro, MF
Shutter speed	4 - 1/2000sec
ISO sensitivity	A, 80-6400
Exposure modes	Auto, P, A, S, M
Metering options	IM, CW, S
Flash modes	Auto, RE, F, SS
Connectivity	microHDMI, PAL/NTSC, USB
Weight	243g with battery and memory card
Dimensions	110.7 x 64.6 x 34.4 mm
Batteries	Rechargeable Li-ion battery pack
Storage	SD, SDHC, SDXC
LCD	3-inch TFT Screen LCD 1,040k-dots
Viewfinder	0.2 inch LVF, 1.166k dots

Verdict

Features A 30x optical zoom, RAW format shooting, a viewfinder and Manual control add up to a very appealing package ★★★★★

Build quality Solidly put together and pocketable – an impressive feat for something packing such a long lens ★★★★★

Handling A good array of dials and buttons, but are perhaps a little on the small side. A touchscreen would be nice ★★★★★

Quality of results Great in bright light, but can't quite compete with the one-inch models in when it comes to low-light ★★★★★

Value for money A price low enough to incite a spur of the moment buy before your travels – the TZ70 offers a lot ★★★★★

Overall ★★★★★

If you're looking for a flexible and versatile travel camera, the TZ70 packs a lot of punch, especially if you're less concerned about low light

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Opposite

Control layout

The layout is very similar to the 700D, making this a smooth transition for those upgrading

Left

Lens options

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SRP: £649 / \$849 (body-only)

Canon EOS 760D

Canon has released two entry-level DSLRs. We find out if you can have too much of a good thing

If you placed the Canon EOS 760D alongside the 750D, you'd struggle to see the difference. Their design and specs are near identical, but the 760D costs a little more and the layout has been tweaked to cater for advanced users. The mode dial has shifted to make room for the monochrome LCD screen so that you can quickly scan your settings, and a rotational dial at the rear of the camera – a design feature normally reserved for the 70D or higher. This can be used in conjunction with the thumbwheel on the top to change settings, while the 750D has just one dial and a four-way D-pad – making it more suited to those upgrading from a compact.

The 760D makes a good first impression. It's relatively compact for a DSLR, but feels surprisingly robust, despite being made from aluminium and plastic rather than magnesium alloy, as seen in pricier models.

The controls feel more high-end, though. Users will appreciate the locking mode dial and the level of customisation available. The 760D also sports a pentamirror-style viewfinder with 95 per cent coverage. There is an eye level sensor that switches on the EVF when you start using it, automatically disabling the LCD. Incidentally, this handy feature is not available on the 750D. There is also a built-in electronic level that helps to ensure horizons are straight.

At its core lies a newly developed 24.2-megapixel APS-C CMOS sensor, which is higher than the 18-megapixel count of the two-year-old EOS 700D. It even beats the 20.2-megapixels of the 70D and the flagship EOS 7D Mark II. This step-up has enhanced the level of detail in images, despite unfashionably employing an anti-aliasing filter. The increase in pixels doesn't have a negative impact on noise, either. Indeed, photos are still usable at ISO 3200, which brings the quality in line with its closest rival, the Nikon D5500, for image quality. The 760D also has the same burst rate, with five frames per second. This isn't an improvement over the 700D, but it can shoot continuously for over 900 JPEGs.

Autofocus, meanwhile, has been given a more significant makeover. Rather than a 9-point AF system, it now offers 19 cross-type points that are faster and more sensitive. This helps you to achieve excellent results no matter what the subject you're shooting, making it a great all-rounder. It's still a way off the Nikon D5500's 39 points, but only nine of these are cross-type. Tests showed the AF system to be very responsive, even in low-light conditions, and it can be set up to shoot using a single point, or from five zones available in Zone AF mode. For fast-moving subjects, however, it's best to switch to Continuous Autofocus, which

“At its core lies a newly developed 24.2-megapixel APS-C CMOS sensor, which is higher than the EOS 700D”



FEATURES

VARI-ANGLE LCD

The three-inch touchscreen LCD can be pulled out and twisted around for high and low-angle shooting. You can also fold it against the camera's body.

IMPROVED SENSOR

Canon has broken the 18-megapixel barrier of its previous EOS DSLR models and opted for a 24.2-megapixel sensor.

VIDEO CAPTURE

The 760D offers 1080p recording at 30 frames per second with a microphone input, but no headphone jack. You can use HDR mode though.

FAST PROCESSOR

This upgrade comes with the new Digic 6 image processor for continuous shooting speeds of five frames per second, for over 900 JPEGs.

