

**14
BONUS
GIFTS!**

MASTER AUTOFOCUS

CAMERA CLINIC: CHOOSE AND USE THE RIGHT SETTINGS FOR YOUR SHOTS



Digital Camera World

*The world's favorite
photography magazine*

Issue 277 February 2024 www.digitalcameraworld.com

AFTER DARK



TESTED

Fujifilm GFX 100 II
Canon RF 24-50mm
f/4.5-6.3 IS STM
Nikkor Z 600mm
f/6.3 VR S

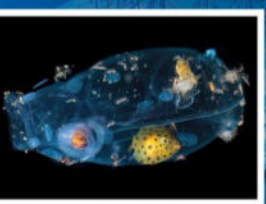
- ✔ How to shoot the Northern Lights
- ✔ Go beyond daylight photography
- ✔ Get creative with light painting!



**42 MINS
OF VIDEO
TUTORIALS**
Lightroom • Photoshop
Camera Raw
Page 83

HOTSHOTS

The world's richest
photo competition



FREE! WITH THIS ISSUE



3 packs of Actions & Presets



9 All-new photo tips cards



**42
MINUTES
OF VIDEO**

42 mins of expert video tutorials



Essential Photography Gear Guide Ebook

PLUS!
PHOTO
ACTIVE
HOTSHOTS
CAMERA
CLINIC

Photo: iStock.com/JohnP. Moran



mpb.com

Buy•Sell•Trade
● Create

Think selling your gear is a hassle?

Pause

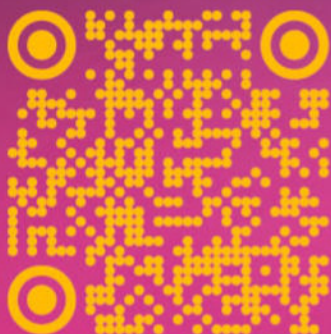
MPB is different. Sell camera gear direct to MPB. It's simple, secure and free of charge.

Go circular. Get paid within days.

Unlock money from your camera gear in one easy process, with free shipping and zero selling fees. Fully insured from shipping to payment.

Let's put a price on peace of mind.

Scan for a free instant quote



mpb.com/sell



Editorial

Editor **Niall Hampton** niall.hampton@futurenet.com
Contributing editors **Claire Gillo & Marcus Hawkins**
Art editor **Roddy Llewellyn** roddy.llewellyn@futurenet.com
Production editor **Jon Crampin** jon.crampin@futurenet.com
Reviews editor **Gareth Bevan** gareth.bevan@futurenet.com
Imaging labs manager **Ben Andrews** ben.andrews@futurenet.com

Contributors

James Abbott, Benedict Brain, George Cairns, Will Cheung,
Jon Devo, Josh Dury, Sean McCormack, Dan Mold,
Angela Nicholson, James Paterson, Matthew Richards

Cover image

Getty
Photography Bath Photo Studio
All copyrights and trademarks are recognised and respected

Advertising

Group commercial director **Clare Dove** clare.dove@futurenet.com
Head of market, advertising **Matthew Johnston**
matthew.johnston@futurenet.com
Account director **Matt Bailey** matt.bailey@futurenet.com
Account manager **Chelsea Speakman**
chelsea.speakman@futurenet.com

Media packs are available on request

Licensing & Syndication

Digital Camera is available for licensing and syndication.
To find out more, contact us at licensing@futurenet.com
or view our available content at www.futurecontenthub.com
Head of print licensing **Rachel Shaw** licensing@futurenet.com

Subscriptions

Email queries: help@mymagazine.co.uk
New subscribers: www.magazinesdirect.com
Renewal: www.mymagazine.co.uk
Phone orders: 0330 333 1113
Customer service: 0330 333 4333

Magazines marketing director **Sharon Todd**

Circulation

Head of newstrade **Ben Oakden**

Production

Head of production US & UK **Mark Constance**
Production project manager **Clare Scott**
Senior advertising production manager **Jo Crosby**
Digital editions controller **Jason Hudson**
Production manager **Vivienne Calvert**

Management

Managing director **Stuart Williams**
Content director **Chris George** chris.george@futurenet.com
Group art director **Warren Brown**
Chief revenue officer **Zack Sullivan**

Printed by

William Gibbons on behalf of Future

Distributed by

Marketforce UK Ltd, 121-141 Westbourne Terrace, London W2 6JR
www.marketforce.co.uk Email: mfcommunications@futurenet.com



Subscription delays

We rely on various delivery companies to get your magazine to you – many of whom continue to be impacted by Covid-19. We kindly ask that you allow up to seven days before contacting us about a late delivery, via: help@magazinesdirect.com

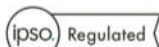
We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards.

All contents © 2023 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any other changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and/or have the necessary rights/permissions to supply the material and you automatically grant Future and its licensees a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, although every care is taken, neither Future nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, adapt all submissions.

Digital Camera, ISSN 1477-1721, is published monthly with an extra issue in April by Future Publishing, Quay House, The Ambury, Bath, BA1 1UA, UK. The US annual subscription price is \$175.37. Airfreight and mailing in the USA by agent named World Container Inc, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Application to Mail at Periodicals Postage Prices is Pending at Brooklyn NY 11256.

POSTMASTER: Send address changes to Digital Camera, World Container Inc., c/o BBT 150-15 183rd St, Jamaica, NY 11413, USA. Subscription records are maintained at Future Publishing, c/o Air Business Subscriptions, Rockwood House, Perrymount Road, Haywards Heath, West Sussex, RH16 3DH, UK.



Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR) www.futureplc.com

Chief Executive Officer **Jon Steinberg**
Non-Executive Chairman **Richard Huntingford**
Chief Financial and Strategy Officer **Penny Ladkin-Brand**

Tel +44 (0)1225 442 244

Welcome



Happy New Year! And it could get off to a great start photographically, as January is forecast

to be a bumper month for the Northern Lights. Our after-dark cover feature (p50) has expert hints and tips for capturing them, plus some top tutorials for light painting. Also this month, another batch of creative projects awaits in Photo Active (p16), and you can marvel at the winning images from the latest HIPA competition (p42). Camera Clinic continues with how to get the most from autofocus (p74) and you can see what happened when we sat in on one of Rankin's portrait sessions (p8). February's camera and lens reviews include the Fujifilm GFX 100 II (p104), new lenses from Canon and Nikon, and DxO FilmPack 7 – and you can now book your tickets for The Photography & Video Show in March (p92). Enjoy the issue.

Niall

Niall Hampton, editor
niall.hampton@futurenet.com

Follow us or get in touch...



www.facebook.com/Digitalcameraworld
Keep up to date on social media



Instagram:
[@digitalcameramag](https://www.instagram.com/digitalcameramag)
Another way to follow us



Email: digitalcamera@futurenet.com
Please mark the subject clearly



SUBSCRIBE AND GET A LOWEPRO CAMERA BAG WORTH £60!

Have *Digital Camera* delivered to your door and save money on the newsstand price
Page 40



Scan this to get our daily newsletter!



Contents

ISSUE 277
FEBRUARY 2024

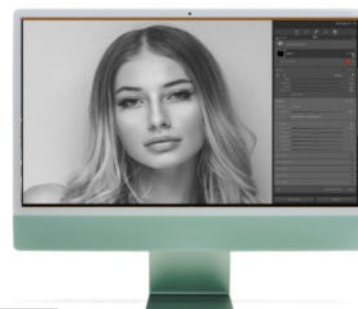


Getty



Massimo Giorgetta / HIPA

42 **Hotshots** Category winners from the Wildlife Photographer of the Year 2023 competition



83 **Practical Photoshop** Get the most out of Lightroom and Photoshop with our tutorials



Gear & tests

104 Fujifilm GFX 100 II
Latest flagship model for a range that's making medium-format mainstream

108 Canon RF 24-50mm F4.5-6.3 IS STM
A full-frame zoom lens for the Canon RF mount in a surprisingly compact package

110 Nikkor Z 600mm f/6.3 VR
Powerful reach and mighty performance from this new prime for Nikon's Z mount

112 DxO FilmPack 7
Latest version of this popular software for adding analogue effects to digital images

114 Mini test: flash modifiers
Three leading magnetic modifier kits come under our scrutiny

Photo skills

- 8 One to One**
On location with portrait photographer Rankin at his pop-up London shop
- 16 Photo Active**
Fresh inspiration on every page – choose from 10 all-new projects and enter our latest photo challenge
- 50 After-dark photography**
Learn how to paint with light – and photograph the aurora borealis!
- 74 Camera Clinic**
Our new technique series continues, with the lowdown on autofocus
- 83 Practical Photoshop**
Lessons covering the latest features of Lightroom and Photoshop, plus our latest collection of software extras



Regulars

- 39 The Art of Seeing**
Benedict Brain tries out a new camera
- 42 Hotshots**
The winning entries from 2023's HIPA 'Diversity' competition
- 66 Reader Gallery**
Presenting the month's best images
- 82 Shot of the Month**
'Rise' by Jonas Hafner
- 92 In Focus**
The latest camera kit and accessories
- 96 Behind the Lens**
Street photographer Craig Whitehead discusses his book *Find Your Frame*
- 102 Scanning ahead**
The latest dispatch from our resident tech-spert Jon Devo
- 118 Interview**
Dr Denise Maxwell on what to expect in her talks at The Photography Show

Page 40 – subscribe today and get a
**Lowepro Nova
 AW II camera bag**



This month's contributors



Will Cheung

LensiPhotography

74 **Camera Clinic** _ Following its launch in the 1980s, autofocus revolutionised photography and it's something we take for granted today, but are you making the most of your camera's AF system? This in-depth guide will help you do that



Rankin

8 **One to One** _ Since 2009, the acclaimed photographer Rankin has invited members of the public to come and have their portraits taken – we sit in on one of the latest RankinLive sessions, in the heart of London's West End

16 **Photo Active** _ 10 things to shoot, edit or create this month. Learn how to capture the magic of murmurations, shoot an artificial landscape you've created at home, control your white balance and take rainy-day portraits



Getty

Ross Hoddinott and Mark Bauer

Claire Gillo

Dr Denise Maxwell
 Photographer and educator



Ahead of returning to speak at The Photography Show in March, we chat to Maxwell about her career to date and why she shoots more than one genre. **Page 118**

Will Cheung
 Photographer and writer



A fellow of the Royal Photographic Society and the former editor of many photography titles, Cheung is the man behind Camera Clinic, which continues on **page 74**

Claire Gillo
 Photographer and writer



Digital Camera's former technique editor now specialises in creative and fine-art photography – you can find her latest photo project contributions from **page 16**

Rankin
 Fashion & portrait photographer



In a glittering career, Rankin has shot all the global celebrities who matter. We popped along to his latest RankinLive event, in a pop-up shop in London. **Page 8**

Jon Devo
 Photographer and writer



Our resident tech columnist enjoys considering the latest developments in photography and digital imaging. Read his latest dispatch on **page 102**

Angela Nicholson
 Photographer and writer



Digital Camera's former staff reviewer has been testing flash modifier kits – which one should you use for your next creative shoot? Find out from **page 96**

Your gifts

Download your gifts via digitalcameraworld.com/dc277

9 PHOTO TIPS CARDS TO TAKE ON LOCATION!

Our latest selection of tips cards gives wallet-sized advice on how to take better photos



ALL-NEW TIPS CARDS

- ✓ 9 subjects
- ✓ Techniques
- ✓ Settings
- ✓ Kit list

Transform your images with the latest batch of software extras for Lightroom and Photoshop

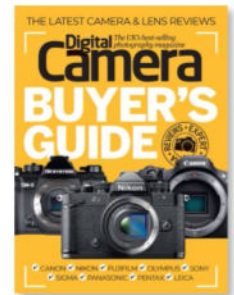
Our latest selection of presets and actions will give your captures a professional and creative look in a matter of seconds. Find out more about each pack on page 90 and download them by following the instructions below.



BONUS SOFTWARE EXTRAS!
Turn to page 90

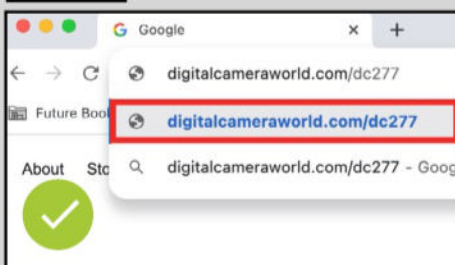
Buyer's Guide ebook

Featuring over 250 pages of camera and lens reviews, plus buying advice for accessories. See the Gifts folder in your download files.



HOW TO GET YOUR DIGITAL GIFTS

STEP 1



ENTER THIS URL
www.digitalcameraworld.com/dc277

Enter the URL www.digitalcameraworld.com/dc277 into the destination bar of your internet browser – we're using Google Chrome, but other browsers work in a similar way. Please do not enter it in any search field or search bar. This will take you to a page on our website.

STEP 2 | Camera 277 download

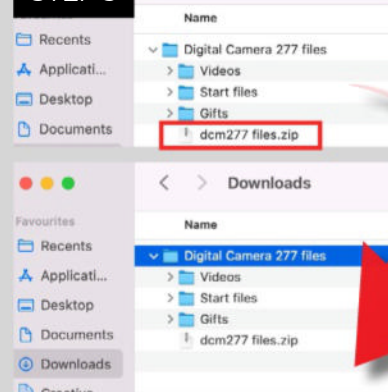
Download the videos, buyer's guide, Photoshop gift and start files for Digital Camera 277



JUST CLICK THE HIGHLIGHTED LINK

Click on the link labelled 'Download the files for Digital Camera 277' and your download will start, delivered from our own server. Please override any browser warnings about downloading from a non-secure source – our server is safe!

STEP 3



ACCESS YOUR FILES
Open the .zip

In your Downloads folder, or wherever you chose to download your files to, double-click the dcm277-files.zip file icon. Then when it expands, double-click Digital Camera 277 Files. The download content will display like this (above), clearly arranged in sub-folders. Keep Digital Camera 277 files and delete dcm277-files.zip. Enjoy your digital gifts!

FUJIFILM
FUJINON



Fujinon HYPER-CLARITY Series Binoculars

Bright and clear field of view optimised for wildlife and nature observation

All-Weather Performance

Built to withstand severe weather and extreme temperatures, HC Series binoculars benefit from a fog-proof, water-resistant body.

Coated for Hyper-Clarity

HC Series binoculars feature lens and prism coatings at five locations to maximise light transmission. This includes SUPER EBC FUJINON multi-coating, which enhances brightness and contrast.

For All-Day Use

When their ergonomically engineered, easy-grip design, HC Series binoculars have been designed to provide complete comfort, even after long periods of use.

[FUJIFILM.COM/UK/EN/CONSUMER/BINOCULARS](https://www.fujifilm.com/uk/en/consumer/binoculars)

IMAGE COURTESY OF ALAN HEWITT

one
to
one



Pop-up portraiture

Rankin is wowing the crowds with his pop-up portrait shop in London's West End. Niall Hampton pays it a visit

For someone who has photographed so many of the world's best-known people, Rankin feels that his RankinLive events are the most ambitious of his many projects. The premise is simple: the photographer turns his lens on members of the public, something he has enjoyed doing since 2009. And the latest RankinLive, in a pop-up shop in the heart of London's West End, couldn't really have asked for a better place to be based.

When *Digital Camera* pays a visit, on a busy Saturday morning before Christmas, Rankin is really enjoying himself, bonding with his subjects in the brief time they

get with each other, while his team bustles around the retail unit with various items of photo equipment. You can feel the creative energy that's bouncing off the walls, while puzzled passers-by stop to peer through the windows, wondering what on earth is going on inside.

Sarah Taylor has just had her portrait taken; she's a fan of Rankin's portraiture and has travelled from Berkshire specially for the occasion. Grabbing some time with Rankin afterwards, I ask him how this particular RankinLive came about.

"We stopped doing it during Covid and brought it back afterwards, with a couple of art shows, the Other Art Fair and the Art Car Boot Fair," he says. →



Rankin

Rankin
Photographer &
cultural provocateur

Known across the world for his photography, Rankin co-founded *Dazed & Confused* and has shot everyone from Madonna, the Queen of Pop, to King Charles III.
Instagram: @rankinarchive



Get a portrait, bag some merch

As well as being able to have your photo taken, a RankinLive event is also an opportunity for fans to pick up prints and other merchandise – all available under the umbrella of Rankin Swag, which has a dedicated website. “We’ve never really done T-shirts before and we’re doing some now,” says Rankin.

“Obviously, we’ve got some posters and some prints, too. We haven’t gone crazy on the prints here, though, because it’s not really the price point; collectors spend lots and lots of money on them – the prints here at Carnaby Street are all much more affordable, almost like a starter price.”

rankinswag.com



Rankin and Clare Sutcliffe review the shots in Capture One.



Rankin directs all the participants he photographs at the event and gets fully involved in proceedings, too – like enjoying a light-hearted moment by posing in Clare Sutcliffe’s jacket.

“But we wanted to do a RankinLive in a store so asked our Instagram followers if they’d be interested. We got so many sign-ups, we thought ‘OK’, and the people who run Carnaby Street offered us this – it’s a great location.”

The event runs until 7 January, by which time, up to 250 photo sessions will have taken place. And while Rankin won’t be photographing all of the sessions – his assistants will be deputising for him when he’s not around – he is hoping to do as many of them as possible.

While some walk-in time slots for RankinLive Carnaby Street have been available – and two of his team are busy

drumming up interest from the shoppers outside – anyone wishing to participate is encouraged to book in advance.

Rankin’s next subject has arrived and he is called away to greet her. Clare Sutcliffe is dressed for the occasion, wearing a leather jacket with distinctive floral prints. After a quick chat, she takes her position in front of the plain white background and Rankin and his team gather around. Shooting on a Hasselblad medium format with a Phase One digital back, and tethered to Capture One Pro software, the photos are pushed to a computer in real-time. This workflow is de rigueur for pro studio shoots and allows instant image feedback; it is Rankin’s preferred way of shooting portraits.

“Even when I shot King Charles recently, I did the same – he chose the pictures [he liked]. I find that people generally choose the best pictures of themselves, so I don’t really worry about interfering too much. Sometimes they want my opinion, which I’m obviously up for giving, but I’m very happy when people choose six pictures and then pick their favourite one.” →



I find people generally choose the best pictures of themselves, so I don’t worry about interfering



Rankin

Camera	Hasselblad H6X & Phase One IQ3
Lens	Hasselblad HC 3,5/50 II
Exposure	1/350 sec at f/16, ISO 100



Camera	Hasselblad H6X & Phase One IQ3
Lens	Hasselblad HC 3.5/50 II
Exposure	1/250 sec at f/16, ISO 100

Sit for Rankin!

RankinLive is running until 7 January at 47 Carnaby Street, London W1F 9PT

The total cost per time slot is £500, which includes the 15-minute photo session, a review of the images taken, a digital 'green tag' file PDF, one authenticated A4 inkjet print to be delivered to a UK address, and one digital file for personal use.

rankinswag.com/products/rankinlive



For Rankin, photographing his subjects is something he feels – rather than it being technical. Participants are photographed against the same white background – only the lighting, handheld and directed by an assistant, with reflectors used to bounce light back onto the subject as required, changes from session to session.



When they come in, I'm already trying to work out how I'm going to light them, how I'm going to direct them

Checking in for the next time slot, a couple has walked into the shop. Rankin opts to photograph them with the man sitting on a stool with his partner embracing him from behind. Afterwards, I ask why he decided to use that particular composition.

"I am quite directional, so when they come in, I'm already looking at them, trying to work out how I'm going to light them, how I'm going to direct them. Some people are coming in for memorial moments, or they're coming to have a photograph taken to remember a particular point in their lives.

"What's amazing about photography for me, is that it is also about memories, and I think as a professional photographer you tend to forget that – it becomes more of a product. For example, the couple I've just photographed chose a photo that's more like a Rankin picture. But three of the other photos I took are the →



Rankin

Camera	Hasselblad H6X & Phase One IQ3
Lens	Hasselblad HC 2,8/80
Exposure	1/350 sec at f/16, ISO 100



Rankin

Sarah Taylor admires Rankin's handiwork (left). Actor Anna Friel (above and right) popped along for a portrait on the event's opening day.

Rankin's kit for pop-up portraits

Optimised for instant feedback when shooting portraits in volume

1 Hasselblad H6X

"I was born as a photographer on a Mamiya RZ, and the RB67," says Rankin, "so the Hasselblad is the closest I've got to that."

2 Phase One IQ3 digital back

"With today's digital backs, you can go two stops over or under and it doesn't really matter anymore. It used to really matter."

3 Hasselblad HC 3,5/50 II

Equivalent to a 35mm lens in full-frame terms, this H-system lens is billed by Hasselblad as the classic lens for reportage.

4 Hasselblad HC 2,8/80

The standard lens for the H-system (55mm in full-frame terms), with a large aperture for working in low-light conditions.

5 Profoto B10 studio flash & reflector

Portable 250W head fired via a remote trigger and powered by a mains studio pack, although it is also battery-powered.

6 Apple Mac Studio

Powerhouse computer for creative professional applications, tethered to the Phase One digital back via a Tether Tools cable.

7 Eizo ColorEdge monitor

One of the best-known names in computer monitor production, ColorEdge screens have a colour calibration system built in.

8 Capture One Pro 2023

"I love shooting to Capture One," says Rankin. "It really suits me and how I work." The pro solution for tethered image capture.

ones that they'll probably be calling me up in five years' time to get prints of."

So you decided on those compositions and how to approach the shoot because of the feeling you had about the couple?

"Yes, I could see they were really into each other, so I was doing similar compositions and shots each time. People criticise photographers for doing that, but I just want them to walk away having a picture that they really like."

And Rankin is certainly achieving that objective today. Before she leaves, I ask Sarah Taylor how she chose her favourite picture to take away (see page 13).

"It's just one that looks the most like how I see myself – obviously, in the best possible way!" she laughs. "It's the one that I feel looks the most like me. I'm actually smiling in it as well, which is lovely. Rankin immediately put me in the right positions and got the best photos, and the whole experience has been wonderful."

Whether photographing the great and good, or members of the public, Rankin approaches them all in the same way. What has really come across today is his deep love of photography and taking pictures.

"I'm never happier than when I've got a camera in my hand, so I always feel like I'm privileged to do what I do," he enthuses. "And to still be doing it after 30-odd years is really special because a lot of people haven't got jobs in photography any more because of the advent of camera phones – I never take what I'm doing lightly."

"Also, I'm always trying to get a great picture, so I want people to walk away feeling, 'Oh yeah, I've got a great picture'. That's what's important, so if people feel that, then it's a really good buzz." ●



Rankin

Camera	Hasselblad H6X & Phase One IQ3
Lens	Hasselblad HC 2,8/80
Exposure	1/350 sec at f/16, ISO 100

Photo Active

10 things you can shoot, edit or create this month, from artificial landscapes to magical murmurations

1 | PORTRAITS

Rainy-day portraits

Take advantage of the bad weather, says **Claire Gillo**. Try this creative project for shooting distinctive portraits

You may not think that dark, cold and wet wintery nights are perfect for photoshoots – but you'd be wrong. Taking winter portraits in the rain is a brilliant thing to do and a creative way to use the bad weather. And if it's not raining, you can make it rain with a hosepipe, as we did here. You'll need an extra pair of hands if you are going to do this, as it's tricky to hold the hose yourself and shoot at the same time.

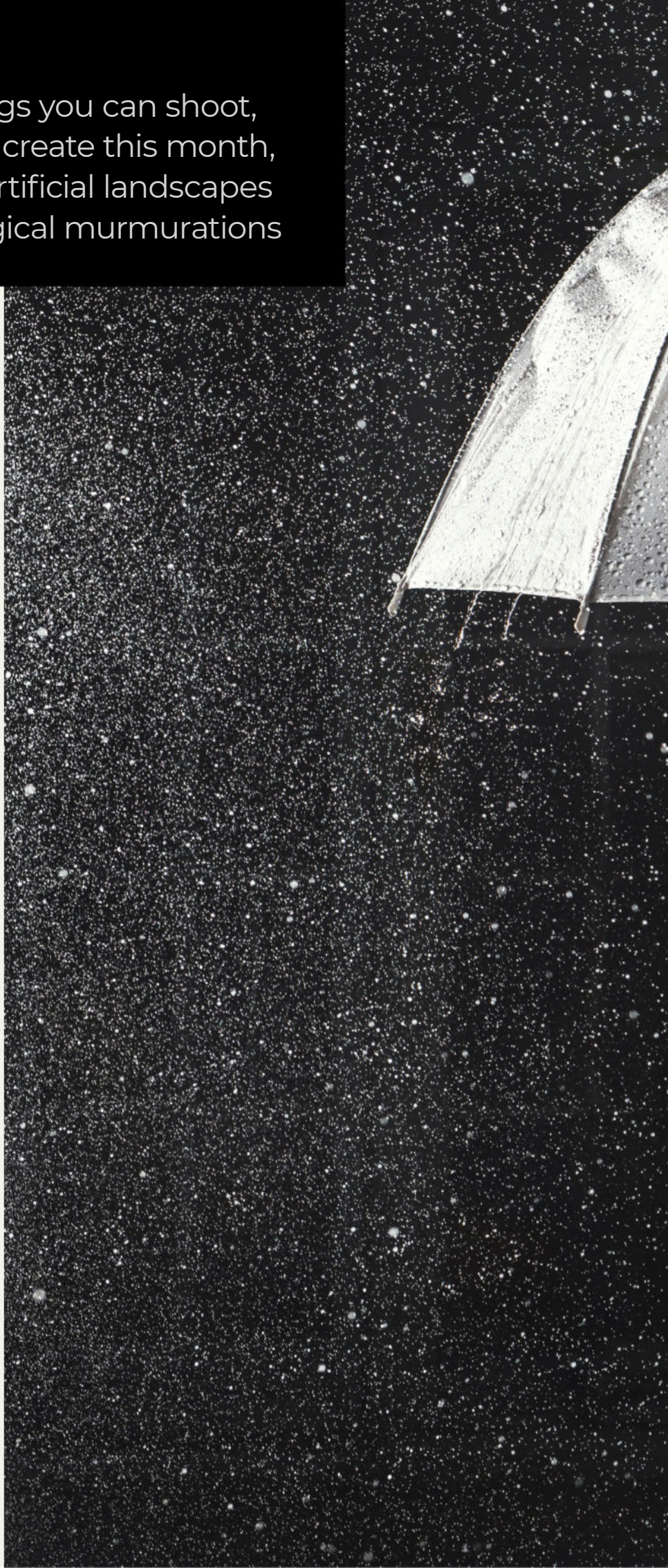
To try this project yourself, you will need two external flashguns and a trigger. We also had a softbox attachment for our main flashgun, which helped spread out the light. If you don't have a softbox, you could also use an umbrella, or you could shoot through the diffuser panel that comes bundled with a five-in-one reflector.

For our photoshoot, we used a Nikon D850 with a Sigma 50mm f/1.4 DG HSM Art lens attached. When it comes to lens choice, something like a 50mm enables you to focus on the model while keeping some space around them, but you can work with whichever lenses you have: there is no right or wrong option here. →



A gentle shower is the ideal time to shoot an eye-catching portrait – and if it isn't raining, you can make your own!

Claire Gillo







1

Camera settings

As you are using flash, you should put your camera into Manual mode. We set our shutter speed to 1/200 sec to sync with the lights, and selected an aperture of f/8. The ISO was balanced with the flashes at ISO 400.

2

Lights

We used two external flashguns, positioned diagonally across from each other. The key light is the one at the rear of our model and is lighting the rain and umbrella. The one from the front is filling in the front and side of the model. Our lights were firing at 1/4 and 1/8 power.

3

Umbrella

A white or translucent umbrella in the shot works better than a coloured or patterned umbrella. For starters, it will look cleaner in the image, but also it won't reflect a colour cast over your subject.



Water and equipment

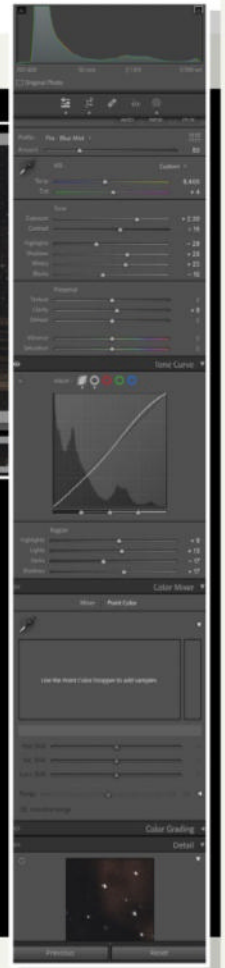
A word of warning: water and camera equipment don't go well together, so be sure to protect your kit. To protect our lights, we placed clear plastic bags over them and taped them down into place. If you are shooting in the rain, protect your camera body and lens by covering them with a plastic cover or a clear plastic bag, especially if your kit is not professional-grade. Pro kit is weather-sealed, so it should be able to handle bad conditions – but if it's really pouring with rain, take extra care.



Tips for editing

When it's time to edit your image, don't rush. The trick for getting great results is to ensure the blacks in your image are dark and moody, and the light raindrops are pinging white. The contrast between the two is what makes the effect work. For this reason, we boosted Contrast and pushed the Blacks and Whites in Lightroom.

For the second part of our edit, we imported the shot into Photoshop to clean up the background. As we had a distracting bench on one side of the frame, we used the Remove Tool to take it out. We also darkened the shed in the background and removed some of the distracting wood elements.





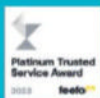
CAMERA INSURANCE

Join many happy snappers and cover your camera equipment for loss, accidental damage, and theft.



UP TO 30% DISCOUNT

The maximum available discount is 30% - this is a combination of 25% Introductory Discount and 5% Digital Photographer reader Discount. The Introductory and Promo Code Discounts are available from the start of the policy until its first review/renewal date.



PROMO CODE: CLICK99

Offer ends 31/12/2024 and is not available in conjunction with any other promo code.

VISIT [THEINSURANCEEMPORIUM.CO.UK/DP99](https://www.theinsuranceemporium.co.uk/DP99)
or call 03300 244 063 today!





Future

2 | WORKFLOW

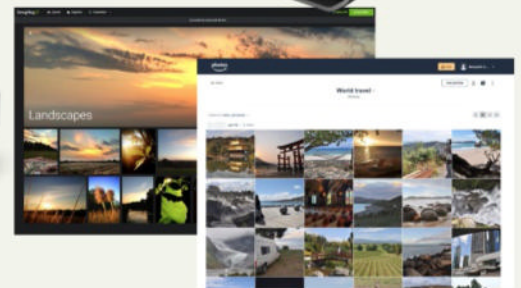
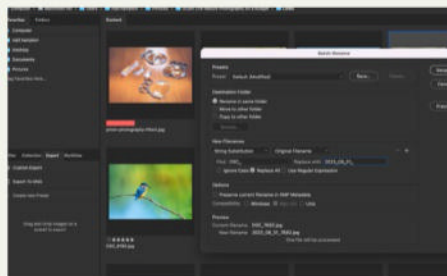
Tidy up your storage

Start the new photo year as you mean to go on

Be honest – do you have a bombproof system for archiving your images, and locating them at a later date should you choose to make some retrospective edits? You might find that some of the actions and presets we give away in every issue of *Digital Camera* would bestow a new lease of life on pictures you took in the past and have consigned to some form of digital storage... if only you could find them! As different people's minds work in different ways, we all have contrasting approaches to how we catalogue and store our photos. And the middle of winter, when it's probably safe to argue that we're taking fewer photos than usual, is a great time to go over the previous year's captures and make sure that your archive system works for you.

Pro tip – a drive for every year

Photographers who shoot large volumes of images will often store a year's worth of pictures on an external hard drive, with a different drive allocated to a particular year. This is a logical way of storing digital files: if you can recall the year of capture, locating individual images will be straightforward. This approach works even better if your image filenames contain numbers to identify a year – easily added using Batch Rename in Adobe Bridge, for example – or if your images are kept in the dated folders created by some camera software.



1

Use meaningful names

A camera generates file names like 1P3A0001.jpg (Canon) or DSC_2351 (Nikon and Sony). Something like 2023_08_31_2351.jpg would be more meaningful, though, and much easier to locate on a computer or external drive.

2

Back up to a drive...

Back up your files to an external SSD (solid state drive) – a 2TB OWC Envoy Pro Elektron, as featured in issue 270's portable SSDs group test, can be purchased for £200/\$200. This will be enough for tens of thousands of jpegs.

3

... and to the cloud

Need the reassurance of an extra backup? Look at one of the many options for free or paid cloud storage. See the roundup on our website for the best options, which include Google Photos and SmugMug: www.bit.ly/dcm277cloud

THE FINAL COUNTDOWN...

PRE-REGISTER NOW FOR YOUR FREE* TRADE SHOW TICKETS!

NOW IN ITS
21ST
YEAR!



The Society
of Photographers
Convention 2024
& London Photo Show

Full Convention:
Wednesday 17 – Saturday 20 January
FREE* Trade Show Dates:
Thursday 18 – Saturday 20 January
Venue: Novotel London West
Hammersmith, W6 8DR

TAKE YOUR PHOTOGRAPHY TO THE NEXT LEVEL
WEDNESDAY 17 – SATURDAY 20 JANUARY...DON'T MISS IT



Europe's Largest 'All-Welcome' Photographic Convention

The 2024 Convention is a veritable feast of education, with four days of action packed programmes designed to help you put your imagery ahead of the game. The three day Trade Show spanning the Thursday to Saturday is a gathering of the who's who in the photographic industry, with the 'big guns' present and eager to show you the latest in technology and design.

FREE to enter Trade Show* Meet over 100 photographic brands – All the important players within the industry are exhibiting at this event, so meet the key personnel who can help you. Book your FREE* trade show tickets today.

Trade Show Opening Times

Thursday 18th January 2024 – 10:00–17:00
Friday 19th January 2024 – 10:00–17:00
Saturday 20th January 2024 – 10:00–16:00

Canon Speakers on the FREE Live Stage

Thursday 18th January @ 13.30

Ian Hippolyte

Can we talk about Fashion Photography?

Friday 19th January @ 13.30

Victoria Haydn

The Fear of Changing Genres

Saturday 20th January @ 13.30

Igor Demba

The Art of Destination Weddings

See full free Live Stage Schedule:

<https://thesocieties.net/convention/free-demos-and-seminars/>

Masterclasses* Don't miss out on the chance to start off the year with inspiration from some of the world's best photographers.

Masterclass Tickets: Day Pass £80 | 4 Day Full Pass £275

All prices shown are inclusive of booking fee & VAT.

REGISTER
TODAY FOR
YOUR FREE
TRADE SHOW
TICKETS.*



Canon

Business School - Wednesday 17 January

Take your business to the next level – step by step! The Societies' Business School has created an amazing reputation. All delegates who attend leave with a wealth of information to plough straight back into their businesses. The theme of the Business School in 2024 is business development and growth – how to best manage your business with creativity being the consistent thread that runs through the programme. The school will be hosted and steered by Gillian Devine, one of the most motivational speakers and one who has a great reputation for designing and influencing some of the most successful businesses within our industry. This highly-focused power-packed business school has been designed to bring you successful professional photographers who have taken their business to the next level. They will share with you their thoughts and secrets of their business.



FREE TO WATCH 20x16" Print Competition & Qualifications

Live at the Convention Join us on Wednesday 17th and Thursday 18th January and experience the live judging for yourself.



