

The Wonderfully Wide World Of Canon's RF 7-14mm Fisheye Zoom



AUSTRALIAN

CAMERA

INSPIRE YOUR PHOTOGRAPHY

PORTFOLIO

A Native Returns

Capturing The Human Heart
And Soul Of Sicily

ON TEST

Value Added

Fujifilm's X-T30 III Is An Even Better Buy



Viewing Pleasure

12th International
Landscape Photographer
Of The Year Winners

Work And Play

Four Decades Of Memorable
Camera Launches



CLASSIC TEST

Getting To Grips With The Mamiya RB67

FUTURE ISSUE 436 A\$11.95



01

9 771449 013005

NIKKOR Z

OUR FASTEST AUTOFOCUS EVER



NIKKOR Z 24-70mm f/2.8 S II

- 5× Faster Focusing than the original Z 24-70mm f/2.8 S
- World's lightest full-frame 24-70mm f/2.8*
- World's first full-frame 24-70mm f/2.8 with internal zoom*
- 50% quieter and smoother



More versatile and stable with the world's first internal zoom in this class*. Faster and quieter with Nikon's best AF system to date. Smaller, lighter and more durable—all with a new optical formula that takes sharpness, bokeh and anti-glare performance to thrilling new level.

*As of August 22, 2025, among 24–70mm f/2.8 interchangeable lenses for full-frame/FX-format mirrorless cameras. Based on Nikon research.



Privacy statement

If you provide information about yourself this will be used to provide you with products or services you have requested. We may supply your information to contractors to enable us to do this. Future Publishing Australia will also use your information to inform you of other publications, products, services and events. Future Publishing Australia may also give your information to organisations that are providing special prizes or offers and are clearly associated with the Reader Offer. Unless you tell us not to, Future Publishing Australia may give your information to other organisations that may use it to inform you of other products, services or events. If you would like to gain access to the information Future Publishing Australia holds about you, please contact us.



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

Chief executive Kevin Li Ying
Non-executive chairman Richard Huntingford
Chief financial officer Penny Ladkin-Brand

Tel +44 (0)1225 442 244



Camera magazine is a member of the Technical Image Press Association.
Visit www.tipa.com

Last man standing... well, nearly. If you're still in love with the DSLR, get the ab fab Canon EOS 5D Mark IV while you can. There are now just two Canon DSLR models left on sale in Australia.

INFOCUS



HOW THE MIGHTY HAVE FALLEN

Making the various updates to the Camera Buyers Checklists in this issue, I was shocked to see that Canon Australia is now listing just two DSLRs as being. Two! Out of curiosity, I trawled through some back issues to see how this decline had progressed. In the November/December 2017 issue there were 16 Canon DSLRs listed and 41 in total... Nikon having an even healthier line-up of 17 models. The following year, both Canon and Nikon launched their full frame mirrorless systems, but in the November/December 2018 issue – in which we previewed the new Canon EOS R – there were still 13 EOS DSLRs that you could buy, and 32 models on sale in Australia in total.

So, around seven-and-a-half years later, we're down to nine which is probably really eight because the Nikon D6 is discontinued, but is still listed on Nikon Australia's Website as there may still be a few floating around in stock somewhere (although we couldn't find a new one at any of our main camera retailers). The lens situation is equally dire. Yet, I still see plenty of DSLRs in use – you may well be among this cohort – so, if there's still some demand, why the fairly ruthless closing down of a category? Ricoh, of course, remains active with the Pentax brand, but then there hasn't been a new DSLR model in ages and its line-up is shrinking too.

It's almost certainly all about money with, logically, all available resources going to further developing and expanding the mirrorless systems, but let's face it, it's not as if there was anything wrong with the last-gen DSLRs. They were – or are – nowhere near their use-by dates and, besides, many photographers still love the optical viewfinder for a number of good reasons.

I'm certainly not bashing mirrorless cameras because I've been using them for years and there are some real benefits that

are directly derived from the configuration. However, I do think it's a pity that some – actually probably many – photographers are essentially having their hands forced when it comes to replacing their much-loved DSLRs. It wouldn't perhaps be so bad if these cameras were the photographic equivalent of the horse-and-cart, but they're still very current in their key capabilities – not everybody needs to shoot at 30 fps or faster – especially if you're mostly shooting only stills. Changing camera systems can be challenging – not to mention expensive if a few lenses are involved – and, in this instance, staying with the same brand doesn't less the pain by much.

The reality now, though, is that if you're ready to replace your DSLR, there's very little choice if you really want to stick with the reflex configuration. Notably, you can still buy the mighty EOS 5D Mark IV so, whatever EF mount body you've got now, this is still a great buy and likely a decent upgrade. Similarly, Nikon's D780 or the D850 if you've got the extra budget. These are as good as the full frame DSLR got for enthusiast-level shooters, unless you really needed the higher spec of the now-gone pro-level bodies. Frankly, if it were me, I'd be finding the money because these cameras will still serve you well for a long time, and it's really not guaranteed that they'll be sticking around. Certainly, if you have a nice workable kit of EF or F mount lenses, it's a no-brainer. Can't say that you'll be able to do it again in the future – the transition to mirrorless will still have to happen – but for now you'll be keeping DSLR photography alive. The DSLR is dead, long live the DSLR! ye'.

Paul Burrows, Editor.

CONTENTS

AUSTRALIAN CAMERA MAGAZINE – ISSUE 436

56

COMPETITION – 12TH INTERNATIONAL LANDSCAPE PHOTOGRAPHER OF THE YEAR

Is winning a landscape photo competition the biggest challenge? Most of us can all access great landscapes – especially in this country – so standing out from the crowd requires something special in terms of the location, lighting, vision and, vitally, dedication. Here's what special looks like when it all comes together in a winning landscape shot.

Image by Dennis Hualong Zhang © 2026

REGULARS

6 WHAT'S NEW

The compact camera revival looks to be more than a brief fad as Canon launches a limited edition of the camera which started it all – the PowerShot G7X Mark III – and increases production of the standard model again. Ricoh is doing its bit too, releasing a Monochrome version of the hot-selling GR IV compact which is likely to be an even big hit with street photographers.

For users of Canon's RF mount mirrorless system, there are two highly desirable new lenses – the remarkable 7-14mm fish-eye zoom (on test in this issue) and the 14mm f/1.4 VCM. OM Digital Solutions introduces a new dedicated astrophotography camera based on its retro-style OM-3 which means it has useful tech including the 'Cross Quad Pixel AF' system and the more powerful

'TruPic X' dual quad-core processor. After a full reworking of its Z mount 24-70mm f/2.8 standard zoom, Nikon has done the same with the companion 70-200mm f/2.8 and the new model is smaller and lighter with higher performance optics.

From Panasonic comes a new compact on-camera microphone which boasts 32-bit 'float' levelling, adjustable pick-up patterns and four-channel recording. Better still, it communicates via the hotshoe with the latest Lumix S bodies so no more pesky cables.

14 LIGHT WORK

These pictorial features are designed to help you better appreciate how successful photographers deal with different subjects and situations to create a memorable

photograph. In this issue, it's the story of the clever photograph which achieved Gold in this year's World Sports Photography Awards.

78 SIGMA SHOWCASE 2025

Our Showcase sponsor, Sigma lenses – via the Australian distributor, C.R. Kennedy Photo Imaging – is providing the competition's grand prize of a lens – your choice of model and mount – valued at up to \$1000. The 2025 Showcase's overall winner is announced in this issue and we kick off the 2026 competition with the first round. It's easy to be in the running for this year's grand prize. Submit your entries online at camera@futurenet.com

80 CAMERA BUYER'S CHECKLISTS – MIRRORLESS CAMERAS, DIGITAL RF CAMERAS AND DSLRS

If you want a brand new DSLR, now is probably the time to buy as the list of new models on sale in Australia is dwindling fast. Of course, there's no shortage of choice if a new mirrorless camera is on your shopping list. Our buyer's checklists for mirrorless cameras, DSLRs and the digital RF models allow you to directly compare all the key specifications and features at all the main price points.



▲ Page 11:
OM System OM-3 ASTRO

FEATURES

16 FEATURE – MEMORABLE CAMERA LAUNCHES

Ever wondered how magazines like this are introduced to new cameras and lenses? Well, before the Covid-19 pandemic, it was often by a press launch designed to show off new tech or capabilities, and the PR departments worked hard to come up with innovative destinations and experiences. Editor Paul Burrows recalls some of the notable events that he's attended over the few decades.

44 PORTFOLIO – A CAMERA LENS AND A CLINICAL EYE

A specialist physician and a documentary photographer, Davide Conti has brought skills from both practices to the documentation of the place of his birth, Sicily. Now living in New Zealand, Davide saw his birthplace quite differently after he started returning to visit. Through his portraits and street photography, he's sought to capture what makes Sicily different from the rest of Italy.

62 CAMERA ICONS OLYMPUS OM-1

It was the camera that made the Olympus brand and changed the course of 35mm SLR design. What's more, the OM-1 was entirely mechanical and achieved its smallness through clever design rather than the use electronics.

68 FEATURE TAMARA DEAN'S UNDERWATER STUDIO

Award-winning Australian photographer Tamara Dean is particularly well-known for her ethereal underwater work, but she was



finding natural locations too unpredictable. Her solution was to have a very special swimming pool specifically designed for underwater photography... without her even getting wet!

ON TRIAL

28 ON TRIAL FUJIFILM X-T30 III

The third-generation of Fujifilm's entry-level X mount mirrorless camera gains some handy upgrades including boosts to its autofocus, continuous shooting speed and video recording; but retains the key attributes of compactness and, importantly, affordability.

38 ON TRIAL CANON RF 7-14mm f/2.8-3.5L FISHEYE STM

Not so much a zoom in the traditional sense – at least not when being used on a full frame body – the RF 7-14mm is essentially

a circular fisheye and a diagonal fisheye in the one package. And while it may seem like a highly specialised lens, in practice it's surprising versatile and a huge amount of fun to use with a big variety of subjects.

50 ON TRIAL PANASONIC LUMIX S 100-500mm f/5.0-7.1 OIS

The 100-400mm is a popular telezoom focal range, but 100-500mm has to be even better, right? Canon's RF 100-500mm model is an absolute cracker and now L mount shooters have Panasonic's Lumix S model that also takes you further without you having to carry any extra weight and is an impressive all-round performer.

72 CLASSICS ON TRIAL MAMIYA RB67 PROFESSIONAL S

It's a beast of a camera with a big presence and an even bigger operating experience. Mamiya's fully-mechanical m6x7cm SLR was the workhorse for many professional photographers during the 1970s, '80s and '90s because it was immensely reliable and very flexible. Today, it's a classic that demands your full attention and involvement.



OUR FRONT COVER: The main photograph on this issue's front cover is by documentary photographer Davide Conti and is taken from his portrait series titled People of Sicily. You can read the full story of Davide's return to the place of his birth, starting on page 44.

CANON ADDS ULTRA-WIDE TO F/1.4 VCM HYBRID LENS LINE

JOINING THE EXISTING 20mm, 24mm, 35mm, 50mm and 85mm models, the RF 14mm f/1.4L VCM is another of Canon's hybrid stills/video fast primes, and all share virtually the same physical dimensions to make it easy to switch them in and out in a video rig. It means they also all have close to the same balance when the camera is on a gimbal (the weights are all quite similar too). The new 14mm ultra-wide is not only Canon's widest-angle RF mount prime so far (excluding the VR



models), but also currently the most expensive lens in hybrid line-up. However, unlike the other models, it can't be fitted with a screwthread filter on the front and instead has a gel filter holder at the rear

A notable feature of these lenses is the use of a voice coil motor (hence the 'VCM' initials) as part of its autofocusing drive and which has more thrust to be able to move the heavy focusing group which is one part of a 'floating' focusing arrangement. The finer adjustments – using a lighter

focusing element – are then performed by a 'Nano USM' ultrasonic pulsed drive. They also have a manual aperture collar although only for video shooting, and so it only has seamless adjustment with no click-stopped settings.

The Canon RF 14mm f/1.4L VCM has an optical construction which employs 18 elements in 13 groups, including one with ultra-low dispersion (UD) characteristics, one fluorite element (for more effective suppression of chromatic aberrations), one 'BR' type – which stands for 'Blue Spectrum Refractive' and three aspherical type created using glass moulding (GMO) for their manufacture. Collectively, these special elements optically correct for distortion, chromatic aberrations and sagittal coma flare, making this lens particularly suited to astrophotography.

The floating focus arrangement also minimises focus 'breathing' when shooting video, but the lens also supports Canon's in-camera digital correction for any variations in image size when focusing (available on the later, higher-end EOS R bodies). An 11-blade diaphragm creates smoother out-of-focus effects which obviously advantageous when shooting subjects such as portraits. The minimum subject distance is 24 centimetres and the minimum aperture is f/16.

The RF 14mm uses both Canon's 'ASC' (Air Sphere Coating) and 'Super Spectra' anti-reflection multi-coatings to minimise flare and ghosting.

The barrel construction is sealed against dust and moisture, and a fluorine coating is applied to the front element to help better repel water and grease.

The Canon RF 14mm f/1.4L VCM is priced at \$3899 and is available in Australia now. Canon Australia provides a five-year warranty for cameras and lenses purchased from an authorised reseller. **For more information visit www.canon.com.au.**



IS THE B&W RICOH GR IV AN EVEN BETTER STREET CAMERA?

WITH THE STANDARD GR IV already a hot seller, Ricoh has added a twist with a B&W-only Monochrome version which is obviously more of a purist's camera especially in terms of tradition street photography. The two models are virtually identical physically except for the blacked-out 'GR' lettering (rather than white) on the front panel and a slightly different texture to the inserts. On the inside, the key change is that the sensor goes without an RGB filter layer. As with Leica's Monochrom models, going B&W with the Ricoh GR IV comes with quite a premium... in fact, over a grand in terms of the local pricing which is a big jump.

Without the colour filters blacking out some light, the Monochrome's sensor now has a sensitivity range equivalent to ISO 160 to 409,600. Noise is reduced and detailing improves as there's no demosaicing involved. The Monochrome model also has a built-in red filter to enhance contrast, but which also reduces exposure by around three stops. Unlike the standard camera, though, the B&W GR IV doesn't have a built-in ND filter. However, it does gain a sensor-based shutter which has much faster top shutter speed than the in-lens leaf shutter – 1/16,000 second versus 1/4000 second.

The sensor is a backside-illuminated (BSI) CMOS mated with the GR Engine 7 processor. Image stabilisation is provided by sensor shifting with five-axis movements and correction for camera shake of up to six stops. A useful 53 GB of internal data storage is provided supplemented by a memory card slot for microSD devices. The GR IV Monochrome has JPEG

and RAW capture, the latter as 14-bit files in the Adobe DNG format. Continuous shooting is possible at up to 4.0 fps. Video capabilities remain pegged at the Full HD resolution at up to 50/60 fps.

The fixed lens is unchanged from the colour camera so it's a 28mm-equivalent prime with an



aperture range of f/2.8 to f/16. It has a seven-element optical design which includes both high-refraction and low-dispersion glass to optimise sharpness across the frame. There's an anti-static anti-grime coating on the front element. Autofocusing is via a hybrid contrast/phase-detection system which employs 25 focusing points with a wide selection of area modes, face detection, 'Snap Focus' settings and a macro mode which enables focus down to six centimetres.

The slim-line body shell employs magnesium alloy covers and weighs in at 262 grams. The fixed 7.62 cm TFT LCD monitor panel has 1.037 megadots resolution and touch screen controls, including touch focus.

There's both WiFi and Bluetooth LE connectivity, delivering image transfer and remote camera control via Ricoh's 'GR World' app. In-camera battery charging is available over USB C, with a full charge delivering around 250 shots.

The Ricoh GR IV Monochrome is priced at \$3249 and is available now. Ricoh products are distributed in Australia by C.R. Kennedy Photo Imaging Pty Ltd. **For more information visit <https://pentax.com.au>**



CANON CELEBRATES POWERSHOT 30TH WITH SPECIAL EDITION G7X III

WITH THE STANDARD model currently being a big success story, Canon has taken the opportunity to celebrate 30 years of the PowerShot digital compact camera line with a limited edition of the G7X Mark III. By the time you read this, it may well be sold out because the compact camera market really loves this sort of thing. The differences with the standard model are few, but enough to add some extra desirability... namely a special graphite grey finish and a 30th anniversary logo on the plate.

The G7X Mark III was originally introduced in July 2019 but has enjoyed a huge revival through the latter part of 2025 – regularly topping best-seller charts – thanks to the surprising comeback of the fixed-lens compact camera. In fact, the PowerShot label had largely been languishing until Canon revived it on the V10 vlogging camera in June 2023 followed by the higher-spec V1 model in March 2025.

Under its smart new body colour, the limited edition G7X III is identical to the standard model which means you get a 4.2x optical zoom lens equivalent to 24-100mm with a maximum aperture range of f/1.8-2.8 and matched to a '1.0-inch' format stacked BSI-CMOS sensor along with Canon's 'Digidig 8' generation processor. The sensor has an effective resolution of 21 megapixels and a sensitivity range equivalent to ISO 125 to 12,800 with a one-stop extension to ISO 25,600. The zoom incorporates optical image stabilisation giving up to four stops of correction for camera shake. Stills can be captured as JPEGs, RAWs or C-RAW files with continuous shooting at up to 20 fps. Continuous shooting at 30 fps is available in the camera's 'RAW Burst Mode' which also supports 0.5 seconds of pre-capture buffering and between-the-frames AF adjustment. There's 4K UHD video capture at 25/30 fps (with no crop) and Full HD recording at up to 100/120 fps using the H.264 codec. The G7X III has built-in stereo microphones supplemented with a stereo audio input for connecting an external mic. Data is recorded onto an SD memory card with the camera's single card slot having UHS-I speed support.

Despite the camera's vintage, it was pretty advanced when launched nearly seven years ago, so it has video streaming over YouTube (albeit with some conditions imposed), vertical video capture, WiFi and Bluetooth wireless connectivity, in-camera battery recharging, face-detection AF tracking and a sensor-based shutter (which runs to 1/25,600 second). Other key features include a built-in three-stop ND filter, a pop-up flash, tilt-adjustable touch screen monitor with 1.04 megadots resolution, in-camera panorama stitching and a set of 'Creative Filter' special effects. With the battery and memory card loaded, the G7X III weighs in at just 304 grams.

If you can secure one, the Canon Limited Edition PowerShot G7X Mark III is priced \$1449. You'll probably have better luck with the standard body which is available in either black or silver and priced at

\$1349. Canon Australia provides a five-year warranty for cameras and lenses purchased from an authorised reseller. **For more information visit www.canon.com.au.**

LENS WORK... AND PLAY

I'VE WRITTEN HERE before about my contention that lenses are the real stars of the photography show... the camera body merely provides the stage on which they can shine. Well, of course, the camera does contribute quite a lot, but it's not much use without a lens which is in charge of framing, perspective, focus, depth-of-field, bokeh effects and sets the base levels for contrast, colour rendition and sharpness. With the arrival of mirrorless cameras, we've never had it so good in terms of what we can do with lenses thanks to the huge choice that's now available with ever-more exotic specs and ever-improving optical performance. Thanks to the shorter flange back distance – the distance from the lens mount to the sensor's focal plane – many more things are possible in the optical designs of lenses made specifically for mirrorless cameras. Basically, better optical quality is achievable from less complex arrangements of elements and more complex arrangements are less challenging... to the benefit of affordability or capability, and sometimes both.

I noted a recent issue of another photo magazine (I know, they do exist) carried a listing of all the lenses currently available for mirrorless cameras and it ran to nearly 450 models. What's more, this only included a couple of the more 'mainstream' Chinese brands and, as you know, new ones seem to be popping up on almost a weekly basis. If all these brands' offerings were also counted, I think the list would swell to over 500 lenses for mirrorless. Notably, the Chinese manufacturers don't seem to be afraid of tackling design challenges – check out some of the Laowa products, for example – and while the big selling point is almost too-good-to-be-true affordability, it seems the overall quality is generally pretty good too (although we've yet to thoroughly test this for ourselves).

Then there's the vast supply of legacy – or vintage – lenses that are now in play for mirrorless cameras via mount adapters. In essence, you can fit any lens that has a longer flange back distance which means there's a myriad of possibilities from the ranks of 35mm SLR systems and even film-era medium format lenses. Vintage lenses are big at the moment as it seems we actually like all the aberrations and flaws that today's optical engineers are trying so hard to eliminate... soft corners, dark corners, flare, ghosting, low contrast, warmer or cooler colours and weird-looking out-of-focus effects. Now it's called character and the experimentation can be fun, especially if you've picked up an old lens for next to nothing... although, inevitably, prices are going up, especially for models that social media (mostly) has made popular... such as the Russian-made KMZ Helios-44 58mm f/2.0 that was standard on many cheap-and-cheerful Zenit 35mm SLRs in the 1970s and '80s.

For me, the real fun is that all this is done in-camera and with next-to-no automation because focusing is manual and so is aperture control, so the whole experience is delightfully old school with an element of unpredictability (but still with all the conveniences of digital capture). Of course, new lenses can be just as much fun – I'm been testing Canon's RF 7-14mm fisheye zoom for this issue, and it's an absolute hoot – plus it's the mirrorless camera that's made vintage lenses so much more accessible. It's the best of both worlds, and lenses really are the purest form of photographic creativity with vintage optics adding imperfection to the mix and a look that is both distinctive and authentic. In my book, you can never have too many lenses, old and new. Tell 'em, I said it's OK.