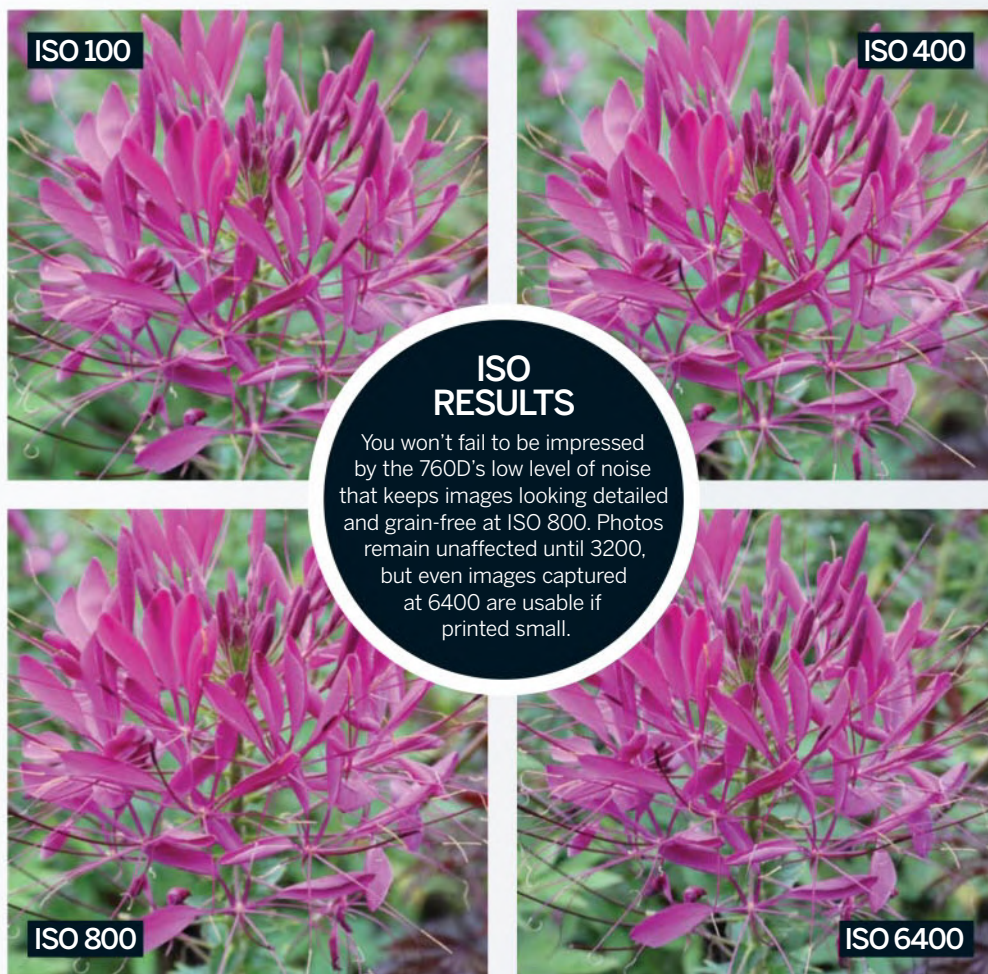
SHARE ON THE MOVE

For the first time in the EOS DSLR range, the 760D features Wi-Fi with NFC. This means you can share shots quickly with other devices or post online.

LENSES

The 760D doesn't come with sensor-based image stabilisation, but there are more than 80 lenses in the EF/EF-S line-up that do.





locks on and follows the subject around the frame. The 760D also has a Servo autofocus option in Live View and video mode that continuously focuses while the shutter release button is depressed half-way – a feature that the 750D doesn't have.

Users can also tap-to-focus using the touchscreen LCD. It's very responsive and great for making quick changes, or zooming into images with a pinch of your fingers. You can also navigate the menu using touch-control, too. The three-inch screen is vari-angle, which comes in handy when shooting tricky angles, and it's bright and clear to view in sunny conditions. When the LCD is not in use, the monochrome screen on the top-plate can be used as a quick reference. It displays information such as sensitivity, shutter speed and aperture, as well as battery level and exposure, all while using less power than the main monitor. There's even a button to illuminate this smaller screen, so that it's easy to see in dim lighting.

This monochrome LCD also lets you know whether the Wi-Fi is switched on or not. The ability to transfer images wirelessly is a welcome, but surprisingly late, addition. It works well, but a dedicated Wi-Fi button would speed up the process. You'll want to share your photos, though, as images look superb straight out of the camera. White balance copes well in a variety of lighting conditions, and colours are vibrant and saturated without looking unnatural. The 7,560 pixel metering sensor produces accurate exposures, and Flicking Detection spots inconsistent brightness from fluorescent bulbs and fires shots to coincide with the peak intensity.

The only area the 760D doesn't fare so well is video capture. Unlike most Compact

“Rather than a 9-point AF system, it now offers 19 cross-type points that are faster and more sensitive”

TALKING POINT...