Enter the most prestigious 20x16" Print Competition held worldwide, open to members and non-members alike. Enter your images today
thesocieties.net/convention/20x16-print-competition/

Presentation Evening Friday 19 January

Join us at the glittering Awards Night and celebrate the success of photographers from around the world. The FREE to enter members' 2023 Monthly Image Competition, 2024 20x16" Print competition and Trade Awards winners will be announced at a glamorous awards ceremony.



USE EXCLUSIVE ONLINE CODE **F10** & SAVE 10% OFF
ALL CLASS TICKETS! PLUS PRINT YOUR OWN FREE ENTRY TICKETS!

thesocieties.net/convention/

*Visitors pre-register before 14 Jan 2024 for FREE and avoid £10 entry fee to Trade Show.



The Society
of Photographers

Balancing act

Mike Harris shows you five ways to keep white balance in check – and how you can fix it during the editing stage

Have you ever wondered why some photographs have a warm, yellowish hue, while others have a cooler, bluish hue? This is because light sources emit different colour temperatures; although the human eye is adept at neutralising them automatically, your camera sometimes needs a helping hand.

White balance is so called because it refers to the process of rendering a white object white, despite the colour temperature of the light source. Colour temperature is measured in Kelvin (K) – direct sunlight is roughly 5,000K, for example, and our Nikon D800 and Z 6II cameras capture a range from 2,500K (very warm) to 10,000K (very cool). But you don't have to know what the various Kelvin values mean – all you have to do is set your camera up for success.

You could argue that the 'correct' white balance doesn't really exist, since the perfect colour temperature of an image will differ from photographer to photographer and the aesthetic they're trying to achieve. But at least if you know how to balance the colour temperature of a scene, you have a solid base to work from during editing. This brings us to an important point: the colour temperature of raw files can be altered at any time without damaging image quality, so if you don't like what you see, you can always change it.

So why worry about white balance at all? Because getting it right in-camera saves time in the edit – and knowing the theory might just help you become a better photographer.



1

Shoot raw files

Head into your camera's shooting menu and make sure the format you shoot in is set to raw. While it is possible to gently tweak the colour temperature of JPEG files in editing, you need to shoot in raw format if you want free rein to alter the white balance without damaging the image.

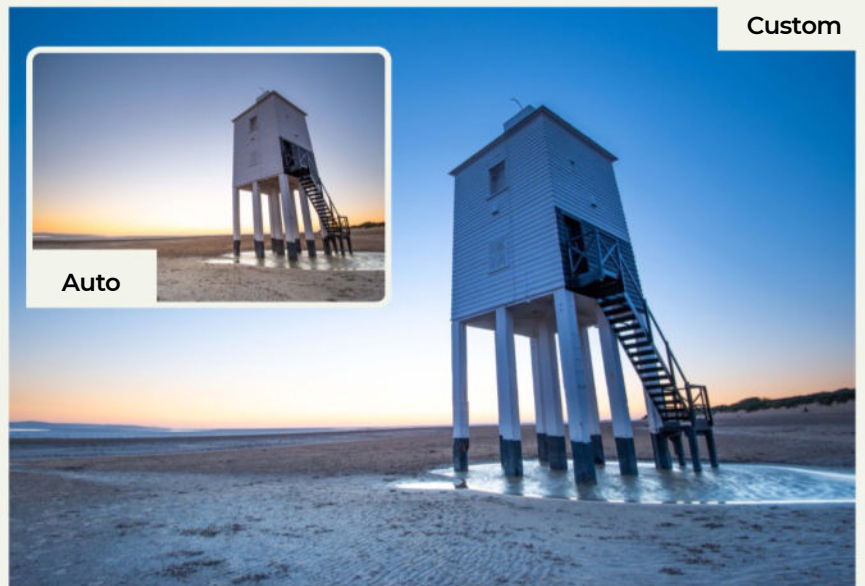
2

When to use Auto White Balance

Many photographers set their cameras to shoot with Auto White Balance: it's a great choice for everyday sessions or if you need to react to your surroundings quickly. Auto is only able to correct the colour temperature within a limited range, though and will often attempt to neutralise extreme lighting conditions, such as the golden hour or the blue hour.



Before



Auto

Custom



Daylight Shade Fluorescent Tungsten

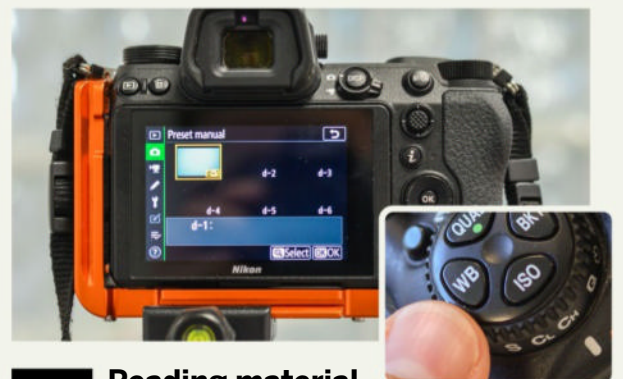
4 Pick a preset

Head to White Balance in your camera's shooting menu to find your list of white balance presets. This allows you to match the scene in front of you to the corresponding preset, without having to worry about Kelvin values. Do familiarise yourself with each preset. If you know Cloudy adds warmth, for example, you may choose to call upon it if Auto is making your scene too cold.



5 Fine-tune the temp

If you want more control over white balance while you shoot, press right when a preset is highlighted to bring up a square colour chart. The A-B value represents colour temperature and the G-M value represents tint. You'll also find a Choose Colour Temp option in the main White Balance menu that lets you input specific Kelvin values or change the tint. These specific controls apply to Nikon cameras, but you may find similar options for managing white balance in your own camera's settings.



6 Reading material

You can take a white balance reading with your camera, using a neutral object or a dedicated grey card as a reference point. This is usually accessed via a dedicated WB button or White Balance in the menu system. Once enabled, fill the frame with the neutral reference and fire the shutter, and the camera saves the reading.

3

Fix white balance in editing

It's easy to correct a shot's white balance in Camera Raw's Basic Panel. The White Balance dropdown menu allows you to select a preset; the Temperature slider allows you to fine-tune the Kelvin value. And with the White Balance Tool, you can click on a neutral area of the image as a reference point to set the white balance.



4 | LIGHTROOM

Mix up the colour

Claire Gillo shows you how to target and adjust individual colours with Lightroom's amazing Color Mixer tool

The Color Mixer Panel in Lightroom provides an easy way to tone and style your images in a few easy steps.

To use the Color Mixer, go to the Develop Module; you'll find the Color Mixer Panel on the right-hand side, fourth tab down.

There are two main settings: the first is Mixer; the second is the newer part of the feature called Point Color. The Mixer tab has been designed to help you make general colour adjustments across the whole of the image, whereas Point Color is for more localised changes (see 'Point Color' below).

Three terms that appear throughout the Color Mixer Panel are Hue, Saturation and Luminance (HSL). Hue refers to the colour or tint; Saturation is the strength of the colour; and Luminance is the brightness.

In the Mixer tab, you can opt to adjust just one of the settings or all three. Have an experiment by pushing and pulling one of the Hue colour sliders and see what happens to your image. For example, in our cupcake photo, when we pushed the Red slider to the right, the cup cases changed to orange, and when we pushed it to the left, they went a deep magenta.

It's easy to get carried away in the Color Mixer and to go too far. You really only want to use it to make subtle adjustments. For example, if the yellows in your image are too overpowering, you can reduce the saturation. If the tone of a colour is too weak or the wrong shade, you can adjust accordingly.

At any point in your edit if you've gone too far, you can reset the settings to take your image back to its original state. To do this, hold down Alt/Option on your keyboard and you'll see the tab labels at the top of the Color Mixer Panel change to Reset Mixer and Reset Point Color. Simply click on either heading to reset the changes you've made.

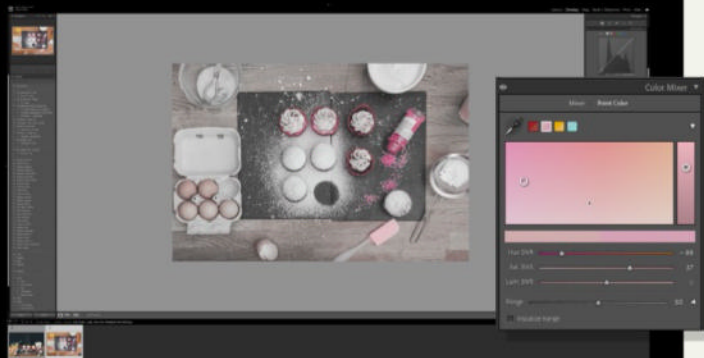


Point Color

The Point Color tab in the Color Mixer Panel is a more accurate way to make targeted adjustments to your image. With this tool, you can fix unwanted colour casts or change the colours of a product, for example.

To use Point Color, click the pipette symbol, then sample a colour in your image. You can select up to eight colours per image. If you want to remove a colour sample you have selected, right-click on the chosen colour on the top bar and select Delete Swatch. To adjust any selected colour, either use the sliders or click on an area in the large sample box. Note that Hue changes from left to right, and Saturation from up to down. The small black dot in the chart shows the original colour; the white circle is the new selected colour. Luminance can also be controlled on the slider below, or by clicking in the box on the right.

Finally, Visualize Range is a useful setting within Point Color. By ticking this box, you can see exactly where your image is being adjusted, and you can fine-tune the selection further using the Range slider.



Insurance designed to help you focus

Over 20 years of experience
protecting the UK's photographers



Cover in the UK and 30 days worldwide

Lend to a friend equipment cover

In-Vehicle Cover

Public Liability up to £1 million

Interest-free payments

10%
discount off
specialist camera
insurance*

Specialist camera insurance that you can trust

One of the great things about photography is capturing the unexpected, but no photographer wants to be on the end of a nasty surprise. With our specialist photography insurance, it doesn't matter if you're a professional photographer or someone who takes pictures in their spare time, we can help you focus on capturing the moment. Get in touch for a quote today.

*Terms and conditions apply: Available to new UK customers aged 16 and over. Applicable to first year's premium.

In partnership with

Digital The definitive guide to
SLR & CSC photography
Camera

Get a quote online
[www.photoguard.co.uk
/digital-camera-magazine](http://www.photoguard.co.uk/digital-camera-magazine)
or call us on:
0333 004 6555

5 | CREATIVE

Make a fakescape

Clare Gillo shows you how to create a mountainous scene out of flour and a dark background

What on earth is a fakescape? It's an image that looks like a landscape scene, but it's not really a landscape at all... it's all fake! We created our fakescape in the comfort of our own home using some black paper, an LED light and some flour. Ours happened to be self-raising flour, but it makes no difference at all what type of flour you use. And you don't have to stick to just flour – be experimental with the ingredients you build your fakescape out of. Icing sugar could be just as effective or mashed potato could also work well (let it cool first if you are sculpting with your hands).

For the photography part of the project, you'll need a tripod and a lens with a mid-range focal length. A 24-70mm or a 50mm is about the ideal length: you don't want to be so wide that it's tricky to compose your scene but, equally, a telephoto lens will get too close. We used a Sigma 50mm f/1.4 DG HSM Art on our Nikon D850 for this project.



SEND US YOUR IMAGES!

Want to feature in our gallery? Please email a high-res image (at least 2.5MB) marked 'Reader Images' and including a title and brief description to:

digitalcamera@futurenet.com

or share it on Instagram with the tag:
#digitalcameramag



Though it looks like a moonscape, this is actually self-raising flour, lit from the side to emphasise the shadows and texture.

Claire Gillo

How to create your fabulous fakescape

Set up a backdrop then get your hands dirty to assemble your scene before lighting and capturing it

1

Camera settings

Start by mounting your camera on a tripod. You'll want to shoot using a narrow aperture and a low ISO setting, so your shutter speed is going to be too slow to hold your camera by hand. Shooting on a tripod also helps you keep tweaking the composition. We had our aperture set to f/11 on our camera but, shooting at such close proximity, you're still going to have blurred parts to the scene – even at f/11. You can focus stack if you want the whole scene sharp, but we like the final effect with some blurred areas: it adds to the concept of the project. You can see there is something unusual about this landscape scene but you can't quite put your finger on it!



Claire Gillo



2

Put up your background

To make it look like night-time in the photo, hang a piece of black paper or card as your background. We used a chair and some pegs to create a mini-studio curved backdrop. As you want the background to be completely black, make sure you have no lights hitting the background, including natural light. We drew the curtains so that no outside light could ruin the final effect.



3 Sculpt the flour

Now comes the fun part! Pour your flour onto the surface (make sure your camera isn't too close at this point, as fine flour dust travels further than you think). You can now start sculpting the flour into mountainous shapes. Do this either using tools, such as a spoon or a knife, or you can use your fingers like we did. As the flour gets everywhere, have a tea towel or cloth at the ready so you can wipe your hands before touching your camera. When arranging your composition, you want to add some depth to the scene, so try to create a gap between the foreground and background of your mountains.



4 Lighting

We used a continuous LED light to illuminate our scene. If you don't have one like the one we're using, simply use a torch or a lamp from around your home. The light will create a different effect depending on where it is placed: as we wanted our mountains to be in shadow and to look like they had been lit by the moon, we placed the light to one side of the scene and slightly behind. To create stronger and harsher shadows, bring the light closer to your subject; to create soft shadows, take it back. You can experiment with what works best for your setup.



5 Editing

When it comes to processing your image, there are many different approaches you can take. We opted to use a black-and-white finish for our fakescape, and boosted the contrast to enable the dark parts of the image to stand out against the light. We also used the Dodge and Burn tools to further this effect. As we were unable to shoot the stars in-camera we decided to paint these in. We added a new layer to our image and used a white small brush to dot stars around the sky (alter the brush size as you go). Keep going until you are happy with the star constellations you've added.



USE YOUR FREE TIPS CARDS

This project features in this month's bonus tips cards. For a handy guide to capturing creative photos like this, keep your tips cards in your camera bag.

1 Super shapes

Murmurations change constantly, so it is a good idea to take as many shots as you can, then select the best ones when you get home. If you can, use Continuous mode to fire off bursts of shots. You should end up with a fantastic selection of photos, with many different shapes and sizes of murmuration.

2 Crop to give a sense of scale

To bring a sense of scale to the flock of birds, it is worth experimenting with different crops for your images, to alter the compositional balance of your murmurations against the background. While shooting, try to make sure your lens is zoomed out enough to capture the whole of the flock within the frame – then you can crop into it afterwards.

6 | WILDLIFE

Marvellous murmurations

Try to capture this amazing and visually spectacular annual wildlife event, says **Roddy Llewellyn**

F

or birds, winter means the end of the breeding season. The weather has turned colder so they choose to roost in reeds. Murmurations are where a large group of birds, usually starlings, all fly together and change direction together. These displays tend to happen during the winter months between October and March. Migrating birds arriving from Europe hit a peak in December and January, so it is worth visiting your local wetland centre to capture this magical event. Murmurations change direction rapidly so you need a shutter speed of at least 1/60 sec.

3

Where to find your murmuration

Check out murmuration websites and groups to see which local nature reserves are close to you. A lot of Facebook groups and wetland centres post daily updates about which birds are roosting. Take a look at www.starlingsintheuk.co.uk, which has regularly updated listings of starling murmurations in the UK. Once you have found a location you'd like to visit, plan your kit and clothing before your trip.

4

Choose your focus points

If the birds are moving around quickly, use a group mode in your autofocus settings; the AF area will therefore be larger, making it easier to track bird movements across the sky. If you're more confident, single-point autofocus will work just as well. Set up your preferred focus points before the shoot, so you aren't fiddling around with your camera settings while the murmurations start.

5

Look out for patterns

Look out for interesting patterns, especially as the flock turns. As the birds bank, they appear larger and darker; with some interesting clouds behind, the photos will look textured. Keep shooting in Continuous mode as new patterns appear. Before the shoot, make sure your memory card is fast enough to save bursts of photos and that it has plenty of free space, as it might take a few hundred shots to find 'the one'.



Shoot with your aperture wide open and try to keep the ISO below 800, to minimise digital noise. A fast shutter speed will be needed to capture the speed of the changing murmurations.

**PART
1 OF 2**

Part 2 in issue
278, on sale
2 February

7 | AFFINITY PHOTO

Simple edits to transform a still-life shot

Maximise the potential of an image by applying some simple adjustments, says **Gary Rogers**

Photography is my hobby – in particular, flower and plant macro photography. Everyone is capable of taking good photos of plants and flowers, even with a camera phone, but how do you capture a really great photo, or produce an eye-catching image? I have a good quality but entry-level camera, a macro lens and some accessories. I sometimes enter my images into competitions but I find it daunting and challenging to produce an image that is different, perhaps unique, and that captures the imagination of the viewer.

Post-processing software such as Affinity Photo and Photoshop offers a multitude of tools and creative filters that I can use to create beautiful and different images, which give me enormous pleasure and fun. I use Affinity Photo and Photoshop Elements, both of which are easy to learn if you approach them with a sense of curiosity. Simply by exploring the tools and filters in these programs, I have often stumbled across techniques that produce stunning and unique images – and which are easy to execute.

Go ahead and explore the endless options available to you. You will have good fun producing great images – and, who knows, perhaps a competition winner.



1

The original image

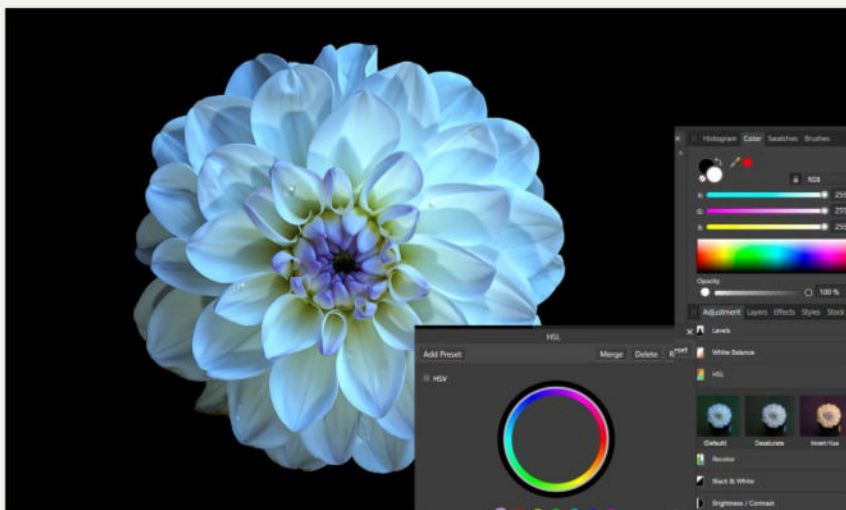
My starting point was a nine-shot image of a dahlia from my garden, focus-stacked using Affinity Photo. It is underexposed and rather dull, but reasonably sharp from front to back.



2

Enhance the tones

Use the Exposure and Contrast sliders, along with the Clarity and Sharpening tools and filters, to enhance the image.

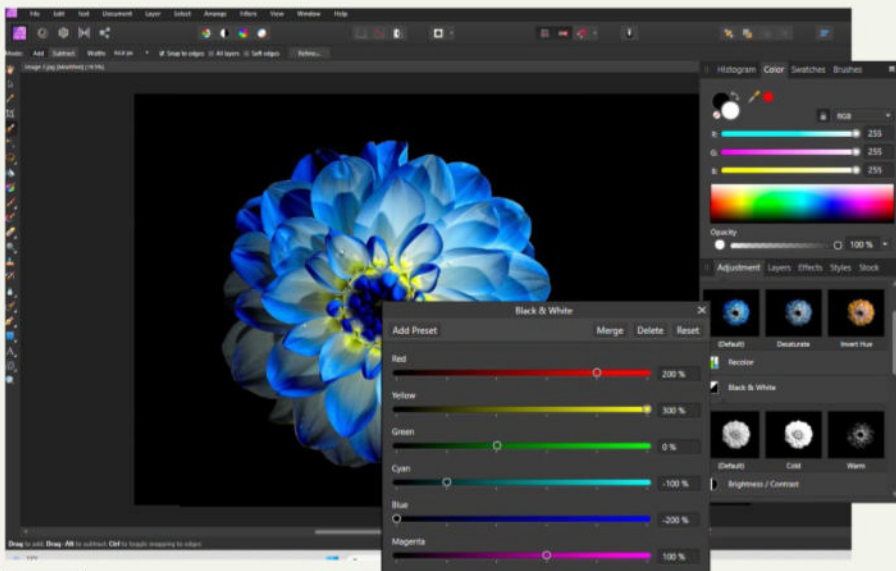


3

Black background

Using the Selection Brush Tool, select the flower,

then invert the selection and turn the background black using the Luminosity slider in the HSL Panel. This produces an eye-catching, high-quality look and feel against the black background.



4

Enhance colour

In the Adjustment

Panel, select Warm under Black & White, then set the Blend Mode dropdown to Overlay. This produces the stunning final image (pictured, right).



How to use the rules of composition

Get the lowdown on an essential element of classic landscape photography, with **Mark Bauer** and **Ross Hoddinott**

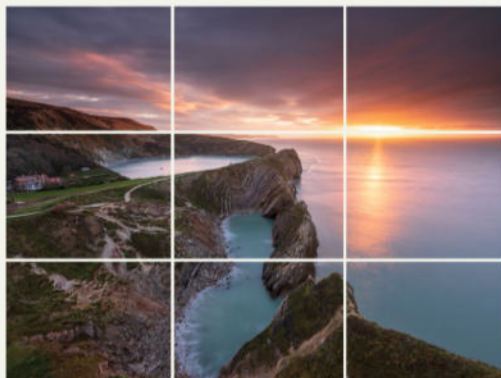
There are a few lucky people who have a 'natural eye' for a picture – but for the rest of us, composition is a skill that has to be learned. The good news is that your compositional ability will improve quickly as you gain experience, and the process will soon become instinctive. In the meantime, however, there are a number of 'rules' we can follow to help us get to grips with effective composition. Of course, as with all rules, they are best applied judiciously.

1 The rule of thirds

The basic goal of a composition is to achieve a balance between the elements in the frame. One tried-and-tested method of doing this is to arrange those elements according to the rule of thirds. Imagine a grid overlaying your viewfinder, dividing it into thirds horizontally and vertically.

Now compose the elements in the scene according to the lines on the grid. The obvious starting point is to place the horizon on one of the dividing lines. In many photographs, the frame will be divided into two thirds land and one third sky; if the sky is dramatic, reversing these proportions gives a better result.

Having decided where to place the horizon, you can organise the other points of interest. A composition will often benefit from having a strong focal point, and the points where horizontal and vertical lines intersect in the rule-of-thirds grid are particularly powerful places to put such a point of interest.



Many cameras have a custom function that superimposes a rule-of-thirds grid in the viewfinder, or on the review screen in Live View mode. This grid can be a valuable compositional aid for beginners.



Ross Hoddinott and Mark Bauer

2 The golden section

The rule of thirds works well, but it's actually a simplified version of a proportion known as the golden ratio – or, when it applies to a rectangle, the golden section. In theory, the golden section should provide an even more harmonious division of the frame. Used in art and architecture for centuries – da Vinci's works are full of examples – the golden section also occurs frequently in nature. There is even research that suggests our brains are hard-wired to respond positively to images and objects that demonstrate this proportion.

To understand the golden ratio, imagine three lines: A, B, and C. The golden ratio states that line C is proportional to line B as line B is proportional to line A. Expressed mathematically, the proportion is approximately 1:1.618; lines C and B

differ in length by a ratio of 1:1.618, and lines B and A differ by the same ratio.

Within a 35mm frame, the basic principle is this: if you divide the frame into two rectangles, the ratio of the small rectangle to the large one is the same as that of the large one to the whole frame. These sections can then be subdivided according to the same ratio, and you end up with a grid that is just slightly different from the rule-of-thirds grid. For painters, applying the golden section is easy – they can sketch the grid onto their canvas – but it was more difficult for photographers in the early days, and the theory was simplified to become the rule of thirds.

As with the rule-of-thirds grid, the intersections of horizontal and vertical lines are ideal places to position focal points in the image.

To begin with, the golden section is best used to analyse photos that have



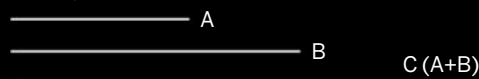
The elements in the image above are arranged around a golden section grid, with the horizon sitting on the upper division and the lighthouse precisely on the intersection of two lines. The diagram to the right explains how the golden section has been taken into account in this image.

Settings: Nikon Z 7II with 14–30mm lens at 18mm; 30 secs at f/11, ISO 64. Polariser, six-stop ND and three-stop reverse grad all fitted.

already been taken. Look at a selection of images – yours and other people’s (and not just photographs, but any images) – and examine the extent to which they conform to the golden section. This will help you to familiarise yourself with the mathematical ratio, so that you can start applying it intuitively in your own compositions.

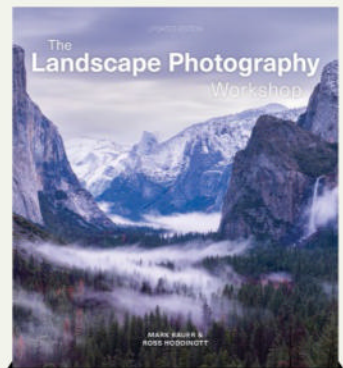
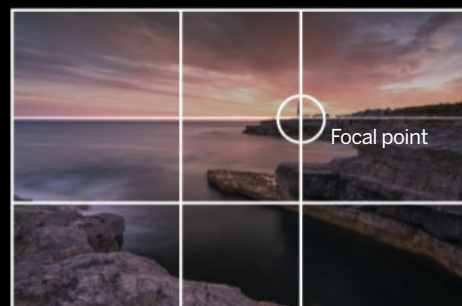
The golden ratio

The proportional relationship between B and C is the same as the proportional relationship between A and B, a ratio of 1:1.618.



The golden section

A frame divided according to the golden section can be used in a similar way to the rule of thirds.



BUY THE BOOK

The Landscape Photography Workshop by Mark Bauer and Ross Hoddinott is published by Ammonite Press, priced £16.99/\$26.95. www.ammonitepress.com



Ross Hoddinott and Mark Bauer

The three ferns in the foreground are a key part of this composition. Try viewing the image while covering one up with a finger – the composition is not nearly so powerful.

Settings: Fujifilm GFX 50S at 23mm; 8 secs at f/22, ISO 100. Polariser and two-stop medium ND grad fitted.

3

The rule of odds

The rule of odds is mentioned far less often than the rule of thirds, but it is remarkably straightforward. It simply states that odd numbers in a composition tend to be more pleasing than even numbers.

Imagine a tree-topped hill as the focal point of a photograph. Imagine a single tree on the hill, then two trees, then three trees. Somehow, the images with the single tree and the three trees just ‘work’, while the image with two trees doesn’t.

Related to this is the observation that triangles are an aesthetically pleasing implied shape within an image. Portrait and wedding photographers often organise groups of people so that they form a triangle; if you can find this shape in the natural world, it can often form the basis for a powerful composition.

9 | AFTER-DARK

Shoot traffic light trails

Winter is the perfect time to try this surprisingly simple technique, says **Chris Rutter**

Winter nights can seem boring for the keen photographer, but here's a great technique to try all year round. Use a long exposure to get cool traffic trail effects when cars drive by. It's something that's hard to capture on a smartphone, and a pain to replicate in software, so it will mark you out as a skilled photographer.

Traffic trails are actually not that hard to shoot, but you do need to prepare. First, find a suitable (and safe) location. Try standing next to a busy junction controlled by traffic lights, or a slip road or a roundabout, where you'll get vehicles coming past at different speeds. Capturing vehicles while they are turning can create interesting effects, too. You're using a slow shutter speed, so you need a tripod and cable release to keep the camera steady.

1 Get started
Set your shutter speed according to the speed of the traffic. Try 10 seconds as a starting point. Shoot in Manual so you can adjust the shutter speed and aperture independently, checking the histogram for each exposure. Use a narrow aperture to get starburst effects on street lights and increase the depth of field for sharpness.

2 Use manual focus
It's best to focus manually because autofocus will struggle in low light and get distracted. Focus carefully on something significant in the background; zoom in with Live View if necessary to check sharpness.

3 Set your ISO
Keep the ISO low to reduce noise, and turn on Long Exposure Noise Reduction via your shooting menu.





10
secs

f/11

ISO
100

Preparation is the key to a successful light-trail photo shoot: choose your location with care and avoid camera shake and you're halfway there.



**WIN
A £50 CEWE
WALL ART
VOUCHER!**

Submit your best 'Action'
photo by midnight on
1 February 2024

10 | COMPETITION

'Action' photo challenge

Send us your best image to win a £50 voucher towards Cewe Wall Art

The latest theme of our monthly Photo Challenge is 'Action' – so whether you like to photograph subjects like fast-moving sport, motorsport or aviation displays, this one is for you. However you choose to meet the brief, we're looking forward to seeing your best shot!

Enter via email or Facebook

Email your entry to digitalcamera@futurenet.com with 'Action challenge' as the subject, including a brief description of the image. Or look for the 'Action challenge' post at www.facebook.com/digitalcameraworld and upload your entry into the feed. Enter by 1 February 2024 (only one image per reader, please). The winner will be announced in issue 279 (April), on sale 1 March. (Please note that this competition is only open to readers based in the UK.)



Michelle Yorke

The winner of the '2023' challenge is...

Michelle Yorke

In *Digital Camera* 275, we challenged our readers to submit an image that best summed up 2023 for them. Congratulations to Michelle Yorke for a photo we've really enjoyed admiring. "This represents my year in photography, as I have had a bad time with both health and mental ups and downs," she says. "Due to this, my main focus has been shooting macro and dreamy-looking flowers with my Lensbaby Velvet 85, but I feel this image captures my mood along with the beauty and detail of the flower."

Email your entry to: digitalcamera@futurenet.com
or enter at: www.facebook.com/digitalcameraworld

cewe
we love photos

ABOUT CEWE

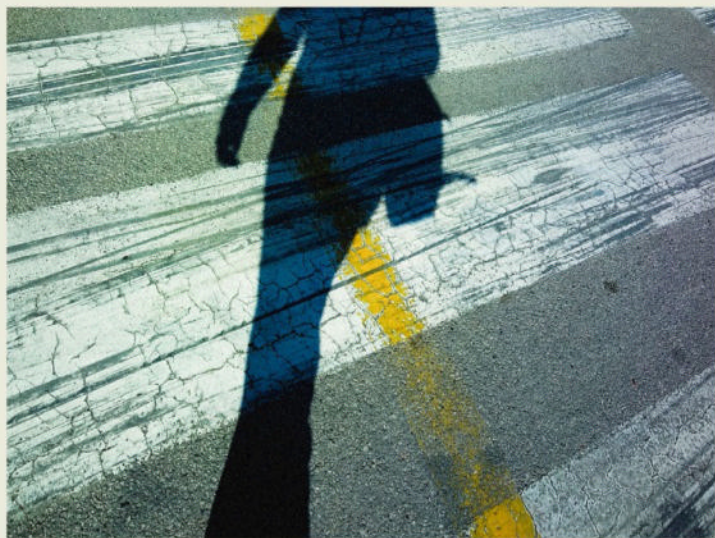
CEWE is Europe's number-one photo printing company. Using photographer-approved print processes and materials, CEWE has a wide range of photo products for you to explore, including the award-winning CEWE PHOTOBOOK and expertly crafted Wall Art to help you get professional results with your photos.

Find out more at:
www.cewe.co.uk



SCAN ME





The art of seeing

Liberating himself from the shackles of modern technology, **Benedict Brain** has creative fun with his new Camp Snap camera

Think of a disposable camera but with a small digital sensor instead of a roll of film. This is the Camp Snap, a simple camera I was seduced into buying. I have a penchant

for quirky toy cameras, so I was fair game for all those online algorithms.

Cheap, toy-like cameras often have a unique aesthetic that some might find frustrating. With the right frame of mind, however, their crudeness can be harnessed to creative effect. Camp Snap looks and feels like a single-use camera; while there is a digital sensor, there are only a few controls and no display screen.

The camera's rear features a flash on/off/auto button and a primitive LED image counter. It's rechargeable via a USB-C cable, which can be connected to a computer to download images stored on a micro SD card. Essentially, it is designed to free you from the distractions of technology and allow you to enjoy some unencumbered creative fun. And that's what I did. More or less.

I took my Camp Snap on a recent trip to the Mediterranean – I also took my 'proper' camera, but using the Camp Snap was still a great experience. I even made some comparison shots with both cameras. While my medium-format

This simple camera is fun to use, but more importantly, drives home the message that creativity and 'seeing' are more important than kit.

Fujifilm camera produced better files, the Camp Snap drove home the core fact that 'seeing' is more important than kit.