Paul Burrows, Editor.



NEW PANASONIC ON-CAMERA MIC HAS 32-BIT FLOAT RECORDING

PANASONIC HAS INTRODUCED a new compact on-camera microphone for its latest Lumix S mirrorless cameras. The DMW-DMS1 has a four-microphone arrangement which allows for a variety of pick-up patterns to suit different subjects and recording situations. It also features 32-bit float audio recording technology. This is designed to eliminate clipped and distorted audio which happens when there are sudden increases (or reductions) in the sound levels... often an issue when recording on location. It also eliminates the need to continually adjust

the recording levels manually to correct for changes in the sound level. Panasonic says the DMW-DMS1 can record audio without distortion at sound pressure levels (SPLs) up to approximately 120 dB which comparable to a front-row seat at a concert. However, the unit can also record in a 24-bit audio mode and, consequently, has gain controls for manually adjusting channel levels. Four-channel recording is available with the option to use two of these channels for making a back-up track.

Weighing just 100 grams, the DMW-

DMS1 connects directly to the camera via the hotshoe so it doesn't require a separate cable. It relays digital audio signals via the hotshoe and also draws power from it. The module employs new large diameter 10mm microphones to give an increased dynamic range. The mic capsule is on an internal, floating shock-mount to isolate it from vibrations and handling noise. A 'fluffy' windscreen is included to help reduce wind noise. This is backed by a new wind noise cancellation system which leverages float recording technology in order to suppress wind without compressing the intended signals. There's a choice of six directional modes comprising Stereo, Wide Stereo, Forward Directionality Cardioid, Forward Directionality Supercardioid, Rearward Directionality Supercardioid and Bidirectional Supercardioid. These are directly selected via six backlit buttons located on a side panel.

The DMW-DMS1 does not have an onboard storage so it only records to the camera, and a number of recording settings – such as for making a back-up track – are adjusted from the camera rather than on the unit itself.

Priced at \$659, the DMW-DMS1 is compatible with the Lumix S1II, S1RII, S1RIIE, S5II and S5IIX full frame mirrorless bodies via a firmware upgrade and, Panasonic says, will also be supported by the GH7 and G9II M43 bodies in the future. **For more information visit www.panasonic.com.au**

CANON DEBUTS FISHEYE ZOOM FOR RF MOUNT

WHILE IT'S NOT the Canon's first fisheye zoom (there was an EF mount 8-14mm f/4.0L), the new RF 7-14mm f/2.8-3.5L Fisheye STM still embodies some unique design elements including its maximum angle-of-view of 190 degrees and variable maximum aperture range. Canon claims its 7-14mm is the "world's widest angle zoom lens with a 190-degree field of view".

The massive angle-of-view at 7mm essentially For More Mags check sastatus.com means that it can see behind the camera, and at its widest focal length, the zoom delivers a circular view. At 14mm the angle-of-view is still 180 degrees, but with a diagonal (i.e. full frame) image. Also notable, is the filter holder arrangement which is similar in design to Canon's EF-to-RF drop-in filter holder and mount adapter, and accepts the filters that are available for that unit which comprise a circular polariser, variable neutral density and a cut gel filter holder. Both the polariser and the variable ND filters can be adjusted while slotted inside the lens via a small geared wheel. The lens is supplied with a new clear drop-in filter.

The optical construction comprises 16 elements in 11 groups which includes two aspherical types and a total of five with ultra-low dispersion ('UD') characteristics to counter chromatic aberrations. Canon's 'Air Sphere Coating' (ASC) anti-reflection multi-coating is used on a number of element surfaces, along with its 'Super Spectra Coating' (SSC) multi-coating to minimise flare and ghosting. A leadscrew-type STM drives the autofocus and employs position sensors for smoother operation. Canon says focus 'breathing' – the slight change in image size as the focusing distance alters – is reduced to just 0.4 percent at the widest focal length and 1.5 percent at the longest. Focusing is performed internally (as is zooming) and the minimum focusing distance is 15 centimetres which is maintained across the full zooming range. The minimum aperture is f/22 at 7mm and f/29 at 14mm.

The external construction is weather sealed with a fluorine anti-smudge coating on the front element which is important as you can't fitting a conventional protective filter. The 7-14mm's external controls include a multi-function control ring, a focus hold button plus a 'Limit' switch for the locking the zooming collar, which is handy if, for example, you only want to shoot full frame fisheye images. Additionally, there's a 'C' setting for use when using the lens of 'APS-C'



format bodies which will set zooming range to only allow the

full frame image (which starts at 8.7mm, equivalent to close to 14mm in effective focal length) and avoid vignetting. The RF 7-14mm weighs in at 476 grams and is 109.4 millimetres (which doesn't change when either zooming or focusing). Video shot with this lens can be converted to 180-degree 2D VR footage using Canon's EOS VR Utility for viewing on a computer or head-mounted display (but requires a compatible body such as the EOS R5 II or R6 II).

The Canon RF 7-14mm f/2.8-3.5L Fisheye STM is priced at \$2799 and available now. Canon Australia provides a five-year warranty for cameras and lenses purchased from an authorised reseller. Our full test is in this issue or, for more information, visit www.canon.com.au.



SIGMA

THE BF CAMERA

Radically simple, deceptively powerful. The system camera redefined. Made in Aizu, Japan.

RRP \$3,995.00

sigmaphoto.com.au

@SigmaPhotoAustralia

Ted's Cameras
Expert Advice. Great Price.

digiDirect

CameraHouse

Digital Camera WAREHOUSE

GEORGES
SINCE 1961

CameraPro

Camera Electronic

Diamonds
CAMERAS • VIDEO • OPTICAL • TRIP & VISIT KIT • GPS



Photograph by Ben Thouard (France) © 2026, winner of the Adventure category, Ocean Photographer of the Year 2025. The location is Nazaré, Portugal.

PHOTOGRAPHY EXHIBITIONS & EVENTS

Current to 6 February: Exhibition. *You Are Here – Melbourne Memory-Scapes*. A remarkable collection of black and white aerial photographs of Melbourne and its surrounds from the 1960s, drawn from the City of Melbourne collection. At the City Gallery, Melbourne Town Hall, 90-130 Swanston Street, Melbourne, Victoria 3000. Entry is free. Gallery hours are 8.30am to 5.00pm Monday to Friday. For more information visit citycollection.melbourne.vic.gov.au

Current to 3 May: Exhibition. *Ocean Photographer Of The Year 2025*. All the winners and finalists (118 images in all) in this international competition run by Oceanographic magazine. At the Australian National Maritime Museum, 2 Murray Street, Darling Harbour, Sydney, NSW 2000. Entry fee is \$35 for adults with concessions for children under 15 (and an \$89 fee for families). Museum hours are 10.00am to 4.00pm daily (9.30am to 5.00pm during school holidays). For more information and bookings visit www.sea.museum/whats-on/exhibitions

Current to 10 May: Exhibition. *Olive Cotton And Her Contemporaries*. This exhibition brings together Cotton's photographs and the work of her leading international peers including key modernist photographers such as Dora Maar, Berenice Abbott, Lucia Moholy, Edward Weston and Tina Modotti. At the Cowra Regional Art Gallery, 77 Darling Street, Cowra, NSW 2794. Gallery hours are 10.00am to 4.00pm Tuesday to Saturday, 10.00am to 2.00pm on Sunday. For more information visit <https://www.cowraartgallery.com.au>

Current to 7 August: Exhibition. *On The Street Where I Live: Viva Gibb's Portrait Of North And West Melbourne*. A landmark exhibition celebrating the work of Melbourne artist and social documentary Viva Jillian Gibbs (1945-2017). At the City Gallery, ground level, Melbourne Town Hall, 110 Swanston Street, Melbourne, Victoria 3000. Entry is free. Gallery hours are 8.30am to 5.00pm, Monday to Friday. For more information visit <https://www.melbourne.vic.gov.au/city-gallery>
Current to 6 September: Exhibition. *Trent Parke: The Christmas Tree Bucket*. A tender and darkly humorous portrayal of the photographer's extended family coming together to celebrate Christmas. At Gallery 14, Level 1, National Gallery Of Australia, Parkes Place, Parkes, Canberra, ACT 2600.

Entry is free. Gallery hours are 10.00am to 5.00pm daily. For more information visit <https://nga.gov.au>

Current to 7 February 2027: Exhibition. *Mervyn Bishop: Close Up*. Mervyn Bishop is one of Australia's most important photographers and this exhibition is drawn from the archive of over 200,000 images held in the State Library Of NSW's collection. At the Exhibition Galleries, State Library Of NSW, Macquarie Street, Sydney, NSW 2000. Entry is free. Exhibition hours are 9.00am to 8.00pm Monday to Thursday, 9.00am to 5.00pm on Friday and 10.00am to 5.00pm on weekends. For more information visit <https://www.sl.nsw.gov.au/exhibitions>

Mervyn Bishop © 2026



WHAT'S NEW



Camera House

Your photo and video experts

SHOOT FOR THE STARS WITH THE OM SYSTEM OM-3 ASTRO

FOLLOWING THE OM-D E-M1 Mark III ASTRO from 2024, OM Digital Solutions has introduced a special astrophotography version of the OM System OM-3. The ASTRO model has a modified infrared-cut filter on its stacked BSI-CMOS 'Live MOS' sensor that allows for a 100 percent transmission of hydrogen-alpha (H α) wavelengths at 656 nanometers. These are the wavelengths emitted by the deep red nebulae and which the standard IR-cut filter on a digital camera sensor mostly blocks to ensure accurate colours when shooting in daylight. The OM-3 ASTRO's modified sensor makes it a specialised camera – shooting in daylight will result in a pink-to-red colour cast – but if astrophotography is your thing, it offers quite a few performance advantages over the much older E-M1 III model. The 20.4 megapixels stacked sensor has higher sensitivity with better noise reduction and superior colour reproduction. The stacked design enables faster data read-out speeds which are complemented by the more powerful 'TruPic X' dual quad-core processor. The OM-3 also has a more accurate AF system which employs 1053 measuring points employing 'Cross Quad Pixel AF' technology so there are four-photodiode groupings at each pixel point arranged in an X-shaped pattern so they can measure in both the horizontal and vertical planes. This is particularly advantageous with very small objects such as distant stars using the 'Starry Sky AF' setting. Additionally, the OM-3 has a multi-shot 'High-Res Shot' mode which delivers 80 megapixels – with the choice of 12/14-bit RAWs or JPEGs – when the camera is mounted on a tripod, and 50 megapixels when shooting handheld. Twelve shifted frames are captured and combined in-camera with the resulting image also exhibiting a two-stop reduction in noise. As the position of each image is matched when compositing, shooting with the 'High-Res Shot' mode when the camera is mounted on a tripod produces composite images in which the diurnal motion of the stars is corrected. This will also correct for any tracking errors when using an equatorial mount. Conveniently, these multiple images

are processed in-camera.

The OM-3 ASTRO has three dedicated custom camera set-ups – C1 is for astrophotography stacking, C2 for starry landscapes stacking, and C3 is for shooting starry landscapes handheld. It also has new colour profiles which are preset in the custom shooting modes. 'COLOR1' is optimised for astrophotography – such as imaging red nebulae – and 'COLOR2' is optimised for starry landscape photography. For handheld shooting, the OM-3 ASTRO has up to 7.5 stops of correction for camera shake via its five-axis in-body image stabilisation (IBIS).

Other features carried over from the standard OM-3 that are particularly useful for astrophotography work include the 'Live Composite' mode which combines a reference background exposure with subsequent multiple exposures that only add any bright light sources (such as stars) thereby avoiding any overexposure. The key advantage is that there's only one frame blended in-camera rather than hundreds that need to be processed post-camera. Also handy is the 'Night Vision' mode which adjusts the brightness of the live view image so it remains visible in low light conditions.

OMDS has also introduced a pair of special filters for the OM-3 ASTRO which clip inside the camera body between the lens mount and the sensor. These are an additional purchase and comprise the BMF-LPC01 light pollution filter and the BMF-SE01 soft filter. The light pollution suppression filter cuts light from artificial sources – such as street lighting or city lights – to help prevent light bleed into the night sky. The soft filter enhances point light sources, enlarging and blurring stars to emphasise their colour saturation and visibility while also preserving optical resolution.

The OM System OM-3 ASTRO is priced at \$3399 body only and is available in Australia now distributed by OM Digital Solutions Australia. The BMF-LPC01 light pollution filter sells for \$449 and the BMF-SE01 soft filter for \$319. For more information about these products visit explore.omsystem.com/au/en/



With over 50 stores nationwide, there is always a store near you!

Photo Credit | With this aerial photograph, **Jonathan Ormandy** was one of our Camera House Photo Competition finalists. Jonathan works at our Launceston Camera House store | He shot this with a DJI Mini 4 Pro.





NIKON REDESIGNS Z MOUNT 70-200mm f/2.8 STAPLE ZOOM

JUST AS IT did with the Nikkor Z 24-70mm f/2.8 in 2025, Nikon has given its Z mount 70-200mm f/2.8 telezoom a complete redesign so the Mark II version is significantly smaller and lighter than before, and has enhanced performance in a number of areas. Both these 'staple' zooms are S line models which means they're higher-end in both their physical construction and their optical performance.

The new Nikkor Z 70-200mm f/2.8 VR S II is 12 millimetres shorter than its predecessor and weighs 1180 grams (with its tripod-mounting bracket) which is 26 percent lighter than before. With the tripod bracket detached, the zoom's weight drops under a kilo to just 998 grams. This is mostly thanks to a completely new optical design which employs three fewer elements and replaces some with thinner types. The new zoom's optics comprise 18 elements in 16 group which includes one using extra-low dispersion (ED) glass, one 'Super ED' type, two with aspherical surfaces, an aspherical element that is also made from ED glass, one fluorite element and one with Short-Wavelength Refractive characteristics designated 'SR'. All the ED-glass elements along with the fluorite type correct for chromatic aberrations. Furthermore, the SR-type element refracts light with wavelengths shorter than blue (such as violet and UV) to also help

with reducing chromatic aberration. The aspherical elements contribute to more uniform sharpness and brightness while also correcting for distortion. Both Nikon's 'Meso Amorphous Coat' and 'ARNEO Coat' anti-reflection multi-coating technologies to reduce flare and ghosting. The new Z mount 70-200mm f/2.8 has both internal focusing and internal zooming so its physical length doesn't change during either of the operations. This also reduces the likelihood of dust or moisture entering the lens.

The autofocus drive has been upgraded to a voice coil motor (VCM) – Nikon calls it a 'Silky Swift VCM' or 'SSVCM' – which has more torque and so is faster and more precise. The AF drive system includes a position sensor to further enhance accuracy. Nikon claims a 3.5x increase in the autofocus speed and 40 percent improvement in the tracking reliability with fast-moving subjects. The minimum focusing distance is 38 centimetres at 70mm and 80 centimetres at 200mm which gives a maximum magnification ratio of 1:3.3 at the shortest focal length and 1:4 at the longest.

The 'Vibration Reduction' optical image stabilisation has small increase in effectiveness, giving up to 6.0 stops of correction for camera shake compared to the previous model's 5.5 stops. The Mark II model



now has an 11-blade diaphragm (up from nine) to give smoother, more rounded out-of-focus effects.

The external construction is weather sealed and there's a fluorine coating on the exposed surface of the front element to help repel moisture and grease. The tripod-mounting collar now has an Arca-Swiss type foot – first for any Nikkor lens – and the external controls include a pair of multi-function 'L-Fn' buttons (both duplicated on the top of the lens) and a multi-function control ring which can be switched between click-stopped and seamless operation. The screwthread filter fitting is 77 millimetres and the supplied lens hood allows for the adjustment of circular polariser and variable neutral density types via a small access window. The minimum aperture setting is f/22 and the new zoom is compatible with the TC-1.4x and TC-2.0x Nikkor Z teleconverters.

The Nikkor Z 70-200mm f/2.8 VR S II is priced at \$5399 and is available in Australia now. Nikon Australia provides a two-year warranty for Nikon cameras and lenses purchased from an authorised reseller.

For more information visit
www.nikon.com.au



Photo: Seiichi Nakamura

EVERY PRINT DESERVES A LEGACY.

Discover the paper trusted by generations of photographers. ILFORD brings your images to life with stunning clarity, rich blacks, vivid colour, and archival permanence. Whether you're printing at home or producing work for exhibition, ILFORD paper delivers the depth, texture, and tonal range your work deserves. From fine art exhibitions to personal portfolios — make every print unforgettable.

ILFORD – The Paper of Choice for True Image Makers.



ILFORD GALERIE

www.ilford.com



The Story

The annual World Sports Photography Awards has grown into one of the most internationally diverse and widely recognised sports photography competitions in the world. This year's edition is the most successful in the competition's history, attracting a record-breaking 23,130 images

which were submitted by a total of 4120 photographers representing 123 countries. The exceptional quality and diversity of this year's submissions highlighted that, even with rapid technological advancements, the photographer's eye and craft remain paramount. Sports photographers around the world continue to innovate, inspire

and push the creative boundaries of the medium.

The winning image was selected from a collection of 24 category-topping photographs spanning more than 50 sports, including Football, Rugby, Cricket, Athletics, Baseball, Formula 1, Equestrian, Golf, Racquet Sports, Winter Sports, Swimming and Tennis.



Photograph by Edgar Su (Singapore), overall Grand Prix winner (Gold) of the 2026 World Sports Photography Awards. This image was also the winner of the competition's Tennis category.

the logistics on location shoots. He then began working as a freelance photographer in Cambodia, mainly specialising in documentary stories for inflight magazines. Today he is a senior photographer at Reuters and works on a wide variety of assignments all over the world, but says that he still enjoys following stories in his own backyard.

"It can be very exciting and rewarding when you are able to spend a lot of time with the subject and go beyond the surface. I am so used to Singapore because it's where I was born and bred, but while I'm taking pictures I try to put myself in the shoes of someone who has never been here.

"One thing I've learnt from the veterans in the field – always stay calm. Instead of just reacting, slow down and think before shooting."

You can see the top three finalists and all the Special Merit images in each of the competition's 24 categories at <https://www.worldsportsphotographyawards.com>

Presented by

ILFORD

www.ilford.com

Ph: (03) 9823 1555
for more information

ILFORD
BLACK & WHITE

ILFORD
GALERIE
PROFESSIONAL INKJET PHOTO RANGE



The Photograph

The shadow of Spanish tennis champion Carlos Alcaraz looks to be perfectly hitting the ball perfectly and was taken during the Spaniard's fourth-round match against Britain's Jack Draper at the 2025 Australian Open in Melbourne. Titled Carlos' Shadow Hits A Ball, this well-spotted –and very precisely-timed – image

was judged the overall winner in the 2026 World Sports Photography Awards.

The Photographer

Edgar Su is a professional photographer who works for the Reuters news agency and is based in Singapore where he was born. He first worked as an assistant to an advertising photographer, organising

FEATURE

Nikon Nikon

MEMORABLE CAMERA LAUNCHES

The Covid-19 pandemic appears to have put an end to the event-style launching of new cameras and lenses, but before that, many camera companies when to considerable lengths - and distances - to show off their shiny new toys. **Paul Burrows** recalls some of the more memorable he's experienced over the last 40-odd years.

When I first starting writing about cameras and photo gear - in this very same magazine around 44 years ago (but who is counting?) - it was a big deal for the announcement of a new product to consist of little more than a press release and a photograph delivered to your desk by post in an envelope. There were exceptions for very significant new products, but even then it would mostly be drinks and nibbles

“Battle hardened retailers could always be relied upon for an honest appraisal of whether something new was going to swim, sink or be discounted by 50 percent within three months.”

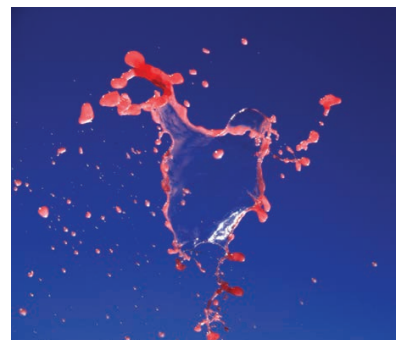
- plus a lot of speeches accompanied by overhead projector slides - in a hotel ballroom or a similar venue. I'm sure it was a bit different in the bigger markets such as the USA and the UK, but in Australia at that time, the local photo press corps could be counted on the fingers of one hand... those working for the specialist consumer magazines (three in 1982, my first year) and perhaps somebody from one of the big newspaper groups or may, or possibly may not, have been expert in the subject.

However, it started to become more commonplace to lump us scribblers in with the camera store managers or senior sales staff who already seemed to be enjoying much more entertaining new product reveals (probably because they would be spending lots of money buying lots of stock). As it happens, this wasn't such a bad thing for us journalists as the seen-it-all retailers - battle hardened from dealing with the vagaries of the buying public - could always be relied upon for an honest appraisal of whether something new was going to swim, sink or be discounted by 50 percent within three months.

When the Minolta 7000 - the first 35mm



Canon EOS 40D
September 2007
Hunter Valley, NSW



Canon EOS 7D
October 2009
Cockatoo Island, Sydney





Canon EOS 300D
 August 2004
 Uluru-Kata Tjuta National Park,
 Northern Territory



Canon EOS 400D
 September 2006
 Blue Mountains, NSW



Canon EOS 600D
 March 2011
 Byron Bay, NSW



Canon EOS R5 Mark II
 July 2024
 URBNSURF
 Sydney Olympic Park.