Improved AF system

The 760D's focusing ability has been enhanced no end by the powerful 19 cross-type AF point system. You can leave it up to the camera to decide in 19-point AF mode, or set this manually in Single point AF mode. Here, each individual point is available for selection, which is useful for ensuring pin-sharp eyes in a portrait. Alternatively, you can choose from five groups of points in Zone AF mode. Note, this AF system is available when composing images in the viewfinder. If you're using Live View mode, the new Hybrid CMOS AF III system comes into play. This includes Face detection, Tracking AF, FlexiZone-Multi and FlexiZone-Single modes. The system has been updated since the Canon EOS 100D and it's promised to be about four times faster than version II. You'll also find Servo autofocus in the 760D that focuses continuously while the shutter is half pressed, which is really useful for sports.



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System Cameras, the 760D lacks 4K recording and doesn't come with the option to shoot 60 frames per second at 1080p. There is an external microphone jack, though, so at least you'll be able to capture quality audio.

Having tested both cameras, we can recommend that serious photographers reach for the 760D over the 750D. The little extras, like having a top-plate LCD and a rear control wheel create a much better shooting experience. With the mode dial on the left-hand side, you can grip the camera with both hands and make adjustments simultaneously. It's faster and more ergonomically friendly, while offering the same stunning image quality. If video isn't high on your list of priorities, then this is a great entry-level DSLR that will serve you well for years to come.

Right
Solid performer

Higher resolution means more detailed images with room to crop and still print large photos

Below
Sharp shooter

Despite an anti-aliasing filter, image sharpness is not compromised in any way

100%



The Canon 760D

Megapixels
24.2

Max resolution
6000 x 4000

Sensor information
22.3 x 14.9mm CMOS

Shutter speed
30-1/4000 sec

ISO sensitivity
A, 100-12800

Exposure modes
Auto, P, A, S, M, Creative Auto, Scene Intelligent Auto, Scene

Metering options
E, P, S, CW

Flash modes
Auto, Fon, Foff, Second Curtain Synchronisation

Connectivity
USB, HDMI, PAL/NTSC

Weight
565g (without batteries)

Dimensions
132 x 101 x 78mm

Batteries
Lithium-ion

Storage
SD, SDHC, SDXC

LCD
3 inches

Viewfinder
Electronic with 95% coverage

Features

Improved autofocus abilities, a faster processor and Wi-Fi connectivity make this worthy

★★★★★

Build quality

Its aluminium and plastic build feels a little cheap, but it still feels robust. It's not weather-sealed, though

★★★★★

Handling

Existing Canon users will have no trouble getting to grips with this ergonomically friendly layout

★★★★★

Quality of results

Noise control is seriously impressive and the camera is very quick to focus

★★★★★

Value for money

Both the 750D and the 760D offer a lot of features and performance for your money

★★★★★

Overall

This is one of the best all-round entry-level DSLRs on the market. It's very affordable, but the control layout and handling will fool you into thinking it's much more high-end

★★★★★



1 VIEWFINDER
An eye level sensor detects when your peering through and disables the LCD

2 VARI-ANGLE LCD
The freedom to twist the screen around gives you more creative options

3 REAR CONTROL WHEEL
The wheel that surrounds the D-pad enables you to change settings quickly

4 MODE DIAL
You'll need to shoot with both hands, as the mode dial sits on the left





Panasonic LUMIX DMC-FZ330

4K PHOTOS

On top of the ability to record videos in stunning 4K, users can also extract photos from their footage. Simply playback your video, press pause on the moment you want to freeze forever, and save the frame as a single 8-megapixel image.

Megapixels
12.1

Max resolution
4000 x 3000

Sensor information
1/2.3 Live MOS

Lens data
f2.8, 4.5mm-108mm
(25-600mm
equivalent)

Focus/macro
1cm - infinity

Shutter speed
60-1/4,000sec

ISO sensitivity
A, 100-6400

Exposure modes
P, A, S, M,

Metering options
CW, S, M, IM

Flash modes
A, Fon, Foff, SS, A+RE,
SS+RE

Connectivity
USB

Weight
691g with battery

Dimensions
131.6 x 91.5 x 117.1mm

Batteries
Li-ion

Storage
SD, SDHC, SDXC

LCD
3 inches

Viewfinder
0.39" OLED LVF

Features

4K video, zoom range, touchscreen and electronic viewfinder make this camera a great all-rounder

★★★★★

Build quality

The DSLR-like build and weather sealing lends a robust feel to this bridge camera

★★★★★

Handling

Being able to switch between the EVF and vari-angle touchscreen is a big benefit

★★★★★

Quality of results

Macro shots have a lot of impact and anti-shake works well in low light and at the telephoto end