The Camp Snap's viewfinder isn't very good, so there was a fair amount of trial and error to learn how the camera 'sees' and how it handles light. The low-raking autumn light was lovely, so I photographed my shadow, amongst other things. It's not exactly original, but I like how the camera handled the contrast. I came back with a large collection, some of which you can see here. I enjoyed the simplicity – not getting bogged down with settings was liberating. I sense the Camp Snap will be a constant companion. It's small, light and cheap enough (£50-ish) to throw in a bag without being too precious. ●



Benedict Brain
www.benedictbrain.com

Camera: Camp Snap
Lens: Not exactly sure (equivalent to about 28mm)
Settings: 1/1200 sec at f/3.2, ISO 100

UK subscription offer

SUBSCRIBE TODAY AND GET YOUR LOWEPRO NOVA AW II BAG



“Subscribe to *Digital Camera* and get the world’s favourite photo magazine delivered to your door or device each month”

Niall

Niall Hampton
Editor, *Digital Camera*



SCAN TO SUBSCRIBE

WORTH
OVER
£60



Fits a DSLR or mirrorless with 17-85mm lens attached, plus 1 or 2 additional lenses

All weather AW cover, with water-resistant zip & overlapping lid

Flexible interior dividers deliver customisable gear protection

Carry via adjustable shoulder strap, padded handle or belt loop

Interior lid, front & side pockets offer easy access to storage

FIVE GREAT FEATURES OF YOUR CAMERA BAG



Great reasons to subscribe to *Digital Camera* magazine today

- **Never miss an issue**
Enjoy 6 issues worth of *Digital Camera* for just £27.99 – that's just £4.67 an issue
- **FREE** Free LOWEPRO NOVA AW II BAG worth £60
- **Delivered direct** to your door
- **The latest tips and insights**
A *Digital Camera* subscription will inspire you to take truly phenomenal photos every month and help you get the best results from your kit

Get a *Digital Camera* magazine subscription today

YOUR SUBSCRIPTION OPTIONS

PRINT ONLY

£27.99*

- 6 issues of *Digital Camera* delivered to your door and a Lowepro Adventura Go BP 150 camera bag

DIGITAL ONLY

£21.49*

- 6 issues of *Digital Camera* digital edition for your tablet or device (No bag included)

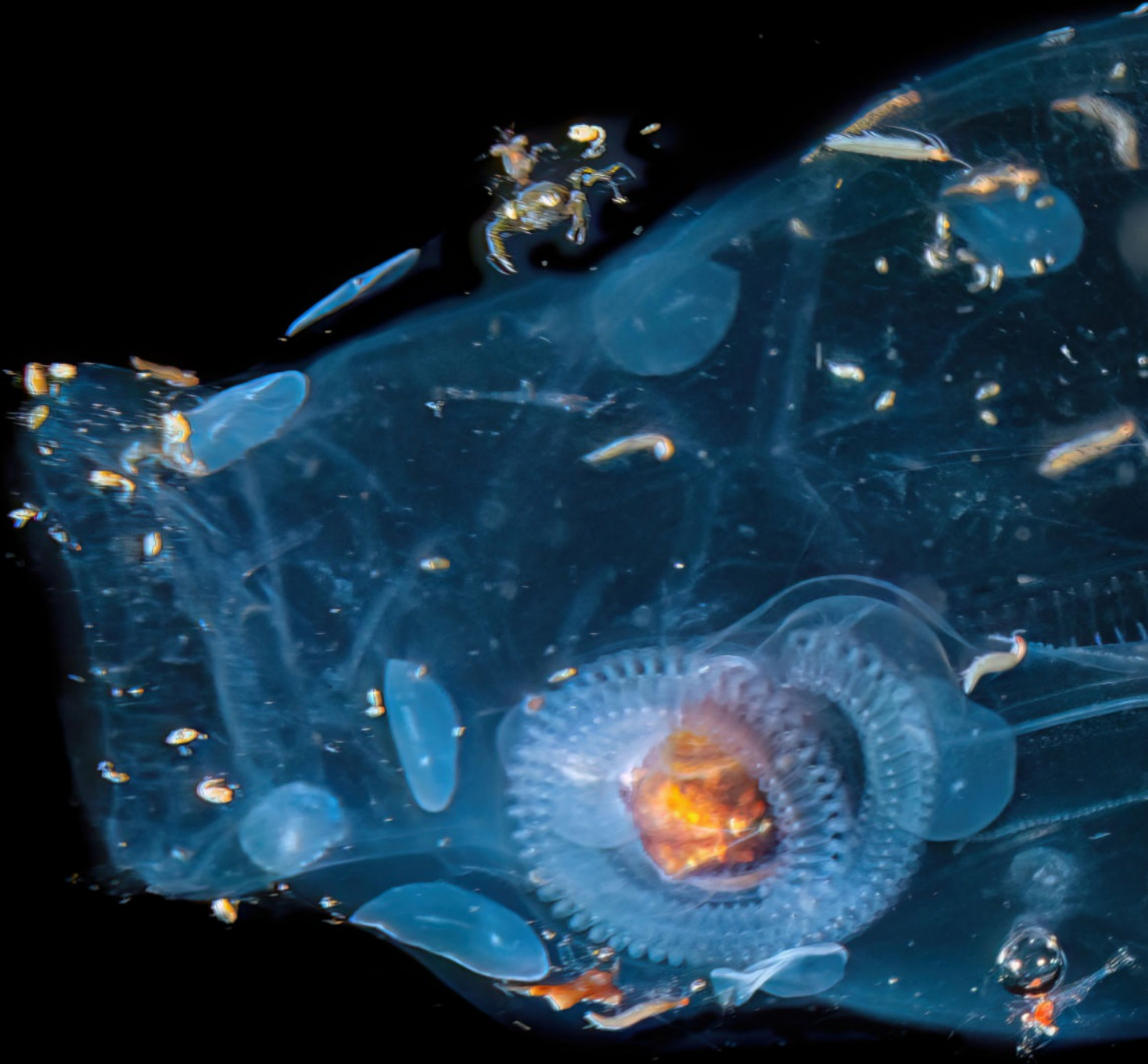
SUBSCRIBE NOW

- **ONLINE** magazinesdirect.com/DCMNOVA23
- **PHONE** 0330 333 1113 and quote code 'C75K'

Offer closes 29 February 2024. Offer open to new subscribers only, and only available on print purchases. Direct Debit offer is available to UK subscribers only. Your gift will be delivered separately within 60 days after your first payment has cleared. Gifts only available to subscribers on the UK mainland with the purchase of a print or premium PhotoPlus subscription. In the unlikely event that we run out of this gift, we promise to offer you an alternative gift of the same or greater value. Please allow up to 6 weeks for delivery (up to 8 weeks outside of the UK). Payment is non-refundable after the 14-day cancellation period. For full terms and conditions, visit www.magazinesdirect.com/terms. For enquiries and overseas rates please call: +44 (0) 330 333 1113. Lines are open Monday-Friday 8:30am-7pm, Saturday 10am-3pm UK Time (excluding Bank Holidays) or email: help@magazinesdirect.com. Calls to 0330 numbers will be charged at no more than a national landline call, and may be included in your phone provider's call bundle.

OVERALL WINNER & WINNER, COLOUR AWARD
'Protected Lives' Massimo Giorgetta (Italy)

A night-time dive encounter with a magical 5cm transparent tunicate in Indonesia's Lembeh Strait. This mysterious sea creature is so transparent that it's almost invisible. Both filled by and covered in other types of marine life, the tunicate is like a miniature diverse ecosystem, floating through the night sea.





Hotshots

A selection of the winning entries from 2023's HIPA's 'Diversity' competition



Imre Potyó/HIPA

i

WINNER, DIVERSITY 'Mayfly Arena' Imre Potyó (Hungary)

Danube mayflies, also known as the ephoron virgo, are spectacular insects that perform an intricate choreographed dance during their mating season. This endangered water insect returned to the river Danube in 2012, contributing to the improving water quality of the rivers of Middle Europe.

i

WINNER, PORTFOLIO 'Antarctica' Scott Portelli (Australia)

Beneath the icy blanket of Antarctica lies a thriving ecosystem teeming with diverse wildlife. The sea ice provides a platform for breeding and a vital food source. Above, the towering glaciers and snow-capped mountains create a breathtaking backdrop for this fragile oasis of life.



Scott Portelli/HIPA



Aleksandr Chehonin/HIPA

i

WINNER, COLOUR
'Icebreaker in Action'
Aleksandr Chehonin
(Russia)

An icebreaker is a powerful vessel that plays a vital role in clearing the way for other ships. A light emanating from the ship's bow serves as a beacon of hope, shining a path through the broken ice and piercing the darkness.

WINNER, DIGITAL ART
'Boundless Dreams'
Wanhua Zhao (China)

This photo perfectly captures childhood curiosity and boundless imagination. The mind of a child is eager to explore and pursue its dreams. Not even the moon is out of reach when you look at it through the lens of endless possibilities.



**RUNNER-UP,
COLOUR****'The Shadows
Dance' Bader Ali
Hussain (Kuwait)**

At night, the desert transforms into a mysterious place where wild creatures thrive in the darkness. This photograph was taken using a single light source, which was placed low to the ground and directed from behind, resulting in a high-contrast silhouette.



Bader Ali Hussain/HIPA



Mohammed Al Bahar Rawas/HIPA

RUNNER-UP, DIVERSITY**'Humans and Nature' Mohammed Al Bahar Rawas (Oman)**

Planet Earth is home to many creatures but, over the years, human intervention has left its mark on nature. This aerial photo shows the aftermath of a fire in a mountainous field. The charred remains create a stark contrast to the lush green forest that surrounds it.

i

**RUNNER-UP, PORTFOLIO
'Hatay Earthquake
Aftermath'**

**Arif Hudaverdi Yaman
(Turkey)**

The earthquake in February 2023 was one of the largest ever recorded in Turkey. This portfolio's tender images reconcile our human empathy and solidarity in the face of disasters beyond our control: a testament to our strength.



Arif Hudaverdi Yaman/HIPA

i

RUNNER-UP, DIGITAL ART 'While We Frame Our Happiness' **Mahmoud Alkurd (Palestinian Territories)**

The ocean teaches us much. Watching the waves endlessly dance under the setting sun is a mesmerising sight. A lone paddler navigates through life's unexpected waves, chasing the radiant beacon of hope on the horizon.

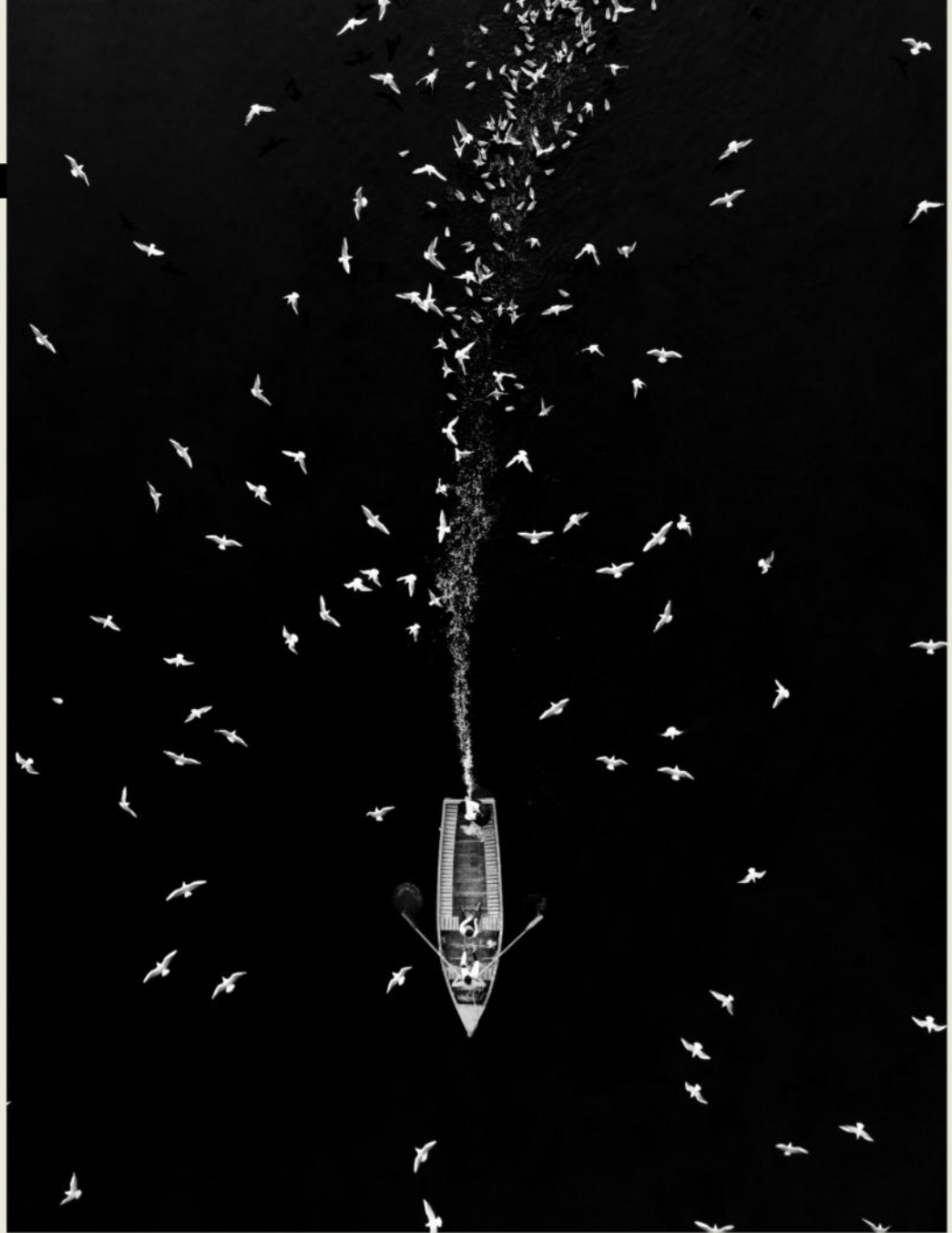


Mahmoud Alkurd/HIPA

i

WINNER, BLACK & WHITE
'A Dance of Seagulls'
Ravi Kanth Kurma (India)

A captivating scene on the river Yamuna in Delhi, India, unfolds as seagulls gather in a lively flurry to indulge in nature's bounty. It's a testament to the harmony that exists here between humanity and wildlife.



Ravi Kanth Kurma/HIPA

RUNNER-UP,
BLACK & WHITE
'Above the Sun'
Talib Abdullah Al Marri
(Saudi Arabia)

In the heart of the Masai Mara, Kenya, as the sun paints the sky with golden hues, a striking moment unfolds: a giraffe emerges from the sunlight, its graceful silhouette capturing the elegance of wildlife.

i



Talib Abdullah Al Marri/HIPA



جائزة حمدان بن محمد بن راشد آل مكتوم الدولية للتصوير الضوئي
HAMDAN BIN MOHAMMED BIN RASHID AL MAKTOUM INTERNATIONAL PHOTOGRAPHY AWARD

About the competition

The Hamdan bin Mohammed bin Rashid Al Maktoum International Photography Award (HIPA) contest celebrates photographers from all over the world. The winners share the competition's £316,000 (\$400,000) prize fund, with the grand prize winner receiving £95,000 (\$120,000).

See more entries and read about HIPA at the HIPA website:
www.hipa.ae/en

AFTER-DARK PHOTOGRAPHY

Dan Mold shares some techniques for capturing creative images during these longer winter nights

Last year, in issue 264 (February 2023), we explored some techniques for painting-with-light photography. These included lighting night scenes with a torch or a flashgun, photographing light orbs and capturing spinning wire wool sparks with long exposures. Now we're back with more creative projects to tackle after dark.

Just because the sun has set doesn't mean your photographic fun has to stop. In fact, one of my favourite times to take photos is after dark, using basic camera kit and a variety of accessories that can be sourced for a minimal outlay.

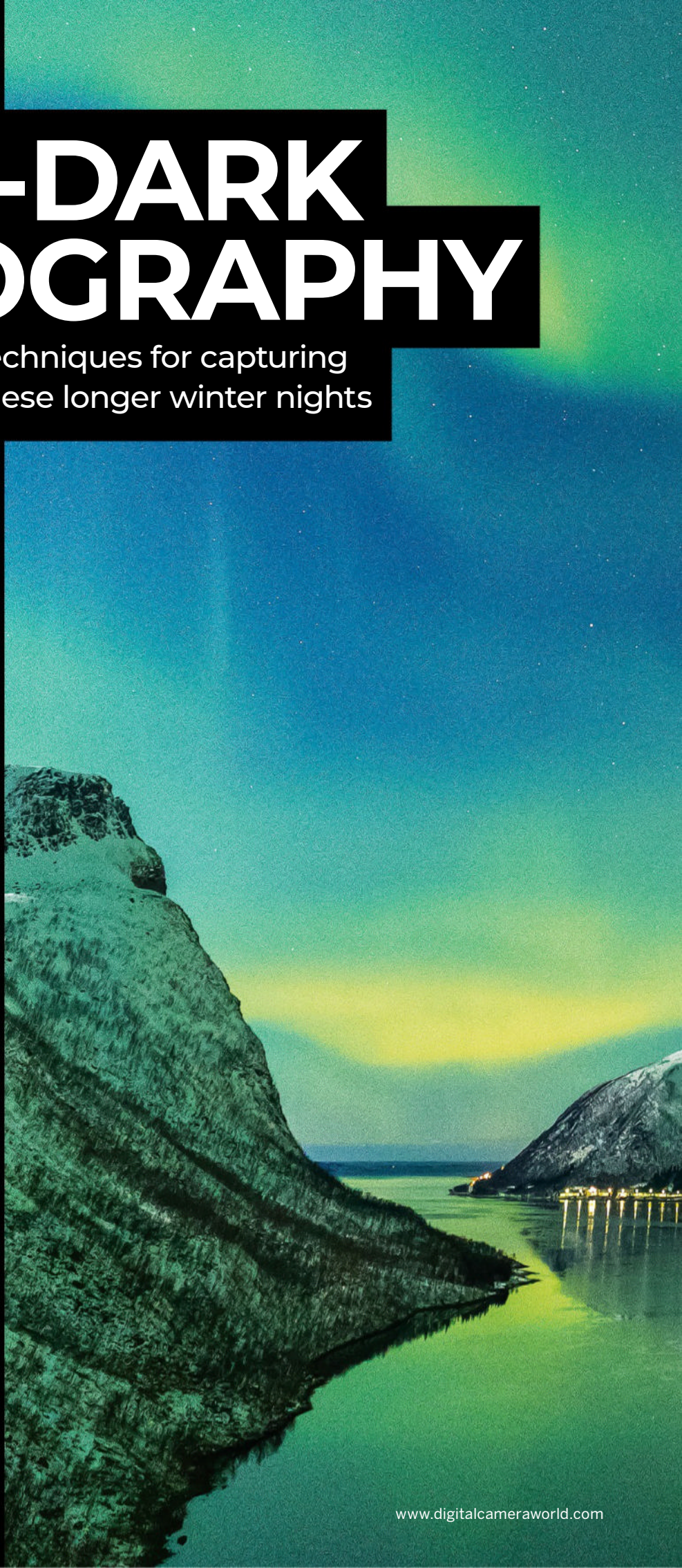
In this feature, I'll go over some of the essential kit that allows you to add your own lighting to scenes after dark – torches, LEDs, fibre-optic lights and flashguns. Then I'll run you through some of my favourite creative light-painting techniques that will make your night-time outdoor photography really stand out. We'll also show you how to shoot the amazing spectacle that is the Northern Lights. →



RIGHT: Captured here in Norway, the aurora borealis are forecast to put on an impressive show across much of the UK this winter. See [page 62](#) for tips on how to shoot them.

CONTENTS

1 Essential gear	page 52
2 Fibre-optic portraits	54
3 Use a flash stencil	56
4 Make a light dome	58
5 Play with light wands	60
6 Shoot the Northern Lights	62





1 GET THE RIGHT GEAR

Discover the affordable accessories you need to make painting with light easier

Painting with light can be one of the more specialist fields of photography, so there's lots of niche equipment available to solve a particular problem, some of which can be rather pricey. The good news is that the essential kit you'll need to get started with painting with light is all fairly basic stuff that you probably have to hand already – such as an interchangeable

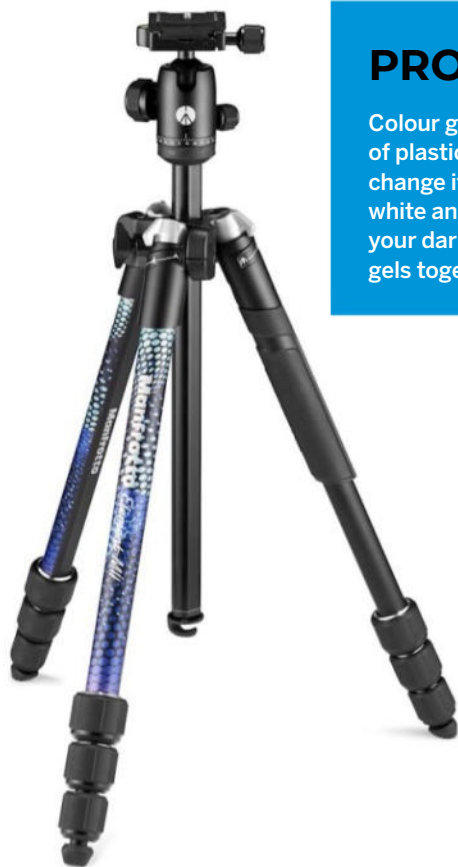
lens camera, a wide-angle lens, basic flashgun and a few different torches, string lights and coloured gels.

Once you've got the hang of light painting, you can then look to upgrade your kit, slowly building it up over time when it's convenient for you. This spreads the cost and helps you work out from experience which upgrade items will most benefit your painting-with-light photography.



PRO KIT COLOUR GELS

Colour gels, such as this set from Rogue, are coloured sheets of plastic that wrap around the front of the flashgun head to change its colour temperature. This stops the flash looking too white and you can use whatever colour you'd like to illuminate your dark scenes. You can even get creative and layer multiple gels together to build up the colour or mix them together.



STURDY TRIPOD FROM £110/\$110

A tripod is an absolute must for painting-with-light photography. By its very nature, you're going to need to shoot an exposure several seconds, or even minutes, long to give yourself enough time to go around the scene and paint in your light. While entry-level tripods start at around £30/\$30, it pays dividends to spend a bit more on a professional-spec model.



CREATIVE CAMERA FROM £300/\$350

Even basic interchangeable-lens cameras are great for light painting, as they have full manual controls. Budget options include the Canon EOS 2000D and Nikon's D3500, which cost around £320. It could also be worth considering an Olympus OM-D or PEN mirrorless camera, which has a Live Composite feature that helps you see your light painting being built up in real time.



BUDGET FLASHGUN FROM £120/\$120

A flashgun is important for all sorts of photographic scenarios, and should definitely be something to add to your kit bag. They're great for illuminating large swathes of your landscape scenes at night. We like to set our flash to Manual mode with a low power value, then use the Test button to manually fire it off-camera and add a few blips of flash around the scene.



PixelStick

PRO GEAR PIXELSTICK

The PixelStick was launched after a successful Kickstarter campaign in 2014. It allows you to paint digital images into your low-light scenes by waving its thin wand of LED lights through the scene. It 'prints' any digital image into the scene line by line, one row of pixels at a time, which opens up a whole new world of possibilities. PixelStick is sadly no longer in production, but we were able to find similar products on sites like Etsy by searching for 'Pixel Staff'. *Digital Camera World* has a guide to simpler light tubes that you can also use to creative effect. www.bit.ly/dc277tubes



WIDE-ANGLE LENS FROM £300/\$400

While you can take painting-with-light shots with any lens (even a kit lens will work well), you'll often be shooting landscape scenes, so a wide-angle optic would be a good choice. A lens like the Samyang 14mm f/2.8 offers a wide field of view as well as a wide aperture of f/2.8, which helps suck in loads of light when you shoot at night. Available for a range of mounts, it doubles up as a great lens for astrophotography, too!

TOP LIGHT GRAFFITI KIT FROM LIGHTPAINTINGBRUSHES.COM

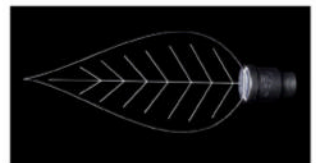
DELUXE STARTER KIT FROM £155/\$192

This kit includes a flashlight, three universal connectors and tools that are perfect for creating light orbs, light sculptures, light graffiti, light painting portraits, abstract light paintings and anything else you can imagine!



PLEXIGLASS SHAPES FROM £33/\$41

There's a brilliant range of plexiglass shapes and kits from Light Painting Brushes, such as this etched-leaf pattern, which is brilliant for light painting trees, or the Plexiglass Feather, perfect for adding wings to a low-light portrait.



FIBRE OPTIC STARTER KIT FROM £73/\$88

This set uses thin fibre optic strands that can be attached to a flashlight and then brushed into a scene. Of course, you can use a cheap inexpensive fibre optic toy, though this kit is designed for light painting and can produce better results. See how we created an abstract fibre optic portrait over the page.



COLOUR HOOD SET FROM £46/\$57

The Light Painting Brushes colour filter and hoods block the flashlight bulb from being seen by the camera, to eliminate unwanted streaks of lights and let your flashlight pick up colour, so you can make your low-light scenes more vibrant.



2 USE FIBRE-OPTICS FOR ABSTRACT PORTRAITS

Create otherworldly portraits that are sure to turn heads with this unconventional but low-cost light painting trick

For this technique, you'll photograph a model in pitch-black, then provide your own light source to bring them to life. We used a fibre-optic light with different colour options that offers a greater range of possibilities. Wave your light over your model's face through the darkness to create fantastic light trails for ethereal and abstract portraits.

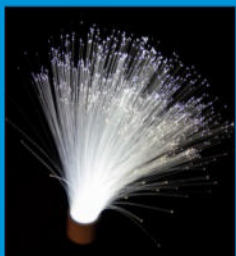
This technique is a fun one to try with friends and family – and you can even try a self-portrait. You just need to make sure the focus is targeted on where you're going to be sat during the long exposure, and use your camera's self-timer to give yourself a chance to get ready in position before the exposure begins.

PRO TIP THREE TOP FIBRE-OPTIC TOOLS

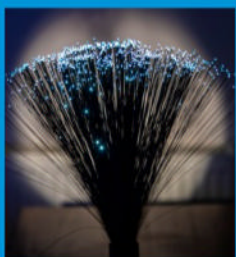
1 FIBRE OPTIC TOY
One of the most budget-friendly ways to paint with fibre-optic lights is using a toy like the one pictured here. They're usually full of colour for vibrant portraits.



2 WHITE FIBRE-OPTIC
This accessory fits on top of a torch and fires white light through the fibres. Gels could also be added to the torch to change the colour of the light.



3 BLACK FIBRE-OPTIC
This is illuminated only at the very ends, so you have more control over where your light will appear as you brush over your model's face.



PRO KIT GET SET UP FOR TOP FIBRE-OPTIC ABSTRACTS

USE A TRIPOD

1 To get started, you'll need a model or a friend to pose for a few photos. Have them sit down: you'll need them to keep as still as possible during your long exposure as you paint with the fibre-optics to brush over their face. Set up on a tripod and compose to frame up. Autofocus on the eye that's closer to the camera and switch to manual focus to lock it off.



SETTINGS

2 Use Manual mode and begin with a shutter speed of 6 sec, an aperture of f/14 and an ISO of 100. You'll also want to shoot raw files for more detail and set the self-timer mode to give yourself enough time to get into position. Take a test shot, and inspect it to see if you need to change the exposure by closing or opening up the aperture.



START PAINTING

3 Now you're ready to paint with your fibre-optics. If you're shooting indoors, turn the lights out and ask your model to stay as still as possible. During the long exposure, carefully brush over your model's face with the fibre optics to paint them with light and create vibrant abstract trails. Check the results and see whether you need more or less light painting.





PRO SHOT

Build up the colour

Experiment with different colours on separate exposures, then blend them together in Photoshop CC. Load the images as layers in one document. Change the Blend Mode and Opacity of your layers and use Layer Masks to hide areas to correct the perfect blend.

PRO ADVICE

Slow-speed fibre

You'll need to expose for several seconds to give yourself enough time to paint your model's face with the fibre-optics. Enable your camera's 2-sec or 10-sec self-timer drive mode to give yourself enough time to get into the position where you're ready to start light painting.



3 STAMP IN COLOURFUL SHAPES WITH FLASH STENCILS

Put your very own stamp on your photos with this project

When you hear the word flash, it's easy to think of a bright burst of light from a studio strobe or flashgun that covers the whole scene. While you can use a flashgun to broadly illuminate large swathes of your landscape and urban night scenes, there are times when you might prefer some more control.

By getting a little creative, you can create a custom flash stencil from an old shoebox. Draw and cut out the shape you want your stencil to take on; simple shapes such as butterflies and flowers work well. It's then just a case of running

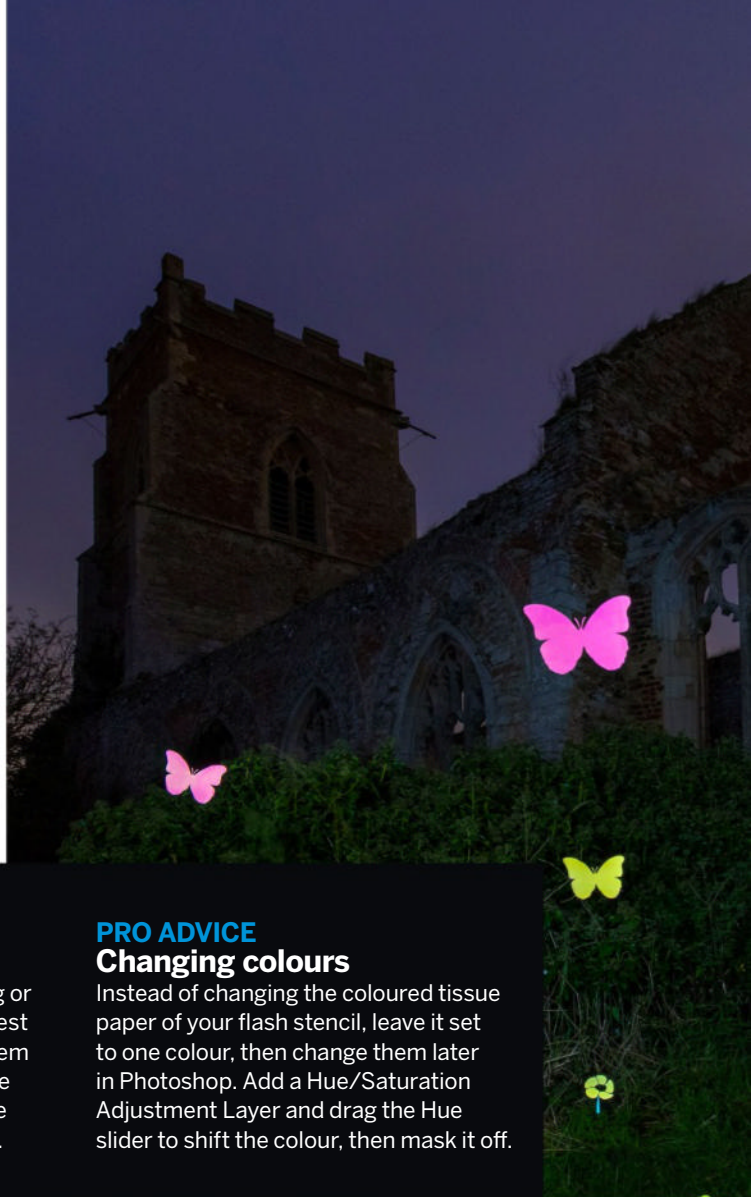
a long exposure on your camera and manually firing your flash stencil at various points throughout the scene to stamp colourful patterns around your photo.

PRO SHOT Build it up

Every time you change your lighting or painting-with-light technique, it's best to shoot a new exposure to keep them separate. This gives you much more control when you come to blend the different photos together in editing.

PRO ADVICE Changing colours

Instead of changing the coloured tissue paper of your flash stencil, leave it set to one colour, then change them later in Photoshop. Add a Hue/Saturation Adjustment Layer and drag the Hue slider to shift the colour, then mask it off.



TOP TIP FLASH

A flashgun is an essential addition to your kit bag for light painting. A flash can cover a large area with an adjustable brightness; many come with a diffuser or bounce card for more lighting possibilities. You can add flash gels to the front of the flash bulb to change its colour, too. You don't need an expensive flashgun with all the bells and whistles, just a basic model will be perfect. In this project, the flash is fired while it's off the camera, using the flash's Test button.



THE SETUP

USE A TRIPOD

1 As you'll be using a long exposure to give yourself enough time to move around the scene and firing your flash stencil, you'll need to set up on a tripod so that your camera is still during the long exposure time. A tripod also helps all of your frames line up correctly, if you decide to blend several of the exposures together to build up the exposure.



LOCK THE FOCUS

2 Shine a bright light on the part of the scene that you'd like to be the focal point: this will give your camera enough light to be able to autofocus on it. If in doubt, focus about a third of the way into the scene for decent sharpness throughout. Then switch over to manual focus to lock the focus in place.





Dan Wood

SHUTTER SPEED

3 Go into Manual mode and dial in a shutter speed of 15 secs, to give yourself a decent amount of working time with the flash stencils. Set ISO to 800, then dial in an aperture of f/8 to begin. You can open or close the aperture to make the exposure brighter or darker as required. Turn on the 10-sec self-timer to give yourself time to get in place.



START PAINTING

4 Start the exposure, then move around the scene, firing your flash stencil – make sure it's pointing towards the camera. Firing it close to the camera will make it larger, while moving further away will make your stencil smaller. Be careful of bright LEDs on your flashgun: tape these up to stop them showing up in your exposure.



MAKE A FLASH STENCIL

Draw and cut out simple graphics, and craft your own flash stencil to punch colourful shapes into your light painting scenes. It takes no time at all, and is particularly budget-friendly. All you need to try it out for yourself is an old shoebox, some aluminium foil, black card, colourful tissue paper, some glue, a flashgun and a sharp craft knife.



LINE YOUR BOX WITH ALUMINIUM FOIL

1 Line the inside of a shoebox with aluminium foil, using some spray glue or double-sided tape. This will help bounce the light from your flashgun around the shoebox and force it through the stencil opening.



CREATE A HOLE FOR THE FLASHGUN

2 Now cut a hole in one side of your shoebox, just large enough for you to fit the head of your flashgun inside. You'll also need to cut a hole in the top of the shoebox lid, for your stencil to fit on top.



ATTACH YOUR STENCIL

3 Draw your stencil shape onto some black card and carefully cut it out with a craft knife on a cutting mat. Use a glue stick to adhere some paper tissue to the back of it. Secure your stencil to the top of the shoebox with a few pieces of tape – and you're done!

4 ADD EERIE LIGHT DOMES TO YOUR NIGHT-TIME SCENES

Learn a clever way to add stunning light sculptures to your shots

Creating mysterious light domes is a brilliant light painting technique to add to your repertoire. These odd geometric half-spheres are a great way to bring your low-light scenes to life, adding a vibrant focal point (or points) if your scene is lacking one.

To do this, attach a series of string lights to a bicycle wheel, add an axle to it, and pivot the whole wheel around

the axle during a long exposure. The technique works best with an old bicycle wheel, so you don't have to remove the lights when you next need to use your bike! You can leave your new light painting tool all set up for the next time you'd like to add some light domes to your low-light scenes.

A few photographers offer online guides to this technique, which will help with details. We love Chris Benbow's guide at www.bit.ly/dcm277domes



20
secs



f/8



ISO
1600

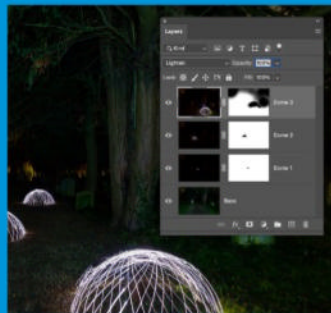
PRO ADVICE Light it up

Make sure your string lights are set to their constant-on setting, so they don't fade or flash while you're spinning the wheel. You don't have to stick to plain white lights; you can either choose lights that have alternating colours so that each spoke has a unique colour or add plastic coloured sweet wrappers to each bulb to change their colours.

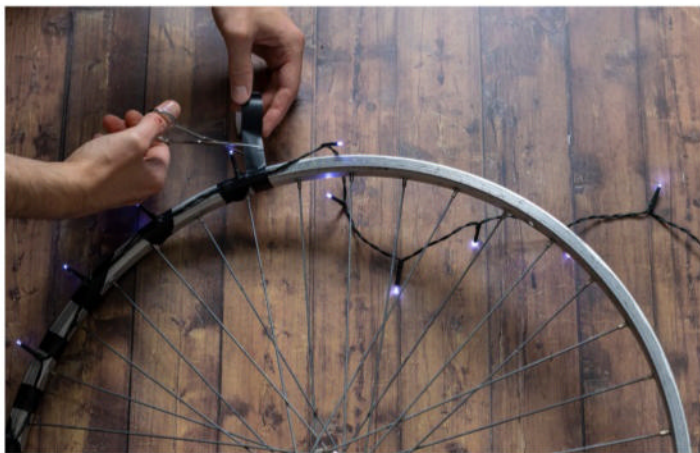
Right: Setting up your camera on a tripod is the hard part. You can then go around the scene with your modified bicycle wheel to create these fantastic spooky half spheres. Paint a few domes around your scene, and make sure each is captured in a separate exposure; you can blend them together in Photoshop (see 'Build the scene with layers', left).

BUILD THE SCENE WITH LAYERS

We'd recommend shooting each light dome on a separate exposure, as this gives you more control at the editing stage. To merge several shots together, open them in Adobe Bridge; select them all with Ctrl/Cmd+A, then go to Tools > Photoshop > Load Files Into Photoshop Layers. In the Layers Panel, (Window > Layers) you can change the Blend Mode of each layer to Lighten to build up the effect.