SLR with a properly integrated autofocus system and a full set of new lenses – came along in February 1985, the local launch in Sydney was a swish sit-down dinner. I forget the venue now, but I do remember it was a pretty big ‘do’ in a large hotel ballroom – although probably again attended mostly by retailers and their staff – and it was the first time in my then short career that I was aware of some real excitement being created around a new product. However, things really took off – literally – two years later when Canon announced its rival 35mm autofocus SLR system in March 1987, introducing the world to EOS as it also celebrated its 50th anniversary.

Canon Australia decided to launch the EOS 650 and the higher-end EOS 620 – announced internationally just a couple of months later – together locally. Journalists were flown in DHC-2 Beaver floatplanes from Sydney’s Rose Bay to the NSW Central Coast and then bussed to a hotel near Terrigal for the event which included the opportunity to use both cameras around the nearby lagoon. After lunch, we were flown back to Sydney and so the standard was set for more experiential product launches, including trips to locations beyond Australia.

Nikon’s then distributor in Australia, Maxwell Photo Optics, sent us to Singapore in late June 1996 for the press announcement of the F5 professional 35mm SLR, and the program included a visit to the famous Long Bar at the Raffles Hotel. The event was held in the hotel’s Grand Ballroom which was, indeed, very grand.

Golden Era

With the arrival of digital imaging and, more particularly, heavyweight competition from the consumer electronics giants Panasonic, Samsung and Sony, the scope of launch events expanded in terms of destinations, activities, entertainment and the all-important wining and dining. It helped, of course, that the cohort of journalists also increased – and probably much more importantly for the PR companies – so did the potential audience ‘reach’. It became a lot easier to justify bigger budgets. Thus began the golden era of camera launches which lasted two decades until abruptly ended by the Covid-19 pandemic in the early part of 2020.

In the early days of digital cameras, the various imaging technologies advanced rapidly largely driven by the ‘megapixels race’ and the imperative to achieve a realistic level of affordability in comparison to film. Consequently, new models came thick and fast, especially after, firstly, compact cameras and then SLRs started arriving that were closer to 35mm equipment in terms of portability and pricing.

To show off the EOS 300D – the first truly compact DSLR and with a more enthusiast-friendly price tag – and the also the first PIXMA series photo printers, in



Canon EOS-1D Mark IV
February
2010, Brisbane, Queensland



Canon EOS-1D Mark IV
Feb 2010
Queensland Raceway, Ipswich



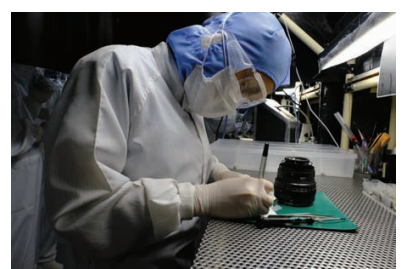
Canon corporate and factory visit
February 2011
Tokyo and Oita, Japan.



Sigma lens test
February 2017
Antarctica flight,
Qantas 747-400 from Sydney



Fujifilm GFX50S
January 2017
Kyoto, Japan



Fujifilm GFX100
May 2019
Tokyo and Taiwa factory, Japan



August 2004 Canon Australia staged the first of what would be a series of multi-day 'Canon Imaging Tour' events. The location was Uluru-Kata Tjuta National Park, in the Northern Territory. We were based in the superb Ayers Rock Resort and the dramatic scenery provided plenty of stimulation for photography.

The Blue Mountains, west of Sydney, was the destination for the next tour in September 2006 to launch the EOS 400D and this involved helicopters, horseback rides and trikes for a wind-in-your-face run down the winding road into the Megalong Valley from Blackheath.

I particularly remember this event because this is where I lived – and still do – and the spectacular scenery makes it a very popular tourist destination. It was an unusual experience to participate in 'touristy' activities usually aimed at visitors. After learning where the event destination would be, I well remember telling Canon's PR person that I'd meet the group when they got to the mountains, thus saving myself the two-hour drive to Sydney. She was very insistent that I make the trip to Canon's offices, but wouldn't say why. The surprise was that we were to be ferried to the mountains by a fleet of helicopters which, of course, was a big part of the whole experience... and a lot faster than driving. We landed – one-by-one in sequence, which was impressive in itself – at the small airfield at Medlow Bath (now closed), about five minutes from my home.

The NSW Hunter Valley was the destination for the 2007 Imaging Tour which introduced the EOS 40D over a two-day event which kicked off, once again with a convoy of helicopters ferrying the invited journalists from Sydney up to the winery resort where we were staying. To put the camera to the test there was a visit to greyhound race meet (at a night), and, early the following morning, a serene soar over the vineyards in a hot air balloon.

Canon Australia launched the EOS 7D in October 2009 at Cockatoo Island in the middle of Sydney Harbour where the

“ With the arrival of digital imaging and, more particularly, heavyweight competition from the consumer electronics giants Panasonic, Samsung and Sony, the scope of camera launch events expanded.



Fujifilm X100
February 2011
Queenstown, New Zealand



Fujifilm X-T3, 2018
September 2018
'Fuji Island', Fiji



Hasselblad 40th anniversary of the first Moon landing
September 2009
Orlando, Florida, USA



Leica 100th anniversary (of Oskar Barnack's prototype 35mm cameras)
May 2014
Leitz Park, Wetzlar, Germany.

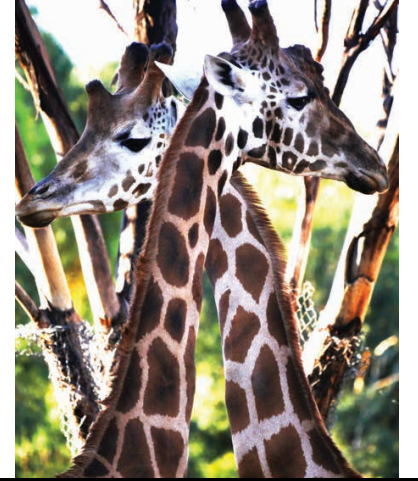




Completion of Stage 3 of Leica's Leitz Park complex
June 2018
Germany



Leica SL2
October 2019
Leitz Park, Wetzlar, Germany



Panasonic Lumix G 100-400mm
February 2016
Taronga Western Plains Zoo, Dubbo, NSW



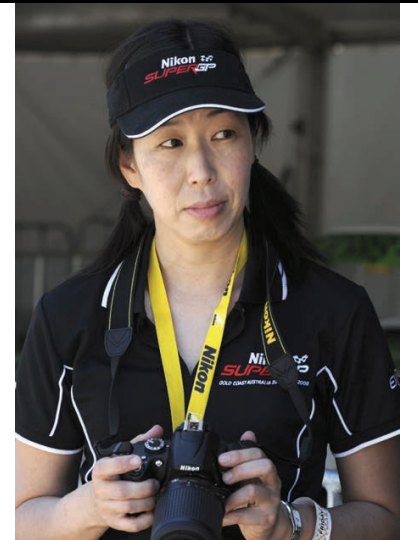
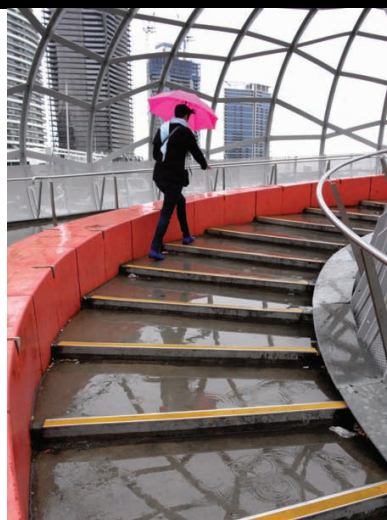
Leica SL
October 2015
Leitz Park, Germany and London, UK



Leica T
May 2014
the Kimberley, Western Australia



Nikon D3S
October 2009
SuperGP motor race, Gold Coast, Queensland



“ However, the prize for the most innovative imaging product launches – and, for a time there, the most launches full stop – goes to Panasonic Australia.”

disused industrial buildings and structures provided plenty of dramatic subject matter. Brisbane was the venue for the local unveiling of the Canon EOS-1D Mark IV in February 2010 which included a day at a V8 Supercars pre-season testing session at the Queensland Raceway near Ipswich. For the EOS 600D launch we went to the famous Byron Bay on the NSW north coast in March 2011 where a photography challenge offered the new camera as a prize for each member of the winning team (yes, we won).

Here, There And Everywhere

However, the prize for the most innovative imaging product launches – and, for a time there, the most launches full stop – goes to Panasonic Australia. By my count, there were 18 major multi-day events between 2005 and 2012, although some of these were Asia-Pacific regional gatherings and at least a couple involved Panasonic New Zealand presumably helping to spread the financial load. International destinations included Thailand, Singapore, Japan, China and New Zealand, along with plenty of interesting places in Australia too.

However, this Panasonic list doesn't involve the many conventional press conferences which were usually held at an up-market Sydney hotel or restaurant. For the Lumix G9 unveiling in November 2017, for example, we were at the iconic Bondi Icebergs on a glorious late spring day.

The sheer number of Panasonic launches shows just how active the company was during this time, especially after the debut of the Lumix G mirrorless system in 2008 – the first of its type, of course – and the hugely popular TZ series 'travel zoom' compacts. Since the TZ models were all about travel that's what we did – to Singapore for the TZ7 in February 2007, to Melbourne for the TZ10 in January 2010, to Queenstown in New Zealand for the TZ20 – along with the FT3 – in February 2011, to Norfolk Island for the TZ30 in February 2012, and to the Western Plains Zoo (in Dubbo, central-western NSW) for the TZ110 in February 2016, which was launched alongside the Lumix G 100-400mm telezoom.

Panasonic Australia camera launches went through a bit of an island phase for a while, starting with Lady Elliot Island (for the



Nikon D3
August 2007
Tokyo, Japan



Nikon D4 and D800
February 2012
Tokyo and Sendai, Japan



Nikon D4S
March 2014
Australian F1 Grand Prix, Albert Park, Melbourne



Nikon D5
January 2016
CES 2016, Las Vegas, USA





Nikon D810
January 2014
Hamilton Island, Queensland



Olympus E-3
November 2007
Byron Bay, NSW



Olympus OM-D E-M1X
January 2019
Hunter Valley, NSW



Panasonic Lumix DMC-FZ18
July 2007
Beijing, China



Lumix L10 in February 2008), the already-mentioned Norfolk Island, Fraser Island (for the Lumix GX7 in July 2013) and Tasmania (for the GX9 in 2018).

Definitely on the highlights reel is Lady Elliot Island which is a tiny coral cay at the southern-most end of the Great Barrier Reef and an important breeding ground for sea turtles and a huge variety of sea birds. An estimated 50 species visit the island at during a year and over 100,000 birds nest here during summer breeding season. On a land mass only around 45 hectares in size, that's a very high density population indeed and consequently, you can't get away from the birds. The noise is constant, but it makes for a truly unique experience, and the photographic opportunities are endless from the moment you arrive. This is by a 12-seater Cessna C208 Caravan and the grass airstrip's runway extends the full length of the island... and is still just 650 metres long. The accommodation is in cabins dotted around the island which are basic but comfortable and, besides, you really don't spend a lot of time inside... there's too much going on outside. Acclaimed landscape photographer Ken Duncan – who is still a Lumix Ambassador – accompanied us on this event and, indeed, many others; providing advice and tips interspersed with his philosophies on life and photography. As it happens, the Lumix L10 – Panasonic's second Four-Thirds format DSLR – was a relatively short-lived model because the world's first mirrorless camera, the Lumix G1, was well on the way.

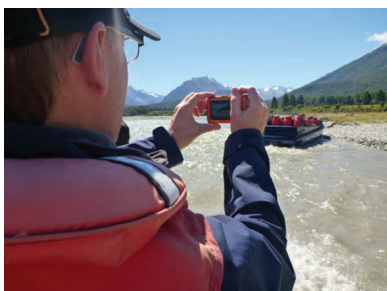
Good Sports

Could Panasonic Australia top the Lady Elliot Island experience? Well, in Melbourne for the Lumix TZ10 there was a night at the Australian Open tennis championships (a men's semi-final between Andy Murray and Marin Čilić) and the following year we were in Auckland, New Zealand, for the Lumix G3... and the final of the 2011 Rugby World Cup between NZ and France. Even if you weren't a rugby fan, this was still a big occasion and definitely a memorable experience.

Definitely on the highlights reel is Lady Elliot Island which is a tiny coral cay at the southern-most end of the Great Barrier Reef and an important breeding ground for sea turtles and a huge variety of sea birds."



Panasonic Lumix L10
February 2008
Lady Elliot Island, Queensland



Panasonic Lumix FT3
February 2011
Queenstown, New Zealand



Panasonic Lumix FT5
March 2013
Adelaide, South Australia



Panasonic Lumix FZ8
February 2007
Sydney harbour joy flight,
Rose Bay to Palm Beach



Panasonic Lumix G2
January 2010
Gerringong, NSW



Panasonic Lumix G5
August 2012
Terrigal, Central Coast, NSW





Panasonic Lumix FZ30
 July 2005
 Bangkok, Thailand



Panasonic Lumix G9
 November 2017
 Bondi Icebergs, Bondi Beach,
 Sydney



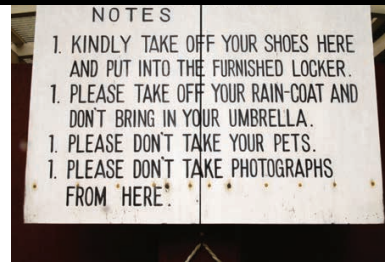
Panasonic Lumix GX7
 August 2013
 Fraser Island, Queensland



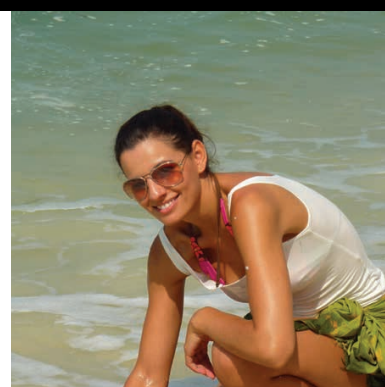
Panasonic Lumix GX8
 August 2015
 Terrigal, Central Coast, NSW



**Panasonic Lumix
 DMC-L1 (it rained... a lot)**
 July 2006
 Kyoto, Japan



Panasonic Lumix TZ7
 February 2009
 Singapore



Fortunately, the All Blacks won.

Sports events are, of course, perfect for trying out new photography gear and Nikon Australia used the one-off SuperGP motor race on the Gold Coast in 2009 – for which it was the naming sponsor – to show off the capabilities of its latest pro-level DSLR, the D3S. This was to have been for A1GP open-wheeler cars, but the series collapsed so the V8 Supercars filled the breach and it's been their event ever since, now named the Gold Coast 500. For the D4S, Nikon took us to the 2014 Australian F1 Grand Prix in Melbourne for the Friday's two free practice sessions.

A few years earlier, we'd been at the 2011 Singapore F1 Grand Prix courtesy of Sony and the Alpha A77, and this event had the extra challenge for photography of being run at night. The entire Marina Bay circuit is lit with, in case you're interested, a colour balance of 4000 degrees Kelvin.

Sports and action provide great subject matter at a camera launch and this became even more the case as continuous shooting speeds started to increase with the development of the mirrorless systems. For the local debut in January 2019 of the Olympus OM-D E-M1X – still by far my favourite M43 body – in the NSW's Hunter Valley wine region, there were rally cars and aerobatic aircraft... both displays were put on exclusively for our cameras.

Samsung - Up, Down And Out

Aircraft also featured in the launch of one of Samsung's many compacts – the ST550 in October 2009 – when we were flown in our very own charter flight to the fabulous aviation museum in Temora in the Riverina region of NSW. The museum's extensive collection – all in flying condition unless being restored – is based on the warbird aircraft owned by businessman David Lowy who was actually on hand to fly an aerobatic routine in his Cessna A-37B Dragonfly jet trainer from the 1960s.

However, the big highlight for me was sitting in the cockpit of the museum's Spitfire Mk. VIII and contemplating what it must have been like to be a barely-proficient teenage pilot flying one of these things in mortal combat during WWII. This is a

“Sports and action provide great subject matter at a camera launch and this became even more the case as continuous shooting speeds started to increase.”



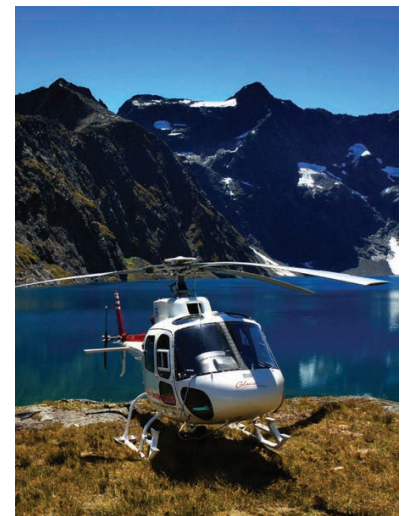
Panasonic Lumix TZ10
January 2010
Melbourne, Victoria



Panasonic Lumix TZ30
February 2012
Norfolk Island



Panasonic Lumix G3,
2011 Rugby World Cup final
October 2011
Eden Park, Auckland,
New Zealand



Panasonic Lumix TZ20
February 2011
Queenstown, New Zealand





Samsung NX1
January 2014
 Queenstown, New Zealand



Samsung NX10
March 2010
 'Roar & Snore' sleepover
 experience, Taronga Park Zoo,
 Sydney, NSW



Samsung ST500
October 2009
 Temora Aviation Museum,
 Temora, NSW



Sony A77
September 2011
 Singapore F1 Grand Prix, Marina
 Bay Street Circuit, Singapore.



much later variant – built in 1944 – than the famous Battle of Britain Spitfires, but it still conveyed a spine-tingling impression of the contribution made by the 'The Few' to achieve an unlikely victory.

In March 2010, Samsung launched the NX10 mirrorless camera with a 'Roar And Snore' experience at Sydney's Taronga Park Zoo. You stay overnight in 'glamping' type accommodation – i.e. tents with a few luxuries thrown in – so there's the opportunity to see some of the nocturnal residents in action... essentially with the zoo all to yourself after everybody else has gone home. And, yes, during the night you will hear roaring, and depending on your tent mate (partners were invited along on this event), some snoring.

By late 2014, Samsung's camera business looked to be gaining momentum especially with the launch of the higher-end NX1 mirrorless body with its 28 megapixels BSI CMOS sensor, 15 fps continuous shooting and 4K video. In the November of that year, Samsung Australia took us to Queenstown, New Zealand, to experience the NX1. Here, the spectacular scenery is almost a visual overload which is why it's been a popular destination for camera launches (in addition to going there with Panasonic, it was also where Fujifilm Australia introduced the now-legendary X100 in February 2011).

The NX1 event was excellent and so was the camera, suggesting that Samsung would be a mirrorless camera force to be reckoned with in the future, except it didn't have a future. Within 12 months, the NX1 disappeared as the South Korean electronics giant closed down its digital camera business after it had failed to meet the targets set when it had been established. A pity because the NX1 proved the potential was there.

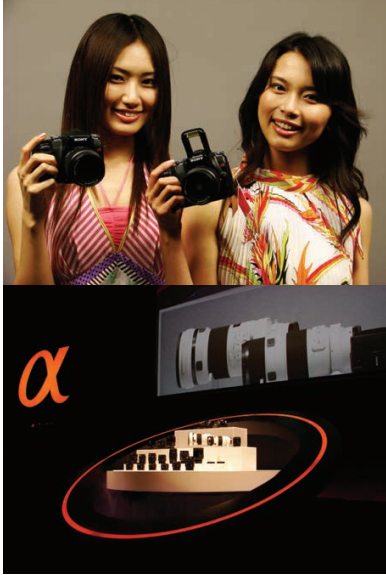
Made In Japan

With the majority of camera-makers headquartered in Japan, this country has been by far the most common international destination for press launches. In most cases, these are wider, south-east Asia market regional events, but on occasions, if the new product is really significant, global. So far, I've visited the Land Of The Rising Sun a total of 25 times, starting with a solo visit to see JVC's

“With the majority of camera-makers headquartered in Japan, this country has been by far the most common international destination for press launches.”



Sony A100 launch event
June 2006
 Tokyo, Sydney, NSW



Centenary of Victor Hasselblad's birth
March 2006
 Gothenburg, Sweden



operations (I was also writing about hi-fi and consumer electronics equipment at the time) and the most recent being the February 2025 launch of the Sigma BF.

In between, the other notable Japanese launches have included the Sony Alpha A100 (June 2006), the Panasonic Lumix L1 (July 2006), Nikon's D3 (August 2007), the Canon EOS 600D (February 2011), the Nikon D4 and the D800 (February 2012), the Fujifilm GFX50S (January 2017) and the GFX100 (May 2019). There have, of course, been the inevitable Japanese camera factory tours during this time too – among them Canon, Fujifilm, Nikon, Sony, Panasonic and Sigma – and, again, it's been fascinating to see how the technology of manufacturing precision instruments has changed over the decades, most notably with the transition from film to digital. When I first visited Canon's factory at Oita – on the eastern coast of Kyushu island – in 1988, it was making the funky Epoca 35mm 'bridge' compact. When I went back there in 2011 there was a much newer and bigger complex (opened in 2005) making the pro-level DSLRs and using the cell production system rather than a continuous production line. It's a much more efficient and flexible method – the workers in a cell build a camera from start to finish – which is now still used widely in the making of both bodies and lenses. Of course, many processes are automated, but you'd be surprised – even today – how much is done by hand. Not surprisingly, this is even more the case at Leica, especially the M lenses, but now also SL optics which are largely hand-built.