★★★★★

Value for money

It may not have the largest zoom or sensor, but it's priced very competitively for the market

★★★★★

Overall

This weather-proof superzoom impresses with its range of premium features and high-quality results. It's unusual to find both an EVF and a vari-angle LCD in this class

★★★★★



Above Robust

The rugged body is weather-sealed with a generous-sized grip

Left Flexible

A vari-angle LCD and electronic viewfinder help with composition

SRP: £500 / \$752 (appr)

Panasonic LUMIX DMC-FZ330

Billed as an all-round bridge, it sports ultra-fast focusing and an f2.8 aperture throughout its range



Superzooms have been stretching the focal range with every release, but Panasonic seems to have found their limit. Back in 2012, the FZ200 sported a fixed 25-600mm lens and now, three years later, the FZ330 arrives with the same focal range and 12-megapixel sensor.

It maintains a super-fast f2.8 aperture throughout the entire zoom range. As well as creating beautiful bokeh in close-ups, this also enhances the appearance of images taken at the telephoto end. Results are sharper even when handheld, aided by the 5-Axis Hybrid OIS+ system that combats camera shake. Colours are a little muted, however, and bright light proves to be problematic, producing unwanted chromatic aberration in areas of high contrast. The camera fares much better in low light, where noise is controlled until ISO 1600. From there you'll notice a drop in detail and 6400 is to be avoided at all costs.

At least you'll be able to compose your shots easily on sunny days though, thanks to the electronic viewfinder. It's been upgraded since the FZ200 and now offers 100 per cent field of view and 1,440k-dot resolution. There is also an eye-level sensor that activates the viewfinder as soon as you rest your peeper against the protruding eyepiece. Incidentally, you can tap on the LCD to focus at the same time as using the EVF. This touchscreen technology is a new addition and it's pleasingly responsive. Once your subject has been selected using the 1-area AF mode, the FZ330 will follow it around the screen with its

impressive tracking system that's perfect for photographing sports. The size of the AF point can also be adjusted using a slider on-screen. Alternatively, you can take more control and switch to Multi-area AF and select from groups of AF points in nine different areas. What's more is that it's extremely fast to lock-on target, at approximately 0.09 seconds!

If you prefer to focus manually, however, then you can take advantage of the magnification feature that enables you to zoom in on any part of the subject for more accurate results. The LCD sits on a hinge so that you can play with angles more easily and turn the screen to face inwards to avoid dirt or damage during travel. This rare combination of viewfinder and flexible screen offers endless shooting possibilities and is bound to be a crowd-pleaser.

The design and handling is something the FZ330 has got down to an art. It looks and feels like a DSLR, with a rear control dial for cycling through aperture and shutter speed, a sizeable handgrip and a Quick Menu for easy access to frequently used settings.

There's a dedicated button to start and stop recording video, which is really useful for capturing fleeting moments on film, and the results are stunning in 4K resolution.

Comparing this model to its predecessor, there aren't enough new features to justify an upgrade, but the FZ330 is a fantastic option for those in the market for a bridge camera. With high-resolution video and a bundle of advanced features it offers great value.



Top Quick autofocus

Autofocus is quick to lock on target, boasting the ability to lock onto subjects in just 0.09 seconds

Above Copes with close-up captures

The 24x zoom lends itself to a range of subjects, suiting everyone from wildlife watchers to landscape lovers

FEATURES

FAST LENS

The 25-600mm lens maintains a bright aperture of f2.8 throughout the focal range.

RUGGED BUILD

This superzoom is splash and dustproof, making it the ideal for landscape photographers.

4K SHOOTING

There is the ability to record 4K video – four times the resolution of traditional Full HD.

TOUCH CONTROL

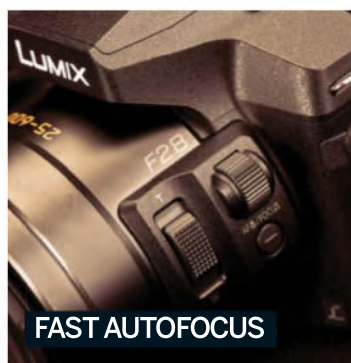
The touchscreen LCD is vari-angle to aid composition. It can also be turned around for protection.

FAST AUTOFOCUS

Can focus at speeds 0.09 seconds and can calculate distance between items in the frame.

INTEGRATED WI-FI

The camera comes with built-in Wi-Fi for sharing, and you can use your mobile as a remote control.



SRP: £780 / \$799

NEC MultiSync EA275UHD

Is the latest in NEC's MultiSync range worth making the jump to UHD for?