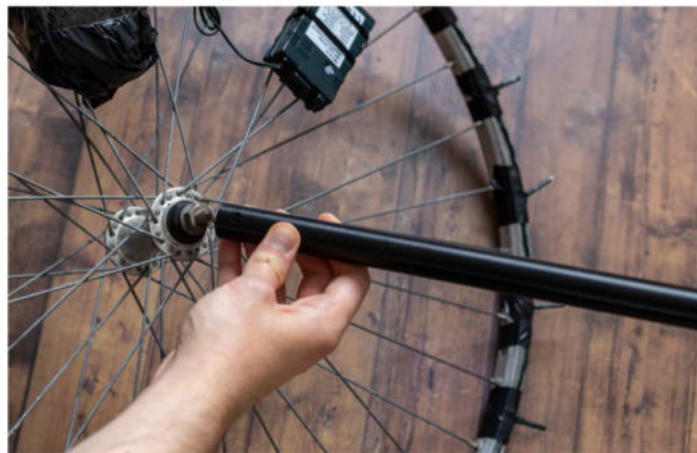


MAKE A LIGHT DOME



ADD STRING LIGHTS TO A BIKE WHEEL

1 Find or buy an old bicycle wheel: we got a used 26-inch wheel on eBay for £12. Add your string lights to the rim, using cable ties or electrical tape to secure a light at regular intervals. Attach the battery pack to the wheel spokes.



ATTACH YOUR AXLE

2 You need to attach a pipe to the central hub of the wheel, to act as an axle. The pipe needs to be the same length as the radius of the wheel – 13 inches on ours. You may need to use some adhesive, but ours held snugly with a push fit.



Dan Mold

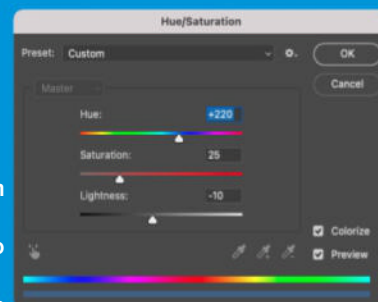


START SPINNING!

3 With your camera on a tripod, get into position. While the exposure is running, turn on the lights and rotate the wheel on the ground, using the axle as a pivot point. After one full rotation, turn the lights off. This needs practice!

PRO ADVICE TRY CHANGING YOUR COLOURS IN PHOTOSHOP

You can change the colours of your light paintings easily in Photoshop. It helps if your light has a colour to begin with, in which case you can hit Ctrl/Cmd+U and drag the Hue slider to change the colour to your liking. To change white light, you will need to tick the Colorize box and you'll also need to lower the Lightness a little.



5 PAINT WITH A LIGHT SWORD

Use the force! Light wands and sabres allow you to draw abstract and graphic light graffiti in your low-light portraits

Light wands are a brilliant way of painting with light that looks completely different. While we used a collapsible sword from Light Painting Brushes for our photo shoot, you could also use an LED ICE light or even a toy lightsabre if you have one to hand – then get creative with how you swing it through the frame to add an interesting flair to your night-time portraits.

A tripod is once again vital to this technique, with a long exposure providing enough time to record the trail of light as the wand is swung through the frame. However, you don't want to push the exposure time too far, or you'll start to record movement in the model. A shutter speed of one to three seconds will work well. We'll also show you how to freeze your model with a little off-camera flash to eliminate their movement in the frame.

DRESS CODE: BLACK

Wear dark clothing so that you're less likely to be picked up in your light painting photos. As you can see in this example even wearing dark clothes, I still appeared faintly on the right. It's always worth taking a 'blank' frame of the scene, which you can superimpose over your final shot: this makes it easy to remove any areas where the light painter has appeared. Alternatively, use the Clone Stamp Tool or the Spot Healing Brush in Photoshop.



PRO ADVICE The blue hour

The blue hour, also called the 'magic' hour, is the dimly lit hour immediately before sunrise or after sunset. This is when there can still be some dramatic detail and colour in the sky, before it turns totally black as we move into nautical twilight. It's a photogenic time in which to shoot but your light streaks will become even brighter as the light levels drop.

Right: We arrived on location at sunset so that we could get set up in the daylight, before it got too dark. This made it easier to focus and also meant we could include the colourful sunset. An off-camera flashgun was set up to add some fill-light to our model, so she wasn't in complete silhouette.

PAINT WITH A LIGHT WAND



GET SET UP

1 Pose your model, then frame up and place your camera on a tripod. Set your camera to Manual and dial in an exposure of 3 secs, an ISO of 100 and aperture of f/11 – you'll need to open the aperture or boost the ISO as the light fades.



OFF-CAMERA FLASH

2 With the light painting and sunset coming from behind her, our model was in silhouette. To illuminate her with fill flash, an off-camera flashgun was pointed towards her, set to 1/32 power in Manual mode and fired wirelessly.



Dan Mold

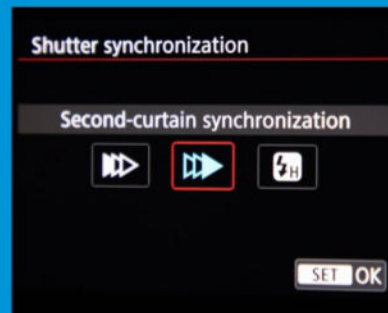


WAVE YOUR WAND

3 We set our camera to fire continuously using a shutter release cable, so we got into position and waved our light wand to create the abstract streaks of light. We could then combine the best exposures together in Photoshop.

PRO TIP USE 2ND CURTAIN SYNC

If the flash for the model fires at the start of the exposure, any movement during the rest of the exposure will appear as a blur in front of the flash-lit subject – not what we want here. The solution is to select second-curtain sync, which triggers the flash at the end of the exposure. Now, any movement recorded at the start of the exposure will appear as a blurred trail behind our sharp, flash-lit subject.



6 CAPTURE THE LIGHT FANTASTIC

Award-winning astrophotographer **Josh Dury** explains why now is the ideal time to capture the majestic splendour of the aurora borealis

A

As we approach solar maximum in 2024, there's no better time to glimpse the Northern Lights from the United Kingdom. During its 11-year solar cycle, the sun becomes more active, resulting in stronger solar winds and 'coronal mass ejections'. These react with atoms of oxygen and nitrogen in Earth's atmosphere at either pole to produce the aurora borealis (or aurora australis in the southern hemisphere). The stronger the ejections, the further down in latitude the 'auroral arc' is seen – so now's a perfect time to capture this spectacular astronomical sight. —>



Josh Dury is a professional landscape astrophotographer who lives close to the Mendip Hills 'Super' National Nature Reserve in Somerset, UK. He was recently announced as the overall winner of the Historic Photographer of the Year competition and was also shortlisted for the Astronomy Photographer of the Year in 2023. **Instagram:** @Josh_dury_photomedia



The Northern Lights as seen from Tromsø, Norway. As we approach solar maximum in 2024, you may not have to travel quite so far to capture images of one of nature's greatest spectacles.

ESSENTIAL KIT FOR SHOOTING AMAZING AURORAS

LOW-LIGHT CAMERA

To prepare for the Northern Lights coming further south in the UK this year, you should get a low-light camera. I use a Sony A7S II, but although a low-light camera is preferable, it isn't essential. Any decent camera will capture detail in the aurora arc and curtains.



SIGMA 14MM ART F/1.4 LENS

Of course, we will be shooting the aurora in the dark, so we need a lens that allows as much light as possible to enter. My go-to optic is the Sigma 14mm Art F/1.4. It is great to shoot with, has a wide field of view and allows more light in so you get greater detail in the aurora.



MOVESHOOTMOVE LENS HEATER

For shooting outdoors in the winter months, it is advisable to use a lens heater to prevent condensation as the air temperature falls. This warms the optics above the dew point to stop the formation of dew and condensation from obscuring your view of the aurora.



TOP TIP: SIGNAL TO NOISE RATIO

When photographing the aurora, be mindful of the signal-to-noise ratio (SNR) and your ISO values. Make sure not to push the ISO setting too high as this has the potential to increase the noise in your image. Experiment with aperture, ISO and shutter speed settings to find the combination that delivers the cleanest results.

'AURORA' APP

Apps such as Aurora can help you predict when the aurora will be visible. However, the sun's activity is often unpredictable, so even if you receive a warning about a Solar Wind, that does not guarantee the presence of the aurora. However, it is still worth getting prepared to give it your best shot.

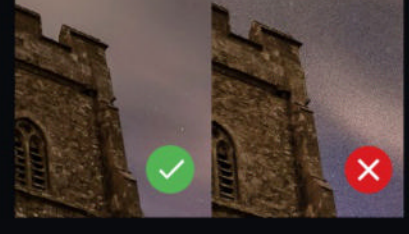


REMOTE SHUTTER RELEASE

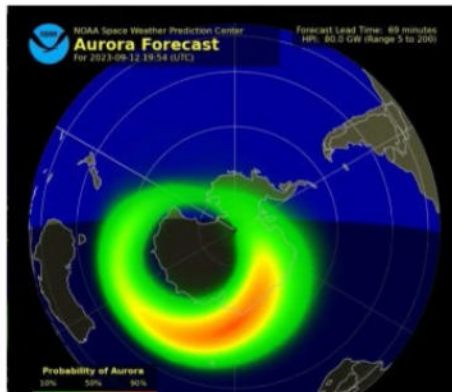
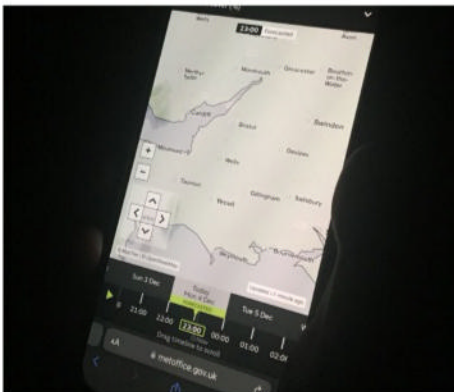
To maintain as much detail as possible in your aurora images, you need to make sure they are free from camera shake. Here, we can use a remote shutter release to reduce shake caused by pressing the shutter button.



ISO 4000 ISO 8000



HOW TO SHOOT THE NORTHERN LIGHTS IN 6 EASY STEPS



1 CHECK THE WEATHER

Especially in the UK, the weather can be unpredictable, with the Jet Stream coming across the Atlantic. So make sure to regularly check weather updates on the day before the shoot. Also, make sure you have the right clothing and kit for the conditions.

2 AURORA FORECAST

This is your best chance of predicting when the aurora will be visible. Once you have a potential 'strong substorm', check the likelihood of clear skies. At lower latitudes, the aurora is visible for shorter periods of time, so be prepared and check the Aurora app regularly for updates.

3 USE A TRIPOD

A sturdy tripod is an essential piece of kit for astrophotography. With the longer exposure times, you want to avoid as much potential for camera shake as possible, so make sure to use a firm tripod when setting up your composition and fire the shutter with a remote release.

Josh Dury

GREAT PLACES TO SHOOT AURORAS AT NIGHT

The best locations to shoot the aurora borealis in the UK and both the northern and southern lights around the world



WORLDWIDE

1 ICELAND is a Northern Lights hotspot within the Arctic Circle, making it ideal for viewing the aurora, even during relatively weak substorms. There are countless popular photography locations around the country.

2 UNITED STATES The Arches National Park in Utah makes for some visually stunning astrophotography compositions. The Cove of Caves is the park's most famous landmark, providing the perfect frame for the night skies.

3 SOUTH AMERICA There are several popular photography locations in South America. Chile has some of the clearest skies in the world and lots of telescopic observatories. It also has the iconic Rapa Nui (Easter Island), home of the world-famous Moai statues.

4 NEW ZEALAND & AUSTRALIA

The Southern Lights, or aurora australis, can be captured in the southern hemisphere when strong substorms hit the South Pole. The

hotspots include the southern fringes of Australia, New Zealand and the Antarctic.

5 CANADA Churchill and Yellowknife are two of the best places in Canada to see the Northern Lights. In the northwest territories, you can capture spectacular shots of the lights against the frozen tundra covering the landscape.



Josh Dury

Iceland is a magical place to see the Northern Lights. Its small population means there is little light pollution.

IN THE UK

1 OUTER HEBRIDES

Home to some of the clearest skies in the United Kingdom, this is an ideal place for photographing the Milky Way, especially when weather conditions are favourable and timed around the New Moon.

2 SCOTLAND

is home to many iconic photography locations. Away from the major cities, there are plenty of places where you can capture natural rock formations, abandoned castles and lakes in the foreground – making for some fascinating night-sky compositions.

3 NORTHERN ENGLAND

The north of England, including regions such as North Yorkshire, Cumbria and the Lake District, is also popular. Northumberland, home of the former Sycamore Gap tree, Hadrian's Wall and other amazing historic locations, is a Dark Sky Park and a great place to photograph the stars.

4 SOUTHERN ENGLAND & WALES

There are plenty of iconic locations to choose from, including the UNESCO World Heritage site at Stonehenge, Dorset's Jurassic Coast and in Wales, the Brecon Beacons National Park, the bioluminescence from the Gower Peninsula and the natural beauty of the Isle of Anglesey.

5 CORNWALL

The south-west of England, including Devon and Cornwall, has beautiful dark skies and popular photography locations, including St Michael's Mount, Botallack tin mine and Tintagel, amongst others. If the aurora comes this far south, you're in luck!



4

USE A WIDE LENS

Use a wide lens to let as much light as possible into your camera. An aperture of around f/2.8 is preferred. This, combined with your shutter speed and aperture, should be sufficient to capture the auroral arc, curtains and pillars in your image.



5

ISO SENSITIVITY

This is crucial for capturing images of the aurora. Your latitude will determine how visible the aurora is and what ISO values you use. Start with a minimum ISO of 1000 and push your settings as far as they can go without creating too much noise amplification.



6

SHUTTER SPEED

Using the two camera settings above, experiment with the shutter speed. Shorter exposures of two seconds may be adequate with aperture and ISO settings, but the key to a good shot is getting the balance of all three right and creating a clean signal-to-noise ratio (SNR).



Reader gallery

Digital Camera readers show how they've been getting creative, submitting images across a range of genres



1 'West Portholland, Cornwall' by Lee Rouse

"My standout achievement with this image is the sense of timeless mystery and drama: the slowed-down water appearing as mist, all finalised as a long panoramic ratio to allow the viewer full immersion in the scene. Verging on monochromatic, with subtle punctuations of greens and yellow in the seaweed and rock veins in the foreground, the shot creates an authentic feeling of how this predominantly overcast day was. The day this was taken was rather gloomy, with failing evening light creeping through the distant clouds. Conditions like these usually offer great opportunities for coastal photography – especially long exposures, as the soft diffused light plays well with softening the water using an ND filter.

"Seeing the wet black rocks emerging from the sea, I wanted to achieve a sense of foreboding and drama. Slowing the shutter to 20 seconds allowed me to render the water as mist-like and create an image of dark drama, reminiscent of the pages of

fantasy and horror novels, which I am always inspired by. The wide image ratio is effectively the full frame of how I captured the scene. Using a Canon TS-E 24mm lens allowed me to shift horizontally left and right to create the panorama, which is a great way to immerse the viewer and fill the frame with a lot of depth."

Instagram: @ljrouse

Digital Camera says:

This shot really wowed the team at *Digital Camera Towers*. It's an absolutely stunning capture. Lee has taken so much into consideration, with the composition leading the eye from the foreground along the coastline. Captured at f/16, the detail is pronounced and shooting over 20 seconds has produced a fabulous misty effect over the water. This is a shot that any professional would be thrilled to have made.



2 'The Reek' by Peter Colman

"This was our first time back to the beautiful Wild Atlantic Way in Ireland since Covid. This shot was taken from Westport Harbour in County Mayo. We had lovely evening sun and mist on Clew Bay, with Croagh Patrick (The Reek) in the distance."

Settings: Canon EOS 5D Mark II with Canon EF 24-70mm f/2.8L II USM lens; 1/320 sec at f/14, ISO 400

Digital Camera says:

A well-composed scene that makes the most of the leading lines and draws your eye to the mountain range in the background.

3 'New Moon' by Tim Newman

"This photo was shot in White House, Tennessee. The main thing I like about this image is how the moon seems to be embraced by the leaves of the tree. This shot seemed to capture the perfect combination of both. I wanted to record the 'blue moon' on this night, which I think worked very well. But I also wanted to add something else – and when I changed positions while walking, this tree just appeared in front of me. It was a lucky moment that I wasn't anticipating."

Instagram: @timnewmanphotography

Digital Camera says:

This is a great example of shooting the unexpected. Choosing the leaves as the framing and subject matter over what would normally be the subject – the moon – works really well here.





READER SHOT OF THE MONTH

Jane Kerr wins a year's subscription to *Digital Camera* for this image. Well done, Jane!



4 'Quincessentially' by Jane Kerr

"I am inspired in my photography by the great still-life artists of the 17th and 18th centuries – in particular the Spanish artist Luis Meléndez. What I like about his paintings is the realism, the texture and the wonderful lighting, which turns ordinary everyday items into something spectacularly beautiful.

"In my photographs, the perishable items are usually things we have grown ourselves: the quinces for this one came from our orchard. I do not attempt to hide any blemishes. I like the idea of 'perfect imperfection'. I like my still-life images to have front-to-back sharpness to capture every possible detail of the subject. I also

chose a bowl with a complementary colour to the gold of the quince. It was shot in natural light from the window; I also held a reflector under the table, on the side where the bowl was, to lift the shadows at that side. I used a circular polariser to reduce the highlights."

Instagram: @magicasympathia

Digital Camera says:

We were stunned by the beauty of this still-life image of quince, with its perfect lighting and focus. Superbly set up and beautifully executed by Jane.

5 'Arrow Release' by Andy Brook

"I was invited to take some archery promotional shots for my local club. I wanted to balance the sky with the archer and could only achieve this with a strobe light. When I got home and reviewed the images, I noticed capturing the arrow just after the moment of release – they leave the bows at approximately 150mph. The image was shot with a Canon R3 using a Sigma 24-70mm f/2.8 lens at 24mm, plus a strobe light with a softbox."

Settings: 1/160 sec at f/18, ISO 200

Digital Camera says:

A fantastically lit action shot, made all the more special by actually managing to capture the arrow in flight!



6

'James McCune Smith Learning Hub' by Stuart Neville

"This is an image of University of Glasgow's James McCune Smith Learning Hub. I love these red bits of metallic structure, which look good in all kinds of light."

Instagram: @glasgowpixman

Digital Camera says:

A really strong graphic capture of an interesting piece of architecture. Framing the curve against a splinter of white building and the dark blue sky really results in a graphic and minimalistic shot.





7 'Barn Owl' by James Allen

"One of the favourite photos I've taken so far on my Nikon D850, using a 200-500mm f/5.6 VR lens, of this beautiful barn owl, which happened to be hunting my local marshes in Lowestoft around dusk! I love this shot, not only because the barn owl is looking in my direction, but also because I managed to freeze the action on the bird's wings using a fast shutter speed of around 1/2,500sec. This allows for the viewer to see the amazing patterns on the wings, and for the wings to be sharp without any motion blur at all. It's always a magical and rare moment seeing a barn

owl, but I feel it's even rarer to get a shot like this of the owl looking towards the camera, and capturing so much detail of the patterns on the wings."

Settings: Nikon D850 with Nikkor 200-500mm f/5.6 VR lens

Digital Camera says: This is a beautiful picture of a barn owl in flight, James, made even more mesmerising by the bird looking directly at the camera, and combined with the detail of the wings and tucked-in claws. A fantastic shot!

8 'Out to Sea' by Craig Liddle

"During a last-minute stroll from my doorstep to capture Steetley Pier, I decided to take the shot from the top rather than the usual famous image from the side."

Settings: Canon EOS 90D with Canon EF-S 10-18mm f/4.5-5.6 IS STM lens; 15 secs at f/14, ISO 100.

Digital Camera says:

This is a great use of a central composition with leading lines out to the horizon. The long exposure, smoothing the water, gives this shot a dreamy feel.







9 'Serendipity'
by Iain Livingstone

"During a visit to Tate Liverpool, I pointed my camera through one of the holes in a kaleidoscopic art installation and by sheer fluke managed to capture an image of my wife in one of the mirrors."

Settings: 1/125 sec at f/3.5, ISO 3,200

Digital Camera says:

This is one of those images that stops you in your tracks. We love Iain's creativity in this photo: making the most of a visit to a museum has resulted in a visually memorable shot. The inclusion of the portraits within the mirrors really puts a smile on your face.

**SEND US
YOUR
IMAGES!**

Want to feature in our gallery? Please email a high-res image (at least 2.5MB), marked 'Reader Images' and including a title and brief description, to:

**digitalcamera
@futurenet.com**

or share it on Instagram with the tag: #digitalcameramag

CAMERA CLINIC

NEW
SERIES!

Master the art of modern photography

This month: Autofocus

With all the tech at our fingertips, there's no excuse for out-of-focus shots

A well-lit scene with plenty of contrast and hard edges means autofocus is a breeze.



Will Cheung



Will
Cheung

An imaging journalist and freelance photographer based in London, Cheung has a wealth of experience over several decades.
www.williamcheung.co.uk

Nearly 40 years ago, the Minolta Maxxum/Dynax 7000 SLR changed the camera world with its in-body autofocus skills. Seeing the subject zip into sharp focus at the touch of the shutter button was a technological marvel and one we continue to enjoy to this day. SLR autofocus has come a long way since – but it probably isn't going much further, with the majority of brands handing over the AF technology baton to their mirrorless cameras.

With mirrorless models having super-fast read-out sensors as well as near-instant communication between the body and lens, made possible with new lens mounts and advanced image processors, this camera type has made huge strides in a very short time. We're already enjoying huge user benefits, with features such as eye-detect, subject-tracking and focus points

covering most of the image frame, but there's much more to come. Deep learning and AI are relative newcomers, but factor in the potential of huge advances here, and mirrorless photography is only going in one direction – and that's forward. Quickly.

All we have to do is work out what we need and how to harness all this technology at our fingertips. Ultimately, what's important is the destination – the final image. The journey is just something to be enjoyed – or endured – depending on your viewpoint. All this tech can help you achieve amazing things in the quest for great pictures, but you need to harness its massive potential.

It might seem overwhelming to start with, but we're here to help you recognise situations where your intervention is needed and then apply the resources available to set you on the way to success.

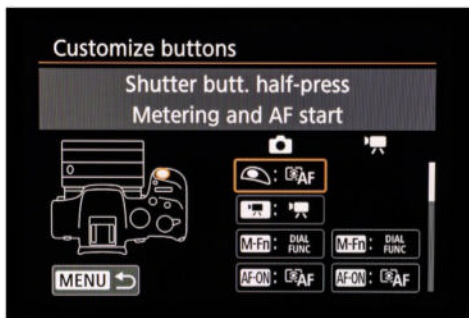
Get the knowledge Autofocusing is incredibly good, but it's fallible

Every camera brand has its own autofocus sensor technology: Canon has Dual Pixel CMOS AF; OM System has Quad Pixel AF; and Sony has Hybrid Phase Detect AF. Not every model has the latest tech, but it's fair to say that in general situations, most cameras can achieve sharp focus more quickly than most of us can manage manually. Fast-moving subjects and telephoto lenses are another challenge,

though, and it's here that any performance shortcomings are likely to manifest themselves. Whichever system you own, get to know it – especially where it can let you down and how to deal with issues that arise – and spend time setting it up. Make notes of settings or, if the camera has the option, save them to a memory card for reference.

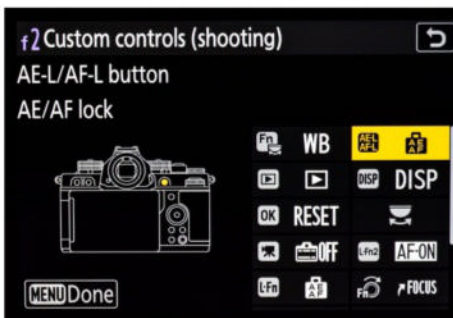
Focus controls

How you autofocus depends on your preference and the subject



SHUTTER-BUTTON AF

The default setting on cameras is to have autofocus initiated by your first touch of the shutter button. That makes sense, and it works really effectively – except when it doesn't. Three quick remedies: aim the AF point at the subject first, half-press the shutter button to focus, and recompose before shooting; use the AF-L (autofocus lock) button to hold focus, then shoot; or move the AF point to rest over the subject, focus and shoot.



BACK-BUTTON AF

Many cameras have an AF-On button within comfortable reach of the right thumb to initiate focusing. On some models, AF-On might be available only via a customisable AF-L or AE-L button. You can hold focus with AF-On pushed down, and the shutter button does not alter focus when it is pressed. There is no right or wrong here: some shooters prefer shutter button AF, while others like the back-button technique.



TWO-BUTTON AF

Having the option of shutter-button AF or AF-On is a good thing, but with the multitude of function buttons and advanced AF modes on today's cameras, there's another option. You could have AF-On as the main focus button and have this working with a small single zone, then set up another button to activate subject-tracking AF. Which button you use for this depends on what's available on the camera and personal preference.

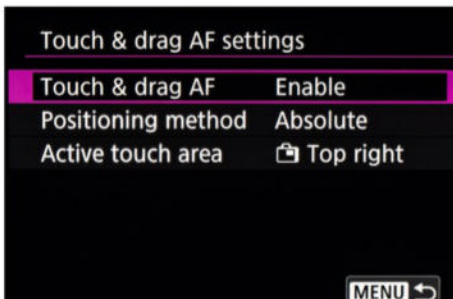
Focusing options to check out

There are ways and means to controlling focus



SINGLE-SHOT OR SERVO AF?

For general photography, use single-shot AF (S-AF) mode, where the camera focuses on the subject when the shutter or AF-On button is pressed and stays locked on until the shutter is pressed all the way down. For moving subjects, set Servo or C-AF: the camera will try to track focus as long as the shutter release is partially depressed. With complex AF zone systems, subject-detect and eye-tracking, there's much more involved in setting up for effective C-AF than meets the eye.



MOVING THE AF POINT AROUND

By default, cameras work with the maximum AF area. In many situations, you'll find working with a smaller focusing area gives you more control. However, the smaller AF zone means it might not be sitting over the subject, so you have to move it. How you move the AF area depends on the camera. It might be equipped with a D-pad or joystick, or it might have the ability of touch-and-drag AF. Many photographers prefer the joystick option, but all three are effective in use.

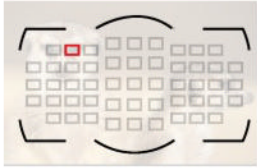


MANUAL MAGIC

AF can sometimes struggle, so having the backup of manual focusing is important. Many systems have a full-time override, so the focus can be tweaked while the camera is up to the eye. Switching to manual focus is often done on the lens with a switch or pullback barrel, as shown here on an OM System lens, and is often possible from the body. There are tools to help you find the sweet spot when you focus manually: peaking highlights and the ability to magnify into the viewing image are effective aids.

Perfect examples of getting the focus right

Increase your success rate by exploiting the camera's AF skills to the max

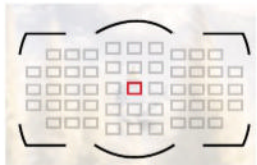


DEALING WITH OFF-CENTRE SUBJECTS

Having a single AF point active gives you excellent control over where the camera focuses, but you have to keep an eye on where the focus point is aimed. Generally, it's a good idea to reset the focus point to the centre of the frame after each shot; some cameras let you dedicate this to a function button. Working in this manner means that you know instinctively where the focus point is as you bring the camera up to the eye, and you're ready to move it to where you want it for the desired composition. In this case, I wanted sharp focus on the meerkat staring at me, so I knew I wanted an off-centre composition, and I was ready to move the AF point.



Will Cheung

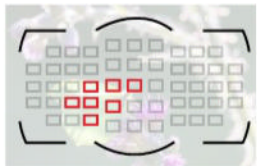


STICKING TO THE POINT

The thinking behind this shot was to frame the Eastbourne Pier pavilion in the distance with the foreground pampas grass – pleasingly blurred thanks to the use of an aperture of f/4 on a 76mm focal length. Having a small focus point at the centre of the frame was an obvious benefit here: with the camera's AF aimed right between the grasses, focusing was instant. Using a wide AF area would have very likely meant that the camera focused on the foreground grasses, blurring the building. That problem could be solved with manual focusing; or just by briefly changing the viewpoint for a clear view of the pier, focusing on it and using focus-lock (AF-L) before re-composing with this view.



Will Cheung



AVOID CONFUSION

A focus system working with a large AF zone can be bamboozled by scenes such as this, where there's something so bright and bold in the foreground that the camera focuses on it instead of the subject you want. Having a smaller focus area means you can zero in precisely on where you want the focus to be, just by moving it around the image frame. Subject-detect modes might help avoid such issues, although only a few cameras, including the Sony A6700 and the Fujifilm X-H2S, have an insect-detect mode. Many camera and lens pairings have the option of full-time manual override and focus peaking to help with accuracy, so you can quickly correct for any mis-focusing.



Will Cheung

Autofocus skills

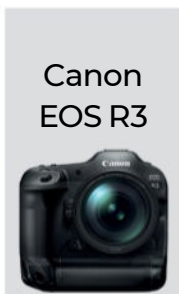
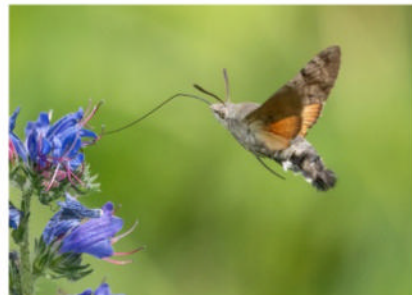
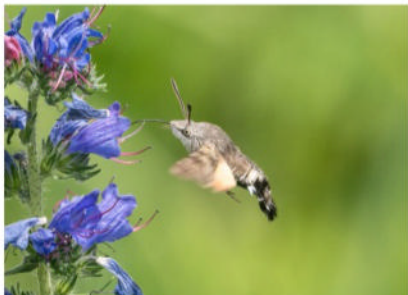
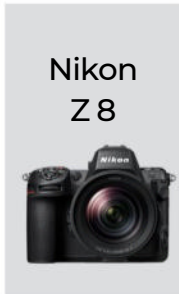
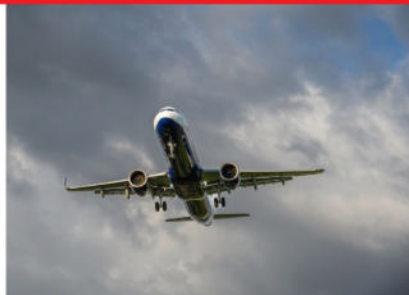
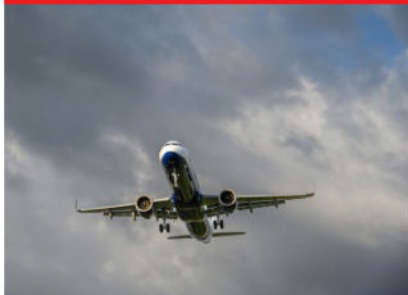
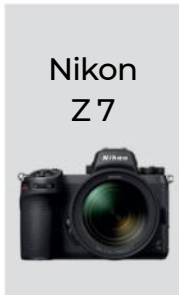
How the latest AF systems handle fast-moving subjects

AF systems, even those on vintage SLRs, are remarkably capable. They might rack back and forth a little in their search of sharpness, but generally speaking, most will do a fine job.

If there was any weakness it was with fast-moving subjects, especially if they lacked hard edges and contrast. Such is the rate of progress, however, notably on mirrorless cameras, that the latest AF

systems are capable of speedily acquiring and holding sharp focus, on moving subjects, assisted by eye-tracking and subject-detect. What's more, they can do this even with fast continuous shooting speeds so every frame in a sequence can be sharp. Current AF systems are so good that photographers with limited experience of shooting action can get great results.

Four cameras show off their continuous AF tracking skills



Analysing the results

The examples here show how capable AF systems can be with a range of subjects. With continuous shooting rates with AE/AF tracking up to 50fps, we have skipped a few frames between each shot to show some movement. Of the four subjects, the easiest was the landing airliner: even though it was the fastest, its size and the shooting distance made it camera-friendly. The other subjects were more challenging: the train was doing over 70mph, the gull was swooping around, and hummingbird moths never stop. Not every shot in each sequence was pin-sharp, but the success rate was still impressive – and probably better than most photographers could manage with manual focus. While top-of-the-range cameras have the best AF, the technology is cascading down to more affordable models such as the Canon EOS R7 and the Sony A6700.



Pros and cons Autofocus

Shoot sharp shots (nearly) every time

To be frank, camera autofocus has many more pros than cons, and any minuses are more annoying niggles than actual faults. Having kit capable of focusing on fast-moving subjects in near-darkness or to lock on someone's eyes is a wonderful thing. Just learn to recognise when AF can trip up, and practise to remedy any issues.

Eye-tracking
Eye-detect AF works well on humans, birds and animals, although it can trip up in low lighting or with dark subjects. Many AF systems offer the option of left- or right-eye priority; in most situations, set Auto and let the camera decide.

Subject matters
Subject-detect AF and tracking is a recent phenomenon, but it is already well refined; we're even seeing systems that can recognise horses, helicopters and insects alongside the more usual people, cars and aircraft. Given its relative novelty, subject-detect has plenty of refinement ahead.

Sharp in the dark
Being able to focus when it's so dark that focusing manually would be nothing but guesswork is a real boon. However, there still needs to be some detail or contrast for the AF system to lock onto. Cameras have an AF illuminator to help out in the dark, but this is a dead giveaway if you are trying to shoot candid, so turn it off.

Touch and go
Thanks to touchscreens, you can take shots, focus, select an AF point and even follow focus with the tip of your finger. It's an incredibly useful feature. It can be really annoying, too: an unintended touch means focusing on the wrong part of the scene, moving the AF point or taking unplanned pictures. Turn off touch operation when it is not needed.

Macro madness
When you get close to a subject, the AF can rack back and forth, searching for focus. This is common with macro lenses. Set the focus limiter on the lens, or on the camera if there's the option; then focus manually (or use a small focus point), look for an edge to focus on and adjust framing.

Near-misses
With a relatively close subject, some AF systems, especially with telephoto lenses, are prone to focusing on the background instead. If the lens has full-time manual override, adjust the focus manually until the subject is more recognisable, then try autofocusing again.

Eye eye
With eye-detect AF, you may see the AF box in the subject's eye and think all is well, but the focus might be on the eyelash or eyebrow, not the iris. Depth of field will get around the difference, but if you are shooting close-up portraits at wide apertures, check where the camera is focusing.

Try focus bracketing

Use focus bracketing for more control over sharpness in the subject. It can give the look of a smaller f-stop, even when a wide aperture is used to keep the background blurred. This photo was taken using an OM System OM-1 with a 60mm macro lens; four focus-bracketed images were stacked in Photoshop. The camera was handheld and the subject was moving slightly, but the stack still worked.

Small is often better

The camera focuses on what the AF zone is aimed at, so using the whole screen or a wide zone can often mean the camera focuses on the wrong part of the scene unless you're using it in combination with a subject-detect mode. You're better off using a small AF point and then moving it with the focus joystick or D-pad onto the part of the scene that you want sharp.