Made In Germany

I first visited Leica in May 1995 when the camera operation was based in the town of Solms – just west of Wetzlar where the company originated – to sample the R7 35mm SLR and the original M6, although neither were new models. However, it has been the remarkable revitalisation of Leica Camera AG – as it's now known – over the last two decades that has kept us camera journalists busy.

This was very convincingly demonstrated with the opening of the new Leitz Park complex at Wetzlar in May 2014 which was timed to coincide with the 100th anniversary of Oskar Barnack's prototype 35mm cameras. I've been back to Leitz Park on a few occasions since then – in October 2015 for the debut of the SL full frame mirrorless camera system, in June 2018 to celebrate the completion of the complex's Stage III building works (which included a luxury watch business), and in October 2019 for the launch of the SL2. This last trip was especially memorable for a tour of Leica's archives which include such gems as Sebastião Selgado's 'oil well' R6 35mm SLRs that survived a drenching in Kuwaiti crude, and the Leica III used by American

press photographer Sam Shere to take the famous images of *The Hindenburg* airship exploding as it docked at Lakenhurst, New Jersey.

Significant anniversaries are often marked by interesting press events, but at the very top of my list is a trip to Florida in the USA with Hasselblad in September 2009 to celebrate 40 years since man first landed on the Moon... and the first cameras to land on the Moon. The program included a tour of the Kennedy Space Centre at Cape Canaveral (culminating in a recreated countdown in Launch Complex 39 as it would have been in the 1960s), an audience with Buzz Aldrin – yes, the great man himself – and, finally, dinner served under a suspended Saturn V rocket, as propelled Apollo 11 on its famous journey. How's that for memorable? Oh yes, and NASA's gift shop at the Space Centre is a cut above any other anywhere.

Grounded!

In early 2020, the world closed down due to the pandemic and that pretty much spelled the end of press trips and of experiential camera launches. Announcements on Zoom or Teams have continued long after we were free to move around again which probably isn't surprising given it's a lot cheaper than entertaining a bunch of free-loading journalists. But the remote press conference really doesn't cut the mustard... you can't even handle the product let alone use.

There have been a few exceptions, most notably Canon Australia's launch of the EOS R5 Mark II and EOS R1 in July 2024, and as mentioned earlier, the Sigma BF in early 2025. We put the high-speed Canons through their paces at the URBNSURF surf park at Sydney's Olympic Park complex. Artificial waves are created via some clever machinery and you can vary the size and frequency. Pro surfers train here and there are great vantage points for photography with, on this day, ample opportunities to find out just how good is the R5II at 30 fps.

The Sigma BF launch was very much like the good old days with a very large group of attendees from all over the world, but as we're were in Japan, everything ran precisely to schedule. However, even the Japanese can't control the weather so unprecedentedly heavy snow in the Aizu region added to the fun. Sigma is rightly proud of its Aizu plant – about 300 kilometres north of Tokyo – which is not only state-of-the-art for lens manufacture, but extremely green in terms of its energy usage and recycling programs. There's even a garden growing vegetables, fruit and herbs which supplies the site's canteens.

My memorable moment? Sampling crisps made from Sigma's home-grown potatoes... and they were delicious. Certainly a unique camera launch experience, among a great many over the decades. 🍌

FUJIFILM X-T30 III



Size and basic styling are unchanged from the previous model so the Mark III X-T30 continues to be one of the prettiest mirrorless cameras on the market. In addition to silver, there's a choice of black and charcoal body colours.

THIRD TIME'S A CHARM

The entry-level X mount mirrorless body steps up to the current-generation processor for more speed and important boosts to its autofocus performance and video capabilities.

Right now, Fujifilm has something for everybody in its X mount 'APS-C' mirrorless line-up. If small-scale video production is your thing, there's the X-M5. If you like an RF-style body shape, there's the X-E5 and, for SLR-lookalike fans, the X-T50. Prefer a more contemporary look? Let me show you the X-S20. And if you're ready to move up to a higher-end camera, the X-T5 soldiers on and there's the X-H2 duo for your hybrid photo/video requirements. And now, if you're on a bit of a budget, prefer something compact, but with an EVF (which rules out the X-M5), and you really don't need a whole lot of bells and whistles, here's the X-T30 III.

The X-T30 line has been the entry

point to the X mount system since being introduced in early 2019 and the subsequent upgrades have been mostly subtle but have added various capabilities to keep the value-for-money aspect an attractive one. That's very much the case with the Mark III model which keeps the small size, SLR styling and dial-based control layout of its predecessor, but on the inside, it steps up to the current generation 'X Processor 5' engine which is both more powerful and faster. The 26.1 megapixels (effective) 'CMOS X-Trans 4' sensor from before is retained, but the processor is the beating heart of a contemporary mirrorless camera so the X-T30 III gets boosts to its autofocus, continuous shooting speed and video recording... up to 6.2K 'open gate' (i.e. using

the full sensor area) and with 10-bit colour. Fujifilm has done a bit since the X-T30 II was launched in October 2021, so its successor gains the full set of current 'Film Simulation' modes with the custom 'FS Recipe' options, and also the physical 'Film Simulation' dial located on the top plate which we first saw on the X-T50 and is now also on the X-M5 and X-E5.

However, before you start thinking this is the bargain of the century, Fujifilm still makes sure there's a decent gap between the X-T30 III and the X-T50 to justify the latter's \$700-odd greater asking price. So, as before, the X-T30 III's body isn't weather sealed – which will probably be a consideration if you're doing a lot of outdoor shooting – plus there's no in-body image stabilisation (IBIS) which may also be something to think about as quite a few X mount lenses don't have optical image stabilisation either.

UPPING THE SPEED

Like all the latest generation X mount bodies, the X-T30 III offers 10-bit HEIF capture among its format options which deliver HDR files, but more efficient compression means that these are no bigger in size than 8-bit JPEGs. Both HEIFs and JPEGs are captured at either Fine or Normal compression levels and at three image sizes plus, of

course, there's the option of RAW+JPEG or RAW+HEIF recording.

The maximum image size for stills is 6240 x4160 pixels and there's a choice of three aspect ratios – namely 3:2, 16:9 and 1:1. In-camera conversion is available to turn the HEIF files into JPEGs or into either 8-bit or 16-bit TIFFs. Additionally, RAW files can be converted into either JPEGs or HEIFs.

Still capture at a very zippy 30 fps if you're happy with a 1.25x crop (which still gives a resolution of 16.6 megapixels), and this obviously uses the camera's sensor shutter. Otherwise, the top speed is 20 fps which will still be fast enough for most applications. For More Mags check sastatus.com. The quoted burst lengths are 127 frames for best-quality JPEGs or 60 compressed RAW files. These extend to 141 and 81 respectively if you opt for the 1.25x crop at this frame rate which is also available when shooting at 10 fps. The focal plane shutter's fastest shooting speed is 8.0 fps which again slightly extends the burst lengths to 173 best-quality JPEGs or 82 compressed RAW files. Alternatively, RAWs can be alternatively captured with lossless compression or uncompressed; all



BEFORE YOU START THINKING THIS IS THE BARGAIN OF THE CENTURY, FUJIFILM STILL MAKES SURE THERE'S A DECENT GAP BETWEEN THE X-T30 III AND THE X-T50 TO JUSTIFY THE LATTER'S \$700-ODD GREATER ASKING PRICE."



▲ Rear panel layout includes a multi-directional joystick-type controller.

options with 14-bit RGB colour. Incidentally, the sensor shutter also has an 8.0 fps speed setting with the same burst lengths (but obviously with nearly silent shooting). Additionally, if you opt for the FP shutter's mid-speed rate of 5.0 fps, you get virtually limitless JPEG shooting (it's quoted at "1000+" frames) which also extends to compressed RAW capture at the 4.0 fps slow speed setting (there's also a 3.0 fps option).

The X-30 III gains the 'Pre-Shot' function which commences continuous capture immediately that the shutter release button is at the half-way position (i.e. for metering and autofocus). This can be set to 30, 20, 10 or 8.0 fps and captures a rolling one second of frames prior to shutter release.

TASTIER FILMIC LOOKS

For the in-camera processing of JPEGs (and HEIFs), the X-T30 III steps up to the full current selection of 20 'Film Simulation' profiles. Following the X-E5, it has the facility for additionally creating and storing three user-created "recipes" (a term borrowed

from the cinematography world). These are designated 'FS1' to 'FS3' and not only use the usual adjustable profile parameters (such as colour, contrast and sharpness), but also the effects processes – 'Colour Chrome Effect', 'Colour Chrome Effect Blue', 'Grain Effect' and, for the B&W modes, 'Monochromatic Colour' which offers tinting in the ranges of warm-to-cool or green-to-magenta. A processing function called 'Portrait Enhancer LV' takes over from 'Smooth Skin Effect' and works in concert with face detection to soften skin with the option of Weak, Medium or Strong settings.

It's always been possible to apply these effects to a 'Film Simulation' profile, but now they can be integrated into a recipe as a key 'ingredient' rather than an added extra. This is obviously a step beyond just modifying the existing 'baked-in' profiles, although you can still choose to use the custom slots for storing customised adjustments to these.

As always, there's an auto bracketing mode for 'Film Simulation' profiles – which includes the 'FS' trio – and allows for up to three to be applied simultaneously to an



▲ Shutter speed dial is a chunky component. T setting provides access to speeds slower than one second.



▲ Exposure compensation dial is marked up to +/-3.0 EV and you switch to the 'C' setting for the extended range to +/-5.0 EV.



▲ Lever below the shutter speed dial switches the camera to fully automatic, point-and-shoot operation, including subject/scene recognition.

image. These profiles are applied directly to JPEGs or HEIFs, and the data appended to a RAW file as a post-camera processing option (when there's the option to switch between any of them).

In addition to the 'Film Simulation' profiles, auto bracketing is available for exposure, dynamic range processing, sensitivity, white balance and focus. The focus bracketing can be set for up to 999 frames with a shift in the focus from one through to ten steps.

The other in-camera adjustments include 'Dynamic Range Priority' processing, the dynamic range expansion processing, multi-shot HDR capture and Fujifilm's 'Lens Modulation Optimiser' (LMO) which corrects for the diffraction blur which occurs when using very small aperture settings. All other lens corrections are applied automatically. The X-T30 III also has a multiple exposure facility, an intervalometer, in-camera panorama stitching (horizontal or vertical), and auto flicker detection and shutter speed correction. The multiple exposure facility allows for a total of nine frames to be combined with the choice of Additive, Average, Comparative Light or Comparative Dark exposure management options. The intervalometer can be set to record unlimited frames or, alternatively, a specific number of up to 999.

LOOKING AND LEARNING

The newer 'X Processor 5's engine endows the X-T30 III with some significant upgrades to its autofocus, bringing it up to speed with all the other recent X mount bodies such as the X-M5 and X-E5. Consequently, the list of subject recognition mode expands to cover people, animals, birds (including insects), cars, motorcycles and push bikes, trains and aircraft (which encompasses helicopters and drones).

Face/eye detection is the default acquisition and tracking mode for humans, and it will work with people wearing goggles, spectacles or masks; or if the subject is in profile. It can also be set to prioritise either the right or left eye.



However, as across the current range, it remains that human face/eye detection is separate from all the other subjects so there's more to do to switch between them than should be necessary.

Automatic subject recognition is available with the camera's fully automatic point-and-shoot mode, but not as a standalone option with the standard 'PASM' exposure modes.

The hybrid contrast/phase-detection autofocus has 425 selectable measuring points which are arranged in a 25x17 pattern with the option of switching to 117 points in a 13x9 pattern for speedier selection. Low light sensitivity extends down to -7.0 EV at ISO 100, but this is with the super-fast and pricey XF 50mm f/1.0 prime lens, so the more realistic spec is -4.0 EV at f/2.8.

There's a big selection of AF area modes which increase in size from Single-Point (itself adjustable to one of six sizes), through Zone (in 7x1, 7x3, 7x7, 5x5, 5x3 or 3x3 point clusters selected from the 117 points) and to Wide which uses all the measuring points. There's also an 'All' setting which allows you to cycle through these three modes via the rear input wheel. In addition, you can create three custom Zone areas in any size or shape you want. With continuous AF operation, the area modes are Single-Point, Zone, Tracking and All. As is a fixture on both X and G mount Fujifilm mirrorless cameras, the 'AF-C Custom' submenu provides a set of five scenarios for fine-tuning tracking based on how the subject is moving and via three parameters - Tracking Sensitivity, Speed Tracking Sensitivity and Zone Area

▲ Check out the dials... if you like you're a classically styled camera, here it is.

Switching - or there's a sixth option for creating your own customised configuration.

To assist with manual focusing there's the standard magnified image and focusing peaking display options, plus Fujifilm's 'Digital Split Image' and 'Digital Microprism' displays. These are 'virtual' representations of, respectively, the classic split-image rangefinder and the gridded collar or ring which surrounded it in the optical viewfinders of many 35mm SLR's. The 'Digital Split Image' display can be in either colour or B&W, but latter actually makes it easier to see what's going on. However, as we've noted on many occasions previously, it's hard to beat the focus peaking display for useability. It's available in the choice of red, white, blue or yellow colours, set at one of two intensity levels.

LIGHT AND COLOUR

As has been standard across the current line-up of Fujifilm mirrorless cameras for quite a while, exposure control is based on TTL metering using the imaging sensor with 256 measuring points and the choice of multi-zone, centre-weighted average, fully averaged or spot patterns. The spot meter can be linked to the active focusing point or zone. Additionally, the metering will be tuned to the subject type selected with the subject-recognition AF. There's the standard set of 'PASM' exposure control modes, plus a total of 14 subject/scene modes which become available with the camera's fully



▲ Shutter release button retains a cable release socket.



▲ Pop-up flash is activated via a lever below the 'Film Simulation' dial. Flash power is GN 7.0 at ISO 200.



▲ Selector on the front panel switches between the focusing modes.

auto shooting setting.

The auto exposure overrides are an AE lock, exposure compensation for up to +/-5.0 EV and, as mentioned earlier auto bracketing which can be applied over sequences of two, three, five, seven or nine frames with adjustments of up to +/-3.0 EV per frame. The focal plane shutter has a timed speed range of 15 minutes up to 1/4000 second with flash sync up to 1/180 second and a 'B' setting for longer exposure times of up to 60 minutes. The shutter speed dial has a 'T' position, but this isn't a timer setting; rather it accesses the shutter speeds slower than one second.

The sensor shutter runs up to 1/32,000 second, but the sensor's slow read-out speed precludes the use of flash so there's the option of the hybrid 'electronic first

curtain shutter' (EFCS). Here the speed range is also 900-1/4000 second with flash sync up to 1/180 second, but the shutter operation is a bit quieter (although why this should really matter when you're firing a flash – which will certainly attract attention – is a bit of a mystery). There are three additional 'mix-and-match' shutter type settings with the 'M+E', 'EF+M' and 'EF+M+E' combinations all seamlessly switching to the faster shutter speeds as needed.

The white balance control options comprise three auto modes – Auto, White Priority or Ambience Priority – with the latter two primarily for use with incandescent light sources to either correct for, or alternatively, preserve the warmer tones. Alternatively, there's a choice of seven lighting presets

(including one for shooting underwater), the provision for making and storing up to three custom WB measurements, white balance shifting in all modes and presets, and the previously mentioned auto bracketing which is over three frames. Finally, the colour temperature can be set manually over a range of 2500 to 10,000 degrees Kelvin.

IN THE HAND

As well as maintaining an entry-level price tag – comparatively speaking at least – the X-T30 III also keeps the trim dimensions of its predecessors which makes a nice change as successive generations of mirrorless camera all seem to have been at the party pies. There's also a new and very compact kit zoom – the XC 13-33mm f/3.5-6.3 OIS (note that it does have image stabilisation) –

MAKING MOVIES

As noted in the main text, Fujifilm is touting the X-M5 – with its dedicated vlogging mode and three mic audio set-up – at single-presenter video-makers so the X-T30 III is essentially more photo-orientated, but the later-gen processor delivers some pretty handy video capabilities, nonetheless.

The headline act is 6.2K res video in the 3:2 'open gate' aspect ratio at 24/25/30 fps with 10-bit 4:2:2 (or 4:2:0) colour using the H.265 codec with LongGOP compression. Additionally, there's the choice of 8.0, 25, 50, 100 or 200 Mbps bit rates. Using the sensor's full imaging area provides flexibility with framing so, for example, there's the option of using the 9:16 aspect for mobile applications.

Both 4K DCI and 4K UHD are recorded using the full width of the sensor – i.e. downsampled from 6.2K – with either 10-bit 4:2:2 or 4:2:0 colour with the HEVC H.265 codec or 8-bit 4:2:0 colour with MPEG 4 AVC/H.264, both with Long GOP interframe compression. The caveat here is that this is at the 24, 25 and 30 fps frame rates, but at the faster 50 and 60 fps there's a smallish 1.18x crop. Again, there's the choice of bit rates from 8.0 to 200 Mbps.

All these options are also available with 2K recording – in either the 16:9 or 17:0 aspects – but with full-width recording at 50/60 fps while slowmo frame rates up to 200/240 fps come with a heavier 1.29x crop.

Notably, the X-T30 III has the wider F-Log2 profile for video which gives a claimed "13+" stops of dynamic range which translates into an increased exposure latitude. It has a base ISO of 1250 versus 640 for F-Log recording (which is also available and has a dynamic range of 12 stops). Alternatively, of course,

there's the Eterna and Eterna Bleach Bypass cinematic 'Film Simulation' profiles along with HLG HDR recording. As with the X-M5, there's a 'Short Movie' mode for shooting short Full HD clips (15, 30 or 60 seconds) in the vertical 9:16 aspect for replay on smartphones. However, this format is also available with normal recording and with access to higher bit rates.

As per all the recent X mount models, for external recording over the HDMI output, there's 12-bit ProRes RAW or Blackmagic RAW encoding at up to 6.2K and 25/30 fps or 5.2K at up to 50/60 fps. This also supports 4K at up to 50/60 fps and 2K up to 100/120 fps.

On the audio side, the X-T30 III has built-in stereo microphones with auto/manual level controls, a wind-cut filter, a low-cut filter and a limiter. However, the stereo audio input is via a 2.5 mm minijack which means you'll need an adapter for any unit with the standard 3.5 mm plug (which is most of them). Likewise, if you want an audio output for monitoring headphones then this has to be via a USB C adapter (which isn't supplied). These limitations are carried over from the previous model and clearly indicate the Mark III version's priorities, but there's also the absence of IBIS and the single card slot working against the overall convenience of shooting video with this camera. However, there is electronic image stabilisation, but as it moves the image around on the sensor to compensate for camera shake there's a crop involved (up to 1.32x depending on the resolution and frame rate). And, as with the X-M5, there's 'Frame.io Camera to Cloud' support which overcomes the single card slot issue as, for example, it can be used to send video proxies while recording the source footage. Also, like the M5, the X-T30 III has zebra patterns with adjustable brightness threshold, time coding, 'Movie

Optimised Control' for silent operation via the touch screen, front and rear tally lamps, and Webcam streaming support via USB C. To this can be added all the 'Film Simulation' profiles and their adjustment parameters, the monochromatic colour adjustments, the dynamic range expansion processing and high ISO noise reduction plus there's a video-only in-camera correction for lens vignetting (a.k.a. 'Peripheral Light Correction').

The upgraded autofocus has benefits for video as well as photography, enhancing the subject tracking in general – including with the eye/face detection for people – and excellent lock-on characteristics with the AI-based recognition. As with the X-M5, tracking can be initiated by simply tapping on the subject in the touch screen and the camera will then follow any subsequent movement. Also, exclusively for video shooting, there's an additional manual focus assist called the 'Focus Meter' which provides an indicator needle to show whether the focus is in front of or behind the subject. Additionally, this can be used in conjunction with the focus peaking display which is even more helpful. There's also a 'Focus Map' assist which shows what's in focus and what's not across the live view image.

So, for serious video shooters, the X-T30 III is a bit of a mixed bag with what is essentially a very handy set of recording capabilities and features, but which are somewhat compromised by the hardware itself... i.e. no IBIS, tilt-only monitor, limited audio connections and a single card slot. You can get around all of this in one way or another, but obviously Fujifilm would like to steer you in the direction of the X-M5 or the X-S20 if video is a priority. For anybody else, it's more than up to the job.



Test images captured as JPEG/large/fine files using the Fujinon XF 18-55mm f2.8-4.0 R LM OIS and XC 13-33mm f/3.5-6.3 OIS zoom lenses. Velvia/Vivid, Classic Chrome and ACROS+Red 'Film Simulation' presets, shutter-priority auto exposure control and multi-zone metering at ISO 400, 640 and 800. Straight out of the camera, best-quality JPEGs exhibit plenty of well-defined fine detailing, nicely smooth tonal gradations and a wide dynamic range.





ISO 80



ISO 160



ISO 200



ISO 400



ISO 800



ISO 1600



ISO 3200



ISO 6400



ISO 12800



ISO 25600



ISO 51200

The sensor's 'dual gain' circuitry gives two base ISO settings – at 160 and 800 – with the result that noise is markedly reduced at the higher sensitivity settings. The full native ISO range is useable, and the image quality remains good even at the extension settings too. These images are JPEG/large files taken in the aperture-priority auto mode with the aperture set to f11 so the exposure time varies to compensate for the ISO adjustments. Both High ISO and Long Exposure noise reduction are switched off. Fujinon XF 18-50mm f/2.8-4.0 R LM OIS zoom.

which is the smallest and lightest X mount zoom lens that we've seen so far, but still has a pretty useful effective focal range of 20-50mm.