NEC has cemented its brand as a trustworthy provider of high-performing desktop monitors, so the MultiSync EA275UHD (Ultra High-Definition) has a reputation to uphold. It boasts 4K UHD resolution and excellent colour coverage, but does the 27-inch Plane-Switching (IPS) monitor live up to expectations?

The design of the EA275UHD's casing is function over style: a 2.6-inch thick business-black cabinet with thin bezels and a matching round base. As standard, the monitor's touch-sensitive function buttons can be found on the lower bezel, along with light and presence sensors, which will automatically adjust the monitor's luminance levels or switch into power-saving mode of the Human Sensing feature when you leave your seat. The mounting arm offers height, swivel, tilt, and pivot adjustability. In addition to Brightness, Contrast and Black level adjustments, it also includes six picture presets and seven colour presets, including colour-temperature settings, Native, sRGB and a DICOM setting. There are also two ECO settings to preserve power and a Programmable setting that can be used with calibration software. Unfortunately, advanced colour adjustments that come with other monitors in NEC's range are missing, such as Six-Colour Hue, Six-Colour Offset and Six-Colour Saturation.

The rear of the cabinet holds a middling offering of ports: DVI, HDMI 2.0, DisplayPort 1.2, USB 3.0 (x3), ControlSync and audio. If you're in need of multiple HDMI and DisplayPort inputs, the EA275UHD will not provide.

However, when it comes to performance, it's anything but a let-down. Its colour coverage is ideal, guaranteeing highly accurate colour reproduction. The IPS panel's ability to display very dark blacks gives colours some extra pop while providing excellent contrast, especially in 4K mode. Even at extreme viewing angles, the EA275UHD's colour range and brilliant contrast handling will serve you well, whether you're working in colour or greyscale.

The EA275UHD does have a 6-millisecond pixel response, which results in minor ghosting and there is a slight input lag of 26.7 milliseconds. Otherwise, the EA275UHD, with its spot-on sRGB coverage, wide viewing angles and crisp picture, offers all the necessary functionality required to cement it as an outstanding photo-editing monitor.

Right-top 4K UHD resolution

The EA275UHD's Ultra-High Definition 4k resolution does not disappoint; users interested in working with 4K will appreciate its excellent colour and contrast

Right-bottom Fully ergonomic

Though it may be large and 4K-enabled, the EA275UHD is still fully ergonomic; its display has full tilt, pivot, rotation, height and swivel adjustability



Summary

Ease of use	★★★★★
Value for money	★★★★★
Features	★★★★★
Quality of results	★★★★★

Overall



Though lacking advancing colour settings, it still delivers crisp UHD imagery, excellent colour, 4K resolution and outstanding greyscale performance

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SRP: £629 / \$950

Fujinon XF 90mm f2 R LM WR

Fujifilm has introduced a brand new 135mm equivalent for its mirrorless X cameras



Fujifilm's mirrorless cameras are pretty impressive, but that's just half the story. It is perhaps the lens range that's most impressive. Not only is the range expanding with genuinely useful focal lengths, but also the quality is very high, easily on a par with the best from rivals.

Take this lens for example. It's not cheap exactly as a 135mm equivalent, but it has complex optical construction with lots of ED glass for some of the best colour correction you can find. Even wide open and with all of the profiles disengaged, there's barely a hint of any of the colour anomalies that beset lesser models and it has some the smoothest transitions to out-of-focus planes that you'll find anywhere. Stopped down and the lens must rate as one of the sharpest in the range, if not perhaps *the* sharpest.

With a length of 105mm and a weight 540g, it's quite a big and heavy lens on the XT-10 body. It has the all-metal body and finely machined focus ring that's common across the line up and it has a metal aperture ring. That and the impressive optical construction all adds to the weight and size. However, the extra length means that there's plenty of room for a decent-sized focus ring and if the bulk doesn't bother you then you'll find it easy to handle.

The plastic hood seems a little cheap, but it's more practical than metal. It's good idea to keep it handy as the only real downside is that this lens is a little susceptible to veiling flare.



Left

Contrast and definition

Stopped down to f8 the lens is at its optimal setting, but it's impressively sharp at f4

Bottom-left

Wide open

With a shorter minimum focus distance than normal and excellent close range performance this lens is versatile



Technical specs

Manufacturer	Fujinon
Model	XF 90mm F2.0 R LM WR
Web	www.fujifilm.co.uk
Elements/construction	11 / 8
Angle of view	17.9 degrees (horizontal)
Max aperture	f2
Min aperture	f16
Min focus distance	0.6m
Mount	Fujinon X
Filter size	62mm
Length	105mm
Diameter	75mm
Weight	540g

Summary



There's no doubting the potential of this model. It may look expensive, but the quality of results means you're getting what you're paying for, and then some

SRP: £329 / \$549

Samyang 100mm f2.8 ED UMC Macro

Samyang continues to impress with its premium series of manual focus lenses



Samyang may not be as glamorous as some of the more common and well-known brands, but few can really argue that price and image quality of their lenses isn't extremely attractive.