Camera know-how AF technologies

AF systems use phase- or contrast-detect AF to achieve focus

In contrast-detect AF, the lens is moved past the point of focus in its search for the highest contrast, before going back to it. It's slower than phase-detect AF, and not suited to moving subjects. With phase-detect AF, the incoming light is split into two signals: the camera can tell whether the two images are in phase and therefore in focus. Phase-detect AF can adjust focus between frames, so it is good for moving subjects. Some cameras, like the Fujifilm X-H2S shown here, have hybrid systems: phase-detect for speed and contrast-detect for accuracy.





Don't dismiss wide-zone AF

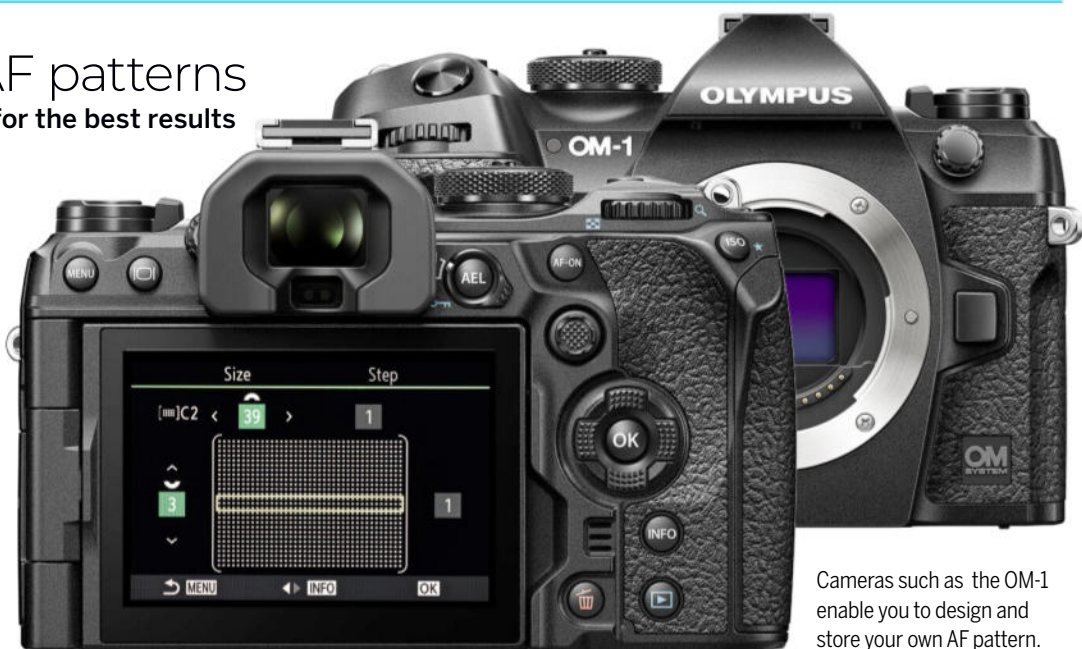
While single-point or small-zone AF gives the most control, wide-zone AF modes should not be dismissed: they can be effective with frame-filling compositions, especially combined with an eye- or subject-detect mode. Wide-zone AF is effective for people and street photography, for example.

Will Cheng

Camera tech AF patterns

Take control of your camera for the best results

■ Dig a little deeper into the AF systems of most cameras, especially mirrorless models, and the potential for fine-tuning and customisation is huge. Whether that's useful is another thing, though: it depends on what you like to shoot and how you like to work. Being able to select your favourite focusing pattern, and dedicate it to a user setting or function button for instant recall when the shooting scenario changes, is a really useful feature. A few cameras let you create your own focus zone pattern: shown here is the custom zone feature of the Olympus/OM System OM-1.



Cameras such as the OM-1 enable you to design and store your own AF pattern.

Shoot photos like a pro

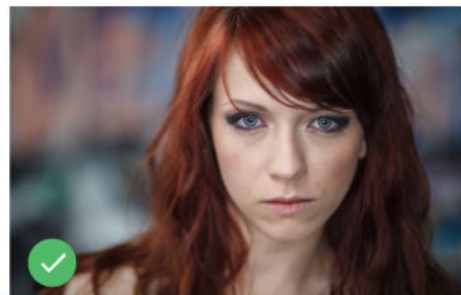
Hone your skills to respond to challenging moments

There's nothing more frustrating than missing a shot, but you can minimise that risk by knowing your camera. While all the technology at your disposal is a huge plus, it's important to know how to instinctively get around any issues. This means using the focus joystick or D-pad to get the AF point to the right place, manually tweaking focus and

exploiting subject-detect modes. User or custom modes mean that favourite settings can be recalled in an instant as you switch from subject to subject. Quick menus are also useful, especially if they can be edited to show only key items. Finally, most cameras have a favourite menu feature, and it'll avoid you having to search for frequently used items.

Keep an eye on focus

Shoot a tightly framed portrait with a medium telephoto lens at an aperture of $f/5.6$ or $f/8$, and there's enough depth of field to ensure the subject's features are nicely sharp. Use something exotic like an 85mm $f/1.2$ at its widest aperture, though, and you have to be extra-critical because the depth of field is so shallow. Make sure that their irises are sharp. Use single-shot AF with a small focus zone placed directly on the iris, or activate eye-detect. If needed, gently sway to or from your subject to keep the eyes sharp.



1/125 sec at $f/1.2$, ISO 50

Point it out

David Mach's art installation 'Out of Order' in Kingston-upon-Thames made a lovely frame for the resting shopper behind. With a large central AF area active, the camera will naturally focus on the phone boxes, which means the subject is blurred. With about a seven-metre gap between foreground and background, even a tight aperture would not give sufficient depth of field. Using a small focus zone, then either placing it over the subject or using AF-L or AF-On to focus on the subject, helps you get the desired photo.



1/800 sec at $f/4$, ISO 800

Pick it out

A small subject set against a bold background can confuse the camera into focusing incorrectly. Here, using a wide focus zone meant the camera failed to pick up on the daisy and focused on the field of buttercups behind. An eye-detect mode might have helped because the centre of the daisy resembles an eye, but the obvious solution is having a smaller AF area in the first place. In this case, the AF point at the centre of the frame is perfect; for off-centre subjects, use AF-L or AF-On to focus first, then reframe.



1/5,000 sec at $f/4$, ISO 400

Camera skills Focus bracketing

Control sharpness in your images with this shooting technique

Focus bracketing means the camera takes a sequence of shots, automatically adjusting focus between each frame. How many shots and how much focus is adjusted depends on what you have set; bracketing can also be done manually. Ideally, you need a static subject and camera, but handheld brackets of very slightly moving subjects are possible. The shots are focus-stacked on the computer, either in

specialist software (such as Helicon or Zerene) or using Photoshop or Affinity Photo. A few cameras have focus stacking built-in; the best implementation of this is in OM System cameras, where images are merged to give a jpeg, and the original shots are retained for stacking in software. Focus stacking is useful when you want more depth of field than is possible with the lens and aperture in use, and it is especially useful

Focus bracketing

Focus bracketing	Enable
Number of shots	4
Focus increment	
Exposure smoothing	Enable

for macro, where the depth of field is very narrow, even with small apertures. It means you get a fully sharp subject set against the background blur of a wider aperture.



Learn to adjust

In the heat of the moment, inadvertently moving the focus point can happen and you might not realise the error. Here, the camera was fitted with a 100-500mm zoom and a 1.4x extender, giving a 700mm focal length. Depth of field was minimal and I took a couple of shots before realising that the camera's AF point was on the creature's fur, a few inches behind its eyes. Using the focus joystick to move the working AF zone to the bunny's right eye did the trick.

Watch the background

It's quite common for an AF system to miss the subject entirely and focus on the background, leaving the subject blurred. Autofocus systems are amazing but they aren't infallible, even when the seemingly correct mode is in use; here, animal focus-detect mode was engaged. Keep an eye on where the camera is focusing, either adjusting the focus point or just tweaking the focusing barrel of the lens so that the subject is pin-sharp; many lenses have full-time manual override available to enable this while autofocus is turned on.

Keep it parallel

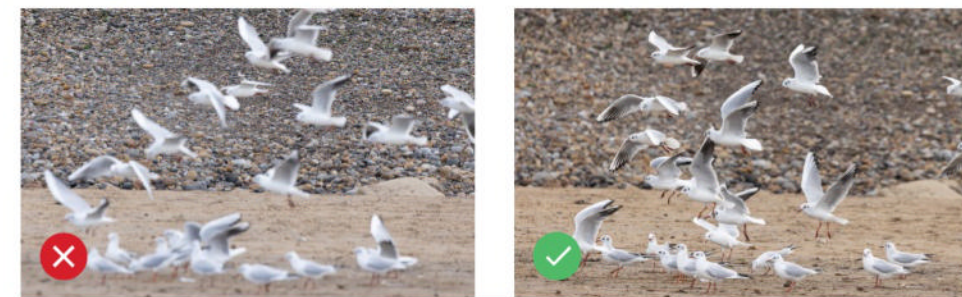
With depth of field getting more shallow as you move in close to a subject, shooting macro subjects and getting perfect sharpness can be tricky. Even setting a small lens aperture might not be enough to compensate for any error. With a subject like this butterfly, the trick is to keep the camera's focal plane as parallel as you can to the subject. It takes a bit of practice – but get it right, and the subject can be sharp even at wide lens apertures, which has the added advantage of keeping the background pleasantly blurred.

Pick your focus

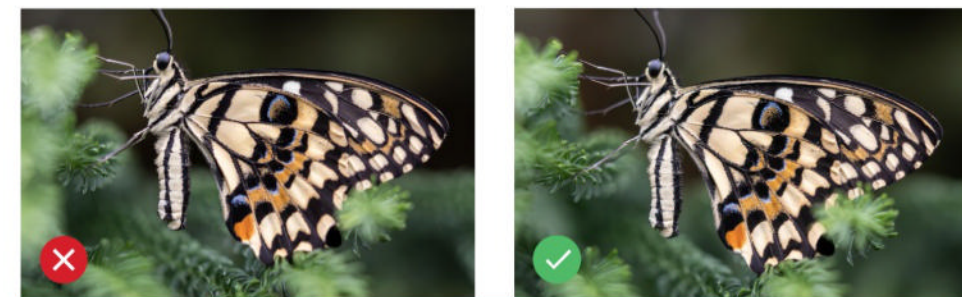
Focusing is about making the subject sharp, but it also pays to think about where you want that sharp focus to be. In a scene like this, focusing on the foreground or background subject could work equally well, especially when the background is Big Ben. Try shooting both options with different apertures, and you can decide later which you prefer. In this case a 24-120mm zoom at 120mm was used at its widest f/4 aperture to give a shallow depth of field. Pictorially speaking, both images work.



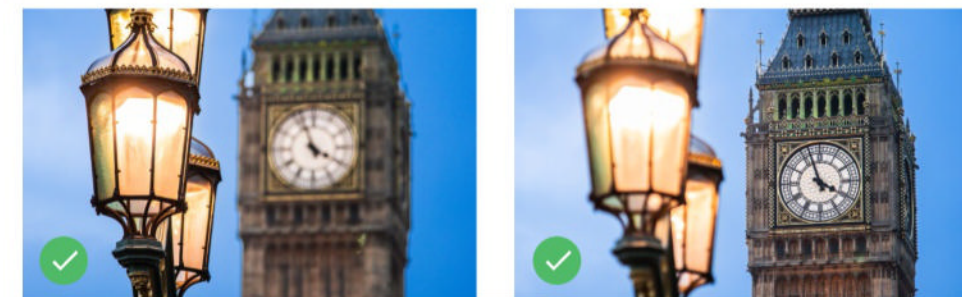
1/200 sec at f/10, ISO 800



1/640 sec at f/9, ISO 800



1/1250 sec at f/2.8, ISO 1,600

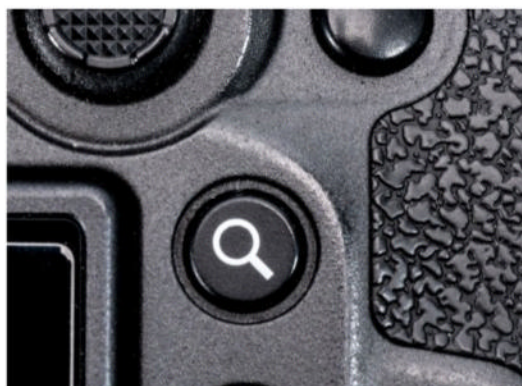


1/250 sec at f/4, ISO 400

Pro tip Magnifier

Take time out for a close look

Most cameras have a Magnifier function, where you can zoom into the image to check sharpness; this feature is usually available pre- and post-shot. There is much to be said for checking the sharpness before taking the shot but, clearly, this depends on the situation. If possible, dedicate the Magnifier to a function button, so you can call it up while you're framing the picture. If you are able, set the Magnifier to go straight to the focus point at 100% rather than going through a progression of magnifications.

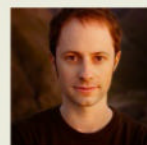


SEND US YOUR PHOTOS!

Now you know how to use autofocus like a pro, show us what you've learned and you could feature in our Reader Gallery: digitalcamera@futurenet.com



Jonas Hafner



Jonas Hafner
Photographer

Title: 'Rise'
Location: Near Hamburg, Germany
Date: Summer 2023
Camera: DJI Mavic 2 Pro
Instagram: @aufzehengehen.de

Portrait photographer Jonas Hafner took this shot with a DJI Mavic 2 Pro, his first photo shoot with a drone camera.



his eye-catching photo by Jonas Hafner took second place in 2023's ViewSonic ColorPro Awards. Entrants

were invited to draw inspiration from nature for their submissions, employing nature as symbolism for growth and resilience in harmony with the overarching theme of 'Rise'.

A portrait and landscape photographer from Hamburg, Germany, Hafner initially took up photography so he could express himself creatively and meet like-minded people – which, he says, has worked out well so far. "I've never tried doing a portrait shoot with a drone before," Hafner recalls, "but I thought it was time to try something new.

"The most challenging aspect was finding a way of communicating with the model as the drone is rather loud when it's flying at a low altitude. When I was standing further away, we initially used our mobile phones to discuss the concept of the next couple of pictures and then switched to sign language.

"Later on, I just pulled the drone up in the air, went closer and shouted the instructions. Next time, I would probably take some earphones.

"During this particular shot, storm clouds were covering the sun, which helped me get the exposure I was looking for [1/200 sec at f/5, ISO 100]. Although I am not the biggest fan of the colour green, I really like how this picture turned out." ●

Shot of the month

Drawing inspiration from nature, **Jonas Hafner** shot 'Rise' to symbolise growth and resilience

ViewSonic is a leading global provider of visual and EdTech solutions. Visit the online gallery to see the full list of winning artworks: www.bit.ly/dcmcolorpro23



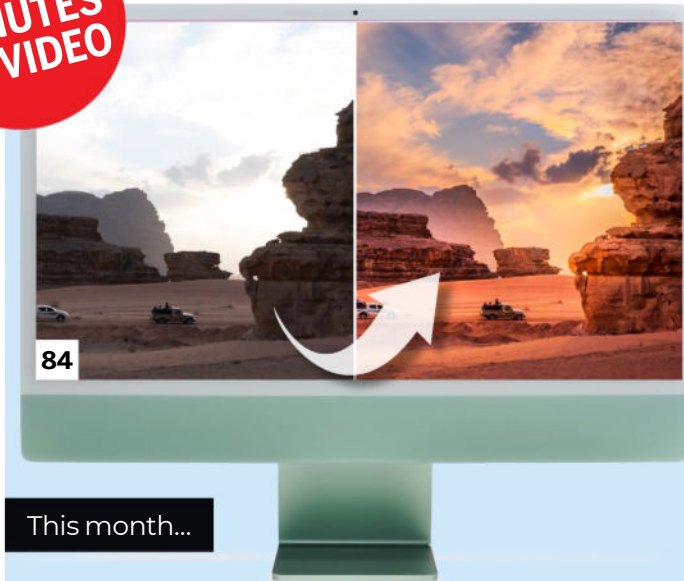
PRACTICAL Photoshop®

SENSATIONAL IMAGES MADE SIMPLE!



FILE & VIDEO
www.digitalcameraworld.com/dc277

42 MINUTES OF VIDEO



This month...

Tool School: HDR tool

Lightroom's HDR mode is an impressive tool and free presets will help you get to grips with it, opening up shadows, pulling detail out of highlights and enhancing colours in your images



86

Fundamentals: Black and white portraits

Black-and-white portraits can be infused with different aspects to give them a distinctive look. One classic look that stands out for many is a high-contrast, but with our Lightroom presets, we're going for a flatter, lower-contrast look. We'll also show you how to apply Brush Masks to add highlights to your portrait

BECOME A LIGHTROOM MASTER!

Get the Look:

Make your snowy landscapes sparkle

Snow can be tricky to shoot and edit, but it also works well with colour shifts, allowing you to apply creative effects, such as our Winter Effects Photoshop Actions

88



VIDEO TRAINING

The issue 277 download includes video lessons that build on our tutorials, plus bonus videos with extra tips!
www.digitalcameraworld.com/dc277

BONUS SOFTWARE EXTRAS:
 Actions for Photoshop and two sets of presets for Lightroom
Page 90



CAMERA RAW & LIGHTROOM
 Using the game-changing HDR tool



LIGHTROOM
 B&W portraits with extra impact



PHOTOSHOP
 Make your winter landscapes sparkle

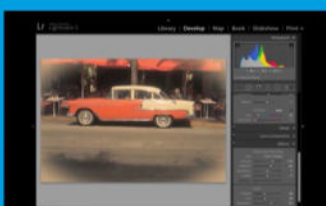


CAMERA RAW
 Boost skies with sky masking

Download 42 minutes of video training for Lightroom and Photoshop



FILE & VIDEO
www.digitalcameraworld.com/dc277



LIGHTROOM
 Give your shots a simple retro makeover



LIGHTROOM
 Boost areas using the Dehaze tool



PHOTOSHOP
 Harnessing the power of Curves



FILE & VIDEO
www.digital
cameraworld
.com/dc277



See images in a new light with HDR mode

This new mode in Lightroom can reveal up to four stops of extra range in photos



James Paterson

With over a decade as a writer and photographer behind him, James knows exactly which Photoshop and Lightroom tools and techniques matter most.

As anyone who's ever merged a set of bracketed exposures knows, High Dynamic Range (HDR) images display a greater range of tones between the darkest and brightest points. But

there's a catch – even at maximum brightness, a standard display can't show that extended range. And you can forget about printing in HDR – whites can only be as bright as the paper they are printed on.

With the emergence of HDR displays, the ceiling for whites is now much higher. Many screens, such as the latest MacBooks, iPhones and iPads, have HDR capability. Until now, we haven't seen the range of tones on offer in Lightroom and Camera Raw, but the HDR mode is a game-changer, letting those with an HDR display view and edit their images in a new light.

Switch to HDR and you'll see up to an extra four stops of range, revealing bold highlights that have to be seen to be believed. It isn't necessary for every image – landscapes work better than portraits – but the difference is so dramatic it seems as though you were viewing your photos through a dirty window.



Use the free HDR presets

HDR mode is an impressive new feature, but it isn't necessary to use it on every image. There are plenty of photos that will look better in standard dynamic range. Whether you choose to convert or not, you'll still need to work on the image to make the most of the tones. Our set of free HDR presets can help you get started. Each gives you a different HDR look by opening up shadows, pulling detail out of highlights and enhancing colours. To load them, go to the Preset Panel, click the menu, choose Import Presets, then load the supplied zip file.

1 Merge to HDR or use a raw

Choose an image – it doesn't need to be an HDR file, as a raw file holds a great deal of dynamic range. But for maximum editing headroom, it's best to merge a set of bracketed exposures. Highlight the set in Camera Raw or Lightroom, right-click and choose 'Merge to HDR'. Click the HDR button to view the image in HDR – you need an HDR display and a supported GPU.

2 The histogram

Switch to HDR and the normal standard dynamic range (SDR) histogram is shown on the left, and the HDR highlights on the right. This gives you up to four extra stops of brightness in four sections. Check the 'Visualize HDR' button, to see how each stop is represented as a colour in the histogram, from cyan to purple. You can use 'HDR Limit' to reduce the number of stops.

3 Brighter than white

HDR screens are brighter than regular screens and clipped areas become unnaturally bright, so avoid using photos with clipped highlights. Some HDR displays show brighter highlights than others. To check yours, click the highlight warning in the histogram. The histogram is split between yellow (visible) and red, which is outside the range of the screen and will be clipped.



4 Point curve

The Point Curve gives you control over the highlights in your HDR images. It is split into SDR (left) and HDR (right). Drag the curve above the line and that part of the tonal range becomes brighter – drag down and it gets darker. The top right point can be moved down to dim the highlights. Turning on Visualize HDR while editing the curve is helpful to judge how many extra stops of brightness you want, though two is often enough.

5 SDR settings

This section determines how the image looks when displayed on an SDR screen. If you don't change anything, the screen tone maps the HDR to fit within its parameters, but the sliders offer more control. It's a conversion guide, so you can optimise your image for HDR and SDR displays. Use the sliders to match the SDR version to the HDR as closely as possible. Uncheck the preview box to return to the HDR version.

6 Output

You need to export your image as an AVIF or JPEG XL file for others with an HDR display to view it in HDR. Right-click and choose Save Image to choose a format. Even then, HDR support is dependent on the app or software used to view the image. The latest Google Chrome is HDR capable, so you can build an HDR web album with Lightroom web, for instance, (at lightroom.adobe.com) then view and share it in Chrome.



FILE & VIDEO

www.digitalcameraworld.com/dc277



Before



After

Give black and white portraits extra impact

Transform your portraits from colour to mighty monochrome in Lightroom and Camera Raw

Expert tip Brush Masks

The brushing can be extended to the hair and the bottom of the iris. You can create and name new Brush Masks for each area to make any further editing easier. Simply add to existing areas of brightness.

One trend that's actually a constant is uniqueness. However, it's also a fleeting trend because once something unique has been done, others will emulate it. If you get known for a particular look, that becomes your signature style. Anything you see here, even from using the preset, could be a starting point for creating something unique.

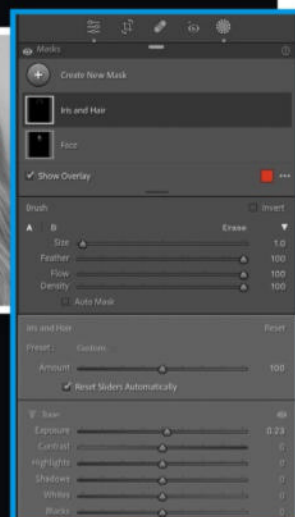
Black-and-white portraits hold a timeless quality, but they can be infused with aspects to give them a distinctive look. The classic black-and-white look that stands out for many people is the high-contrast look – but here, we're going with a flatter, lower-contrast look. We will introduce elements that make it impactful, though.

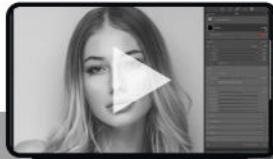
First, we do a basic conversion, just using Saturation, then start to build the contrast we want. Next, we'll do some work using a Brush Mask to add highlights. As brushwork is manual and photo-specific, it's not something that can be stored in a preset. We could start from a preset, though, and add brush strokes from there. Lighter tones make a feature appear forward, while darker tones make it recede – and this manual work will help make your image look unique.



Sean McCormack

Sean McCormack is a photographer and writer, based in Galway. He's the author of *The Indispensable Guide to Lightroom CC*.



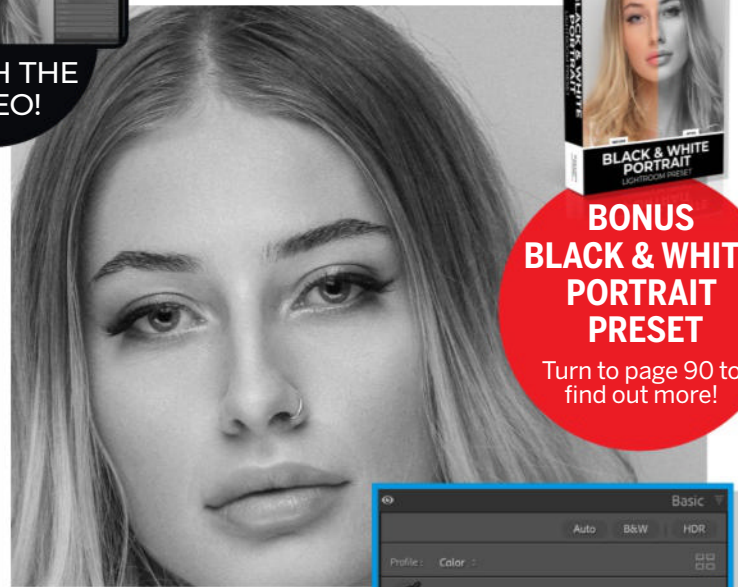
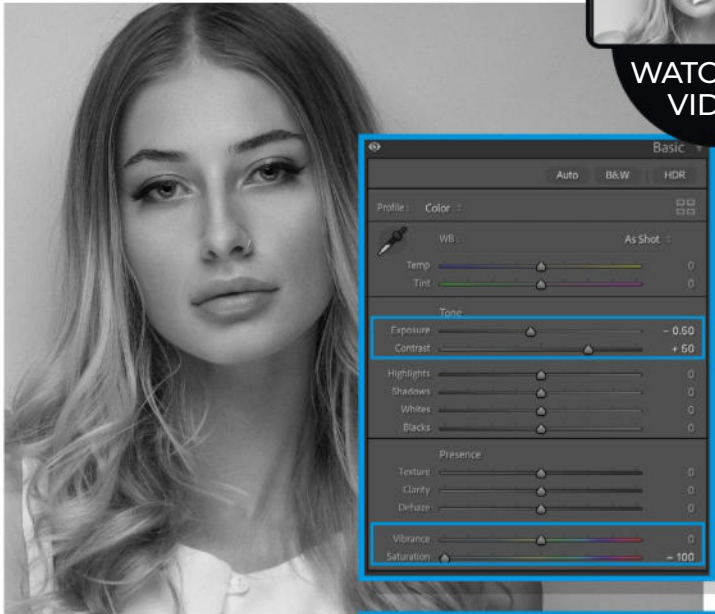


WATCH THE VIDEO!



**BONUS
BLACK & WHITE
PORTRAIT
PRESET**

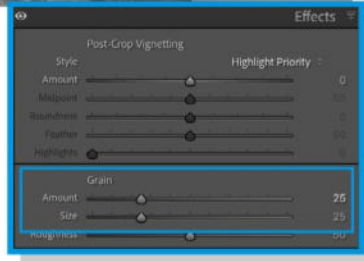
Turn to page 90 to find out more!



1

Convert to mono

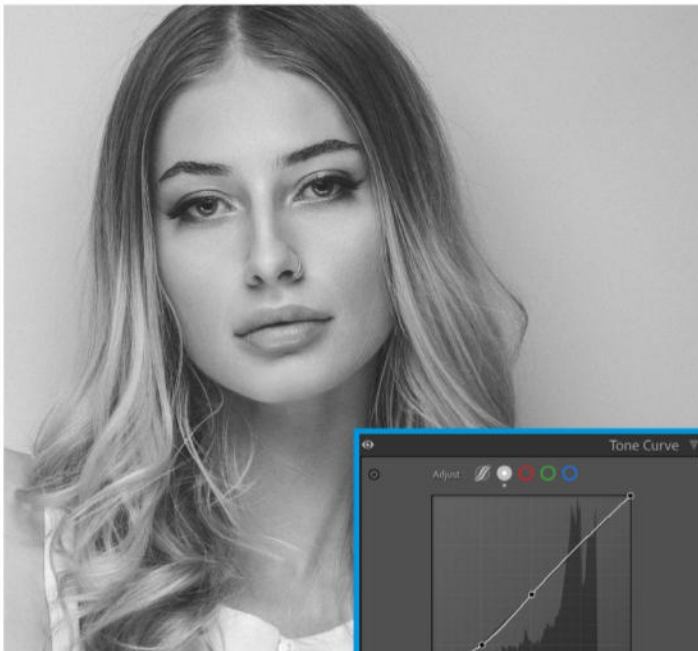
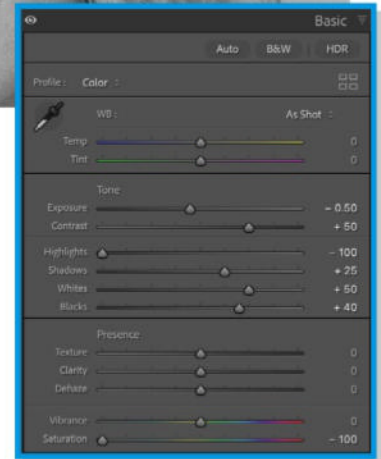
In the Basic Panel, drop Saturation to -100. Decrease Exposure by 0.5 stops to allow room for effects. Increase Contrast to +50. Finally, in the Effects Panel, set Grain to 25 for a more vintage look. Be aware that the grain is only properly visible at 100%.



2

Make the skin shine

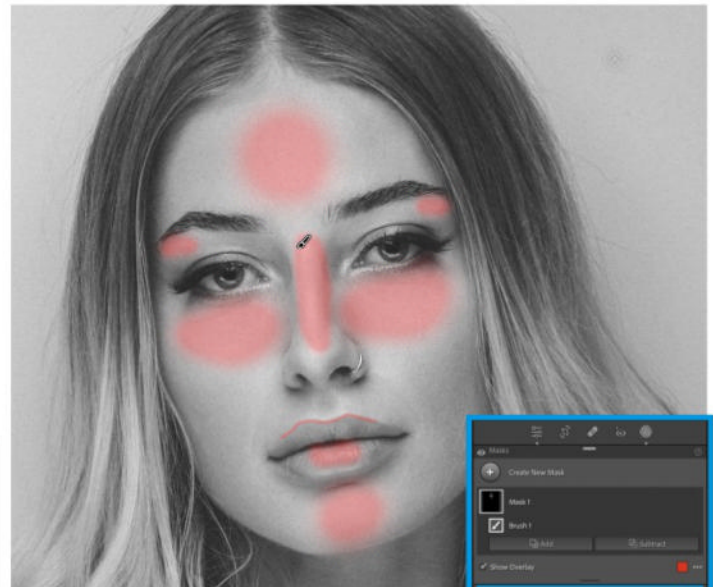
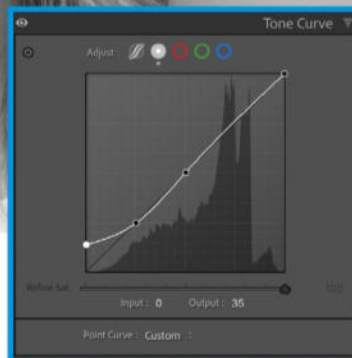
To emphasise the skin shine, go back to the Basic Panel and pull Highlights down to -100, and then push Whites to +50. To open the shadows, set Blacks to +40 and Shadows to +25.



3

Use the Tone Curve to balance blacks

One job that's hard to do in the Basic Panel is to set the lowest level of darkness. Go to the Tone Curve, and select the second option for the Point Curve. Click a point in the dead centre as an anchor point. Add another about a quarter from the left, then move the leftmost point up to fade the blacks. It should read Input 0, Output 35.



4

Increase highlights with masking

Choose a Brush in Masking. Set Exposure to 0.15-0.20 with Feather, Flow and Density at 100, and Auto Mask off. Change the brush size for the feature. Brush on the bridge of the nose, the cheekbones, the centre of the forehead (if visible in your photo) and the chin. Press the letter O to see where you've painted.





FILE & VIDEO
www.digital
cameraworld
.com/dc277



GET YOUR
WINTER EFFECTS
ACTIONS

Turn to page 90
to find out more!



Before



Make your snowy landscapes sparkle

With an abundance of white in the scene, snow-filled landscapes can be the perfect genre for applying creative colour effects

Winter is finally upon us – and with the colder weather comes the chance of frost and snow, which can often simply be punctuations between murky and grey conditions. But when they do arrive and the light looks great, it's an opportunity not to be missed: snow can transform the landscape visually, simplifying scenes to provide an aesthetically pleasing variation on new and familiar locations.

However, snow can be tricky to shoot if you're unfamiliar with how it affects exposure. You need to overexpose to capture snow as white rather than grey, taking care not to blow the highlights. Editing can be a little tricky too, but as long as you maintain highlights and ultimately detail, you'll be fine. Once you've got to this stage, the fun can begin: snow works incredibly well with colour shifts, allowing you to apply creative effects with ease while maintaining a realistic look.



James Abbott

James Abbott is a pro photographer who specialises in landscape and portraits. He's an advanced Photoshop user and has created hundreds of tutorials.

1 Remove the blue tint

Snow often has a blue tint, so we'll take a look at a basic method for reducing this. Click on the Create new fill or adjustment layer icon at the bottom of the Layers Panel and select Hue/Saturation. Click on the dropdown menu set to Master, and select Blues. Next, take Saturation down to around -60. If there's a blue sky in the image that becomes too desaturated, select the Layer Mask and paint black over the sky area using a soft brush. Paint white if you make a mistake.



WATCH THE VIDEO!



2

Make it blue hour

Create a Photo Filter Adjustment Layer and select the Cooling Filter (80) using the Filter

dropdown menu – leave it at the default 25% Density and close the dialog box. Next, create a Curves Adjustment Layer. Click on the dropdown menu set to RGB; select Red, then drag the bottom-left corner point along the bottom to the right until Input is at 20. Output remains at 0. This will add cyan to the image, but mostly to the shadows and midtones, making the blue hour effect more realistic.



3

Apply sunset warmth

Create a Solid Color Adjustment Layer and choose a vibrant orange in the Color

Picker (#f8a006 was used here). Click OK when you are happy with the colour, then change the Blend Mode from Normal to Overlay. Click on the Layer Mask to make it active, go to Image Apply image, use the default settings and click OK. Repeat Apply Image in the same way three more times, so there are four passes in total to target only the brighter tones. Finally, reduce the layer Opacity to 70%.



4

Add gritty contrast

Create a Black & White Adjustment Layer and immediately close the dialog

box (we don't need to make any custom adjustments, just a Black & White Layer). Simply change the Blend Mode of the Adjustment Layer from Normal to Soft Light and you're done. If you find the effect too strong at 100% Opacity, reduce the layer Opacity to the desired level. If you'd like a stronger effect, use the Overlay Blend Mode instead because it produces stronger contrast than using Soft Light.

THIS MONTH'S BONUS SOFTWARE EXTRAS

Improve your shots with our Actions and Presets



As seen in this month's tutorials, you'll be able to transform your photos in just a few clicks

This month, we have curated another collection of software extras to help transform your images. Once installed in Camera Raw, Lightroom or Photoshop, Actions and presets can have a huge impact on your photos in a matter of seconds, saving you lots of time at the editing stage. Rather than having to manually

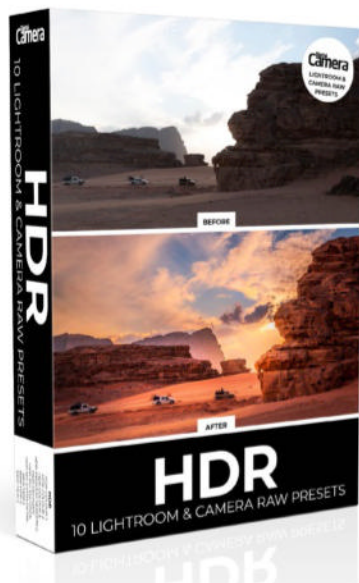
adjust a photo to give it a certain look, these actions and presets will get you there in a few clicks.