The styling has some obvious DNA from the Fujica ST series 35mm SLRs of the 1970s, and the X-T30 III is close in size that system's entry-level model, the ST605 (although obviously a good deal more capable). The construction comprises magnesium alloy top and bottom covers over a polycarbonate chassis which helps with the lightness of weight (just 378 grams without the battery) but also gives a pretty solid feeling in the hand. As noted earlier, there isn't any weather sealing. There isn't a handgrip either, but given the small size and light weight, you really don't need one, even with a bigger lens attached.

The top panel control layout is all classic dials – which are knurled metal components just like in the good old days – and now,

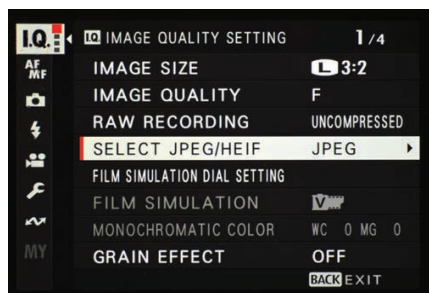
as also mentioned earlier, include one for setting the 'Film Simulation' profiles. This replaces the previous drive mode dial and these functions are now selected via a button.

The 'Film Simulation' dial has six positions for a selection of photo-based favourites – namely Provia/Standard, Velvia/Vivid, Astia/Soft, Classic Chrome, Reala ACE and ACROS B&W – plus a further three 'FS' settings that can be assigned to whichever profiles you'd like to add. Additionally, you can modify the ACROS setting to have any of the contrast filter options. There's also a 'C' setting which will take you to whichever 'Film Simulation' profile you've assigned to it in the main 'IQ' image quality menu. The other dials are for setting shutter speeds and exposure compensation. As across the X-T family, there isn't a dedicated exposure mode dial and you instead set the shutter speeds and/or aperture collar to 'A' for the

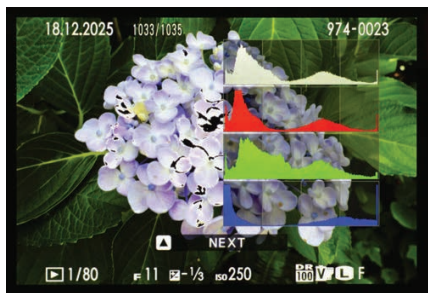
semi-auto or program options... the latter obviously having both set to 'A'. It's how the first multi-mode 35mm SLRs worked in the late 1970s and early '80s and is perfectly logical when you think about it.

The rest of the top panel control layout comprises front/rear input wheels (which Fujifilm calls 'Command Dials' and which also have press-in actions), the shutter release which incorporates a cable-release socket and the on/off switch, an 'Fn' multi-function button, a lever to pop up the built-in flash and another lever to switch the camera to its fully automatic point-and-shoot operation. Both levers are located below dials, as there isn't a lot of real estate available.

The rear panel layout is also very straightforward and has a joystick-type controller and a handful of function buttons, including the one for the drive settings. This also gives you access to the auto



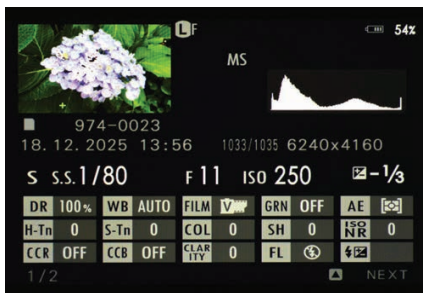
▲ The X-T30 III is the latest Fujifilm X mount mirrorless camera to have the option of 10-bit HEIF capture.



▲ Review/replay screens include a full set of histograms and two pages of capture data, including the lens settings.



▲ Monitor-based 'Info Display' includes a large selection of function settings, the exposure settings, a real-time histogram and an AF point/zone map.



▲ Live view screen is configurable with an extensive choice of elements and read-outs, including a real-time histogram, a highlight warning, either single- or dual-axis level indicators and a choice of grid patterns.



bracketing modes, multi-shot HDR capture, the multiple exposure facility, the 'Advanced Filter' effects and the in-camera panorama stitching function.

In addition to the top panel's 'Fn' button, another four are customisable as is the rear input wheel's press-in action. Additionally, there's the set of four 'Touch Functions' ('T-Fn') which use left, right, up and down swipe actions on the monitor's touch screen to select assigned functions. These and the physical controls can be assigned pretty well everything that the X-T30 III can do – there are, in fact, ten menu pages of items to select from. Furthermore, pressing the front input wheel cycles through a selection of adjustments – apertures, ISO settings, exposure compensation or the 'Film Simulation' profiles (and these vary according to the selected exposure mode).

The touch screen implementation includes focus point/zone/face selection, and, for playback, there are touch controls for browsing, zooming in or out (which also selects the thumbnail pages), or zooming in on the active focus point/zone. When a power zoom lens is fitted, there's also a 'Touch Zoom' function. Additionally, the monitor-based 'Quick Menu' has touch tiles, but the main menus still have to be navigated using the joystick controller along with the front or rear input wheels. The 'Q Menu' is extensively customisable with up to 15 functions on display as the default 'Custom Settings Bank', but you can create an additional seven customised banks which might, for example, be used when shooting specific subjects. You can also reduce the number of displayed function tiles to 12, eight or just four. There's also a

video-specific 'Quick Menu' screen, again with all the same customising options as for photography.

The monitor screen itself is adjustable for up/down tilts, but that's all, and has a resolution of 1.64 megadots. The EVF is unchanged from the previous model so it's a 1.0 cm OLED display with a resolution of 2.36 megadots and a magnification of 0.62x (35mm equivalent). It's shared with both the X-T50 and X-E5 and, as we noted with both these models, it seems quite small until you get used to using it, and then it works fine. Both the EVF and the monitor are adjustable for brightness, colour saturation and colour balance.

The live view screen can also be extensively customised with the key elements comprising 3x3 or 4x6 guide grids, a real-time histogram (either brightness only, or with the RGB channels as well), level indicators – either single- or dual-axis displays – and a highlight warning (or you can use video's zebra patterns which have an adjustable threshold and so can be more helpful). There is a long list of available read-outs and status indicators – just over four Display Custom Setting' menu pages – and you simply tick the boxes as desired. Additionally, you can increase the size of selected icons and adjust the display contrast to enhance legibility in different lighting conditions. This includes a 'Dark Ambient Lighting' setting which gives red-on-black displays to help better preserve your night vision.

As with the previous model, the X-T30 III is powered by the 1260 mAh NP-W126S lithium-ion battery which is also currently used by the X-T50, the X-M5 and the X-E5.

Fujifilm quotes 415 shots when the camera is the Economy power mode, but this drops to 310 shots in the Normal mode which is how you'll most likely run the camera. In-camera battery recharging is available via the USB Type C port which also allows for Webcam video streaming at up to 4K and 50/60 fps. The other interfaces are micro-HDMI (i.e. Type D) and the pesky 2.5 mm minijack input (instead of 3.5 mm) for connecting an external stereo microphone or a wired remote trigger. You won't be surprised to learn that there isn't a stereo audio output.

The wireless connectivity options are via WiFi 2.4 GHz and Bluetooth 5.2 LE with the Fujifilm XApp allowing for both image file transfer and remote control of the camera. Like all the recent Fujifilm cameras, the X-T30 III has 'Frame.io Camera to Cloud' support so high-res images and video clips can be immediately uploaded to Adobe's Frame.io software platform as they're recorded.

SPEED AND PERFORMANCE

With a San Disk Extreme PRO 32 GB SDXC UHS-II memory card and using the sensor shutter, the X-T30 III captured a burst of 158 JPEG/large/fine frames – at the full frame size – in 7.834 seconds which represents a continuous shooting speed of 20.16 fps. With the focal plane shutter, a sequence of 108 best-quality JPEGs was recorded in 13.307 seconds to give a shooting speed of 8.11 fps (and the camera would have gone on shooting for a lot longer, we just chose to stop the timing at this point). The test files averaged 16 MB in size.

Arguably the biggest improvement over

the previous model is the autofocus performance which is faster with more reliable subject tracking – even beyond the subjects covered by the expanded recognition list – thanks to an upgraded movement prediction algorithm.

In addition to the enhanced responsiveness and speed, the T30 III's AF is also very reliable in low light situations. The tracking keeps up with subjects that are fast moving or change direction either continually or erratically. The eye/face detection for humans stays locked-on with a smaller-sized head and if the subject either briefly looks away or looks down.

As is to be expected, the X-T30 III's image performance is very much on a par with the X-M5 with which it shares the same sensor and processor combo. Of course, the 'X-Trans CMOS 4' sensor already has a proven track record in the previous X-T30s models as well as the X-T4s and the X100V. As we've noted previously, the pixel count of 26.1 million pixels count is a real sweet spot for an 'APS-C' format sensor, balancing resolution and a reasonable pixel size. The latter gives a higher signal-to-noise ratio and the subsequent benefits in terms of image quality such as a wider dynamic range. As a result, the best-quality JPEGs from the X-T30 III exhibit plenty of well-defined fine detailing, nicely smooth tonal gradations and a wide dynamic range. As always, the 'Film Simulation' profiles provide plenty of scope for playing with colour and tonality, and here Fujifilm remains unchallenged in its ability to balance colour saturation and tonality to create a specific look, but now with the added capacity to make your own customised recipes.

The sensor's dual-gain output's two base ISOs are set at ISO 160 and ISO 800. The low ISO circuit optimises dynamic range and the high ISO circuit optimises sensitivity (i.e. the signal level) which results in some reduction of the dynamic range (at the highlights end), but reduced noise in the shadows. Consequently, the noise characteristics at the higher sensitivity settings are essentially minus two-and-a-

third stops better off so less noise reduction processing is required to the benefit of both sharpness and saturation. This means that the image quality at ISO 4000 will be pretty much the same as it is at ISO 800, albeit with some reduction in dynamic range. In practical terms then, the full native ISO range is useable, as there's a negligible loss of definition at ISO 12,800 and only minimal softening at ISO 25,600. The dual gain circuitry also gives more flexibility when it comes to exposures as, for example, there's actually a less noise at ISO 800 or 1600 than at ISO 400. This means more latitude if you're deliberately using underexpose to preserve more details in the highlights and then subsequently brightening the shadows which will exhibit much less noise than would otherwise be the case.

THE VERDICT

Like its predecessors, the X-T30 III vies with the lower-end Olympus/OM System bodies in the beauty stakes but is more overtly classical in styling and operation thanks to all the dial-based control layout. Subjectively then, these also make it much more intuitive to use and enhance the involvement factor. It is a thoroughly enjoyable and engaging camera to use.

Perhaps most importantly though, Fujifilm has done a really clever job of maintaining affordability while also making sure that you don't miss out on important features such as state-of-the-art autofocus and faster shooting speeds (plus more flexibility when it comes to shooting video). Yet there's still a clear distinction between this model and the X-T50 if an SLR-style mirrorless camera body is your preference so it's a case of how much you want to spend. However, the X-T30 III is still a lot of camera for your money in terms of its capabilities and performance. What's more, in real world terms it has as much as a great many users will likely ever need or want so to save your pennies for lenses. Incidentally too, the new 13-33mm 'kit' zoom is a real gem and surprisingly flexible given its extra-wide to



▲ 'Film Simulation' dial offers direct on-camera access to the staple profiles and also three custom-made 'FS' recipes.



▲ Both the front and rear input wheels have press-in actions for various functions. The front control cycles through a selection of adjustments – apertures, ISO settings, exposure compensation or the 'Film Simulation' profiles

standard focal range. Consequently, this is a very handy little package if you're making a move into mirrorless from an 'APS-C' DSLR (you'll notice the size difference straight away) or stepping up from a smartphone.

There's a fair bit of competition at this price point for cropped-sensor bodies right now – including Nikon's excellent Z50II – but the X-T30 III gets big plusses for being the smallest, the most stylish and the fastest (albeit with a crop). Plus, if you like a camera with a more classical look and feel, the X-T30 III can't be beaten, especially as it now supports this with a more contemporary feature set. 📸

VITAL STATISTICS



FUJIFILM X-T30 III \$1,679 body only, recommended retail price

Type: Enthusiast-level digital mirrorless camera with Fujifilm X bayonet lens mount.

Focusing: TTL automatic hybrid system using phase-difference detection and contrast-detection measurements. 425 measuring points (in 25x17 or 13x9 patterns). Single-point (six sizes), zone (in 7x1, 7x3, 7x7, 5x5, 5x3 or 3x3 point clusters selected from 117 points), custom zone (three user-defined shapes) and wide/tracking modes. Five 'AF-C Custom' settings for optimising tracking plus a user-definable setting for Tracking Sensitivity, Speed Tracking Sensitivity and Zone Area Switching. Face/eye detection with left/right priority. Subject detection for animals, birds

and insects, cars, motorcycles and bikes, aircraft and drones, and trains. Auto subject detection when the camera is in full auto mode. Focus range limiter. Face/eye detection with left/right priority. Manual switching between one-shot and continuous AF modes. AF+MF mode. Low-light assist via built-in illuminator. Manual focus assist via magnified image, 'Digital Split Image' display (colour or B&W), Digital Microprism' display, or focus peaking display (white, red, blue or yellow; low or high levels). Sensitivity range is EV -7.0 - 18 (ISO 100 and f/1.0).

Exposure Modes: Continuously variable program with shift, shutter-priority auto, aperture-priority auto

and metered manual. 14 subject/scene modes with automatic selection in 'Auto' mode.

Shutter: Electronic, vertical travel, metal blades, 900-1/4000 second plus 'B' (up to 60 minutes). Flash sync up to 1/180 second. Sensor shutter has a speed range of 900-1/32,000 second. Electronic front curtain shutter (EFCS) has a speed range of 900-1/4000 second plus 'B' (up to 60 minutes). Exposure compensation up to +/-5.0 EV in 1/3-stop increments.

Viewfinder: 1.0 cm OLED-type EVF with 2.36 megadots resolution, 100% vertical/horizontal scene coverage and 0.62x magnification (35mm equivalent). ▶



VITAL STATISTICS

Automatic/manual switching between the EVF and the LCD monitor screen. Eyepiece strength adjustment built in. 7.62 cm LCD monitor (1.62 megadots) with up/down tilt adjustment and touch screen controls. Both EVF and monitor are adjustable for brightness, colour saturation and colour balance.

Flash: Built-in flash pop-up flash with GN 7.0 power (ISO 200). Auto, red-eye reduction, fill-in, slow sync, first/second curtain sync, and commander modes. Manual control down to 1/64. Up to +/-2.0 EV flash compensation. External flash units connect via hot-shoe.

Additional Features: Magnesium alloy top and bottom panels over a polycarbonate bodyshell, AE/AF lock, auto exposure bracketing (up to +/-3.0 EV over two, three, five, seven or nine frames), multiple exposure function (two shots), multi-mode self-timer (2 and 10 second delays), audible signals, auto power-off, cable release connection, wired remote trigger.

DIGITAL SECTION

Sensor: 26.1 million (effective) pixels 'X-Trans CMOS 4' (BSI-type CMOS) with 23.5x15.6 mm imaging area and 3:2 aspect ratio. Sensitivity equivalent to ISO 160-12,800, extendable to ISO 80, 100, 25,600 and 51,200.

Focal Length Magnification: 1.5x.

Formats/Resolution: Two JPEG compression settings, two HEIF compression settings, RAW output (compressed, lossless compressed or uncompressed), RAW+JPEG and RAW+HEIF capture. Three resolution settings at 3:2 aspect ratio; 6240x4160, 4416x2944 and 3120x2080 pixels. Three resolution settings at 16:9 aspect ratio; 6420x3512, 4416x2488 and 3120x1760 pixels. Three resolution settings at 1:1 aspect ratio; 4160x4160, 2944x2944 and 2080x2080 pixels. 24-bit RGB colour for JPEGs, 30-bit colour for HEIFs, 42-bit RGB colour for RAW files.

Video Recording:

- MOV format with 10-bit 4:2:2 or 4:2:0 colour (HEVC/H.265 codec, LongGOP compression) at 6240x3510 pixels (6.2K); 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 3:2 aspect ratio. At 4096x2160 pixels (4K DCI); 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18x crop. At 3840x2160 pixels (4K UHD); 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 16:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18x crop.
- At 2048x1080 pixels (2K DCI) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 1920x1080 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 16:9 aspect ratio. At 1080x1920 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 9:16 aspect ratio. At 1920x1080 pixels (2K FHD) at 240, 200, 120 or 100 fps (200 Mbps) and 16:9 aspect ratio with a 1.29x crop. At 1080x1920 pixels (2K FHD) at 240, 200, 120 or 100 fps (200 Mbps) and 9:16 aspect ratio and a 1.29x crop.
- MOV format with 8-bit 4:2:0 colour (MPEG 4 AVC/H.264 codec, LongGOP compression) at 4096x2160 pixels (4K DCI); 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18 crop. At 3840x2160 pixels (4K UHD); 30, 25 or 24

fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18 crop.

- At 2048x1080 pixels (2K DCI) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 1920x1080 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 16:9 aspect ratio. At 1080x1920 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 9:16 aspect ratio. At 1920x1080 pixels (2K FHD) at 240, 200, 120 or 100 fps (200 Mbps) and 16:9 aspect ratio with a 1.29x crop. At 1080x1920 pixels (2K FHD) at 240, 200, 120 or 100 fps (200 Mbps) and 9:16 aspect ratio and a 1.29x crop.
- MP4 format with 8-bit 4:2:0 colour (MPEG 4 AVC/H.264 codec, Long GOP compression) at 4096x2160 pixels (4K DCI); 30, 25 or 24 fps (8.0, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18 crop. At 3840x2160 pixels (4K UHD); 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 4096x2160 pixels (4K DCI); 60 or 50 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio and 1.18 crop.
- At 2048x1080 pixels (2K DCI) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 17:9 aspect ratio. At 1920x1080 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 16:9 aspect ratio. At 1080x1920 pixels (2K FHD) at 60, 50, 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 9:16 aspect ratio. At 1080x1920 pixels (2K FHD) at 30, 25 or 24 fps (8.0, 25, 50, 100 or 200 Mbps) and 9:16 aspect ratio. At 1920x1080 pixels (2K FHD) at 240, 200, 120 or 100 fps (200 Mbps) and 16:9 aspect ratio with a 1.29x crop.

Built-in stereo microphones with auto/manual levels adjustment, limiter, wind-cut filter and low-cut filter. Stereo audio input via a 2.5 mm minijack (switchable between mic level and line level).

Video Features: F-Log and F-Log2 gamma profiles, HLG HDR recording, time code (free run or rec run, drop frame correction), electronic image stabilisation (with a crop), 'Short Movie' mode for 9:16 vertical aspect clips (at 15, 30 or 60 seconds), HDMI rec control, 'Focus Meter' MF assist, 'Focus Map' MF assist, focus peaking display, two zebra patterns with adjustable brightness thresholds, 'Movie Optimised Control' for silent operation via touch screen, front and rear tally lamps, Webcam support via USB C.

HDMI Output: ProRes RAW 12-bit 6.2K 3:2 and 5.2K 16:9 at 30, 25 or 24 fps.

Blackmagic RAW 12-bit 6.2K 3:2 and 5.2K 16:9 at 30, 25 or 24 fps. 6.2K 16:9 with 10-bit 4:2:2 colour and 30, 25 or 24 fps. 4K DCI 17:9 with 10-bit 4:2:2 colour and 60, 50, 30, 25 or 24 fps. 4K UHD 16:9 with 10-bit 4:2:2 colour and 60, 50, 30, 25 or 24 fps. Full HD 16:9 or 17:9 with 10-bit 4:2:2 colour and 60, 50, 30, 25 or 24 fps. High Speed Rec HDMI; Full HD 16:9 with 10-bit 4:2:2 colour and 120 or 100 fps.

Recording Media: Single memory card slot for SD, SDHC and SDXC with UHS-I speed support.

Continuous Shooting: Up to 173 JPEG/large/fine frames at up to 8.0 fps or 38 RAW (lossless compressed) frames using the focal plane shutter. Up to 127 JPEG/large/fine frames at up to 20 fps or 34 RAW (lossless compressed) frames using the sensor shutter. Low speed continuous mode captures at 5.0 fps with continuous AF/AE adjustment. Up to 128 JPEG/large/fine frames at 30 fps or 46 RAW (lossless compressed)

frames using the sensor shutter with a 1.25x crop. 'Pre-Shot' pre-capture buffering at 8, 10, 20 or 30 fps for one second.

White Balance: TTL measurement. Three auto modes, seven presets and three custom settings. White balance shifting/tuning in all modes and presets, and white balance bracketing. Manual colour temperature setting from 2500 to 10,000 degrees Kelvin. Auto White Priority maintains whites under incandescent lighting. Auto Ambience Priority maintains warmer hues under incandescent lighting.

Interfaces: USB 3.2 Gen 2 (Type C), micro-HDMI (Type D), 2.5mm stereo audio input/remote trigger connector.