This 100mm macro model is impressive optically. It is sharp when stopped down, which is what you would expect and it performs well at f11-16 where diffraction can really start to affect the sharpness of the resulting imagery. That will depend on your sensor's pixel pitch, but it's also sharp wide-open at least centrally where it matters.

Best of all it has low levels of chromatic aberration, which is often more troublesome in lenses like this, especially if you intend to use it wide open.

Perhaps the biggest problem with this lens is that it doesn't have an auto aperture, meaning you need to remember to stop it down. That's not such a big issue if you intend to use it on a tripod, but if you want it for more generalised use, it could be a showstopper – at least that's the case with most mounts, though if you're a Nikon user then you're in luck.

There's no autofocus, but then that's not always a bad thing for a macro lens. Focus is generally smooth and nicely weighted and the lens doesn't extend, which is very useful.

Build quality isn't bad either. It may have a mainly a plastic exterior, but Samyang claims it uses metal on the inside so it could actually be a great deal more durable than it looks.



Left

Life size

With no lens extension, working at the minimum focus distance means you're less likely to bump the front element

Bottom-left

Close up

Sharpness is amazingly consistent once stopped down, but what's most impressive is the suppression of chromatic aberration

Technical specs

Manufacturer	Samyang
Model	100mm F2.8 ED UMC Macro Canon mount
Web	www.syoapt.com
Elements/construction	15 / 12
Angle of view	24.8 degrees (horizontal)
Max aperture	f2.8
Min aperture	f32
Min focus distance	0.3m
Mount	Canon EF, Nikon F, Sony A, Pentax K
Filter size	67mm
Length	120-150mm, mount dependant
Diameter	72.5mm
Weight	720g (approx, mount dependant)

Summary



The macro has some concessions regarding the price, particularly the manual aperture operation of the Canon mount reviewed, but it's an affordable lens and there's no faulting the quality

SRP: £80 / \$99
OS: Mac only

Aurora HDR Pro

Is this latest addition to Macphun's collection of fast and functional software worthwhile?

Macphun's Creative Kit challenges the common notion that photo-editing software has to be difficult to use in order to produce great results. Using their software, novices and professionals alike can create in a fast, efficient and functional workspace – all for a fraction of the price of Adobe's programs.

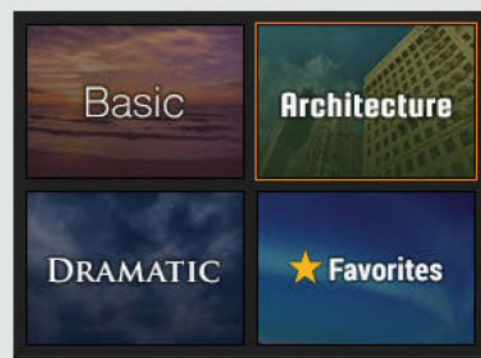
For their latest release, Macphun has teamed up with renowned HDR photographer Trey Ratcliff to produce Aurora HDR, combining its own software processing with Ratcliff's experience and know-how. Currently available is the basic Aurora app and the more advanced Aurora Pro, which adds plug-ins for Lightroom, Photoshop and Aperture, enabling you to export images straight to Aurora HDR.

As is standard of Macphun's applications, users have the option of utilising 38 HDR presets to achieve instant results with one click. The presets are grouped into categories: Basic, Architecture, Landscape, Indoor and Dramatic. These presets aren't as targeted as the specificity of their titles would suggest, so

it would benefit users to test several effects until they find the one that best fits their image.

Professionals should be aware that the program's simplistic design hasn't made it any less powerful. The app's toolbox is where it really shows its full prowess. Included are controls for advanced tone mapping, tone structure, noise, radiance, top and bottom lighting, tone curve, vignette, blend modes, Detail Enhancer tool – the list goes on. It also supports JPEG, PNG and TIFF, as well as Adobe RGB and ProPhoto wide colour profiles. RAW is also available in the Pro version on test here. Users may be disappointed in the lack of an Auto Edge Detection brush when creating masks as you would in Lightroom.

The best aspect of any of Macphun's software is its processing speed and Aurora HDR certainly doesn't disappoint there. All edits are made in real time; users can expect to see the results of their every adjustment happening right in front of them. This is one of the best elements of Macphun's products – Aurora HDR will never slow you down.