This month, we're giving away HDR and B&W Portrait presets for Lightroom and Camera Raw, plus four Winter Effect actions for Photoshop. So whether you want to improve your wintry landscapes or transform portraits into black and white, we've got you covered.

How to use your software extras

Once you have downloaded the 'dcm277-files.zip' file to your computer, extract it and put the Actions and Presets folders where you can easily access them. These folders contain the files, PDFs and installation instructions.

Instruction PDFs can be found in the Gifts folder of the issue's download file



10 HDR PRESETS

Software: Lightroom and Camera Raw

Presets are saved settings that can be applied to raw or jpeg files. To complement this month's tutorial on page 84, we have included 10 HDR presets that will change the way your merged bracketed exposures look. These presets for Lightroom and Camera Raw will transform your images from the ordinary into ones with a cinematic and extraordinary look.



FOUR WINTER EFFECTS ACTIONS

Software: Photoshop

Photoshop Actions can transform your images with just one click. To go with our tutorial on page 88, we're giving away four Winter Effects actions that can be applied to create awesome effects on your images taken this winter. The four actions are Remove Snow Blue Tint, Make It Blue Hour, Apply Sunset Warmth and Add Grainy Contrast.



BLACK & WHITE PORTRAIT PRESET

Software: Lightroom

As seen in our tutorial on page 86, you can transform your portrait images into a beautiful monochrome one with this useful Lightroom preset that creates the base B&W look with three empty masks for Face, Iris and Hair. The masks can be manually brushed to suit your portrait and the Brush settings are ready to go.

Download all three packs from: www.digitalcameraworld.com/dc277

Digital subscriptions



ENJOY DIGITAL CAMERA ON APPLE NEWS+

ADD US TO 'MY MAGAZINES' TODAY!

GET ISSUES
DIRECT
TO YOUR
DEVICE!



PLUS! GET THE LATEST NEWS, REVIEWS
AND BUYING GUIDES FROM OUR WEBSITE.

IN YOUR APPLE NEWS FEED, FOLLOW:
DIGITAL CAMERA WORLD



Find it on
Apple News+

In Focus

The latest photography news from around the globe



Now back in its regular March spot, The Photography Show brings together more than 250 brands from the world of photography as well as a packed programme of demonstrations, talks and workshops.

BOOK YOUR TICKETS TODAY AT: www.bit.ly/tps2024dcm



Join us at The Photography Show

Save the date! Tickets for Europe's largest event dedicated to both the still and moving image are now on sale – speakers including Donatella Nicolini, Kelly Brown and Forough Yavari have been confirmed

The Photography & Video Show is the must-attend live event for photographers, videographers and content creators, whether you're a professional, an amateur or an enthusiast. Taking place in Halls 2-3 of the NEC Birmingham from 16-19 March, the event brings together more than 250 of the biggest international photography brands alongside a packed programme of demonstrations, talks, masterclasses and workshops. Visitors to the show, which is now back in its regular March time slot, can discover new products, try out the latest kit, take advantage of exclusive show offers – and more.

Leading names in the world of imaging and content creation will share their stories, insights and expertise across the show's six stages. Excluding Masterclass tickets, access to stage and theatre programmes in the exhibition hall, featuring an incredible lineup of speakers, comes at no additional cost. The show theme is 'Change your perspective' and will be embraced by a number of galleries and competitions. The Creator Playground also returns. **www.photographyshow.com; from £14.95 (single-day standard entry). Students, professional photographers, filmmakers and content creators can apply for free admission.**

1 SIGMA 70-200 F2.8 DG DN OS C
Fast, quiet and accurate autofocus is promised by Sigma, while image stabilisation makes this new trinity zoom suitable for hand-holding in low light.

2 SIGMA 100-400 F/5-6.3 DG DN OS C
With the 1.5x crop factor of Fujifilm X APS-C sensors, this new super-tele's effective focal range of 150-600mm makes it ideal for action and wildlife.



Sigma launches two new zooms

A 70-200mm F2.8 DG DN OS for Leica L & Sony E – a 100-400mm F5-6.3 for Fuji X

Sigma has released another of its popular DSLR optics for Leica L- and Sony E-mounts. The **70-200mm F2.8 DG DN OS C** is based on one of the best 70-200mm lenses on the market and brings its appealing blend of performance, build quality and features to a new audience. Sigma claims that “built-in HLA (High-response Linear Actuator) delivers fast, quiet and accurate autofocus” and the optical stabiliser with Sigma’s OS2 algorithm allows

use in low light, even when shooting hand-held. Also, the brand’s first telephoto zoom for Fujifilm X-mount cameras, the **100-400mm f/5-6.3 DG DN OS C**, is on sale now. Adapted from the full-frame Sigma 100-400mm f/5-6.3 DG DN OS C, the 1.5x crop factor of X-mount cameras gives an effective focal length of 150-600mm. www.sigma-imaging-uk.com; **£1,500/\$1,499 (70-200mm F2.8 DG DN OS S). £900/\$949 (100-400mm f/5-6.3 DG DN OS C)**

Focal point

Rounding up what’s new and exciting



DJI Osmo Pocket 3 vlogging camera
With a three-microphone array, the ability to shoot 4K video at up to 120fps and more, the Pocket 3 is aimed at high-end vloggers and content creators. Its three-axis gimbal boasts active tracking with face detection and dynamic framing. www.dji.com; **£489/\$519**



Roe photo backpack from Covered
The UK-based sustainable backpack brand has launched a new adventure-style bag that will be ideal for photographers. Its lower internal compartment will accept a camera body and three lenses. covered.co.uk; **£120/\$155**

Elinchrom Three portable flash
This new battery-powered unit joins the brand’s One and Five strobes and targets on-the-go shooters. Weighing just 1.6kg, the Three provides 261Ws of power and a single charge enables 525 full-power flashes. www.elinchrom.com; **£979/\$999**



Focal point

Rounding up what's new and exciting



New creative portrait lens from Lomography
The Nour Triplet V 2.0/64 Bokeh Control Art Lens offers Soft, Classic and Bubble effects. Designed for full-frame mirrorless cameras, its 64mm focal length is coupled with an aperture of f/2. shop.lomography.com; from £399/\$449



Lowepro launches Pro Trekker 650 AW II
Offering the largest padded interior in the Lowepro line-up, this new pack will accommodate plenty of kit. The 650's modular exterior and MaxFit divider system offer users optimal weight distribution. www.lowepro.com; £470/\$549



Wex Photo Video opens new flagship store
The leading UK retailer's recently opened Putney branch – at 133 Upper Richmond Road – will sell all the major brands, plus a seminar suite for live demos and workshops. www.wexphotovideo.com

Sony FE 300mm F2.8 GM OSS

Gap in lens lineup for pro sports shooters has been filled

The 73rd lens in the E-mount lineup, the FE 300mm F2.8 GM OSS is also the 19th G Master lens. It joins the FE 400mm F2.8 GM OSS and FE 600mm f/4 GM OSS and completes the manufacturer's trinity of telephoto prime lenses. The new lens promises superb sharpness, resolution and optical fidelity from edge to edge. The optical path comprises 20 elements in 16 groups, including a single extra-low dispersion and a trio of super extra-low dispersion glass elements (to minimise lateral and axial chromatic aberration), with Nano AR II coating (to suppress flare and ghosting). Honouring the G Master's claim of offering a 'supreme blend of high resolution and beautiful bokeh', the lens boasts an 11-blade aperture to offer circular bokeh with 'careful control' of spherical aberration both at the design stage and in the manufacturing process.

www.sony.co.uk; £5,800/\$5,998

Sony claims that the FE 300mm offers a blend of high-resolution and beautiful bokeh.



Two new 3LT L-brackets

Zaara for Nikon Z 9 and Zooney for Nikon Z 8

Updating a previous 3LT L-bracket, **Zaara** eschews an extendable base in favour of a single piece of aerospace-grade magnesium alloy, shaped to provide easy access to the strap lug and focus mode button without impeding the Z 9's tilting rear screen. Access to the battery compartment and side ports of the camera is unrestricted.

Also launched recently was the **Zooney** L-bracket for the

Nikon Z 8. Machined from a single piece of anodised aerospace-grade magnesium alloy, cut-outs in the vertical aspect of Zooney enable easy access to the rear tilt screen, camera strap lug, and focus mode button. Multiple mounting arms for accessories can also be attached.

www.3leggedthing.com;
£130/\$150 (Zaara);
£110/\$130 (Zooney)



3 Legged Thing's Zooney can be used with Peak Design's Capture clip system (above) and mounting arms for accessories (below).



Zaara is available in three different finishes: matte black Darkness (left), the signature Copper finish (right) or Metallic Slate Grey.



1 LEICA M11-P RANGEFINDER
Comes with Content Credentials technology to protect creators from AI.



2 LEICA SOFORT 2 HYBRID INSTANT CAMERA
Captures images on a digital sensor and outputs them onto Instax Mini film.



New Leica cameras and lenses

New compact, a new 21mm prime and a 14-24mm zoom lens and instant camera

The latest in Leica's M-series of cameras, the **M11-P** has a neat trick on board to help photographers in the fight against AI stealing their work. Internally the same as the Leica M11, with a 60MP BSI CMOS sensor and Maestro-III image processor, the M11-P also comes with Content Credentials technology. Special hardware within the camera, including a dedicated chipset for storing digital certificates provided by the German Federal Printing Office, hard-codes image capture files with information about their creator.

Also released by Leica is the **Super APO Summicron SL 21mm f/2 ASPH**, the world's first APO [apochromatic] lens with a focal length of 21mm. The new optic has been designed to meet the highest professional requirements and provides a consistent sharpness right into the corners of the image. Another SL lens also made its debut: the **Super Vario Elmarit SL 14-24mm f/2.8 ASPH**, which marks the first time the SL-System has offered a focal length from 14mm. The **Leica Sofort 2** is a digital camera with a 1/5-in CMOS sensor

and a printer all rolled into one device, and outputs onto Fujifilm's Instax Mini prints. **leica-camera.com; £8,000/\$9,195 (M11-P). £4,700/\$5,495 (SL 21mm f/2 ASPH). £2,220/\$2,495 (SL 14-24mm f/2.8 ASPH). £350/\$389 (Sofort 2)**

3 SL 21MM F/2 ASPH
Introducing the world's first APO [apochromatic] lens with a focal length of 21mm.

4 SL 14-24MM F/2.8 ASPH
Offers a wide focal range at a relatively low weight, says Leica.





Behind the lens

CRAIG WHITEHEAD

Street photographer and author of a new book called *Find Your Frame*

www.sixstreetunder.com

Whether you are relatively new to street photography or a long-established practitioner of the genre, it is always exciting to get lessons and hear experiences

from someone who is at the top of their game. Street photographer Craig Whitehead (@sixstreetunder on Instagram) recently released his first book *Find Your Frame: A Street*



Craig Whitehead

London, 2017. Taken on a Fujifilm X-Pro2.

Photography Masterclass. Drawing on his own experiences, Whitehead provides great insights and tips that will benefit budding street shooters and established ones alike.

The book contains lessons on various aspects of street photography such as equipment and settings, composition and how to overcome the awkwardness of shooting in public. Whitehead provides photographic examples of how he approaches different situations, giving context to the written words.

In the 'Get Out There' section of the book, Whitehead talks about the benefit of just getting out and shooting. Many of us are guilty of over-thinking or over-planning, to the point where it almost becomes a procrastination technique. This chapter gives tips on how to get out and shoot: "The more time you spend out on the streets, the more you'll learn your craft and the more likely you are to get a good shot worth keeping," he says.

We sat down with Whitehead to discuss his book and the state of current street photography...

Is there an image that you worked particularly hard to get? If so, how?

I've waited for close to an hour for a couple of different shots in the past but I don't think any individual shot was that difficult. There are certainly some



Craig Whitehead

Cambridge, 2018



Craig Whitehead

New York, 2019, taken on a Fujifilm X-Pro2.

incredibly lucky ones but I often move on if I feel like the effort for a shot isn't worth it for the end result. I'll come back to the idea or the location six months or a year later if that's what it takes for the right light. I waited an entire year to photograph a wall in Coney Island but that was to make up for having missed the chance earlier.

What is your opinion on the current state of street photography?

Photography is in an interesting place right now. AI is disrupting so many art forms and as phones and dedicated cameras keep crossing over, it makes creating great art easier than ever.

Post-pandemic, I also think we are aware of our proximity to people in a way we weren't before so it has made street photography a little harder. The way technology is evolving may mean fewer people doing street photography

as they can create the art they want so much easier. We may see fewer people doing it – only time will tell.

What advice would you give to people who want to photograph 'street photography' but don't live in or have the means to get to a city?

At its core, street photography is the practice of paying attention to moments. What's significant around you isn't always going to be a busy street. If you live somewhere rural, think about what makes that place what it is, the good and the bad. What things can you document that not everyone sees in their everyday lives?

As normal as it is for me to see university porters in bowler hats, I'm always aware that it's not the norm, and keep an eye on the light around the university entrances for the perfect shot I will get one day. ●

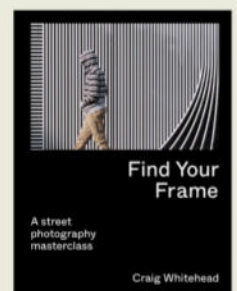
“Street photography is the practice of paying attention to moments. What can you document that not everyone sees?”



Craig Whitehead

London, 2017. Taken on a Fujifilm X-Pro2.

Find Your Frame: A Street Photography Masterclass by Craig Whitehead is published by Frances Lincoln (Quarto Publishing Group) and is on sale now, priced £15/\$15.





TOP PHOTOGRAPHER

Erik Enrico Ersson, Sweden

GuruShots

We've joined up with GuruShots, the world's greatest online photography game, to present the winning images from its Captivating Architecture contest

GuruShots is billed as the world's leading photo game. It's an online platform conceived to give global exposure to people who love taking photographs. GuruShots members start out as 'Newbies' and compete with other photographers to win challenges, increase their ranking on the site and eventually progress to the coveted 'Guru' status. Challenges are voted on by Gurus and the wider GuruShots community, and there's a fresh challenge – 'Captivating Architecture', for example – every day. Winners receive prizes from GuruShots' partners, including Adobe Stock, Lowepro and Kodak. **Find out more at www.gurushots.com**

Enter GuruShots contests

Sign up to GuruShots for free, upload your best photos and start entering competitions today! Vote for your favourite entries from other photographers and receive helpful feedback from the GuruShots community. You'll improve your photos and have fun!
www.gurushots.com



TOP PHOTO
Gisela Nunes, Portugal



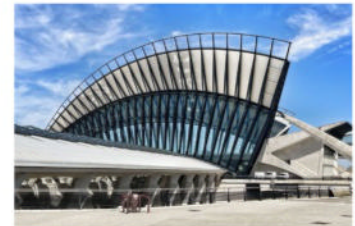
Honourable mentions



Feu, France



Izabella Hamar,
Croatia



Zúza Kosejková,
Czechia



Maria Fremming,
Denmark



Marc Ollivier,
Luxembourg



Danielle Stange,
France



Viktor Borsós,
Hungary



GURU'S TOP PICK
Sascha Lafleur, Germany



Maggi Berman,
Portugal

Advertising feature



CLOCKWISE FROM TOP LEFT: Kevin Cros, France; Marketa Zvelebil, France; Florenc Elezi, United States; Michael Gordon, Israel; Buffan Walter, Sweden.

More honourable mentions



Zsuzsa Tothne Prekub, Hungary

Chris Walmsley, United Kingdom



Nate Riggins, United States

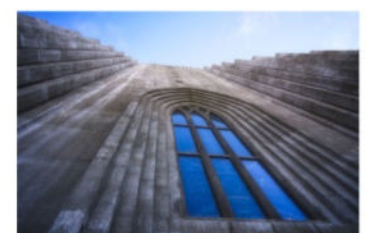
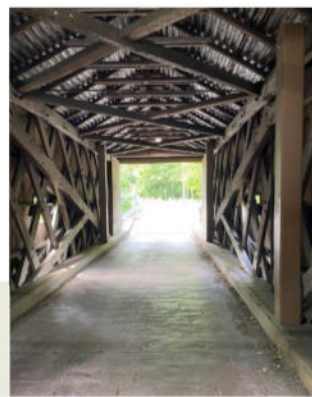


Josh Stevenson, Canada



Stephanie Vaughan, United States

Nicholas Wong, United States



Mia Kumlin, Sweden

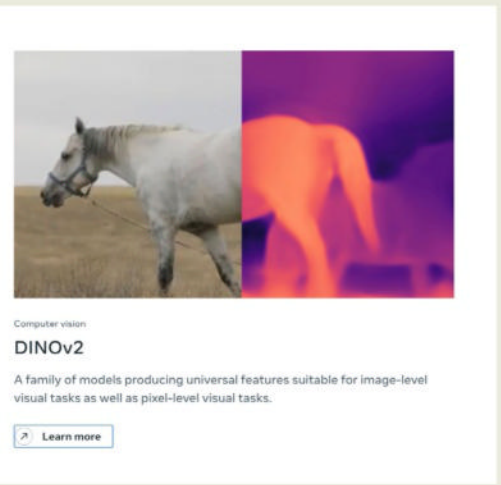
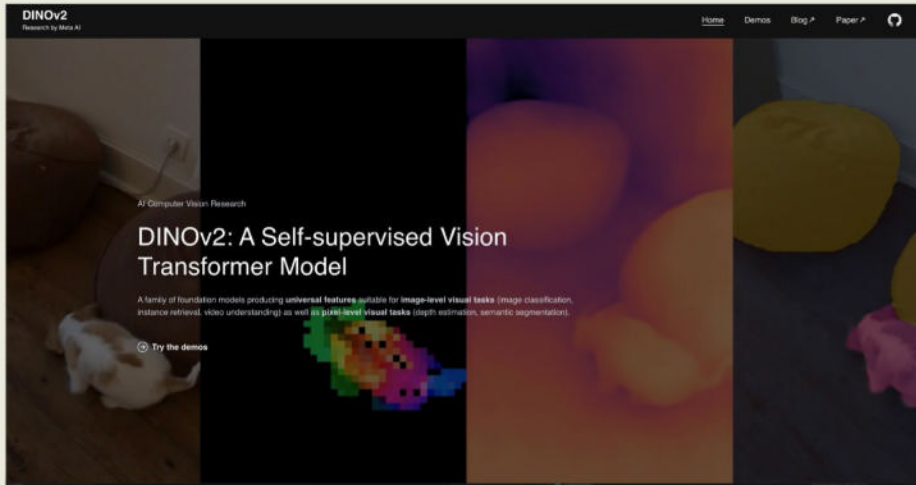
Buy a year's worth of digital back issues for just £19.99!

The 2022 Collection is now available on USB – browse, search and print issues 250-262. Available for UK and international readers (overseas postage fees will apply)



Digital Camera's 2022 Collection USB contains the 13 issues published in 2022 (250-262) plus all tutorial videos, tutorial start files, photo tip cards PDFs, buyer's guide PDFs and other digital gifts... giving you one-click access to a wealth of photo technique projects, camera, lens and accessory reviews, galleries of inspirational images, interviews with the world's leading photographers – and more! (Adobe Reader or Acrobat required)

Buy the 2022 Collection today at:
www.bit.ly/dcm22collection



https://ai.meta.com/resources/demos

Scanning ahead...

Photographic memory? **Jon Devo** considers the pros of creating images from our thoughts

The ability to produce images based on thoughts alone may be less than a decade away. Is this an exciting development or a nightmare scenario?



Jon Devo
[instagram.com/gadgetsjon](https://www.instagram.com/gadgetsjon)

Jon is a professional photographer, videographer and technology journalist.

Mind-reading computer systems that can produce high-fidelity images from your thoughts alone are coming. Are we a decade or less away from being able to think images into existence?

Short answer: less. Thank you for reading, see you all again next month. But before we dig into the long answer, let's first answer the question of how this might be possible. Meta, the parent company of Facebook, recently began sharing the early results of a project, dubbed DINOv2, that has been in development for the past couple of years. The project involves researchers using magnetoencephalography (MEG) combined with AI to understand how the brain processes visual information.

Magnetoencephalography isn't quite as complicated as you might first assume. It's a functional brain scanning technique that captures the magnetic field, generated by electrical signals

when neurons fire in the brain, in real-time. It's often used to assess conditions such as epilepsy and to aid in the removal of brain tumours. However, in healthy patients, MEG can be used to study what the brains of healthy volunteers do when fed a series of different images. Pairing this data with AI, which studies the output, Meta claims it has created a way to decode the output of the brain, generating images that are close to the original input. In a blog post on its website, Meta explained the process like this: "Using magnetoencephalography, we showcase an AI system capable of decoding the unfolding of visual representations in the brain with an unprecedented temporal resolution."

The system can analyse thousands of brain activity measurements per second and churn out approximated images that at least fit the categories of the original images, even though some of them miss the mark. In its inception, this process involved people manually

feeding and categorising thousands of images and video clips into an AI model. What's critical about DINOv2 is it can learn from images without human input and without being told what they are or what the context is. As a self-supervision model, DINOv2 can learn key visual characteristics, including depth perception and the natural behaviour of light in different scenarios.

What could all of this mean in terms of real-world applications? Computer-vision systems are already being used to help create the first generations of self-driving transport. But if computers can read our minds and generate high-fidelity representations, we could eventually create unique images from thoughts alone; no cameras, no canvas, no paintbrushes or pens required. Could we get to a point where we record our dreams like we save TV shows? Perhaps that's further down the road.

Of course, there are huge implications for our privacy and autonomy as individuals in a world where our minds can be looked into and their contents displayed for others to see. In many ways, it's a terrifying prospect. But as a technological optimist, I'm excited to see where research like this may lead. I'm excited to see the creations generated by people when there's literally no filter between our personal vision and what we can generate. ●

"If computers can read our minds and generate representations, we could eventually create unique images from thoughts alone – no cameras, no paintbrushes or pens required"

KitZone

New gear, buying tips and the world's toughest tests



104 Fujifilm GFX 100 II _ New flagship medium-format mirrorless



108 Canon RF 24-50mm f/4.5-6.3 IS STM _ A compact full-frame zoom



110 Nikkor Z 600mm f/6.3 VR S _ Powerful and lightweight telephoto



112 DxO FilmPack 7 _ Give your images a vintage look with this film emulator



Famous for giving the full-frame sensor market a wide berth, Fujifilm has carved out a distinctive niche for itself elsewhere. While its X-T cameras are highly regarded for their tactile controls and film-camera handling, plus clever tech inside the cases, the brand's medium-format range is no less compelling.

Its latest release into this segment is noteworthy in many ways – power, image quality and affordability. Turn the page to read our review of the GFX 100 II, and to find out why our tester was so reluctant to hand

it back after spending time shooting with it. Two other new products to pass through our lab this month are the Canon RF 24-50mm f/4.5-6.3 IS STM, a surprisingly compact full-frame zoom, and the Nikkor Z 600mm f/6.3 VR S prime for Nikon Z sport and wildlife shooters needing serious reach.

While all the aforementioned kit will help their users produce flawless images, DxO's FilmPack 7 will add some character to them, via the brand's celebrated film emulations.

And to round matters off this month, we test some modifier kits for sculpting and shaping flash lighting. **Niall Hampton**



Plus 114 Flash modifiers

The awards bestowed by the Digital Camera lab...



Given to the top product in a group test



For products that receive five stars overall



Given to products that offer superb value for money

Ratings explained

- ★★★★★ Best in class
- ★★★★☆ Excellent
- ★★★☆☆ Good
- ★★☆☆☆ So-so
- ★☆☆☆☆ Poor

All products reviewed in KitZone are tested independently by photographers with years of experience, using lab and real-world testing

Medium-format



1

Fujifilm's Bishamon-Tex texture is designed to improve handling while you're on location.

2

At 44 x 33mm, the medium-format image sensor is considerably bigger than the 35 x 24mm sensor in full-frame cameras.

3

There are 17 Fujifilm lenses designed for use with the GFX 100 II's G mount.

Fujifilm GFX 100 II

£6,999/\$7,499

The do-it-all medium-format camera that should tempt full-frame professionals

www.fujifilm.com

Specifications

Sensor: 102MP CMOS II HS

Image processor: X-Processor 5

Lens mount: Fujifilm G mount

Autofocus: Intelligent Hybrid AF (TTL contrast AF / TTL phase detection AF)

Stabilisation: 5-axis in-body; up to 8 stops

ISO range: 80 to 12,800 (exp 40 to 102,400)

Max burst: 8fps continuous AF (mechanical shutter)

Video: 8K 30p, 4K 60p, FHD 120p

Viewfinder: 9.44m-dot, 0.64in OLED

LCD: 3.2-inch 2.36m-dot, tilt-type LCD touchscreen

Memory card: 1 x SD/SDXC UHS-II, 1 x CFexpress Type B

Connectivity: USB Type-C, HDMI,

Ethernet, mic port, headphone port

Battery: NP-W235 Li-ion battery, approx 540 frames

Size (W x D x H): 152 x 99 x 117mm (including EVF)

Weight: 1,030g (including EVF & battery)

It has only been a few years since Fujifilm began its journey to push its own vision of exactly what a medium-format camera should be. After decades of medium-format being synonymous with boxy, heavy cameras for high-end pro users, the Fujifilm GFX 50S and GFX 50R brought medium-format (almost) to the masses. Each had a body size that rivalled DSLRs and even some mirrorless cameras, at a price that significantly undercut the competition.

Fujifilm is certainly not alone in revolutionising medium-format cameras: industry stalwart Hasselblad was the first to create a more compact medium-format system with the Hasselblad X1D 50C, although Hasselblad's system didn't come close to touching the relative affordability of Fujifilm's cameras.

In 2019, the GFX 100 changed the body of the GFX series to include a vertical grip: this was somewhat against

the philosophy of making mirrorless medium-format cameras more compact, but it was an answer to the question of how far could Fujifilm push the specs of a medium-format camera with its introduction of in-body image stabilisation.

The new Fujifilm GFX 100 II returns to the styling of the original GFX camera ideology and then pushes medium format even further. But is it enough to finally woo full-frame photographers over to the benefits of medium format?

Key features

The Fujifilm GFX 100 II features a new high-speed 102MP CMOS sensor. Paired with Fujifilm's X-Processor 5, it enables the camera to shoot at eight frames per second at full resolution – a notable achievement for a medium-format camera, with a larger buffer than its predecessor: up to 325 frames in raw.

It supports shooting in various formats, including 16-bit HQ raw and HEIF 10-bit, offering improved dynamic

Fujifilm GFX 100 II Medium-format



4

The 3.2-inch rear screen tilts in three directions – not the most adaptable you'll find, but decent.

7

The GFX 100 II comes with a detachable EVF; an optional tilt adapter is available.

5

The rear panel buttons are generously spaced, with a thumb joystick control above.

8

A sizable top screen provides at-a-glance shooting information with room to spare.

6

The no-frills mode dial has standard exposure modes plus space for six custom options.

9

Three function buttons occupy a spot that might previously have been seen as dead space.



Gareth Bevan

The GFX 100 II's impressive technology is supported by Fujifilm's acclaimed Film Simulations, with the new Reala Ace likely to win a lot of fans.

range over the previous model with a new base ISO of 80. The GFX 100 II can also create 400MP Pixel Shift images by combining 16 raw shots, and achieve true-colour (24-bit) images with just four frames. Fujifilm has also added a new Film Simulation called Reala Ace, bringing the total to 20.

Autofocus has been enhanced with the X-Processor 5, with subject recognition for humans, animals, vehicles and insects available. It also offers improved human face and eye recognition – especially useful for portrait photographers. The camera also provides up to eight stops of in-body image stabilisation when used with compatible lenses.

For video, the GFX 100 II offers 4K 60p 4:2:2 10-bit video internally without cropping, as well as 8K 24p with a 1.42x crop or 8K 30p with a 1.51x crop, and Full HD up to 120p. It supports Apple ProRes and Fujifilm's F-Log2 for up to 13 stops of dynamic range, expandable to 14 stops in D Range Priority mode. External

recorders can enable ProRes Raw or Blackmagic Raw recording and the camera can record to external SSDs. Targeting video professionals, the GFX 100 II offers IDT support, focus mapping, vector scope, and waveform in Live View. Its Video Format mode adapts the sensor video size to the cinema lens from a range of manufacturers.

The GFX 100 II features a detachable 9.44m-dot viewfinder as well as a three-way tilting three-inch screen, and a 2.09in screen up top. The camera uses Fujifilm's NP-W235 battery, providing around 540 frames (20 percent better than the GFX 100) or 60 minutes of 4K 30p recording on a single charge.

Build and handling

The styling of the GFX 100 II follows that of Fujifilm's compact medium-format cameras like the GFX 100S and does away with the built-in vertical grip from the original GFX 100. The camera is smaller and lighter than the GFX 100, as it no longer has the grip built in, although,

with the optional grip accessory attached, it actually becomes the larger and heavier option of the two.

Personally, I think the optional grip is the right move. Despite shooting mostly portraiture, I don't like a vertical grip and the GFX 100 II is big enough already, so having it as an optional extra enjoying the full force of Fujifilm's most powerful medium-format camera without the extra bulk is very welcome.

Fujifilm is one of my favourite manufacturers when it comes to the build quality and styling of its cameras, and the GFX 100 II continues that trend. The GFX 100 II is a slick-looking camera, but also it feels good in the hand, the new Bishamon-Tex material on the camera is pleasing to hold: it's a little more grippy than the traditional faux-leather finish, but it's nothing revolutionary. It gives strong futuristic space suit vibes and makes the camera look much more modern. I will admit that I prefer the look of the faux leather but after a while, I didn't notice the new material.

Coming from using smaller systems day to day, the GFX 100 II does feel heavy and bulky. It certainly is →

Medium-format Fujifilm GFX 100 II



The back streets of Stockholm's Old Town show how much detail the GFX 100 II's 102MP image sensor is capable of capturing, with superb colour fidelity the icing on the cake.

a camera you will notice after carrying it for long periods, and I noticed the added weight even throwing the camera into a rucksack to walk around. But when I remind myself that this is a 102MP medium-format camera, it is still much smaller than most of the best professional full-frame DSLRs – and for the size and weight, the power is pretty amazing.

The GFX system is still hamstrung by the need for GFX lenses to be large. Unfortunately, current technology dictates that larger lenses with more elements have better image quality, and more space for powerful autofocus motors – and with a medium-format image circle, GFX lenses are only ever going to get so small. By design, the GFX 100 II body is about what is comfortable to hold and still balance with large GFX lenses.

The 100 II's control layout is fairly similar to that of previous GFX models, but there are three new custom unmarked function buttons up top. Their functions are shown in three corresponding little symbols on the top screen, which is a nice touch. GFX bodies are definitely large enough to accommodate more custom function buttons, so these three new ones are appreciated. As is common with Fujifilm cameras, pretty much all the buttons can be remapped to your personal shooting preferences.

The two custom function buttons on the front are in a slightly more central position than before; maybe it's my large hands, but I found that my middle finger kept knocking the top of these buttons when I picked up the camera, as it was easily pressed. I don't have any functions on this button that drastically affected my images or setup, but this could be



The dynamic range that the GFX 100 II accommodates in raw images copes easily with shadows and highlights.

Gareth Bevan

particularly irritating depending on what you decide to use them for.

The 2.09-inch top screen remains, and still functions as the fastest way to view camera settings quickly; it can also be used to display virtual dials or a live histogram. There is a lot of spare real estate on the screen in stills mode, and I wish the screen could do even more to be useful, but it's busier in video mode.

The rear screen is good quality. Fujifilm has opted for a three-way tilting unit; given the purposes for which this camera will be used, that's probably all it really needs, and you can sort of replicate that waist-level viewfinder experience of traditional medium-format film cameras. The removable viewfinder is a pleasure to use, with a clear and sharp resolution; it can also be pushed into boosted mode for a smoother viewing experience – great for high-speed action. You can fit the optional EVF-TL1 adapter (£499/\$569) between the viewfinder and the camera body to add tilting functionality to the 'finder.

Performance

I initially tested the GFX 100 II at Fujifilm's X Summit 2023 in Stockholm. While the weather was against me, the undeniable beauty of the Old Town district was a pleasure to capture on the GFX 100 II. The 102MP photos are incredibly detailed. The resolving power is simply amazing and there is so much cropping potential to work with: while taking photos of a crowded street, I could zoom in on individual faces and the details held are incredible.

We have already seen Fujifilm's 102MP sensors at work in its previous GFX cameras, and they have impressed; but with a new faster sensor, improved in-body image stabilisation and the autofocusing prowess of the X-Processor 5, the 100 II is a worthy

Rival cameras



Hasselblad X2D 100C
£7,369/\$8,199

As a pure imaging machine, the X2D 100C pulls no punches and is practically untouchable, thanks to its mighty 100MP image sensor. Review: bit.ly/dcw_100c



Leica M11
£7,500/\$8,995

A class act that captures very sharp images with that distinct 'Leica look' – and a camera where features and value hardly enter the equation. Reviewed: issue 253



Sony A7R V
£3,999/\$3,898

Pitched by Sony as the resolution specialist, the A7R V blurs all the video and sports boundaries, too – it's an amazing technological achievement. Reviewed: issue 264





Gareth Bevan

With its responsive eye-tracking autofocus, the GFX 100 II is designed for shooting portraits. The autofocus system keeps up with small movements by the model to keep eyes sharp.

rival to almost any full-frame camera, for almost any type of photography.

At eight frames per second, this thing is fast for a medium-format camera. Obviously, the GFX 100 II isn't going to trouble any of the best full-frame cameras for sports or for wildlife, with cameras like the Sony A1 or Canon EOS R3 reaching 30fps (at considerably smaller image sizes). Let's not forget that the GFX 100 II has a 102MP medium-format sensor compared with the 24MP full-frame sensor in the EOS R3, say. For Fujifilm to push that many pixels at that speed is a hell of an achievement, which drives medium format ever closer to being a viable high-speed action camera.

The GFX 100 II is most at home taking portraits, though, so that was my next port of call while testing the camera. Where to start? The eye detection autofocus is near flawless. I got such a high hit rate that I barely needed to discard any final shots, which is so important when the perfect expression can be ruined by missed focus.

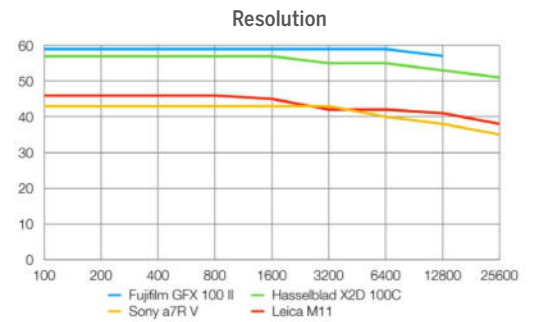
The autofocus had no hesitation jumping to the nearest eye as the model moved around; after a while, I stopped even being concerned about the focus, and could redirect my energy to composition and poses.

When it comes to editing, medium format is a league above. Not only is the ability to crop in and still maintain so much detail huge, but the dynamic range stored within the uncompressed Fujifilm RAF files gives so much room to play with. I like to edit by flattening out my images, pushing the shadows and squashing the highs: this was easy in the GFX files, without losing details or encountering any murky greys when the highs or lows hit their limits.