Additional Digital Features: Sensor cleaning, 20 'Film Simulation' presets (Provia/Standard, Velvia/Vivid, Astia/Soft, Classic Chrome, Nostalgic Neg, Pro Neg High, Pro Neg Standard, Classic Neg, Reala Ace, Eterna/Cinema, Eterna Bleach Bypass, ACROS, ACROS+Yellow, ACROS+Red, ACROS+Green, B&W, B&W+Yellow, B&W+Red, B&W+Green, Sepia), three custom 'FS Recipe' slots (FS1, FS2, FS3), adjustable image parameters (Tone Curve – Highlight/Shadow, Colour Saturation, Sharpness, Clarity and Monochromatic Colour – warm-to-cool or green-to-magenta), 'Colour Chrome Effect' (Strong, Weak, Off), 'Colour Chrome Effect Blue' (Strong, Weak, Off), 'Grain Effect' (Roughness: Strong, Weak, Off, Size: Large, Small), 'Portrait Enhancer LV' (Strong, Medium, Weak, off), eight 'Advanced Filter' effects (Toy Camera, Miniature, Pop Colour, High-Key, Low-Key, Dynamic Tone, Soft Focus and Partial Colour [Red/Orange/Yellow/Green/Blue/Purple]), multi-shot HDR capture (Auto, HDR200, HDR400, HDR800, HDR800 Plus), multiple exposure facility (up to nine shots with Additive/Average/Bright/Dark exposure adjustment), in-camera panoramas (120 or 180 degrees), flicker detection and correction, pixel mapping, 'Lens Modulation Optimiser' (LMO) processing, intervalometer (up to 999 frames), dynamic range expansion (Auto, 100%, 200%, 400%), 'Quick Menu' control screen, real-time histogram display, dual-axis level display, grid displays (choice of two), guidance displays, bracketing functions (AE, Film Simulation, Dynamic Range, ISO, White Balance, Focus), high ISO noise reduction (plus/minus four levels), long exposure noise reduction (On/Off), sRGB and Adobe RGB colour space settings, in-camera editing functions (RAW Conversion [18 adjustable parameters], Erase, Crop, Resize, Protect, Image Rotate, Red-Eye Removal, Copy, PhotoBook Assist), slide show, multi-image playback, 9/100 thumbnail displays, zoom playback, silent mode, Instax print, customisable 'My Menu' (16 items), seven custom 'Quick Menu' settings banks, copyright info, Wi-Fi 2.4 GHz and Bluetooth 5.2 LE wireless connectivity, 'Frame.io Camera to Cloud' support.

Power: One 7.2 volt/1260 mAh rechargeable lithium-ion battery pack (NP-W126S type). In-camera battery charging via USB-C.

Dimensions (WxHxD): body only = 118.4x82.8x46.8 mm.

Weight: body only = 378 grams (without battery or memory card).

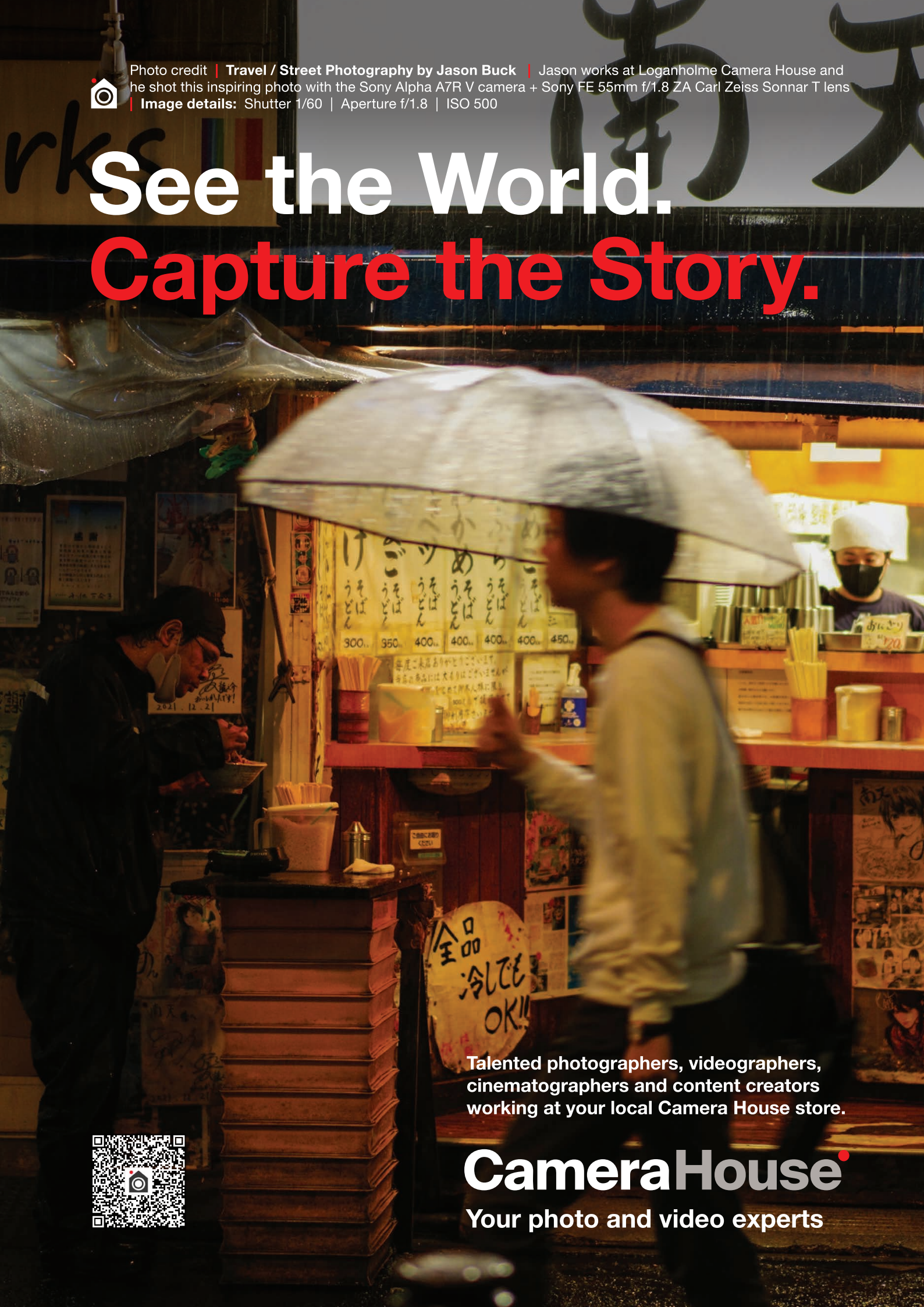
Price: \$1679 body only. \$1949 with XC 13-33mm f/3.5-6.3 OIS zoom lens. Choice of silver, charcoal or black finishes. Fujifilm X mount camera bodies and lenses are backed by a three-year warranty when purchased from an authorised Fujifilm Australia reseller.

Distributor: Fujifilm Australia, telephone (02) 9466 2600 or visit www.fujifilm.com.au



Photo credit | **Travel / Street Photography by Jason Buck** | Jason works at Loganholme Camera House and he shot this inspiring photo with the Sony Alpha A7R V camera + Sony FE 55mm f/1.8 ZA Carl Zeiss Sonnar T lens
| **Image details:** Shutter 1/60 | Aperture f/1.8 | ISO 500

See the World. Capture the Story.



Talented photographers, videographers, cinematographers and content creators working at your local Camera House store.

CameraHouse

Your photo and video experts



CANON

REPORT BY PAUL BURROWS

RF 7-14mm f/2.8-3.5L FISHEYE STM



EXTREME VIEWS

You can have both a circular fisheye and a diagonal fisheye in the same lens with Canon's new RF mount ultra-wide zoom. It's still a highly specialised lens, but there's lots of scope for experimentation and turning the ordinary into the extraordinary.

The circular fisheye lens can be a huge amount of fun to use, rendering everyday subjects into dramatic and often graphic globes which can often have viewers scratching their heads. But you can have too much of a good thing and the novelty can soon wear off for both you and your audience. The diagonal – or full frame – fisheye is a lot more versatile while still delivering all the drama and distortion of the ultra-wide angle-of-view. So a lens that gives you both options doubles the fun factor

and provides more scope for playing around with your subjects. There's no doubt that Canon's RF 7-14mm fisheye zoom is still a very specialised lens, but in practice you can do quite a lot with it, and with a wide selection of subjects – sports and action, landscapes, architecture and astrophotography just for starters.

Canon has been here before with the EF 8-15mm f/4.0L Fisheye USM model for its DSLRs introduced in 2010, but the new RF mount zoom has been designed from scratch for

the EOS R mirrorless camera bodies and so benefits markedly from the expanded design possibilities which benefit the optical performance, the physical construction, the specifications and the capabilities. So, most notably, the Canon RF 7-14mm f/2.8-3.5L Fisheye STM goes even wider than 180 degrees and, at 7mm, has an angle-of-view of 190 degrees. It has a faster maximum aperture than the EF lens and is 64 grams lighter despite the optical design having two more elements (an indication of how lens design has progressed over the last 16 years). It also features a much neater solution to how filters can be used when it's not possible to attach them to the front (more about this shortly).

Given how big and bulky circular fisheye prime lenses used to be – Nikon's hugely bulbous 6mm f/2.8 Fisheye-Nikkor from 1972 being an extreme example – Canon's RF zoom is remarkable compact overall and weighs in at 476 grams (the Nikon weighed a hefty 5.2 kilos, by the way). The length is a little under 110 millimetres and the diameter is 76.5 millimetres which only reduces slightly across the barrel length after the zoom's trio of control rings. So, while the front element has a pronounced curve, it's no wider than the rest of the lens. As both focusing and zooming are performed internally, the barrel length remains constant at all times. The control rings are pretty much flush-fitting so the RF 7-14mm doesn't actually look much like an extreme ultra-wide lens, more like a common-or-garden standard zoom. And, unlike many fisheye lenses, a shallow petal-shaped lens hood is supplied, but has to be detached for shooting at 13mm or wider because it will intrude into the frame (and at focal lengths wider than 8.7mm with an 'APS-C' RFS body)

The 'L' designation means a high-quality external construction which employs polycarbonate barrel tubes – one of the reasons the weight has been kept below 500 grams – with full weather sealing. This includes a rubber gasket around the lens mount, and there's a fluorine coating on the front element to help better repel moisture and assist with easier cleaning. This is just as well because, as noted earlier, like any ultra-wide lens, it's not possible to fit filters to the front.

OPTICAL DESIGN

Not surprisingly, the 7-14mm has a fairly complex optical design which employs a total of 16 elements arranged in 11 groups. No fewer than seven of these are special types – two with aspherical surfaces and a total of five with ultra-low dispersion (UD) characteristics (compared to only two in the EF mount lens). These are designed counter chromatic aberrations while the aspherical elements are primarily correcting for spheri-

cal aberrations, but probably also reduce distortion to a small degree in the full frame images. However, pretty extreme barrel-type distortion comes with the territory here, so it should be considered an attribute rather than a deficiency.

Likewise, also ghosting and flare as, especially at the 190-degree angle-of-view, keeping the sun (or any other bright light sources) out of the frame is a challenge. To help prevent it becoming too messy or distracting, the RF 7-14mm has Canon's 'Super Spectra Coating' (SSC) multi-coating backed by the 'Air Sphere Coating' (ASC) multi-coating which is applied to the rear surfaces of three elements. ASC – which consists of air and silicon dioxide – has an ultra-low refractive index which makes it particularly effective at minimising reflections and thereby reducing flare. Consequently, Canon's 7-14mm doesn't suffer from nearly as much flare or ghosting at the 7mm focal length as you might expect, especially if the sun is kept closer to the edge of the image circle. However, stopping down, the nine-blade diaphragm renders bright light sources such as the sun into nicely-defined 18-point starbursts.

Canon calls the aspherical elements in this lens "Replica Aspherical" which is otherwise known as a hybrid aspherical and is created by shaping optical-grade resin over a spherical glass core. It's a process that Canon itself pioneered back in the early 1990s and it's less expensive than using grinding and polishing to create a glass element, while also allowing for more complex shapes and hence more effective correction of both chromatic and spherical aberrations.

The 'STM' in the model designation stands for 'stepping motor' which is now quite commonly used in mirrorless lenses to drive the focusing group. The 7-14mm uses a lead-screw type STM which is very responsive so it starts and stops almost instantaneously to give a level of AF accuracy. It's aided in this by a position-detecting sensor. STMs are also fast – the focusing group in this lens doesn't actually

have to move much – and near-silent in its operation which is particularly important when shooting video. As noted earlier, focusing is performed internally and the minimum focusing distance of 15 centimetres is maintained across the zooming range. At 14mm, this gives a maximum reproduction ratio of 1:2.85, and being able to get this close to a subject really helps accentuate the distorted perspective of such a short focal length

IN THE HAND

Thanks to its design, size and weight; the RF 7-14mm handles very easily and comfortably. We tested it on the EOS R6 Mark II body on which it feels nicely balanced, but this will be the case on any of the full frame RF mount bodies.

The zooming and focusing rings are located right next to each other on the barrel with the former closer to the camera body and slightly narrower. Even though the zooming collar has focal length markings, from behind the camera it's still pretty easy to grab the wrong one, at least until you get used to the layout. The ribbing is actually slightly different on each, but not enough to make differentiation obvious. Right at the front of the lens is the multi-functional 'Control Ring' which can be set to adjust apertures, shutter speeds, ISO settings or exposure compensation. Interestingly, it's click-stopped and almost mechanical in its noisiness – which is a bit of a surprise – and there's no option for switching to seamless adjustment... at least not easily. It's not going to be an issue when shooting stills, but will almost certainly be picked up on a video soundtrack.

Behind the control collars is a set of on-barrel controls comprising an AF/MF switch, a focus hold button that's also extensively customisable to assign other functions, and a 'Limit' switch which acts on the zooming collar. Essentially, you'd set it at 7mm if you



▲ Nifty system for applying filters uses the same drop-in holder as one of Canon's EF-to-RF mount adaptors. The lens comes with a clear filter fitted.

only want the fully circular, 190-degree fisheye images when using full frame camera, or at a 'C' mark on the zooming collar when using an 'APS-C' camera which then limits the focal range to 8.7-14mm in order to maintain a diagonal fisheye image (as the effective increase in the focal length at 7mm to 11.2mm precludes a fully-circular fisheye image with these camera bodies).

With the full frame format, a diagonal image with no vignetting at all is only achieved at 13mm so you're unlikely to use anything between this focal and 7mm as the hard vignetting on the sides of the frame can look like a bit of a mistake which makes it distracting more than anything else. Because of this then, as far as using it on the full frame EOS R bodies is concerned, the 7-14mm isn't really a zoom in the traditional sense, but rather a circular fisheye and a diagonal fisheye in the one lens.

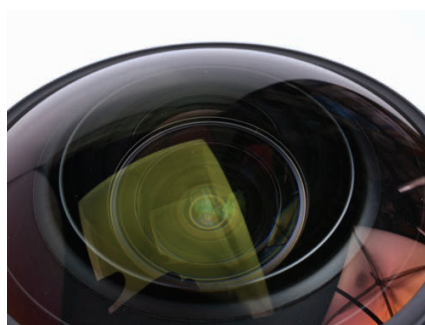
Most fisheye and extreme ultra-wide lenses typically have a filter holder at the rear which accepts cut gel-type filters, but Canon has come up with a much more elegant solution for the RF 7-14mm. There's a slot at the rear of the lens which accepts the holder-mounted filters already used in the 'Drop in Filter Mount Adapter EF-EOS R'.



▲ 'Limit' switch locks the focal length at 7mm for use with full frame cameras, and restricts the focal range to 8.7-14mm in order to maintain a diagonal fisheye image with Canon's RF-S 'APS-C' mirrorless bodies.



▲ There's a trio of controls rings, with those for focusing and zooming located very close together.



▲ Characteristically curved front element has a fluorine coating to help better repel moisture and grease, as well as assist with easier cleaning.

These are circular glass filters, but they're fixed in the holder, making for easy handling. The existing circular polariser (CPL) and variable neutral density (ND) filters are joined by a clear glass option which is supplied with the lens. Both the PL and ND are adjustable from the holder, and the latter has a range of ND3 to ND500 which reduces the exposure by 1.5 up to 9.0 stops.

Not surprisingly, the focusing collar is electronic – a.k.a. 'fly-by-wire' – so there are no hard stops at either end and it feels a bit light in its operation. However, this is a lens with massive depth-of-field so it doesn't need much focusing manually (as evidenced by the AF point display which usually covers most of the frame). You can switch between linear and non-linear focus ring operation in an EOS R camera's custom menu. Canon calls this "MF focus ring sensitivity" which is actually quite a good way to describe the difference. In a nutshell, non-linear adjustment relates to the rotation speed of the focus collar, and linear adjustment relates to the degree of rotation. The Canon camera's settings are 'Varies with Rotation Speed' and 'Linked to Rotation Degree'. In practice, the latter allows for better uniformity of adjustment which is something video-makers often require when using focus as a creative tool.

IN THE FIELD

Working with this lens's widest angle-of-view has its challenges. At 190 degrees, it can see behind so you need to be careful to avoid bits of you or, harder still, a tripod leg making an unwanted appearance in the image. However, the rear vision only extends to just behind the multi-function control collar at the front of lens so you can still shoot handheld, but you'll need to watch where your feet are, and also lean forward by quite a bit.

If the camera is angled downwards even slightly when using a tripod – which you might want to do to emphasis details in the foreground – it's well-nigh impossible to avoid a tripod foot sneaking in somewhere. However, with astrophotography in particular, you'll be pointing the lens upwards

so the tripod legs should be out of the frame. With the higher-end EOS R mirrorless bodies, in-camera image stabilisation will extend the hand-held shooting possibilities into lower light situations, especially as you don't really need to worry too much about having to use the smaller apertures for increased depth-of-field.

Perhaps even more of an issue when shooting in bright conditions with the sun anywhere behind you are the shadows that will be visible in the image. Depending on the subject and situation, these may not be so noticeable – particularly with the circular fisheye images which tend to be more attention-grabbing – but otherwise you'll have to get creative with your composition and try and hide them as much as possible.

As noted earlier, the RF 7-14mm has surprisingly good suppression of flare so you can play around with having the sun – or other bright light sources – in the frame without it creating overly distracting side-effects.

More generally, getting in close to a subject – which is quite possible with the minimum focusing distance of 15 centimetres – helps emphasise the effect of the distortion and the extremely wide view behind. Of course, this lens always works well in confined spaces such as the interior of a car or a train carriage while exaggerating the spaciousness of big venues like a concert hall or sports stadium.

It's also worth adding here that video shot with the RF 7-14mm fisheye zoom can be converted to 180-degree VR content using Canon's EOS VR Utility (but you'll need a supporting EOS R body – such as the R6 III – for this).

PERFORMANCE

Obviously some different criteria apply to evaluating the performance of a lens like this. For starters, as noted earlier, distortion is to be celebrated as an integral part of the visual characteristics of the fisheye angle-of-view. And, when there aren't any corners, you can't measure their sharpness, can you? Nevertheless, these images are uniformly very sharp even when shooting at

the widest apertures and with the diagonal, full frame image, the corners stay nicely crisp too.

It's not really all that meaningful to talk about vignetting either because you can have as much of it as you want from around 13mm to the fully circular fisheye image at 7mm. However, the good news is that the diagonal full frame image doesn't exhibit any light fall-off in the corners.

Some axial (or longitudinal) chromatic aberration is evident when shooting at the widest apertures, but is cured by closing down a stop or two, depending on the subject matter. This is also true of spherical aberrations since the two appear together to varying degrees.

When shooting JPEGs – or HEIFs for that matter – Canon's 'Digital Lens Optimiser' corrects in-camera for a variety of aberrations including coma, sagittal halo, chromatic (both axial and lateral), spherical and small-aperture diffraction tuned to this particular lens (distortion and vignetting are separate corrections). DLO can be switched off, but since it does such a fine job, you probably wouldn't.

Canon says the 7-14mm's optical design reduces focus breathing – the slight change in image size as the focusing distance changes – to just 0.4 percent at 7mm, increasing to 1.5 percent at the 14mm focal length which is pretty minimal. Since it doesn't really zoom in the full frame format, the in-camera 'Focus Breathing Correction' that's now on the later EOS R bodies such as the R6 III isn't available.

THE VERDICT

Probably the biggest surprise of Canon's RF 7-14mm fisheye zoom is that it's actually quite versatile. Yes, on the full frame EOS R bodies, you've really only got the two options of a circular fisheye or a diagonal fisheye – unless you like the funny vignetting in between – but you can have a whole lot of fun with both... and with a wide variety of subjects. The extreme distortion can create truly dramatic looking images and, while the 'porthole' framing of the circular fisheye can be easy to overdo, with bright and bold



▲ Weather protection measures include a rubber gasket to seal the lens mount.



▲ Multi-functional 'Control Ring' at the front of the lens can be set to adjust apertures, shutter speeds, ISO settings or exposure compensation.



▲ Petal-shaped lens hood is detachable as, on full frame bodies, it'll start to intrude into the frame at 13mm or wider.



On full frame EOS R bodies, the 7-14mm isn't so much a zoom as dual circular/diagonal fisheyes in the one lens. There's a full circular image at 7mm (left) and a full diagonal one at 14mm (right). You can use everything in between, but the vignetting at the sides of the image can look a bit like a mistake (centre).



subjects it works very effectively indeed. Experiment too, with B&W and the built-in 'Creative Assist' effects available on bodies such as the R6 III. The diagonal fisheye view is, of course, a lot more versatile, but still with plenty of visual impact thanks to its 180-degree view and pronounced barrel distortion.