Summary

Ease of use	★★★★★
Value for money	★★★★★
Features	★★★★★
Quality of results	★★★★★

Overall



There is no other HDR product currently available that is as functional, responsive and feature-rich as this piece of software



Top Presets

Excellent for novices and professionals alike, Aurora HDR's preset options can give you instant results or a fantastic starting point. You can download user-made presets

Above Instant results

Aurora HDR does not keep you waiting, with every adjustment made is displayed in real time and users can compare their adjusted work to their original photo

Left User-friendly

Unlike Adobe's products, users will not have to trawl through the UI to find tools. The interface is tidy and uncomplicated, while the simplistic design is kind on the eyes too



SRP: \$70 / £46 (approx) **OS:** Windows/Mac

Topaz Texture Effects

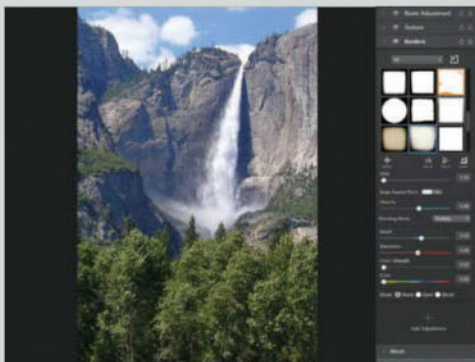
Add textures and adjustments to your pictures using Topaz Labs's latest software package



For some photographers, textures and filters aren't just seen as optional extras. In a world of Instagram and retro culture, they're becoming ever more common and as phone apps become more and more advanced, software is having to play catchup not just in terms of social power, but also in providing easy and exciting effects.

Topaz Labs is renowned for a series of plug-ins for transforming pictures, but Texture Effects might just be their most relevant one yet. It centres around the idea of adding textures as adjustments for your images. Texture Effects looks and feels simple enough to control. It consists of a drag-and-drop area for you to place pictures and then panels for adding effects to the photo in the centre of your screen. Delve a little deeper and you'll see that not only does the program have a wealth of presets for you to add to your picture, but the capability to stack and edit individual effects. The aspect of social power and sharing is there too. You can share your effects with friends and also download presets from the user community.

Texture Effects is a powerful, multilayered tool for editing your photos, but it's also forward-thinking and exciting. It's certainly a useful addition to your existing software.



Above

Borders

Add borders and edges with an array of styles. Choose to incorporate them subtly or place them prominently

Summary

Ease of use	★★★★★
Value for money	★★★★★
Features	★★★★★
Quality of results	★★★★★

Overall



Offering some great presets and a good idea of enabling sharing and community, Topaz has given new life to retro photos. Texture Effects is powerful, packed with cool styles and adjustments

Apps

Can these popular apps improve your mobile snaps?



Lifecake

Price: Free

OS: Android 4.0 or later, iOS 8 or later

In the past, we had photo albums to document our children getting older and now we have smartphone apps to do it for us. Lifecake is designed to chart your child growing up through photos; it's a handy companion for a parent and a useful app for sharing with friends.

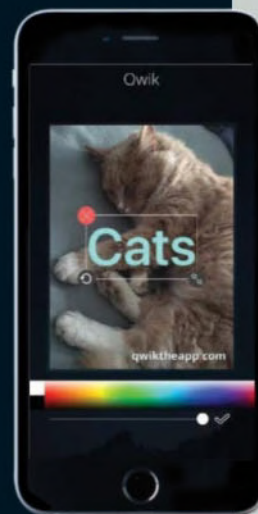


Qwik

Price: Free

OS: Android 2.3.3 or later, iOS 6.0 later

Qwik is free to try out and add effects to your pictures, and you can crop and insert text, too. For 79 pence though, you can own everything in the app; it isn't anything unique but it's simple and great for beginners to start editing their smartphone shots.



Camera MX

Price: Free

OS: Android 2.3.3 or later

A photo and video editor like many other, Camera MX is perhaps most exciting for its Shoot The Past mode. The camera enables you to capture a few seconds of footage just after you've captured your shot, which means you'll never miss another moment ever again.

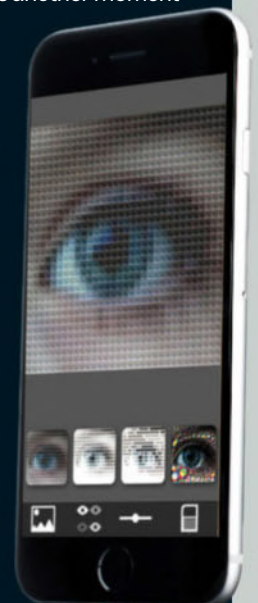


PixelWakker

Price: £2.29

OS: iOS 8.1 or later

Turn any picture into pixel and pointillist art with Pixelwakker, a special effects app with various styles of vector art. It does cost £2.29, but it's fantastic quality and has the capability to export to PDF among other formats.