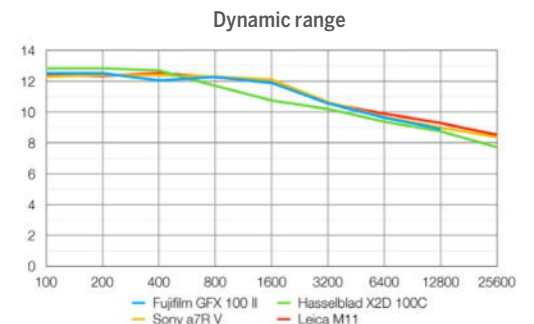
The new Reala Ace Film Simulation is going to replace Provia as my standard profile for editing. It offers a much more neutral and balanced starting point for editing when used as a raw editing profile. I am counting the days until it comes to Fujifilm's X-Series cameras.

Gareth Bevan

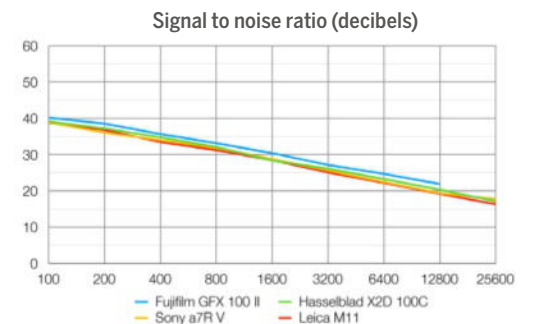
Lab tests



In most comparisons, the Sony and Leica cameras would trounce their rivals in our resolution test, but here, their sensors of around 61MP are no match for the two 100MP cameras.



The cameras are more closely matched here. The 100 II manages to maintain its peak performance right up to ISO 1,600, whereas the X2D's dynamic range is already starting to drop at ISO 800.



Remarkably, given its huge megapixel count, the GFX 100 II manages to generate slightly less image noise than the full-frame cameras on test; its extra sensor size keeps it just ahead of the pack.

Digital Camera verdict

5.0 ★★★★★ A best-in-class product



The GFX 100 II is a revelation. I review a lot of cameras, but this is one of the few that I found really hard to give back after the review period. The GFX 100 II should be the catalyst for every full-frame professional portrait, fashion, product and landscape photographer who might be wavering over jumping to medium format.

Zoom lens Canon RF 24-50mm f/4.5-6.3 IS STM



Canon RF 24-50mm f/4.5-6.3 IS STM

£379/\$299

A full-frame zoom lens in a surprisingly compact package

www.canon.co.uk

The Canon RF 24-50mm f/4.5-6.3 IS STM is designed to take a load off. One of the big attractions of many mirrorless cameras is that they are small – but for travel and walkabout photography, that advantage is largely lost if you hang a hefty lens on the front of it. This not-so-standard zoom is fairly short on actual zoom range and has a modest aperture rating – but it packs wide-angle to standard focal range coverage, effective optical stabilisation and ultra-quiet autofocus into an amazingly compact package that weighs in at just one-fifth of a kilogram.

Although this configuration is new to the Canon line-up, it's not unique: Nikon launched its Z 24-50mm f/4-6.3, which is even shorter and lighter, in 2020; and, just as that lens became a kit option for the Nikon Z 5, the RF 24-50mm has become a kit lens for the EOS R8. There's also something to be said for using it on Canon's APS-C format R-system bodies, such as the R10, where it gives an effective zoom range of about 38-80mm. If you don't mind a drop in megapixel count, you can switch to APS-C crop mode in full-frame cameras and get the same extended zoom range.

Key features

This lens's standout key feature is compactness. It has a retractable design that shrinks the stowage length to just 58mm. That's not much longer than the RF-S 18-45mm f/4.5-6.3 IS STM for APS-C format Canon R-system cameras, which measures 44mm when retracted. And while the RF 24-50mm is more than 50 percent heavier, it's still amazingly light for a full-frame compatible zoom, at 210g. To put that into perspective, the Canon RF 24-105mm f/4-7.1 IS

STM is 89mm long when retracted and weighs 395g – getting on for twice as heavy.

One of the main drawbacks of this downsizing is the lens's lack of telephoto reach. There's nothing wrong with its wide-angle coverage, which stretches to an 84-degree viewing angle, but the lens runs out of stretch at the long end, topping out at a standard 50mm. For many, though, that's not a problem: if you major in street, landscape or cityscape photography, you're likely to find the zoom range adequate – and it also works well for vlogging.

Another plus point for both stills and video capture is that the stepping motor-based autofocus system is quick and snappy, while also enabling smooth, virtually silent focus transitions for shooting movies.

Given that the original EOS R and RP cameras had no in-body stabilisation, the optical stabiliser featured in this lens is a useful addition – and the advantage isn't limited to these two cameras. The stabiliser has 4.5-stop effectiveness in its own right, rising to a seven-stop advantage when you mount the lens on a body that features in-body image stabilisation.

The optical path features just eight elements in total, including two precision-moulded aspherical elements to enhance image quality, as well as to reduce the size and weight of the lens. Canon's heritage Super Spectra coating is applied to minimise ghosting and flare.

Build and handling

As is typical of Canon's lower-budget RF lenses, the build quality feels pretty solid, but there are no weather-seals. This one's a little less solid than some, as it features a plastic rather than metal mounting plate, but that helps to keep the weight to a minimum.

Although it's fairly compact in its retracted state, the lens almost doubles in length once extended for shooting. It's physically longest at the 24mm end of the zoom range, with the inner barrel receding a little at mid-zoom settings and extending again towards the 50mm mark.

Two switches are fitted to enhance handling, which saves dipping into camera menus. One is a Stabiliser On/Off switch, the other is a three-pole switch for AF/Control/MF. As well as giving direct access to autofocus with manual override and fully manual focusing, the Control option enables the focus ring to be assigned to other customisable functions like aperture, exposure compensation and ISO adjustments. The focus ring itself is rather small, in keeping with the diminutive

1
The optical path features a modest eight elements in eight groups.

2
The Control option lets you choose your own setting to adjust via the focus ring.

3
To keep the lens weighing as little as possible, the mounting plate is plastic.





The RF 24-50mm is designed for those times when you want to travel light and concentrate on shooting photos. Its small size and low weight means you'll hardly notice it in your kit bag.

size of the lens, but operates smoothly with the now-typical electronic coupling.

One component that's lacking, as usual with Canon's non-L-series lenses, is a lens hood, which is sold separately.

Performance

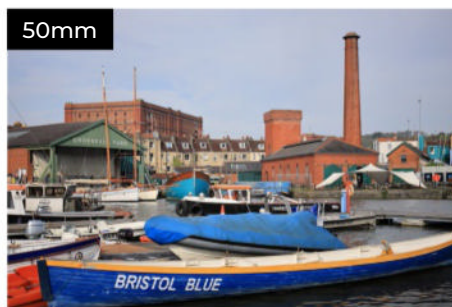
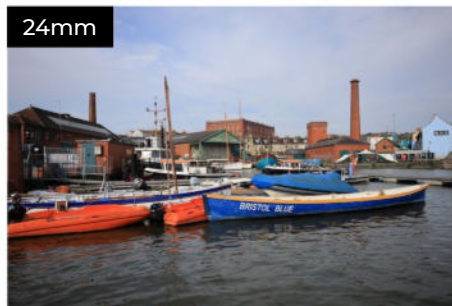
In our real-world testing, sharpness proved very good (rather than entirely great) throughout the zoom range. Centre-sharpness isn't as impressive as you'll see in other Canon RF standard zooms that we've tested, but levels of sharpness are remarkably uniform across the whole image frame, right out to the edges and corners. They're also pretty consistent throughout the whole zoom range.

In practical terms, the highly effective optical image stabilisation system helps to maintain consistent sharpness in handheld shooting, even at slow shutter speeds. After all, there's little point in having a really compact, featherweight lens if you need to lug a tripod around.

Lateral chromatic aberration towards the edges and corners of the frame is minimal at all zoom settings – and automatic in-camera correction is available anyway. The lens relies entirely on auto-correction for distortions, especially in the 24-35mm sector of the zoom range. This can't be switched off in-camera because the lens would be basically unusable without auto-correction for distortion. That's by no means uncommon in recent lenses designed for mirrorless cameras.

The speed and accuracy of the linear stepping motor autofocus system are impressive for stills and it lives up to its billing of delivering smooth autofocus transitions while shooting video. Overall, the performance is impressive, considering the compact and lightweight design of the lens. However, the modest aperture rating is a minus point for gaining a tight depth of field, and for maintaining quick shutter speeds under low lighting levels, for freezing motion.

Matthew Richards



The 24-50mm range for focal length is pretty limited – that's the compromise you have to make with such a travel-friendly barrel.

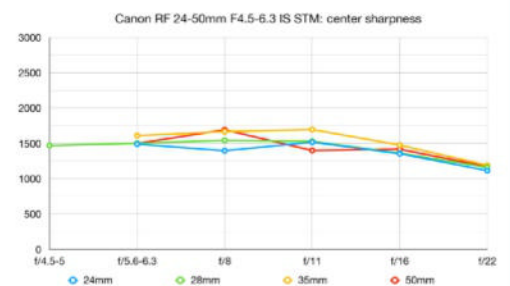


Image sharpness in the centre is respectable, but not on a par with some other Canon RF lenses.

Zoom lens

Specifications

Mount: Canon RF
Lens construction: 8 elements in 8 groups
Angle of view: 84-46°
Max aperture: f/2.8
Min aperture: f/22-32
Diaphragm blades: 7
Min focusing distance: 0.3m (W), 0.35m (T)
Max magnification ratio: 0.11x (W), 0.19x (T)
Filter size: 58mm
Dimensions (W x D): 70 x 58mm (retracted)
Weight: 210g



Sharpness

It's not the sharpest as Canon RF standard zooms go. Levels of centre-sharpness proved underwhelming in our lab tests but, on the plus side, sharpness is remarkably consistent across the whole image frame and throughout the entire zoom range.

Fringing Short 0.60 Long 0.37

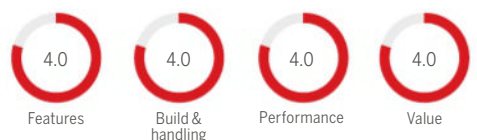
The lens does well to control colour fringing, with minimal lateral chromatic aberration even out at the edges and corners of the frame. That holds true at all focal lengths and aperture settings.

Distortion Short -10.3 Long -2.84

Like many compact lenses designed for mirrorless cameras, this one relies on in-camera correction, which can't be switched off in menu settings. Disabling correction at the editing stage reveals extreme barrel distortion in the 24-35mm sector of the zoom range.

Verdict

4.0 ★★★★★ Excellent



Full-frame compatible zoom lenses don't get any smaller than this. While it doesn't stretch into telephoto territory, wide-angle and standard focal lengths are covered in style, complete with effective optical stabilisation and snappy, near-silent autofocus. It's a lens that truly punches above its weight, although the modest aperture rating can be a limiting factor in some situations.

Super-telephoto Nikon Z 600mm f/6.3 VR S



Nikor Z 600mm f/6.3 VR S

£4,999/\$4,797

This lens packs a powerful telephoto reach and mighty performance into an unfeasibly lightweight package

www.nikon.co.uk

The Nikon Z 600mm f/6.3 VR S follows on from a few impressive super-telephoto lenses. It has the same kind of design as the Z 800mm f/6.3 VR S, based on the use of a Phase Fresnel element in the optical path, which is used in lighthouse beams and theatrical stage lights to enable a smaller, more lightweight design. The Z 600mm is smaller and lighter than the Z 800mm, weighing 1.47g, compared with 2.38g. It has a regular 95mm filter attachment thread at the front, whereas the Z 800mm takes 46mm drop-in filters at the rear.

A more recent comparable lens is the Nikon Z 180-600mm f/5.6-6.3 VR, which has the advantage of zoom versatility, although it's not a top-flight S-line lens and is heavier than the Z 600mm, at 2.14g. Cost-wise, the Z 600mm is over £1,000 cheaper than the Z 800mm, but is three times the price of the Z 180-600mm zoom.

Key features

The 600mm focal length of this lens makes it ideal for action, sports and wildlife photography, when you need distance between where you're standing and the subject you're shooting. In these scenarios, it is generally a better fit than the Z 800mm prime, whereas the latter is better for small subjects, such as bird photography. Another upside of the super-telephoto focal length is that you can compress the effect of perspective, giving a different look to landscape images.

The inclusion of a Phase Fresnel element enables a comparatively downsized design. For a 600mm prime, the dimensions of 106.5 x 278mm and front-mounted 95mm filter attachment thread make the lens manageable. That's even more true of the overall weight, which shrinks from 1,470g to just 1,390g if you remove the tripod mount. By way of comparison, the lens is barely any heavier than the Nikon Z 70-200mm f/2.8 VR S trinity zoom.

1
The inclusion of a Phase Fresnel element enables a relatively compact and manageable design.

2
Thanks to its relatively lightweight build, the lens has been engineered to make handheld telephoto shooting a breeze.

3
Handling exotica includes one customisable L-fn (Lens-function) button at the rear and four towards the front.

Other optical highlights include two ED (Extra-low Dispersion) elements and an SR (Short-wavelength Refractive) element, to enhance clarity and colour accuracy while minimising chromatic aberrations. Nano Crystal Coat is applied to guard against ghosting and flare, while a fluorine coating on the front element helps to repel moisture and greasy finger marks, as well as making the element easier to clean.

Engineered to make handheld super-telephoto shooting a breeze, thanks to its relatively lightweight build, the lens features optical Vibration Reduction, rated at 5.5 stops. This is further enhanced to six stops when used on recent camera bodies that support Synchro VR, including the Z 8, Z 9 and Z f. Autofocus is based on a linear stepping motor system, which is designed to be suitably fast for tracking rapidly moving subjects in sports and wildlife photography, as well as being virtually silent in operation.

If you want to super-size your telephoto reach, the lens is compatible with Nikon's 1.4x and 2.0x Z-system teleconverters, albeit with the usual 1-stop or 2-stop reduction in aperture, respectively. Naturally, using the lens on a DX-format Z camera gives you a 1.5x 'effective' boost in focal length to 900mm, with no aperture reduction.



The 600mm focal length of this lens makes it particularly suited for action, sports and wildlife photography, when you need distance between where you're standing and the subject you're shooting.

Build and handling

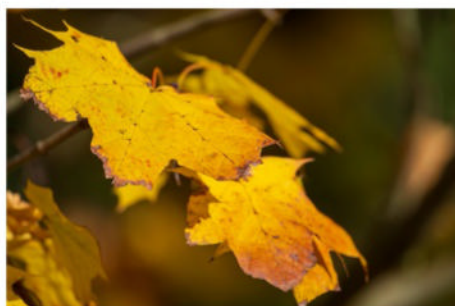
Build quality is everything you'd expect from Nikon's top-flight, S-line lenses. It feels solid, features a comprehensive set of weather-seals and, for added security, there's also a Kensington lock slot. The lightweight build makes for easy handling, but also, thanks to the Phase Fresnel element, the centre of gravity is near the rear of the lens, so it feels natural in handheld shooting. Rubber grip rings help ensure a secure and comfortable hold when shooting handheld.

Further handling exoticia includes one customisable L-fn (Lens-function) button at the rear and a rank of four customisable L-fn buttons towards the front. These are useful for the likes of AF-On, AF-Lock and AE-Lock, set up via the host camera's Custom Settings menu. The same goes for the primary and secondary control rings, which can be useful for stepless aperture control when shooting video. A Memory Set button is also here, as well as an autofocus range limiter to lock out the short end of the range.

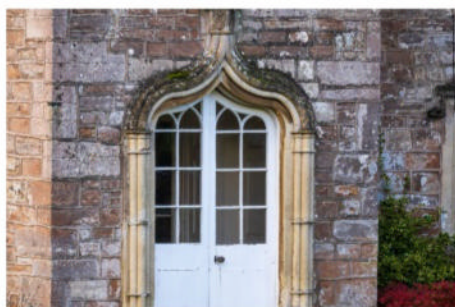
Performance

Although the f/6.3 aperture rating isn't particularly fast, the long focal length of the lens enables a tight depth of field when shooting at this aperture. Defocused areas in images look smooth, with pleasing bokeh. For outright sharpness, the lens performs excellently across the entire image frame, even when shooting wide-open. That's important, as you'll often want to shoot at the widest aperture to maintain fast shutter speeds for freezing movement, without the need to bump up your camera's ISO setting, which can degrade image quality.

Coupled with advanced tracking options in recent Nikon Z cameras, particularly for people, animals and vehicles, the lens's autofocus system proved super-quick at acquiring subjects during our testing and agile for tracking them through quick and erratic movements. Overall, every aspect of image quality and all-round performance is top-drawer. **Matthew Richards**



The long focal length enables a tight depth of field. Defocused areas look smooth with pleasing bokeh.



For outright sharpness, the lens performs excellently across the entire image frame.

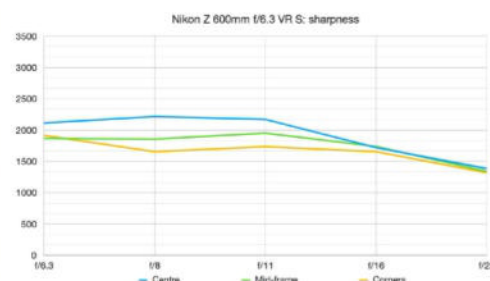


The autofocus is fast enough for tracking rapidly moving subjects and virtually silent in operation.

Super-telephoto

Specifications

Mount: Nikon Z
Lens construction: 21 elements in 14 groups
Angle of view: 4.2°
Max aperture: f/6.3
Min aperture: f/32
Diaphragm blades: 9
Min focusing distance: 4m
Max magnification ratio: 0.15x
Filter size: 95mm
Dimensions (L x D): 278 x 106.5mm
Weight: 1,470g (incl tripod ring)



Sharpness

Even shooting wide-open, which you will often want to do given the modest aperture rating, the Z 600mm is both super-sharp and remarkably consistent, right out to the extreme edges and corners of the frame.

Fringing

0.51

There's virtually no colour fringing to be seen, even in terms of lateral chromatic aberration out at the edges and corners of the image frame, where it typically tends to be more problematic.

Distortion

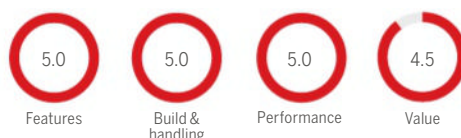
0.66

It's not quite a zero-distortion lens, however, it does come pretty close. With no in-camera correction applied, there's only the slightest hint of pincushion distortion, although that generally goes completely unnoticed in real-world shooting.

Verdict

5.0 ★★★★★

A best-in-class product



Think super-telephoto primes and heavyweights that are a pain to carry around for handheld shooting spring to mind. This 600mm lens uses a Phase Fresnel element in its optical path and crafty design work makes it a lightweight that's a real joy to use. That joy is enhanced by terrific image quality and all-round performance, along with exotic handling characteristics, but it doesn't come cheap.



System requirements

Windows (recommended)

Intel Core processor or AMD Ryzen with 8 cores. 16GB RAM, 4GB available disk space. 1920 x 1080 display. Microsoft Windows 10 version 20H2 or 11 (64-bit). NVIDIA RTX 2060, AMD Radeon RX 6600 with latest drivers

Mac (recommended)

M1 processor. 16GB RAM, 4GB available disk space. 1920 x 1080 display. macOS 12.6.8 (Monterey). M1 or Intel Mac with AMD Radeon Pro RX570

LEFT: The Luminosity Mask allows you to make precise tonal or colour selections and then modify their properties, such as darkening the colours and tones of a sky.

DxO FilmPack 7

£129/\$139 (£69/\$79 upgrade)

Give your digital photographs an analogue look with this versatile vintage film emulator

www.dxo.com

DxO FilmPack 7 was released with DxO PhotoLab 7, a tool-packed digital darkroom designed to let you manually organise and process your pictures to perfection (see our review in issue 275). DxO FilmPack 7 features a comprehensive collection of filters that emulate a wide range of old film stocks and, in some ways, does for photography what vinyl does for music. It lets you travel back in time by taking the crisp clean pixels of your digital photos and giving them an analogue look.

This retro look evokes images captured on old cameras using a wide range of darkroom techniques. Analogue artifacts such as vignetted edges and film grain also help your retro images stand out from the social media crowd's artifact-free digital images as well as allowing you to produce striking prints you can hang on your wall.

Key features

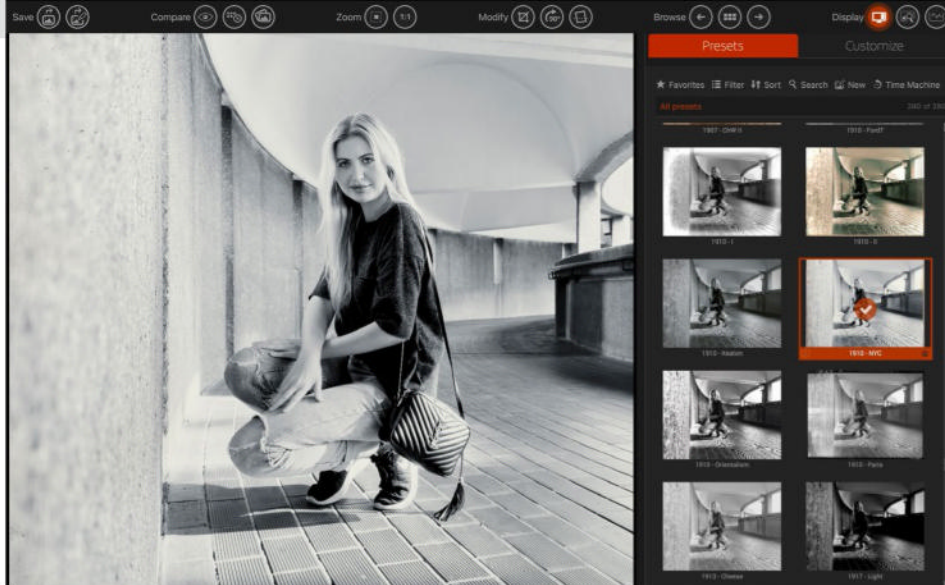
After two decades of research, DxO has developed FilmPack 7 to work its magic by digitising classic film stocks. This research has enabled FilmPack 7 to create convincing analogue prints that feature a wide range of artifacts, such as film grain from a range of positive and negative film formats. FilmPack 7's 280 presets are gathered into themed collections such as Negative Films and Slide Films. There's also a Time Machine mode that lets you browse back

through the decades to view 104 presets that emulate film stocks – from the dawn of photography to the present day. Time Machine is also an educational tool that explores the work of pioneering photographers and lets you imitate their classic style in a click.

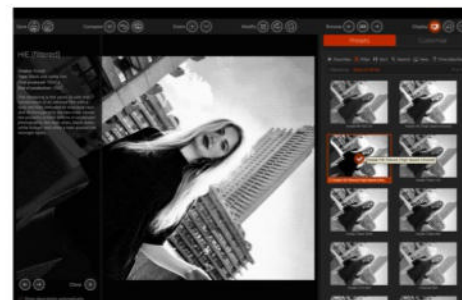
FilmPack 7's interface is reminiscent of apps designed in the noughties, with a bar at the top containing large white circles that feature chunky icons, such as crop or rotate. When you've finished adjusting a shot, the Apply or Save buttons have a bevelled 3D edge that evokes the skeuomorphism of those apps that felt the need to emulate 3D buttons on 2D screens. Given that DxO FilmPack 7 is all about emulating the past, we can forgive (and even embrace) the retro look of the workspace.

Once you've explored and applied a preset analogue look to a photo in the Presets workspace, you can click the Customise tab to access a wide range of tools to fine-tune

George Cairns/Model: Eli (Instagram: @elis_a.)

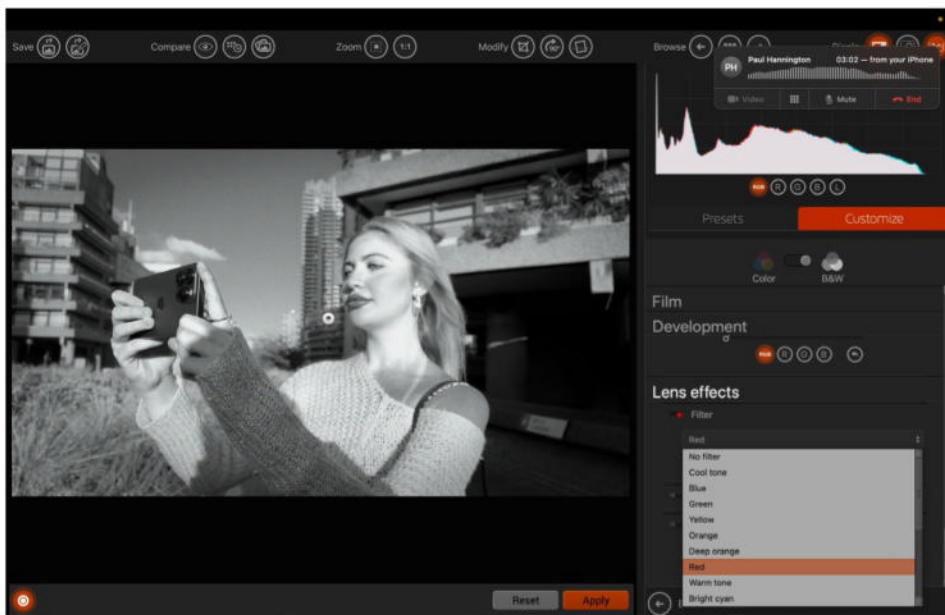


One-click presets enable you to make striking analogue-style mono conversions to your digital images.

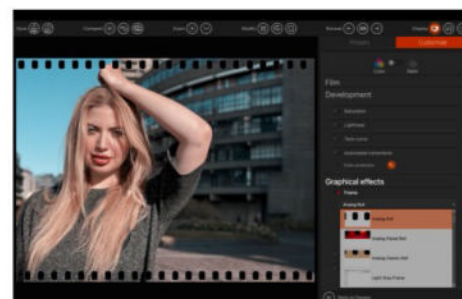


You can filter presets according to type, such as Black and White. For each filter, an information panel explains what classic film stock or photographic technique it is recreating.

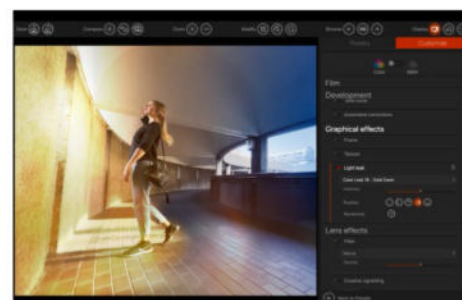
George Cairns



DxO FilmPack 7 allows you to mimic classic black and white photography techniques, such as darkening a blue sky by placing a red file over the lens.



After applying a preset, you can customise the look by adding extra graphical effects such as paper texture or a range of picture frames.



The Graphical Effect panel enables you to simulate the warm colours and fogged tones caused by light leaking into the film development process.

the style. Here, you can pick and mix different film rendering options and then add a custom grain effect. There's also the option to add other filmic artifacts such as light leakage effects and blurred vignetted edges.

The new Luminosity Masks panel enables you to sample and isolate specific areas of the image, based on colour or tone, and tweak a wide range of properties with precision. The Customise workspace also contains a collection of classic digital darkroom tools – such as Curves and a Histogram – that enable you to adjust colours and tones, though this darkroom isn't as comprehensive as the one that is featured in DxO PhotoLab 7.

Results

To get assets for this review, I hired a model and snapped her on my iPhone 15 Pro Max. It must be noted that DxO doesn't support .dng files from an iPhone (on FilmPack 7 or PhotoLab 7), so if you

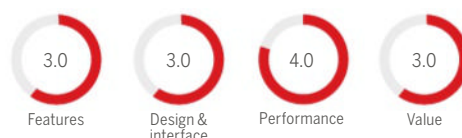
shoot in Apple ProRAW, then you will need to export the images as jpeg files first.

Despite this lack of .dng support, I enjoyed exploring how FilmPack 7's one-click presets gave my digital photos a retro analogue makeover. By adding artifacts such as film grain to portraits I was able to send my model, Eli, back in time to earlier decades. This visual variety motivated me to populate my Instagram feed with many more images than I usually do after a shoot.

I also enjoyed the ability to customise the look of a preset by adding extra analogue artifacts, such as light leakage effects that add patches of colour and fogged tones to parts of the frame. You can also add textured paper and a range of framed edges – an effective way of making a modern shot look like a retro snap that has been weathered over time. This technique worked particularly well on retro subjects, including a vintage engine I snapped at the Nene Valley Railway on the iPhone 15 Pro Max. **George Cairns**

Verdict

3.0 ★★★★☆ Good



If you own DxO PhotoLab 7, then FilmPack 7 probably isn't an essential purchase. The more expensive PhotoLab 7 also has hundreds of analogue-imitating presets, including Time Machine, and it's also packed full of a wider suite of digital darkroom tools. However, if you use another app as your main photo editor, such as Apple Photos or Adobe Photoshop, then DxO FilmPack 7 is well worth a punt as it enables you to produce a wide range of nostalgia-inducing looks in seconds – and it's considerably cheaper than PhotoLab 7.

Flash modifiers

Angela Nicholson tests three magnetic modifier kits

Hahnel Module Creative Lantern Kit

£59/\$100. Module 360 Clamp: £10/\$11;
Module 600 Clamp: £10/\$21

Add the Clamp and this kit softens flashgun light effectively and enables creative colour effects

www.hahnel.ie

Hahnel is known for its third-party camera batteries and chargers, but it also makes accessories, including remote controls, flash triggers, flashguns and flash modifiers. The Module Creative Lantern Kit is one of the company's modular flash modifier systems and requires either the Module 360 Clamp or Module 600 Clamp to mount on a flash.

Key features

The kit comes in a smart wallet that holds the key components, including the Lantern Diffuser and a filter adapter that accepts any of the six included coloured gels. The Clamp needed to attach the kit to the flashgun is purchased separately and is available in two sizes. The Clamps also allow Hahnel's other Module flash accessories to be mounted.

Both Module Clamps extend to fit over a flashgun head and spring back to hold firmly. The Module 360 Clamp opens to 35-64mm while the Module 600 Clamp stretches from

65-80mm. The two clamps have magnets within them to hold the Lantern Diffuser or the filter adapter in position over the flash.

When closed, the Lantern Diffuser looks like a U-shaped piece of plastic, but it opens to reveal a concertina-like structure made from what appears to be white paper, and it is this that spreads and diffuses the light.

Hahnel supplies six coloured filters with the kit: blue, green, purple, red, orange and yellow, cutting out between 1 EV (yellow) and 1, 2/3EV (green) of light and are intended for creative effect rather than colour correction.

Build and handling

The Module Creative Lantern Kit feels well-made, albeit primarily plastic. The Clamp feels similar to a mobile phone clamp with good tension and stays on the flashgun.

When it's closed, the Lantern Diffuser feels robust, but the diffusion material seems quite delicate and needs to be handled with care to avoid creasing the structure. Meanwhile,

the filter adapter feels durable, and the rigid colour gels snap in and out easily.

While the Lantern Diffuser can be attached directly to the Clamp, it is also possible to mount the filter adapter first and then pop the Diffuser on top. When the Diffuser is used on the Clamp, the magnetic attraction is strong, but the Diffuser slides up or down. This is avoided by mounting it on the filter adapter, which has a lip to hold the Diffuser in position.

Performance

The coloured filters may be of occasional use for creative effects, especially background or rim lighting, but the Lantern Diffuser is likely to see the most use. As well as softening the light from a flashgun, the Lantern Diffuser spreads it further across the scene so the image has more uniform exposure.

With the Lantern Diffuser in position, the highlights are less harsh and the shadows look less dramatic as there's smoother gradation, which is beneficial for portraits.

Specifications

Kit includes: Lantern Diffuser, filter adapter, six colour gel filters, wallet
Compatible with: Flashguns from around 35mm to 80mm wide with the correct Clamp
Mount: Via an expandable Clamp with magnets to hold the filter adapter and Diffuser
Material: Plastic



1 Six coloured gels are included in the kit, plus a filter adapter to attach them.



2 The Lantern Diffuser has a concertina-like structure that spreads and diffuses the light.

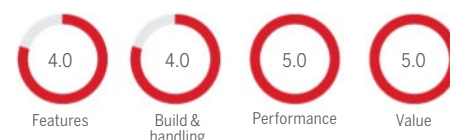


3 The kit comes in a smart wallet that holds the components, including the Lantern Diffuser.

Digital Camera verdict

Hahnel's Module Creative Lantern kit is compact and lightweight and the included case helps keep it intact in your camera bag. You can take it everywhere to soften light from your flashgun at a moment's notice. The required Clamp is extra but is easy to fit and the diffuser mounts quickly via the magnets. Just take care to avoid damaging the concertina-like Diffuser.

4.5 Outstanding



MagMod Professional Flash Kit 2

£250/\$200

Now even better and easier to use on round or rectangular flashguns

www.magnetmod.com



Specifications

Kit includes: MagGrip 2, MagSphere 2, MagGrid 2, MagBounce 2, Pro Correction Gels, soft pouch

Compatible with: Most flashguns/strobes with rectangular or round heads eg Profoto A1, Godox V1 and Westcott FJ80

Mount: Magnetic
Material: Silicone

MagMod founder Spencer Boerup had the idea for a flash modifier system using magnets. In 2013, the first system launched on Kickstarter and quickly caught the attention of portrait and wedding photographers, thanks to its robust build and ease of use. The MagGrip's design means the MagMod system can be used on a huge number of flashguns. The MagGrip 2 makes it compatible with an even wider range of flashes.

Key features

MagMod sells all its components separately, but if you're buying for the first time, it makes sense to buy a kit. The Starter Kit 2 includes the MagGrip 2, MagSphere 2 and MagGrid 2, while the Professional Flash Kit 2 adds the MagBounce 2 and Pro Correction Gels, too.

The MagGrip 2 is essential for the system. It's made from tough, stretchy silicone and fits on the head of the flash, housing magnets that enable the modifiers to be attached. The MagSphere 2 transforms a flash into a diffused omnidirectional light source, making the light softer. Made from white silicone, it has the same squishy feel as the original version but at 88g, it's 40% lighter.

Similarly, the MagBounce, which is designed for use on a flash pointing upwards rather than forwards, is made from white

silicone and is lighter than the original version. It's claimed to increase the apparent size of a flash by over 300%. Unlike most lighting grids, the MagGrid is made from silicone. It weighs under 49g, is more compact than the previous version and has magnets that enable it to mount quickly on the MagGrip 2.

MagMod's Pro Correction Gels are made from rigid polycarbonate and are easier to handle than gel sheets. Unlike the original MagMod gels that had to be mounted on a holder, the new ones have a magnet on either side and snap onto the MagGrip 2.

Build and handling

Although lighter than their predecessors, the MagGrip 2, MagSphere 2, MagGrid 2 and MagBounce 2 look similar. The MagGrip 2, however, has a larger, more rounded aperture that makes it easier to fit on flashes with a circular head. That said, it still takes a bit of wiggling to get it onto a Profoto A-series flash – if you have more than one flashgun, you won't want to swap the MagGrip between them, you'll want one for each light.