For a lens that you could well end up using fairly selectively, the RF 7-14mm certainly isn't an inexpensive proposition, but the more you use it, the more you'll find it can do in terms of creating something unusual out of the everyday and something quite remarkable out of more interesting subjects. Put simply, the potential for out-there creativity is huge. 🌀

VITAL STATISTICS

CANON RF 7-14mm f/2.8-3.5L FISHEYE STM \$2799

Estimated average street price

Format: Full frame.

Focal Length Multiplier: None.

Effective Focal Length: 7-14mm. Equivalent to 11.2-22.4mm on the RF-S (i.e. 'APS-C' mirrorless camera bodies at 1.6x crop factor).

Angle-of-View: 190 to 180 degrees (diagonal).

Construction: 16 elements in 11 groups. Seven special elements – five UD (Ultra Low Dispersion) types and two aspherical types.

Minimum Focus: 15 centimetres.

Maximum Reproduction Ratio: 1:2.85.

Aperture Range: f/2.8-3.5 to f/22-29.

Length: 109.4 millimetres (without the lens hood fitted).

Maximum Diameter: 76.5 millimetres.

Filter Diameter: Rear slot for Canon A series holder-mounted filters. Clear filter included.

Weight: 476 grams.

Features: Weather-sealed construction, fluorine moisture repellent coating on the exposed surface of the front element, stepping motor (STM) autofocus drive, internal focusing, internal zooming, 'Air Sphere Coating' (ASC) and 'Super Spectra Coating' (SSC) anti-reflection multi-coatings, nine-blade diaphragm, multi-function lens control ring (aperture, shutter speed, ISO or exposure compensation), multifunction/AF lock button, zooming limit switch (for setting circular/diagonal fisheye framing focal range limits), switchable linear/non-linear manual focus adjustment. Supports 180-degree 2D VR video using Canon's EOS VR Utility (with compatible EOS R mirrorless camera bodies). Bayonet-fit lens hood and lens pouch supplied.

Price: \$2799. Canon Australia provides a five-year warranty for cameras and lenses purchased from an authorised reseller

Distributor: Canon Australia. For more information visit www.canon.com.au.



OLYMPUS OM-1

These are the cameras that, in one way or another, had a significant influence on photographers and photography. Before electronics made down-sizing much easier, Olympus completely redesigned the 35mm SLR to create the small camera that was the start of something big.

It was at the 1972 Photokina that Olympus showed off prototypes of its new M-1... the camera that would revolutionise the 35mm SLR. Dramatically reduced in both size and weight, the M-1 was the work of Olympus's genius camera designer, Yoshihisa Maitani. However, word reached Leica that Olympus had adopted the model designation "M-1" and the German camera-maker objected... even though its M-series cameras were rangefinders and not reflexes. Production had already begun, but the ever-courteous Maitani agreed to a revision and so, when his new baby was officially launched in 1973, it was called the OM-1.

Yoshihisa Maitani was an immensely talented camera designer and engineer. Before the OM-1 he created the hugely successful Pen series of 35mm half-frame compacts and the innovative Pen F half-frame SLRs. Maitani was obsessed with making cameras smaller... and at a time when everything was still largely mechanical so he was really thinking outside the square.

Maitani started sketching out his ideas for a more compact 35mm SLR design in the mid-1960s, and his first challenge was to convince Olympus's management that there was actually a market for it. He recalled, "It took the whole of 1967, from January to December, before they finally understood my concept." This was quite a triumph because, previously, his superiors had

thought it would probably be good enough to simply rebadge somebody else's product!

Once he got the green light, Maitani set about achieving his goal of completely redefining the 35mm SLR. He didn't just want a slight reduction in the size or weight either, he wanted both to be halved, taking the Nikon F as the reference point. In the end, this proved to be over-ambitious, particularly because it would compromise durability, but nevertheless he still wanted something that would look and feel significantly smaller than anything else on the market.

The technical challenges were many, but Maitani noted that, "the interior of an SLR is not all crowded; there are crowded areas and empty areas." The crowded areas were those containing the core functions, such as advancing the film, releasing the shutter or changing the shutter speeds. Maitani hit upon the idea of relocating some of these core functions to the less crowded parts of the camera body and this, for example, led to the OM-1 having its shutter speed selector located around the lens mount. In the digital era, anything can really go anywhere inside a camera, but with a mechanical design, there were physical linkages – shafts, levers and gear cogs – to locate which was why re-arranging the internal configuration of the 1960s-vintage 35mm SLR wasn't as straightforward as it might seem today.

Nevertheless, Maitani was determined to make it work and later stated,

"The concept of using underutilised spaces was our first step on the road to developing a compact SLR."

At the start of the 1970s work continued on the M-1 with the designer and his engineers trading in millimetres as they slowly transformed the concept into reality.

Maitani stubbornly resisted any requests to make the camera any bigger than he had decreed, but begrudgingly yielded when it was obvious it was really necessary such as adding space for a seal to splash proof the battery compartment. Many years later, he still ruefully told audiences, "So the camera we have now is a millimetre taller than the dimensions that I first approved!"

Apart from greatly reducing the size and weight, Maitani also demanded increased durability. For instance, he wanted the shutter assembly to be good for 100,000 cycles when, at the time, 10,000 actuations was considered acceptable. He also wanted both the shutter and the reflex mirror mechanism to be quieter in their operations and create less shock. Alloys replaced brass for the body covers and the pentaprism viewfinder was completely redesigned to eliminate the traditional condenser (further saving weight). Even brass screws were replaced by steel ones which helped save a few precious milligrams.

In addition to being so compact, the OM-1 embodied some neat design elements. It just makes so much sense to have the shutter speed selector on the lens mount... so it feels quite natural to move from here to the aperture collar and back again when changing exposure settings. Equally sensibly, the release lock for the film transport is on the front of the camera rather than in the base so it's easier to reach, especially when the camera is on a tripod. And, of course, the lens release buttons should be on the lens itself... so just one hand is needed to detach it.

Olympus quickly followed up the OM-1 with the 'MD' version, introduced in 1974, which could be fitted with a 5.0 fps motordrive (although this was actually always possible, but the baseplate on the earlier models had to be modified). The semi-automatic OM-2 followed in 1975. The OM-1N appeared in 1979 with a few minor revisions, mostly relating to the fitting of dedicated T-series flash guns via a new hotshoe module (these were detachable on both the OM-1 and OM-2).

Not only did the OM-1 make Olympus into a leading brand in 35mm SLRs, but prompted rivals to all start thinking smaller with their next generations of models, most notable among these being the Pentax M series introduced in 1976. And, all these decades later, the OM-1 still inspires the designs of the latest OM System mirrorless digital cameras. 📷



PIXUS DELUXE

Dual Lens Digital Camera



A CAMERA LENS AND A CLINICAL EYE

DOCUMENTING SICILY'S
ENDURING SPIRIT



Davide Conti is a specialist physician and documentary photographer who is based in Rotorua, New Zealand. Originally from Sicily, he has applied skills from both practices to document the place of his birth as seen through the eyes - and lens - of somebody who had been away for close to two decades.

I left Sicily, my homeland, soon after graduating from medical school in 2007. I was young, naive, and hungry to discover the world and build a medical career. After a three-year stint in Ireland, I landed in New Zealand. It was meant to be a one-year pit stop to explore the land and sort my papers for registration with the Australian Medical Board, but Aotearoa - the land of the long white cloud - stole my heart and my soul. I stayed.

Photography was not an interest of mine until 2021, during the second long COVID-19 lockdown. Looking for a new activity to keep me busy, it "locked me in." From a hobby, it became a passion and evolved into an obsession - a good one.

Of course, landscape was my first subject. How could it not be in Aotearoa? Gradually, I explored other areas, but I unconsciously started filling my shots with people who were casually in the scene. I started taking more notice of these people, not only as a matter of composition, but for their persona. It became clinical. As a physician, connecting with strangers to talk about their intimate lives is a daily routine; it is the norm. Naturally, I started applying these clinical skills to street photography. They weren't strangers filling the composition anymore; they became the subject. Not just their appearance, but their unique persona.

The Return

I went back to Sicily from time to time to visit family and reconnect to my roots, every time noticing something new. Living abroad had expanded my vision, and gaining clinical experience helped me understand people more, even strangers I had never met.

In late 2025, it finally clicked. Armed with a baggage of clinical experience and successful people photography, I went



home with a project – a photo documentary of people on the street, with the camera as the tool and the clinical eye as the operator. What followed was two months of intensive street and documentary photography.

Sicily has a unique history. As an island in the middle of the Mediterranean, almost every emerging civilization of the past millennia conquered it, leaving behind a paradoxical blend of habits. Being constantly under dominance – even after incorporation into the unified Italian nation – denied many the ability to thrive financially, but not culturally. The silver lining has been the resilience of Sicilians to live simply. That paradox is even more evident now. Sicily is part of the European Union, yet it feels different from the rest of Europe. It is simply Sicily.

The Diagnostic Tool

Armed with a Fujifilm X-T5 mirrorless camera and a Sigma 18-50mm f/2.8 DC DN, my project took shape. People of Sicily is a story of resilience. I had recently upgraded from the X-T3. Why Fujifilm? I liked the physical exposure dials as they offer a tactile ability to change settings while moving, rather than clicking on a screen like a mobile phone.

I found several remarkable differences in the X-T5. The 40 megapixels sensor step-up wasn't the main one as I don't commonly do aggressive cropping or need to make prints big enough for billboards. The in-body image stabilisation (IBIS), however, was a game-changer. Since I don't use native lenses with OIS, my handheld shooting had always been limited to a slowest shutter speed of roughly 1/100 second. With the X-T5, I can easily drop to 1/16 second with handheld shooting and still get a sharp image. This is vital as I shoot exclusively handheld, often in suboptimal light. I also found I can be more generous with higher ISOs. Even at SO 1600, Adobe Lightroom CC renders reasonably low-noise images.

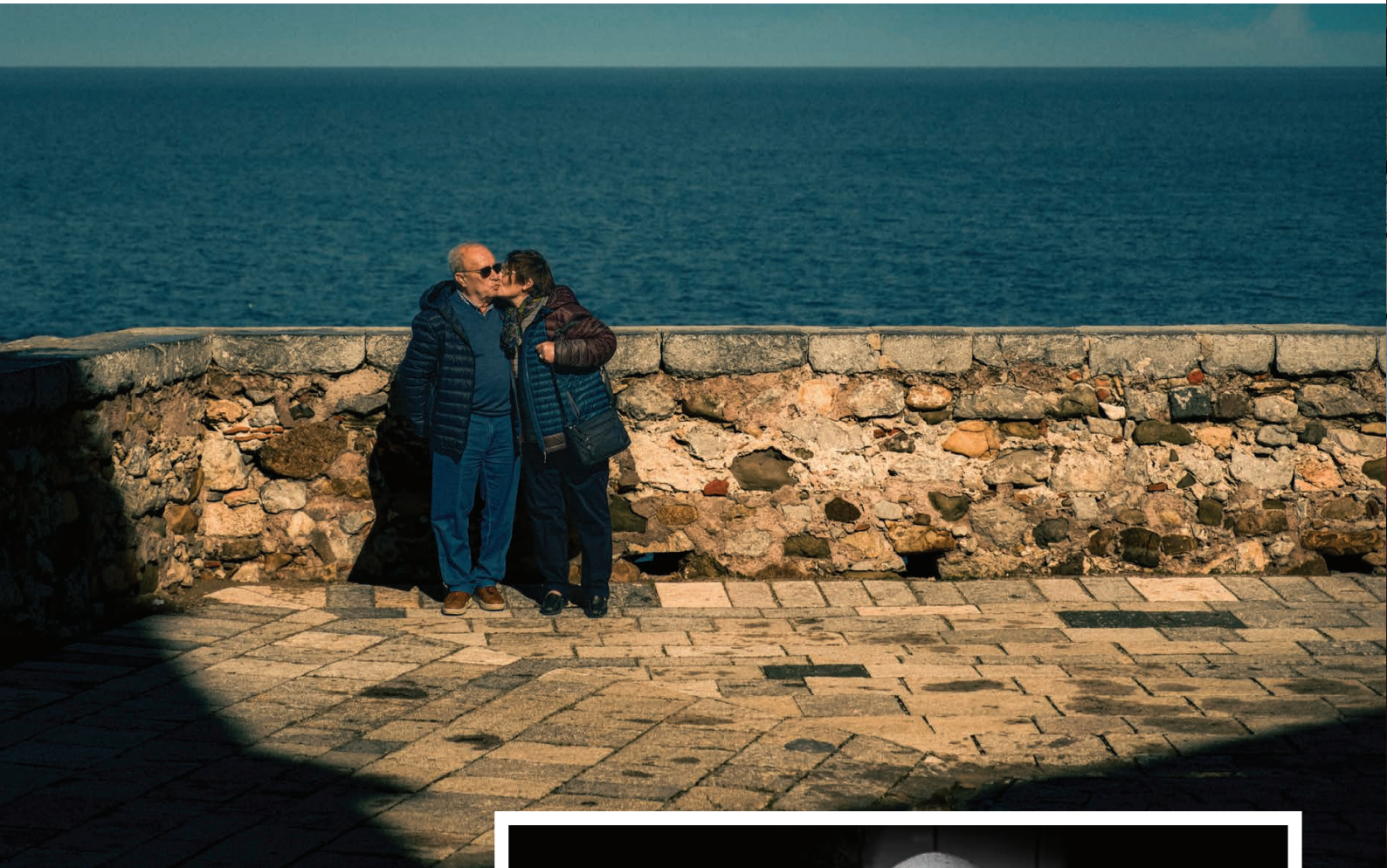
The Sigma 18-50mm zoom completed the mix. It's light, small and punchy. While f/2.8 is great for low light, I mostly shot at f/5.6 or f/8.0 as the background is part of the story. This kit felt 'just right' and, at no time, did I feel limited by my gear.

The Digital Darkroom

One of Fujifilm's strong marketing points is its 'Film Simulation' profiles. I tested them for fun, but soon realised they don't work for me. I shoot RAW almost exclusively. For me, the development of a RAW image is as important as the composition.

“ Sicily is part of the European Union, yet it feels different from the rest of Europe. It is simply Sicily.”





“ Each photo is a vision that I ‘seal’ with the shutter, but it is on the laptop where the art becomes real.”

In my medical practice, I am trained to treat each patient as a unique individual and there is no ‘one-size-fits-all’ diagnosis. I apply this to my photography. To me a film simulation profile is a pre-set protocol, but a RAW file is a patient waiting for bespoke treatment. Each photo is a vision that I ‘seal’ with the shutter, but it is on the laptop where the art becomes real.

Closing The Loop

My People of Sicily project allowed me to connect to strangers on the street living their lives resiliently. Most were happy to share details of their lives once I introduced myself and my camera. This opportunity taught me a lot about my people and my land – a land I had never stopped watching. I developed this project into a 21-photo essay and a 100-photo series. My goal for 2026 is to turn this series into a coffee table book.

I left Sicily as a graduate in 2007. In 2025, I went back as a physician and photographer to close the loop. 🔄





PANASONIC

LUMIX S 100-500mm f/5.0-7.1 OIS



GOING THE LONGER DISTANCE

I'll see your 100-400mm telezoom and raise you a 100-500mm that's pretty much the same size and weight. Panasonic goes longer with its L mount offering in a popular telephoto focal range.

In case you hadn't noticed 100-400mm telephoto zooms are in vogue at the moment. Every mirrorless system now seems to have one or the equivalent depending on the sensor size, with the OM System 50-200mm f/2.8 PRO model being a notable recent example. It's easy to see the appeal – a very useful focal range, comparatively compact dimensions thanks to what's now possible with the mir-

rorless configuration, a high level of optical correction for the same reason and a workable maximum aperture range. However, as it happens, one of the few systems without a 100-400mm zoom is Panasonic's Lumix S – although you can buy an L mount Sigma model – and that gap has now been plugged with a... 100-500mm. What's more, an extra 100mm – that's 20 percent – of telephoto power in a lens that's the same size and weight as a full frame 100-400mm.

We tested Canon's RF 100-500mm f/4.5-7.1L IS USM just after it was introduced in mid-2020 and then used it again at the EOS R5 Mark II launch in July 2024 and on both occasions it truly impressed us by how easy it was to carry and use despite having supertelephoto capabilities. It was – and still is – a compelling example of the size reductions and the enhanced optical performance achievable now that there's no mirror box in the way. It was also surprisingly versatile, and we noted it worked as well as an 'every day' lens as one for subjects such as sports or wildlife.

The Panasonic Lumix S 100-500mm f/5.0-7.1 OIS is smaller and lighter again – although not by significant amounts in either case – and is a bit slower at the shortest focal length, but once again, is a massively capable supertelephoto zoom that's not going to break your back... or the bank. For the record, the Canon much older model is

still around \$700 pricier – and the key specs for both lenses are actually quite similar – so L mount users are ahead right from the moment they head out of the camera store.

Of course, at a shade under 20 centimetres in length and weighing close to 1.3 kilos, this is still a fairly substantial lens which is why it comes with a tripod mounting bracket. It's detachable, but attached to the Lumix S1 II body, for example, your total load is around two kilos so you're likely to want some support if you're shooting for long periods of time. That said, the Lumix S 100-500mm can definitely be used handheld especially as it has optical image stabilisation to work alongside the camera's IBIS – which gives a total of seven stops of correction for camera shake – but obviously there's still some physical effort involved. As with many bigger lenses, a monopod can be an effective solution, providing some additional support without unduly compromising mobility or manoeuvrability.

The Panasonic lens feels solidly built – using mostly polycarbonate barrel components to help save weight – with sealing against dust and moisture and insulation to ensure reliable operation in subzero temperatures down to -10 degrees Celsius. This matches the protection level of the Lumix S bodies, and the zoom also has a fluorine coating on the front element to help repel water and grease while also

making it easier to clean. However, there's a big expanse of exposed glass upfront so fitting a protective filter is a very good idea even if the 82 millimetres screwthread fitting means spending a bit more money. It's definitely a worthwhile investment.

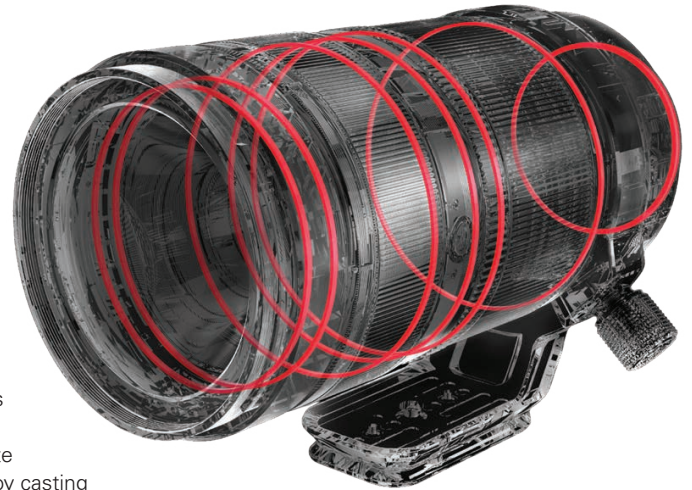
The already-mentioned tripod mounting collar adds around 180 grams to the zoom's weight as it's a quite substantial magnesium alloy casting which includes an Arca-Swiss type foot. When on the lens it can be easily rotated by loosening the locking clamp's knob. There are index marks at the 90-degree intervals, but no click stops so you have to look at what you're doing when making these adjustments.

The 100-500mm is compatible with the Lumix S system's DMW-STC series teleconverters so the 1.4x model gives you a 210-700mm f/8.0-10 and the 2.0x model creates a 300-1000mm f/11-14. Both combos are obviously quite slow, but the Mark II Lumix S cameras have pretty good high ISO performance – courtesy of their 'Dual Native ISO' sensors – so they're workable if you want the longer focal lengths without the much larger outlay of a longer lens.

OPTICAL DESIGN

Nowhere are the benefits of the mirrorless camera configuration – specifically the shorter back focus distance – better appreciated than in the 100-500mm zoom's optical construction. It employs 19 elements in 12 groups which is still complex, but nothing like it would have been if it had been designed for a DSLR. It's also a lot more compact and, additionally, a lot easier to correct optically.

This is the role of the six special elements which comprise two 'UED' (Ultra Extra-Low Dispersion) types, two 'ED'



▲ External construction is sealed against dust and moisture with insulation to allow shooting in freezing temperatures.

(Extra-low Dispersion) types and a pair of 'UHR' (Ultra High Refractive Index) types. The ED elements are made from a type of optical glass that's designed to more precisely control how the different coloured wavelengths of light pass through them – remembering that refraction or bending takes place as light both enters and leaves an element. The objective is to minimise the difference in the degree that the different colours refract – in other words, the amount of dispersion – so they all focus at the same point. This limits both lateral (also known as transverse) and longitudinal (or axial) chromatic aberrations – which manifests itself as colour fringing along high-contrast edges – and also corrects for spherical aberrations. Not surprisingly, this colour fringing compromises sharpness. Obviously, the likelihood of chromatic aberrations increases when there is a larger number of elements which, in turn, means it tends to be more of a problem with telephoto lenses and especially telephoto zooms. Additionally, the fact that there's a longer light path in a telephoto lens – because it's also physically longer – makes it even harder to focus all the wavelengths at precisely the same point. Longitudinal chromatic aberration (LoCA) – when the different colours focus



NOWHERE ARE THE BENEFITS OF THE MIRRORLESS CAMERA CONFIGURATION BETTER APPRECIATED THAN IN THE LUMIX 100-500MM ZOOM'S OPTICAL CONSTRUCTION."