Accessories

A collection of the best travel-friendly and functional accessories for photographers





1 Booq Python Slimpack

and semi-pros are most likely to be interested in. Smaller sizes are restrictive, while bigger bags can simply create unnecessary bulk and weight. That said, you can also get a tablet or iPad Air in here, so space is far from tight. As the name implies, this bag has been specifically designed to have a compact design, but it's got a distinctly luxurious feel to it.

★★★★★

2 SanDisk Extreme 500 – Portable SSD

Website: www.sandisk.co.uk

Price: £87 / \$151 (240GB version)

Hard drives are notoriously fickle things: all too often they can be alive and kicking one minute and deceased the next. Portable hard drives can be particularly troublesome, as by their very nature they are prone to death by misadventure. Tough housings can help, but solid-state drives are the best bet, devoid as they are of moving parts. This Extreme model from SanDisk is designed to resist the perils of extreme temperatures, drops and the like, and is available in 120GB and 240GB configurations.

★★★★★

3 COOPH – Ultimate Photo Gloves

Website: www.cooph.com

Price: €199 / £140 (approx) / \$211 (approx)

As all outdoor photographers know only too well, staying warm is a constant battle and one that's difficult to win. Often, the very best light conditions occur precisely when temperatures are at their most inclement, so finding ways to keep working in reasonable comfort is vital. Fashioned from 100% super-soft sheep's wool with a leather outer shell, you can pin back the latter component with hidden magnets to reveal a more tactile inner glove. These certainly work well and are remarkably cosy!

★★★★★

4 Gitzo Traveler Kit, Series 2, 4 section tripod GT2545T + head GH1382QD

Website: www.gitzo.co.uk

Price: £920 / \$1,100

This is an absolutely beautiful tripod that oozes class as soon as you look at it, let alone grasp or use it. Weighing in at just 1.84kg, but with a safety payload of 12kg, the portability of this new Gitzo model is enhanced by the fact that the centre column and head fit between the legs. Superbly designed and engineered – the smoothness of the locking mechanisms on both the legs and the head is first class – this has to be high on your list.

★★★★★

5 leef iACCESS iOS microSD card reader

Website: www.leefco.com

Price: £50 / \$50

MicroSD cards are very useful devices, great for supplementing mobile memory when you've snapped too many photos and your device isn't able to store any more. Android and Windows-based smartphones allow these cards to be fitted directly into the hardware, but Apple devices – iPhones, iPods and iPads – do not. The iACCESS from leef solves this problem, attaching to the same port as your device's charger. J-shaped and weighing just six grams, it's capable of reading microSD cards from 8 to 128 GB.

★★★★★

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- ✓ Our test shots from the reviews section
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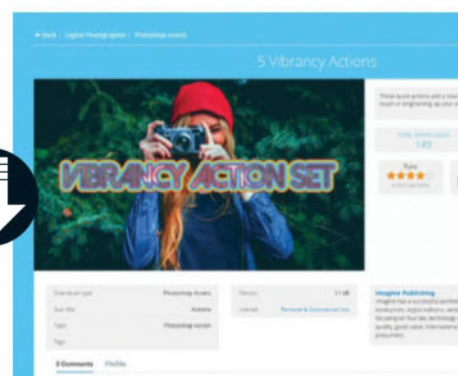
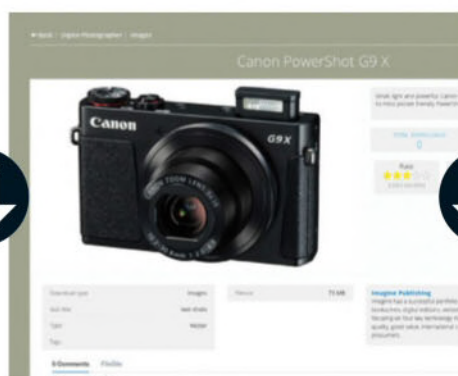
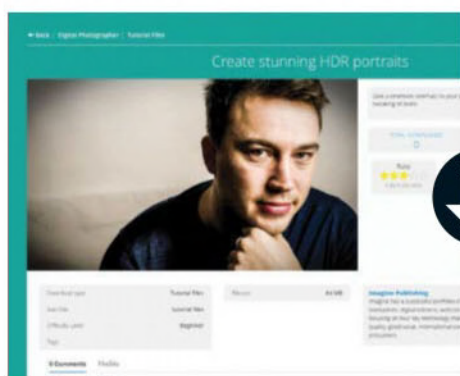
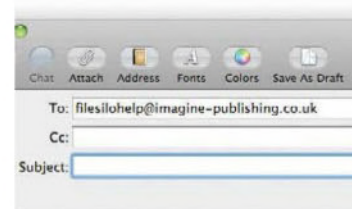
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