MagMod is a modular system which means that once the MagGrip is on the flash, the modifiers can be used by themselves or stacked together. There's a powerful magnetic attraction between the MagGrip and the light modifiers which means that

once the modifier is around 2cm from the MagGrip, you can let go and the MagSphere, Bounce, Grid or Gel snaps onto the flash.

MagMod supplies a drawstring bag with the Professional Flash Kit 2. Thanks to the silicone nature of the MagSphere and MagBounce, it has just enough room to fit the components, keeping everything together in your bag.

Performance

Once the MagGrip is on the flash, using the rest of the kit is a cinch. The MagSphere 2 does a good job of diffusing and softening the light so highlights are less harsh and shadows aren't as deep. If you need a wider throw of light, the MagBounce is a great choice as it spreads the flash brilliantly. Conversely, the grid reduces light spill well and there's rapid fall-off towards the edges of the frame, depending upon the direction of the flash.

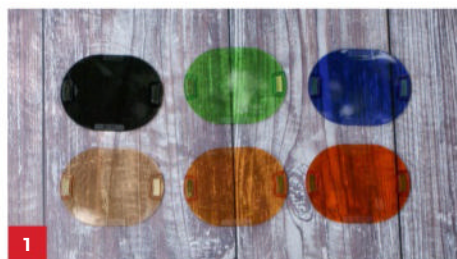
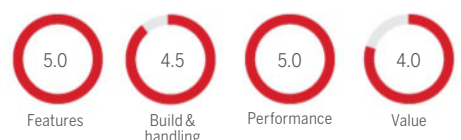
Meanwhile, the six correction gels (1/4 CTO, 1/2 CT, Full CTO, 1/2 CTB, Plus Green and 8x ND) give you good scope for matching the flash to the ambient conditions. If you want to get more creative with the colour of the flash, there are the Pro Artistic Gels and Pro Creative Gels, each with six filters.

Though not a major issue, it's worth taking care where you place the MagSphere and MagBounce when they are not in use. The silicone is a magnet for dust and dirt, and while it's not a problem in use it doesn't look good, especially in a professional setting.

Digital Camera verdict

It commands a hefty price but the MagMod Professional Flash Kit 2 is well-made, durable and easy to use. It also works well but if the price is too steep, take a look at the MagMod Starter Kit 2, which has everything you need to get more attractive results with flash.

5.0 ★★★★★ A best-in-class product



1

1 The six correction gels offer good scope for matching the flash to the ambient conditions.



2

2 MagMod is a modular system so once the MagGrip is on, modifiers can be stacked.



3

3 The drawstring bag has just enough room to keep all the components together.

Rogue Round Flash Kit + Rogue Flash Adapter (Standard)

£136/\$130

Control the light from your flashgun with magnetic modifiers for both round or rectangular heads

www.rogueflash.com

Expolmaging is best known for its Rogue FlashBender but also produces a collection of round magnetic flash modifiers that are quick and easy to use. Paired with the Rogue Flash Adapter, available in Standard or Small sizes, the circular modifiers can also be used on flashguns or strobes with a rectangular head. The Rogue Round Flash Kit is sold on its own or with the Rogue Flash Adapter, though you can buy the kit components separately.

Key features

The Rogue Round Flash Kit contains a Rogue Flash Diffuser Dome, Flash Gel Lens, Flash Grid 45 and 3-Gel Starter Set and a Storage Pouch – all you need to control, soften or colour balance light from a flashgun with a round head. It is compatible with Godox (V1, R100, and HR200 head for AD200), Geekoto (GT 250, GTR) and Westcott FJ80 flash units while a Rogue PF Adapter (£35/\$35) is required with the Profoto A1, A1X and A10. The modifiers attach directly to compatible round heads via magnetic attraction but the Profoto heads need help from the PF Adapter.

Thanks to the inclusion of the standard-sized Rogue Flash Adapter, the magnetic modifiers can be used on compatible

rectangular flashguns/strobes such as the Canon Speedlite 580EX, 600EX, Nikon Speedlight SB700, SB910, Godox TT685, V860, Metz 52 AF1, Nissin Di700A, MG10, Sony F45, F60 and Yongnuo 685. The small Rogue Flash Adapter is designed for use on smaller flashes such as the Canon 430EX, Nikon SB600 and SB800, Godox TT350, Nissin (i40, i60A) and Sony F32. Once the Adapter is mounted on the flash, the modifiers can be snapped on and off the flash in the same way as they can on round flashes.

Build and handling

The Rogue Round Flash Kit and Rogue Flash Adapter feel well made. Depending upon the size of the flash, the Flash Adapter can take a bit of stretching to fit on a rectangular strobe. The magnets hold the modifiers in place, so they aren't easily knocked off, but are also easy to remove. Expolmaging supplies a drawstring pouch to keep all the components together in your bag.

To adjust the colour of the flash, attach the Flash Gel Lens. This doesn't take much lining

up as the magnets pull it into the correct position. Then you can put the gel on the lens followed by the grid and the Diffuser Dome. If you don't want to use a gel, the grid or diffuser can be attached to the flash or Flash Adapter for rectangular flashes.

Performance

As well as being easy to use, the Rogue Round Flash Kit and Rogue Flash Adapter do their job well. The diffuser dome softens light effectively, spreading it evenly across the frame and making shadows less harsh.

Although the dome is white, it makes images slightly warmer when shooting with a camera that's set to Auto White Balance mode than when it's not used. The grid does a good job of reducing the light-spill and making the light from a flashgun more directional, so it can be targeted effectively.

There are just three gels in the kit (1/2 CTO 5700K to 3500K, Cotton Candy Pink and Blue Steel) so the options are limited. However, they're a good start and there are plenty more available on the Rogue website.

Specifications

Kit includes: Flash Diffuser Dome, Flash Gel Lens, Flash Grid 45, 3-Gel Starter Set, storage pouch
Compatible with: Godox, Geekoto and Westcott models. Flash Adapter fits most flashes
Mount: Magnetic
Material: Plastic



1 The kit comes with a 3-Gel Starter Set but there are more available on the website

2 The Flash Adapter can take a bit of stretching to fit on a rectangular strobe.

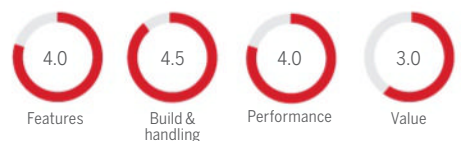
3 To adjust the colour, attach the Flash Gel Lens and magnets pull it into position.



Digital Camera verdict

The Rogue Round Flash Kit is great for anyone who wants to get a bit more creative or to capture more attractive images with flashguns or strobes that have a round head. It's easy to use and effective. The Rogue Flash Adapter extends the kit's use to flash units with rectangular heads, but make sure you buy the correct size for your strobe.

4.5 Outstanding



The results are in...

Flash modifiers

All these flash modifier kits work well and are easy to use, with magnets holding the key components in place. The Hahnel Module Creative Lantern Kit is a great choice for anyone on a budget or wanting a compact

set-up. The Rogue Kit feels more robust than the Hahnel kit and the different modifiers snap smartly in and out of position. Ultimately, however, the MagMod Professional Flash Kit is our pick of the bunch. It's versatile and durable and though it can take some wrestling

to get the MagGrip onto some flashguns, once mounted, it is easy to swap between the various modifiers. It's the most expensive system but should give years of service, it doesn't object to being squashed and if you drop anything, it will just bounce.



How the flash modifiers compare



Contact	www.hahnel.ie	magnetmod.com	rogueflash.com
Kit includes	Lantern Diffuser, filter adapter, six colour gel filters, wallet	MagGrip 2, MagSphere 2, MagGrid 2, MagBounce 2, Pro Correction Gels, soft pouch	Flash Diffuser Dome, Flash Gel Lens, Flash Grid 45, 3-Gel Starter Set, storage pouch
Compatible with	Flashguns from around 35mm to 80mm wide with the correct Clamp	Most flashguns/strobes with rectangular or round heads eg Profoto A1, Godox V1 and Westcott FJ80	Godox, Geekoto and Westcott models. Flash Adapter fits most flashes
Mount	Via an expandable Clamp with magnets to hold the filter adapter and Diffuser	Magnetic	Magnetic
Material	Plastic	Silicone	Plastic
Price	£59/\$100; Module 360 Clamp: £10/\$11 Module 600 Clamp: £10/\$21	£250/\$200	£136/\$130
Features	★★★★★	★★★★★	★★★★★
Build & handling	★★★★★	★★★★★	★★★★★
Performance	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★
Overall	★★★★★	★★★★★	★★★★★

© Lensi Photography



Dr Denise Maxwell
Photographer

The owner and photographer of Lensi Photography for 13 years, Maxwell became a professional photographer after being made redundant from her job in the NHS.

She shoots a variety of genres for a wide range of clients and her work has appeared in many different publications.

An educator as well as a photographer, Maxwell has spoken at The Photography and Video Show.

Born and raised in the Midlands, she was recently awarded a Doctor of Arts by the University of Wolverhampton.

<https://lensilearning.co.uk>

Instagram: @lensi_photography

Dr Denise Maxwell

The photographer and educator gives **Niall Hampton** some insights into making a living from photography – the title of her talks at The Photography Show



Denise Maxwell returns to the NEC in Birmingham on 16 and 17 March to give a talk on how to make money from photography. A regular visitor to the show, first as a punter and then as a speaker, Maxwell has enjoyed a successful and rewarding photographic journey. Focusing on more than one genre, Maxwell just loves taking photos – and inspiring and teaching others to do the same. And she will appear at The Photography Show with a new title – she was recently awarded a Doctor of Arts by the University of Wolverhampton.

We sat down with Maxwell to discover more about her career to date, and to get a taste of her upcoming speaking engagements in March...



Your talks are titled 'How do you make money from photography?' What you will be covering?

Everyone can expect a frank and honest workshop where I will explicitly talk about money – one thing that so many photographic workshops shy away from – what can I actually earn from doing job X, Y or Z?

The audience can also expect some jokes because we are also going to be there to have fun, and a relatable workshop that will help them understand how doable making money from photography is. There will be no talk about f-stops, the best lenses or buying the latest cameras... just a snippet of how I make my money and how the audience can, too.

I have attended so many workshops over many years and have always felt like they have stopped short of

sharing real gems – often peripheral general details – which has left me feeling cheated. It's as though everything is secretive. In all of my courses, I share real pounds and pennies, state how I go into this type of work and give people the formula for how they can, too. In the eight-week course I deliver, participants have already started to implement what they have learned before the course ends.

I run courses that teach photographers how to earn £5-10k per month from photography, as I do. My talks will be a snippet of some of the information I teach in my courses. I got tired of hearing some photographers and even lecturers speak about how there was no money in the industry anymore when I have found the opposite; it is a great industry to be in and people have →

Above: Sherrell SB Dillion modelling for the She-yepé photoshoot, 2023.

**DON'T MISS
DENISE'S
TALKS!**

16 & 17 March at 11.50am

www.photographyshow.com



© Lensi Photography

Above: will.i.am at Cannes Lions International Festival of Creativity, 2023.

never needed as many images as they do now. Clients need images for their social media feeds, websites, newsletters and events, to bring their businesses online – and so much more.

This is why I decided to speak on this subject and create workshops and courses. It was something I was not taught when studying, and I still speak to photographers leaving three-year degrees and master's degrees with no clue about how they will earn money after the course. So it is still not largely being taught. Yet it is the one thing photographers need to know to make a go of being a full-time photographer. I find this is one of the most asked questions I see in photography groups, so I know it is still a mystery to so many people.

Currently, I have 10 income streams from photography. In the time I have for the talk, I will teach participants how to set up and earn from different streams and what they can earn from them. So this workshop will be for anyone who is serious about wanting to earn an income from their photography, wanting to make it their full-time job as I did and have

done. Yes, it is a joy to be creative and do it for the fun of it, but photographic equipment is expensive and we still all have bills to pay! Imagine being able to combine both – being creative and paying your bills at the same time. This is my life as a full-time photographer.

What has your photographic journey been so far?

Do I start from when I used to borrow my mum's 110 Kodak film camera to take to junior school? Or my own 35mm camera from the days before mobile phones which I used to take everywhere with me? I started with on-site event studios, weddings and portraits. I was made redundant from a career in the NHS, which was devastating at the time. I earned a good salary, did a job I loved and worked with colleagues I liked; I could not imagine finding anything better. That was a blessing in disguise. The saying 'Good things come to an end to make way for more good things', has been my experience; I became a full-time photographer.

I now cover a wide mix of different genres, everything from sports to red carpets, events, fashion, portraits, campaigns... I like the variety and I love the fact that I'm shooting different things on different days – it means nothing gets boring. Now, 13 years in, I still love my job and I am not sure how many others can say that.

I now also give back in many ways. I mentor emerging photographers, I do equipment giveaways as an ambassador, I also offer opportunities where

“I cover everything from sports to red carpets, events, fashion and portraits – it means nothing gets boring”



© Lensi Photography

Above: Iru performs 'Echo' for Georgia at Eurovision 2023 in Liverpool, UK.

emerging photographers can shadow me on real commissions sponsored by MPB and I lecture in various educational establishments around the UK.

My journey has taken me to places beyond where I dreamed of, events I used to watch on TV, working with people I grew up watching. In December, for example, I worked with two of my childhood icons, Linford Christie and Baroness Floella Benjamin. When I was little, I used to have the same plait and beaded hairstyle as Floella and I grew up watching Linford beat the USA in athletics. I would never have thought I would ever end up working with them. They are now both proudly added to my selfie collection!

Which kind of photography do you shoot most?

Are you a master of one – or several – genres?

I am a master of many and, yes, I can proudly say that. I don't subscribe to the idea that you can only cover one genre well. In other parts of the creative world, people cover multiple genres: people like Jamie Fox and Kano are both actors and musicians. We have so many singers and songwriters, and multidisciplinary artists, like Dr Vanley Burke. We are surrounded by examples of creatives covering many genres, but do not label it as such, or make anything of it – except in photography.

That is not to say there is anything wrong with being a master of one genre. It suits some people; it just

would not suit me. I have always had jobs that require variety, where I do different things on different days. As a photographer, I am just continuing what I have always done in previous roles.

Has your career turned out the way you expected, or have there been some unexpected changes of direction to deal with along the way?

It has turned out nothing like what I expected. I always thought I would be successful shooting weddings and events – there is nothing wrong with these genres, I would have been happy if this was my path.

But my career has gone beyond what I ever imagined. I attended The Photography Show and its predecessor for many years whilst a student and in the earlier parts of my career. I attended talks, met up with friends and made purchases. Now I am one of the speakers that others are coming to see and I have had amazing feedback from speaking in previous years. How about that for the world throwing curveballs I didn't expect?

Last month, I photographed The Fashion Awards, a red carpet of people I have watched on TV. I have shot premieres for Netflix series, like *The Crown*, and then suddenly, the actors were standing in front of me.

I spent part of my summer at the Cannes Lions Festival, a festival of creativity for the leading creative agencies and big companies in the world, —————>



© Lensi Photography

Above: Maya Jama at The Fashion Awards, London's Royal Albert Hall, 2023.

attending as a delegate creative workshops run by well-known names including Halle Berry, will.i.am, Kevin Hart, Denai Guerra and Issa Ray, to name just a few.

I could offer so many similar anecdotes that could probably fill the magazine! I now earn what I did in a month in a few days. I do a job I love that brings me to amazing places and I have the freedom to give back. It is not where I thought I would be but I always say I feel completely blessed to be where I am.

How did your honorary degree come about?

The first I knew about it was getting a letter one morning. I read it, then wondered who was pranking me. From what I now understand, it works in a similar way to honours, where you are nominated. Then it goes to the university committee, who vote on it. The letter I received confirmed that it was a unanimous decision and that the committee was particularly excited that I was an alumnus of the university and that I had stayed in the local area to pass my skills on to others. It also cited that it was for ground-breaking achievements in my field where I was an inspiration to others. Not bad at all for a working-class girl from the Black Country!

Does the degree award require you to do any teaching or mentoring?

Not specifically, but this is something I do anyway. Being part of the alumni, it also makes sense that

I would do some work at my former university. I am currently arranging to do some work with the university photography department. I would have really appreciated hearing from a working photographer when I was at college, not someone who was famous and beyond my reach, so I hope to be that 'see it so you can be it' person for others.

One of the young women from the photography degree also won one of my shadowing opportunities and came to shadow me at one of Birmingham's biggest award events. She got to have selfies with all her favourite influencers as an added bonus, in addition to learning how to cover a big awards event.

There are multiple ways to earn a living from photography these days – from being commissioned to running workshops, and much in between – but for anyone who's looking to turn pro, what do you think should they focus on most?

This is going to sound simple, but practice! Nothing is going to happen without you being able to deliver when opportunities come your way, or having a portfolio so clients will want to hire you. The first thing to work on is your portfolio and getting to know how to deliver in any situation, knowing your camera inside out. I hear some photographers speak about not having picked up their cameras for months and, honestly, I am shocked when I hear this! If you are not yet full-time, this is your time to



have fun and practise without the pressure of deadlines and clients. Shoot something, shoot everything!

Imagine getting your dream commission but failing because you are unfamiliar with that kind of shoot and aren't quite sure how to control your lighting in that environment or which lens would be best. Practice will ensure you do not end up in this predicament.

Some photographers like to recharge their creative batteries by experimenting with a style of photography they don't normally practise. Do you do this, or do you have another way of recharging?

Because I shoot so many different things, I continually experiment, but I would still say my style is consistent across all genres. If I use the analogy of clothes, for example, whether you are attending a wedding, a party or a business function, your clothes may be different but your style would be the same across all events. I see photography as the same.

My style has been described as vibrant and clean; when I first heard that, I thought to myself, 'Yes, that's me'. I am not a fan of muted colours and changing the original tones of colours and so on, and whether I am shooting food or people, I do love to see colour and I hate to see clutter. So my style remains consistent.

I also get to work with so many different photographers from every corner of the photography world, so I naturally come across so many styles and

inspirations. This is one of the things that keeps my creative batteries charged. So yes, you will see me exhibiting in an art exhibition one week and on a red carpet in the rain the next.

While there has been progress in recent years, does much more need to be done to introduce more varied and diverse voices into photography and photographic storytelling?

I appreciate that The Photography Show is doing more to ensure it is more diverse. This is one of the reasons I stopped attending years ago; I could not relate to many of the speakers. Their issues and paths through photography were very different to mine. I wanted to see people I could relate to more, on various aspects of who I am – working class, female, black – who'd had careers in other areas, who had not been given silver spoons and succeeded through connections.

When I teach at universities and colleges the classes are very mixed, but this is not →

Above: Nensi Dojaka Fashion Show, London Fashion Week, February 2023.

“The university was excited that I was an alumnus and had stayed in the local area to pass my skills to others”



© Lensi Photography

reflected in full-time photography. So something is happening between the student stage and the full-time experience because the wider photography space is still very homogeneous.

For example, I do a lot of press and red carpet work and I am often one of the very few black people or women in the pit – yet I know loads of female and black photographers. This is the same with agency and ‘stringer’ photographers; I know one single full-time black photographer who works for a major agency. Each year, when I see new ones taken on and I start to see new faces, in all the years I have been shooting, I have never seen a black one, and have only seen a handful of females.

So in news, for example, we are largely viewing the news and the images that tell these stories through one lens – that of a male, white middle-aged one. Some people may be reading this thinking, ‘Why does this

“We all have a set of personal value filters that we apply each time we create an image”

matter?’ Unfortunately, it does. We all have a set of personal value filters that we apply each time we create an image – these are developed through our lived experiences. If a limited set of value filters and experiences produce all the images, the news and the storytelling around it then it is nowhere near subjective.

This year, I attended a workshop at Cannes Lions about advertising around the menopause. The speakers were saying that adverts have changed since more women have started working at the concepts, production and photography stages of advertising; the adverts are now a lot more direct and true to the lived experiences of women. This is just one example of how personal value filters that we gain through our lived experiences affect an image or advertising campaign.

I have seen the same reflected when it comes to many issues. You see an image and think, ‘Who would really take that image or shoot the scene like that?’ And you can only come to the conclusion that it is how that person sees and experiences the world.

So there is much more work to be done to level the field. Some genres are more diverse, such as wedding or portrait photography, but in my experience, PR, press, sport, red carpet events and fashion, to name just a few, are all pretty homogenous. If anyone reading this has the influence to change how PR agencies accredit photographers for press events, then please have a word! ●

Above: Singer Lionel Richie performing at the Cambridge Club Festival, June 2023.



‘How do you make money from photography?’ takes place at The Photography & Video Show on 16 and 17 March at 11.50am. Tickets cost £10 per person, and are on sale now: www.photographyshow.com

Next month

BUDGET PHOTOS SPECIAL

Get the most from your camera kit with our expert tips and tricks!



**SUBSCRIBE
TODAY
AND GET A
LOWEPRO CAMERA
BAG **WORTH £60!****

Have *Digital Camera* delivered to your door and save money on the newsstand price
Page 40



REGULARS

10 all-new photo projects
Camera Clinic: Lenses
Expert editing tutorials
One to One pro masterclass

ON TEST

Leica M11-P
Tamron 70-180mm
F2.8 Di III VC VXD
DJI Mini 4 Pro

ON SALE Friday 2 February

Download our digital editions, or buy in print while stocks last

BACK ISSUES



The digital advantage

Digital magazines can travel with you – even if you delete them, they are free to download again later. Subscribe today by visiting:

www.magazinesdirect.com/categories/photography-and-design

Available on



Available on the following:

Apple iOS devices

Get the free *Digital Camera* app for your iPad, iPhone or iPod Touch at: www.bit.ly/app_DCM (UK) or www.bit.ly/app_DCW (outside UK)

Then browse through our back issues or buy a subscription (see page 40 for offers) using the app.

Android, PC or Mac

Zinio
www.bit.ly/DCW_Zinio
Pocket Mags
www.pocketmags.com

Other options

Digital Camera is available for Kobo, Kindle, Nook and more (see above). It can also be found on the all-you-can-read Readly magazine app: <https://gb.readly.com/>

Printed back issues

Prefer print? We also sell a limited selection of recent back issues – issues 269-276 are currently available. Each issue costs £5.80, plus postage. Overseas dispatch costs \$13.80, plus postage.

To browse the contents of each issue, please see the listings on the opposite page.

www.bit.ly/dcmback
or visit magazinesdirect.com and click **Single Issues** in the top toolbar



Print issue binders

Keep your magazines together with our binder, which neatly holds a year's worth of issues.

www.magazinesdirect.com/merchandise/categories/binders





Issue 276
January 2024
 24 photo ideas for the new year / 68 mins of video tutorials / Nikon Z f review / OM System TG-7 review / Eight-page Buyer's Guide / Wildlife Photographer of the Year awards / Christophe Jacrot interview



Issue 275
December 2023
 Urban scenes: How to find beauty in buildings / 50 mins of video tutorials / Panasonic Lumix G9 II review / Apple iPhone 15 Pro Max review / Eight-page Buyer's Guide / Landscape PotY Awards 2023 / Greg Oakley interview



Issue 274
November 2023
 Seven steps to stunning landscapes: Capture your best-ever scenic shots / 33 mins of video tutorials / Sony ZV-1 II review / Eight-page Buyer's Guide / The Cewe Photo Awards 2023 / James and Karla Murray interview



Issue 273
October 2023
 Go for gold: Capture autumn like a pro / 47 mins of video tutorials / Sony A6700 review / Eight-page Buyer's Guide / The International Portrait Photographer of the Year Awards 2023 / Andy Summers interview



Issue 272
September 2023
 Super Stars: Capture the night sky with basic kit / 66 minutes of expert video tutorials / Travel PotY awards / Leica Q3 hands-on preview / Panasonic Lumix S5 IIX hands-on preview / Dani Connor interview



Issue 271
August 2023
 Shoot the coast: How to capture superb seascapes / 45 minutes of expert video tutorials / The Canarian Photo Awards 2023 / Canon EOS R100 review / Fujifilm X-S20 hands-on preview / David Hurn interview



Issue 270
July 2023
 Wildlife special: Capture creatures and critters like a pro / 39 minutes of video tutorials / Portable SSDs group test / Pink Lady Food Photographer of the Year 2023 / Nikon Z 8 review / Mike Will interview



Issue 269
June 2023
 Travel photo tips: Top techniques for home and away / 45 minutes of video tutorials / ND filters group test / Concrete in Life 2022 awards / Leica M11 Monochrom review / Andrea Gjestvang interview



Issue 268
May 2023
 Master Lightroom: How to get the most from your captures / 44 minutes of video tutorials / Travel tripods group test / Sony World Photography Awards 2023 / Pentax KF review / Graeme Green interview



Issue 267
Spring 2023
 Shoot the spring: Capture spring like a pro with our in-depth guide / 45 mins of video tutorials / Filter holders group test / International Garden PotY awards 2023 / Panasonic Lumix S5 II review / Benedict Brain interview



Issue 266
Apr 2023
 Fix your framing: Expert tips for composing pictures like a pro / 40 minutes of video tutorials / Photo backpacks group test / Close-up PotY 04 showcase / Canon EOS R8 hands-on review / Luc Kordas interview



Issue 265
Mar 2023
 Filters special: Take creative control of outdoor exposures / Image editors group test / Google Pixel 7 Pro and GoPro Hero 11 Black reviews / Paul Nicklen on the power of visual storytelling / Kaylee Greer interview



Issue 264
Feb 2023
 Painting with light: Light trails, fire spins, light orbs & more! / Photo printers group test / Sony A7R V hands-on and Canon EOS R6 Mk II review / Affinity Photo 2 review / Tristan Dicks and Will Burrard-Lucas interview



Issue 263
Jan 2023
 Top tips for 2023: Start planning your best-ever photo year / 5 best-buy SD UHS-II cards / Fujifilm X-T5 hands-on and OM System OM-5 review / Create your own photobooks / Michael Freeman interview



Issue 262
Dec 2022
 Master Raw: 10 essential editing steps for transforming your captures / Gift guide: Photo products for all budgets / Apple iPhone 14 Pro Max review / Low-light photography guide / Neil Aldridge interview

Mifsuds Photographic Ltd Est. 1954.

Family Run Pro Dealership With Friendly, Knowledgeable Staff.

27-29, Bolton Street, Brixham. Devon. TQ5 9BZ.

www.mifsuds.com 01803 852400 info@mifsuds.com

Current opening times: - **Tuesday - Saturday 10 am till 2pm.**

*Proudly Celebrating 70 Years Of Serving
The Photographic Community*



*As a thank you to the many customers who have supported us during these fabulous years,
we are planning a series of promotions and giveaways throughout 2024,
so be sure to keep checking our website...*

WWW.MIFSUDS.COM for full details.

Remember too that we have the West Country's best selection of used & new stock....

DIGITAL (DSLR / Mirrorless) - **FILM** (35mm-6x7)
LENSES (AF / MF) - **ACCESSORIES** Etc.

Or sign up via the website, to receive regular updates on the latest news of what is new and happening at

MIFSUDS PHOTOGRAPHIC.



*This is the camera used
to photograph weddings
back when the business
first opened*

THE BEST STOCKED DEALER IN THE WEST COUNTRY

WANTED
YOUR FILM AND DIGITAL KIT



UPGRADE NOW - PART EXCHANGE & COLLECTION ARRANGED Subject to postcode

CALL MATT 0736 828 8126 8am till 8pm daily

Sensor cleaning and Pro equipment hire available

ANY PRICES SHOWN INCLUDE U.K. MAINLAND DELIVERY. Correct 01/12/2023. E&OE.

Website updated daily inc. promotions

The best stocked dealer in the West Country

QUALITY USED EQUIPMENT - Checked, Tested and Warrantied. More on website - www.mifsuds.com.

Used Canon



Table of Canon R3, R5, and R6 mirrorless camera bodies with prices ranging from £1299 to £4499.

Used Canon



Table of Canon RF lenses with prices ranging from £1199 to £1899.

Used Canon



Table of Canon RF lenses with prices ranging from £1299 to £499.

Used Nikon



Table of Nikon Z lenses with prices ranging from £399 to £1199.

Used Nikon



Table of Nikon F lenses with prices ranging from £999 to £5999.

Used Nikon



Table of Sigma lenses with prices ranging from £4499 to £2499.

35mm AUTO/MANUAL FOCUS CAMERAS & ACCESSORIES, CANON, MINOLTA, NIKON, OLYMPUS, PENTAX, ETC. USED

Large table listing various 35mm cameras and accessories from brands like Canon, Minolta, Nikon, Olympus, and Pentax.

BRONICA, FUJI, HASSELBLAD, MAMIYA, PENTAX ETC. MEDIUM FORMAT USED

Table listing medium format cameras and accessories from brands like Bronica, Fuji, Hasselblad, Mamiya, and Pentax.

35mm AUTO/MANUAL FOCUS CAMERAS & ACCESSORIES, CANON, MINOLTA, NIKON, OLYMPUS, PENTAX, ETC. USED

Table listing 35mm cameras and accessories from brands like Canon, Minolta, Nikon, Olympus, and Pentax.

ITEM YOU REQUIRE NOT LISTED? EMAIL DETAILS OF WHAT YOU ARE LOOKING FOR AND WE WILL EMAIL YOU WHEN WE CAN HELP. Mail order used items sold on 10 day approval.



with Chris George

What the f-stop?

How much do you really know about photography? Test yourself to the max every issue with our tricky trivia quiz!

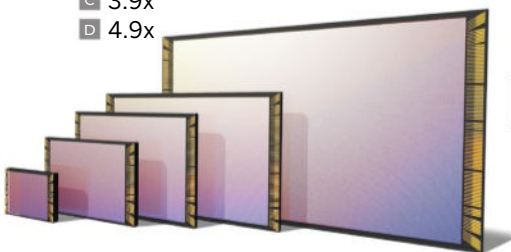
Fotoeventis / Alamy Stock Photo



Getty/Gareth Cattermole/Staff

- 1** Where were Argus cameras made (and where is the Argus Museum located today)?
- A Ann Arbor, Michigan
 - B Alice Springs, Australia
 - C Beverly, Massachusetts
 - D Santa Barbara, California

- 2** How much bigger is a full-frame sensor compared with a Micro Four Thirds sensor?
- A 1.9x
 - B 2.9x
 - C 3.9x
 - D 4.9x



- 3** Which photographer was recently named the art world's most influential person (in the annual ArtReview Power 100 list)?
- A Annie Liebowitz
 - B Nan Goldin
 - C Cindy Sherman
 - D Cristina Mittermeier

- 4** Which photographer came up with the idea of the 'decisive moment'?
- A George Eastman
 - B Ansel Adams
 - C Robert Doisneau
 - D Henri Cartier-Bresson

- 5** Which singer-songwriter (and keen photographer) is holding the Leica?
- A Craig David
 - B Usher
 - C Lenny Kravitz
 - D Prince

- 6** What is the diameter of the bolt used to attach a tripod to a DSLR and most other cameras?
- A 1/3in
 - B 1/4in
 - C 1/5in
 - D 1/6in

- 7** What is the noble gas used in standard flashguns?
- A Argon
 - B Neon
 - C Xenon
 - D Radon

- 8** How many exposures would you expect using a 120 film in a 645 medium-format camera?
- A 10
 - B 12
 - C 15
 - D 18

- 9** Which of these is not a book by Sebastiao Salgado?
- A Genesis
 - B Amazonia
 - C Exodus
 - D Leviticus

- 10** The first-ever aerial photographs were taken of which city?
- A London
 - B New York
 - C Liverpool
 - D Paris

How did you do?

10 points You're a photo mastermind!
8-9 points Fantastic, you're a brainiac
6-7 points Really good score
4-5 points Respectable, but no cigar
2-3 points We'll keep your score secret
0-1 points Epic fail

ANSWERS 1A,2C,3B,4D,5C,6B,7C,8C,9D,10D



The Latest New Products & Special Offers available from Park Cameras!

Nikon Z f

Make it iconic



NEW!

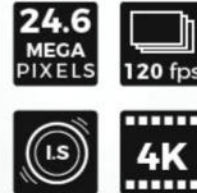
STOCK NOW AVAILABLE!

Z f Body **£2,299.00**
 Z f + Z 24-70mm f/4 **£2,849.00**
 See website for even more lens bundles with the Nikon Z f.

Add the Nikon FTZ Mark II lens mount adapter for **HALF PRICE** when bought with the Nikon Z f. See website for full details.

Sony a9 III

The power of one frame



NEW & COMING SOON!

Watch our first-thoughts video at youtu.be/OPcqeJKZHXM

a9 III Body **£6,099.00**
 + VG-C5 Grip **£6,488.00**
Stock expected January 2024
 See web for details

SPREAD THE COST: Pay £154.77 per month for 48 months. Minimum deposit 10%. 16.9% APR

Nikon Z 8

Body Only



In stock at only
£3,999.00

£270 trade-in bonus available! Ends 31.01.24

Nikon Z 24-70mm

f/2.8 S



In stock at only
£1,889.00

Save 10% off selected Hoya filters with this lens.

Nikon Z 135mm

f/1.8 S Plena



In stock at only
£2,699.00

Spread the cost with our finance options. See web.

Sony a7R V

Body Only



In stock at only
£3,469.00*

*You pay £3,869 & claim £400 from Sony UK.

Sony FE 24-70mm

f/2.8 GM



In stock at only
£1,379.00*

*You pay £1,579 & claim £200 from Sony UK.

Sony FE 100-400mm

f/4.5-5.6 GM OSS



In stock at only
£1,949.00*

*You pay £2,149 & claim £200 from Sony UK.

Polaroid Go Generation 2

Instant Camera



In stock at
£79

Available in Red, White or Black Designs

Zeiss Secacam 5

Trail Camera



Coming Soon!
£199

Watch our video at youtu.be/W8VxnJLM7qI

Pentax WG-90

Waterproof Camera



Coming Soon!
£379

Expected Jan. 2024
 See website to learn more

Insta360 Ace Pro

Action Camera



In stock at
£429

Read our review at bit.ly/Ace-Pro-Review

Sigma 70-200mm

f/2.8 DG DN OS | S



Sony E-Mount
£1,499.00

NOW IN STOCK!
 See website to learn more

Wandrdr PRVKE 21L V3

Backpack



In stock at
£219

Available in Disnet Grey.
 See website to learn more

Happy New Year!
 Want to be -in-the-know about all the latest products for 2024?
 If so, be sure to check out www.parkcameras.com/new-products, watch our YouTube channel or sign up for our e-mails to get the latest info straight into your inbox!

TRADE-IN OR SELL YOUR KIT WITH PARK CAMERAS

FAIR HONEST QUOTES: values received INSTANTLY

FREE COLLECTION SERVICE: See website to learn more

TRADE-IN BONUSES: available on a wide range of products

FREE HOME COLLECTION AVAILABLE*

*For equipment valued over £300



The Photography & Video Show

16-19 March 2024
The NEC,
Birmingham

Tickets on
sale now!



The destination for anyone
passionate about photography,
video or content creation.

250+ exhibiting brands | 300 live talks & demos | Endless inspiration

Get 20% off standard ticket rates with code **DCAMTPS24***
Visit **photographyshow.com** to claim

Free entry for professional photographers**

*Discount applies to standard adult entry only and cannot be used in conjunction with any other promotion, including concession rates.
The code expires at midnight on 14 March 2024 and cannot be applied retrospectively.

**Professional photographers, videographers, content creators and image-making industry representatives can apply for FREE entry to the show.
All applications must be made before midnight on 15th March 2024 and will be verified against specific criteria.