▲ Weather protection measures include a rubber gasket around the lens mount.



▲ The tension of the zooming ring can be adjusted between Smooth and Tight. In practice, the Smooth setting feels tight enough.



▲ Manual focus collar is multi-functional when using AF. For MF, it can be switched between linear and non-linear adjustment.

in front or behind the actual focus point – is more of an issue in longer telephotos and hence extra effort is needed to correct it optically.

The HR elements are made from glass with a high refractive index which allows them to have less curvature which, in turn, minimises field curvature and also spherical aberrations. However, you can get an idea of the challenges facing optical engineers designing a lens like this because the HR elements tend to have much higher chromatic dispersion characteristics so they need to be matched with an element that will correct for this.

The Lumix S camera bodies have automatic correction for distortion, chromatic aberration and vignetting – brightness fall-off at the frame corners – based on stored data for the attached Lumix S lens. This is applied to JPEGs and HEIFs as they're processed in-camera, and embedded in the RAW files so they're available with post-processing, but obviously here you can choose to make corrections manually in whatever editing software you're using. The Panasonic camera body does, in fact, allow for vignetting correction to be switched off, but everything else happens behind the scenes, but as we've noted before with other brand lenses, the objective is to achieve as much as is practicable with optical correction to provide the best possible starting point for any software processing.

Zooming is performed by a telescopic action, extending the barrel length by about 80 centimetres by the time the 500mm focal length is reached. The focusing group moves internally and is driven by a 'Dual Phase Linear Motor' – as used in the Lumix S 100mm f/2.8 Macro – which Panasonic says has around three times more thrust than a voice coil motor (VCM) so it's faster and more precise. The minimum focusing distance is 80 centimetres at 100mm and 1.5 metres at 500mm which gives a maximum magnification ratio of 2.7:1 or just a little larger than one-third life size. This is potentially handy for subjects such as birds

or insects as you're far enough away not to disturb them.

Both the optical design and the focusing mechanism are designed to optically suppress focus 'breathing' which is the slight change in image size that would otherwise happen as the focusing distance changes. This is not a big issue with stills photography, but quite problematic when shooting video. Furthermore, manual focusing during zooming is possible which essentially means that the focus won't shift as you zoom in or out.

IN THE HAND

As already observed, the Lumix S 100-500mm zoom is a big handful of lens, but it's still pretty well balanced even when zoomed out to its longest focal length. The zooming collar has a wide grip and the tension can be adjusted from Smooth to Tight via a narrow control ring located just in front (the Canon RF 100-500mm has the same feature). In practice, though, this didn't seem to make a whole lot of difference, and even at the 'Smooth' setting the zooming action is still quite heavy. Frankly, it's better than being too loose and you soon get accustomed to how much twist you need to apply... and it does allow for quite fine adjustments.

The manual focusing collar serves as a multi-function control ring when you're using autofocus and assigned from the camera's Lens/Others menu. The choices here include manual aperture control, shutter speeds, exposure compensation setting, white balance and the 'Photo Style' picture profiles. For aperture control, the adjustments can be in one-third or 1/12 stop increments, the latter obviously allowing for very fine control which is particularly useful when shooting video as the brightness adjustments will be less noticeable. You can also set the direction in which the control ring rotates to go from the maximum aperture to the minimum.

The directional choices are also available when focusing manually and, additionally, you can switch between linear or non-linear



▲ Size and weight balance well on the latest Lumix S full frame bodies.

adjustment of focus. It's all in the same camera menu. With non-linear adjustment, the amount of focus shift is governed by the rotation speed of the focus collar... in other words, if you turn it quickly, you'll make big adjustments, but turning it slowly allows for more precise control thanks to smaller degrees of adjustment. With the linear setting, the focus is shifted at a constant speed according to the rotational angle of the focus ring. In this mode, the sensitivity (i.e. the amount of focus shift per the rotational angle of the focusing collar) can be adjusted from 90 to 1080 degrees (in 30-degree increments up to 360 degrees) or set to 'Maximum'. In a nutshell, the latter allows for more uniformity of adjustment



▲ Tripod mounting collar is detachable for handheld shooting and saves around 180 grams of weight.



▲ Mounting shoe is integrated and is an Arca-Swiss twin-rail coupling.



▲ On-barrel controls are a focus limiter, AF/MF switch and optical image stabiliser mode selector.

which is something video-makers often require when using focusing creatively. The focusing collar also provides a full manual override when you're shooting with AF... so you can fine-tune the focus at any time.

There's only one focus hold button – located on the left side of the lens as viewed from behind the camera – and it's unmarked. Apart from the focus hold function which is the default setting (Panasonic calls it "Focus Stop"), there are six menu pages of alternatives in the Photo mode and seven in the Video/S&Q modes. Among the many options are the 'Crop Zoom' and 'Hybrid Zoom' functions that are available with the Lumix S9 and the S1 II/IE models. The crops are a way of gaining an effective increase in focal length – with both stills and video – by switching progressively down to the medium, small and extra-small sizes at 1.4x, 2.0x and 3.1x respectively. However, it's not just a straight crop because interpolation and scaling are used to maintain resolution. The 'Hybrid Zoom' combines optical and digital zooming into a single continuous action so, after the end of the lens's optical focal range is reached, the digital 'zoom' automatically takes over.

Behind the tripod-mounting collar is a bank of three on-barrel controls for a focus limiter, AF/MF switching and the optical image stabiliser's modes. The limiter can be set to the full focusing range or to a reduced span of five metres to infinity (which will be handy for some sports where you don't



THE LUMIX S 100-500MM ZOOM IS A BIG HANDFUL OF LENS, BUT IT'S STILL PRETTY WELL BALANCED EVEN WHEN ZOOMED OUT TO ITS LONGEST FOCAL LENGTH."



▲ The Lumix S 100-500mm is very similar in size and weight to the full frame 100-400mm telezooms.

need to focus any closer). The OIS can be switched between Mode 1 for general shooting and Mode 2 for panning.

IN THE FIELD

We trialled the Lumix S 100-500mm on the S1 II body which was a nicely balanced combination for handheld shooting and when using a tripod. As already mentioned, this package weighs around two kilos so you do definitely start to feel the load over longer periods of shooting without any additional support. However, with applications such as wildlife and sports, it's much preferable to shoot handheld so you can move quickly with flighty subjects or rapidly respond to changes in the action.

What also becomes apparent is that beyond these obvious applications, the 100-500mm is very flexible especially when it's combined with handy close-up focusing capabilities. It's a long way off being a macro

lens, but even with smallish birds or reptiles and the larger insects such as butterflies or dragonflies, the 1:2 magnification ratio at 500mm is sufficient to give a good-sized reproduction in the frame.

In practice, the slow maximum apertures – which, it should be noted, are the roughly same for all the full frame telezooms with a similar focal range – mean that you do need to keep an eye on shutter speeds even with the highly-effective 'Dual I.S.' stabilisation doing its thing. At 500mm and using the 1/focal length rule for the slowest 'safe' shutter speed, the seven stops IS range theoretically that means you could shoot at 1/4 second without any blurring occurring, but the reality is that the physical effort required is more of a limitation in the field. Nevertheless, everything still looked pretty sharp as low as 1/15 second so there is plenty of leeway when using the lens handheld, assuming that you don't need a



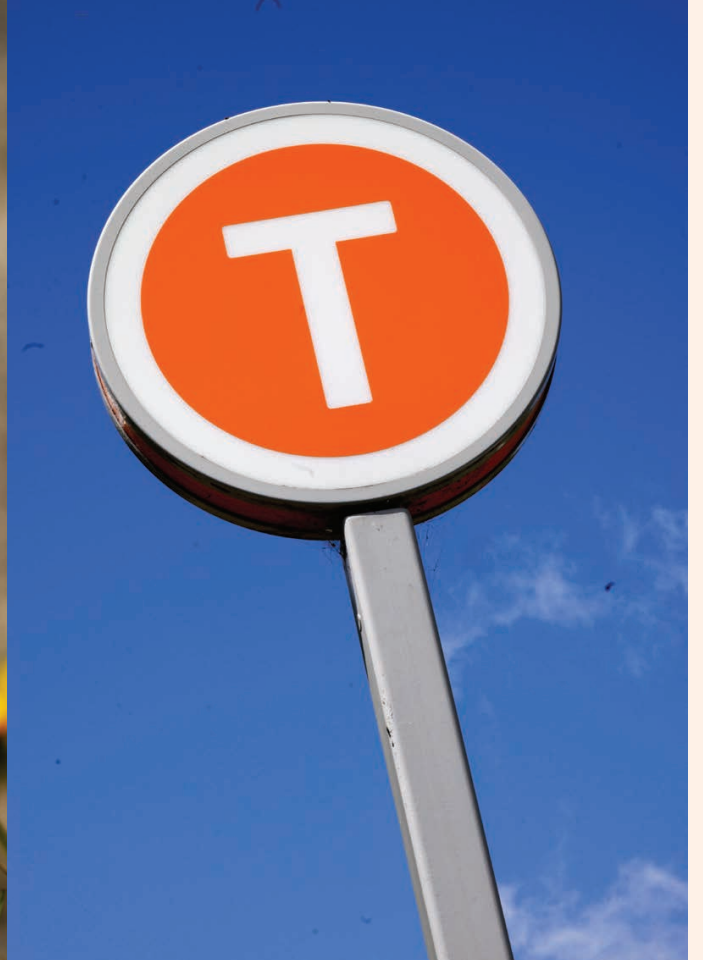
▲ Sole focus hold button is unmarked. It's multi-functional too.



▲ Teleconverters can only be fitted after the 'Zoom Limit' switch is set which restricts the minimum focal length to 150mm to prevent issues with the rear elements.



▲ Front element has a fluorine anti-smudge coating.



◀ Test pictures captured as JPEG/ large/fine files with the Panasonic Lumix S 100-500mm f/5.0-7.1 OIS on a Panasonic Lumix S1 II camera body. Overall sharpness is excellent across the zooming range and at all apertures, although the corners crisp up more by closing down the aperture by a couple of stops. The zoom is very well corrected for distortion and chromatic aberrations. Contrast and colour are also excellent.

faster shutter speed to freeze movement. In this case, it's going to be a case of cranking up the ISO which, especially with the 24 megapixels Mark II S1 models, doesn't unduly compromise sharpness either.

The zooming collar's action is definitely on the stiffer side – so it's unlikely you'll ever want to take it off the 'Smooth' tension setting – but you do get accustomed to it and, on the positive side, you can be assured the focal length won't shift unless you want it too.

PERFORMANCE

In concert with the S1 II, the autofocus is fast and accurate even at this camera's rapid-fire continuous shooting speeds. The camera's manual notes that, at 60/70 fps, it's working on "estimated focus" from one frame to the next, but given any movement at this speed – even with very fast-moving objects – is still quite small, every frame in the burst is still very sharp so the lens is definitely keeping up. This especially true with the subject recognition tracking which stays locked-on no matter what.

Of course, the lens itself is also very sharp optically across the zooming range and at the widest apertures. Diffraction-related softening is noticeable at the smaller apertures beyond f/22 so it most affects the supertelephoto end of the focal range, but the Lumix S bodies have the option of 'Diffraction Compensation' processing for

JPEGs (and for HEIFs in the case of the S1 II and IIE). Otherwise, the uniformity of sharpness across the frame – i.e. centre-to-corner – is good even at 500mm and f/7.1 – but it does improve with closing down the aperture by a stop or two. Importantly, this lens is still exceptionally sharp at its longest focal lengths and also at its closest focusing distances which is important with subjects with fine details such as feathers or fur. The 11-blade diaphragm gives beautifully rounded and smooth-looking out-of-focus effects so, as the depth-of-field progressively diminishes at the longer focal lengths, backgrounds are rendered as mostly just soft colours (or tones with B&W) which very effectively isolate subjects in applications ranging from portraiture to wildlife. This becomes even more important at the longest focal lengths when the compression effect flattens a scene and the background appears to be much closer to the subject.

The uniformity of brightness across the frame is also very good with some slight vignetting at the widest apertures across the focal range, but eliminated by closing down just one stop (although, again, there's in-camera correction for JPEGs and HEIFs). As noted earlier, in this review, the Lumix S1 bodies automatically correct for chromatic aberrations so they're effectively completely eliminated. The same is true for distortion. It simply isn't evident in real-world images and barely measurable with only very slight pincushion-type bending occurring between 150mm and 500mm.

Panasonic doesn't provide any details of its anti-reflection multi-coating methodology for its Lumix S lenses, but the 100-500mm doesn't appear to have any issues with flare and ghosting, both being very effectively suppressed, but the hood will be needed when strong side lighting is splashing the sun's rays across the front element. However, the lens handles backlight subjects well, maintaining good contrast and, with

ALL THIS ZOOM'S CONSIDERABLE CAPABILITIES ARE FULLY EXPLOITABLE RATHER THAN JUST SOME WISHFUL THINKING ON THE PART OF ITS MAKER."

the sun actually in the frame, the 11-blade diaphragm gives dramatic-looking 22-point starbursts when the aperture is stopped down.

THE VERDICT

L mount shooters have a bit of choice when it comes to telephoto zooms with 100-400mm models from Leica and Sigma, along with the latter's 60-600mm or 150-600mm (plus, of course, the monster 300-600mm f/4.0, but this is definitely a more specialised lens). The Lumix S 100-500mm has some clear attractions compared to the 100-400mm zooms by virtue of delivering a 5x zooming range in a similarly-sized package. The telezooms extending to 600mm involve some compromises by going so long (not the least being their size), and the 100-500mm's greater overall flexibility is further enhanced by its useful close-up focusing capabilities. More importantly, it maintains its excellent image quality – in terms of both sharpness and the corrections for distortion and aberrations – across the whole of its focal range. Add in the effective image stabilisation, and all this zoom's considerable capabilities are fully exploitable rather than just some wishful thinking on the part of its maker. Consequently, the Lumix S 100-500mm is impressive all round and an impressive all-rounder. 🍌

VITAL STATISTICS

PANASONIC LUMIX S 100-500mm f/5.0-7.1 OIS \$3,699 recommended retail price

Format: Full frame.

Focal Length Multiplier: None.

Effective Focal Length: 100-500mm.

Angle-of-View: 24-5.0 degrees (diagonal).

Construction: 19 elements in 12 groups. Six special elements – two UED (Ultra Extra-Low Dispersion) types, two ED (Extra-low Dispersion) types and two UHR (Ultra High Refractive Index) types.

Minimum Focus: 80 centimetres at 100mm, 1.5 metres at 500mm.

Maximum Reproduction Ratio: 1:2.7 at 500mm.

Aperture Range: f/5.0-7.1 to f/29-40.

Length: 196.1 millimetres.

Maximum Diameter: 92.0 millimetres.

Filter Diameter: 82 millimetres.

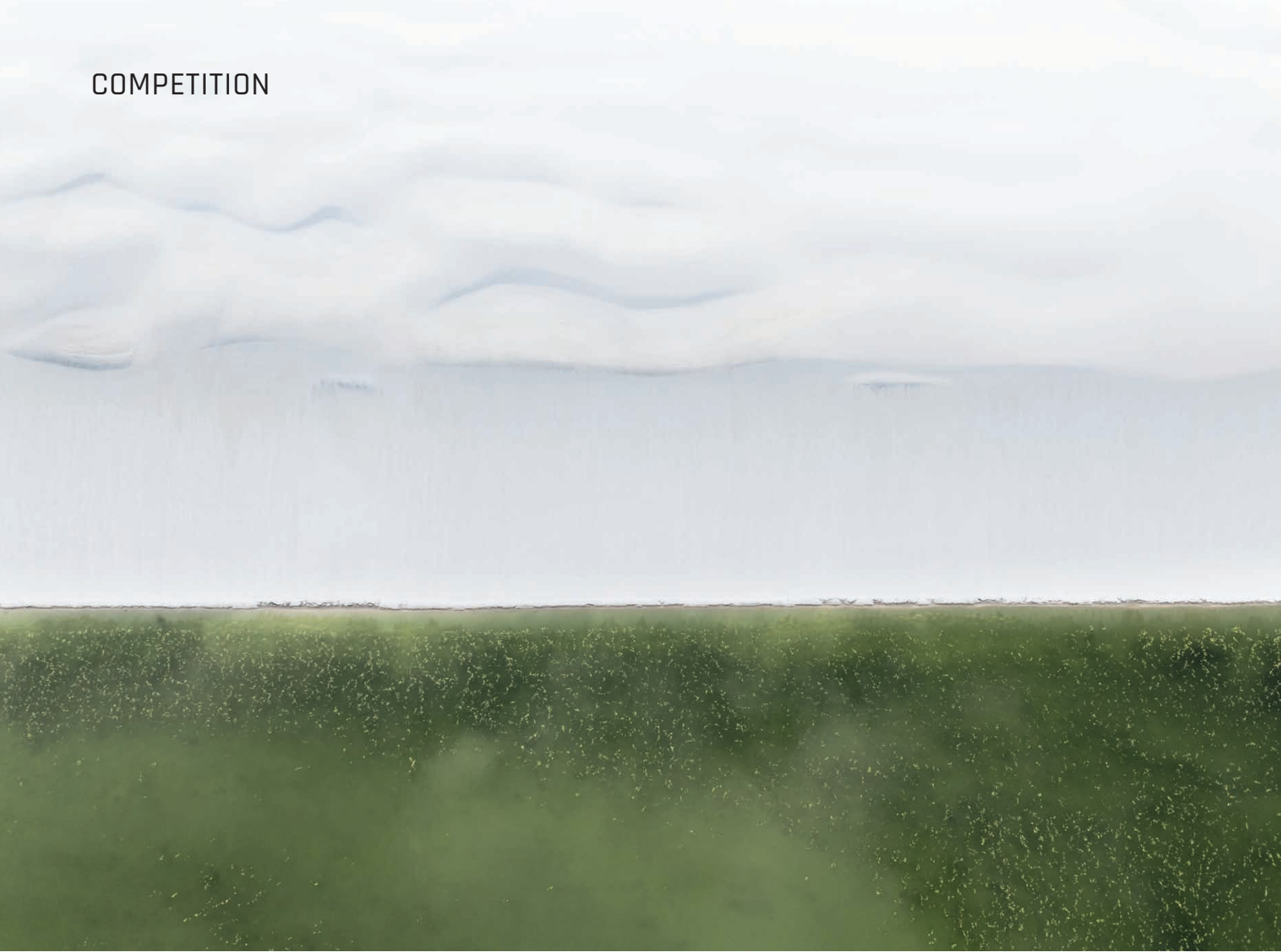
Weight: 1285 grams without the tripod mounting bracket.

Features: Weather-sealed construction (dust, moisture and subzero temperatures down to -10 degrees Celsius), fluorine moisture repellent coating on the exposed surface of the front element, optical image stabilisation (up to 5.5 stops of correction for camera shake, up to 7.0 stops with 'Dual I.S. 2'), 'Dual Phase Linear Motor' AF drive, internal focusing, focus limiter (5.0 metres to infinity, full range), switchable focus ring direction of turn, switchable linear/non-linear

focus range operation, alternative focus ring functions, adjustable zoom collar tension (Tight-Smooth), one customisable focus hold button, OIS mode switch (1, 2, Off), 11-blade diaphragm, rotatable and detachable tripod mounting collar with Arca-Swiss plate. Bayonet-fit lens hood supplied. Compatible with the Lumix 1.4x Teleconverter DMW-STC14 and Lumix 2.0x Teleconverter DMW-STC20. 'Zoom Limit' switch sets minimum focal length to 150mm for attaching the teleconverters.

Price: \$3699. Panasonic Australia offers an extended five year warranty (two year standard warranty plus an additional three years) on Lumix lenses sold by an authorised Panasonic Australia reseller.

Distributor: Panasonic Australia, telephone 132 600 or visit www.panasonic.com.au



MAKING A SCENE

THE 12TH INTERNATIONAL LANDSCAPE PHOTOGRAPHER OF THE YEAR

No part of the globe appears to have been left unexplored by the dedicated landscape photographers whose stunning images are the winners and finalists in the 12th running of the world's leading awards for the genre.

The twelfth running the International Landscape Photographer of the Year competition (2025), attracted a total of 3601 entries from around the world. There are two parts of this competition with the Landscape Photographer of the Year awards selected from submitted portfolios comprising at least four images, and the Landscape Photograph of the Year awards judged from single image entries.

J. Fritz Rumpf from the USA is the winner of the 12th International Landscape Photographer of the Year award. Second place was awarded to Karol Nienartowicz

from Poland, while in third was another American photographer, Joyce Bealer.

The winner of the 12th International Landscape Photograph of the Year is Lukas Trixl from Austria. The second prize in this category was won by Albert Dros from the Netherlands, and the third placegetter is Dave Drost, also from the USA.

Born in Venezuela, J. Fritz Rumpf grew up in a country with some spectacular landscapes and diverse cultures. His passion for photography started as a child with a simple Kodak Instamatic camera, but then life got in the way and photography took a back seat. "Many years later, my interest in photography was reawakened while

travelling and eventually, in 2020, I dedicated myself full-time to photography.

"Even though I admire photographers who can create a beautiful image by combining multiple photos, my personal preference is to use a single photo. I like to process my images so they retain a realistic look, but in a way that conveys my emotions of the moment at which the photo was taken."

These days Fritz uses Nikon Z8 and Z7II mirrorless cameras with a range of Nikkor Z lenses – a 14-24mm f/2.8, 24-70mm f/2.8, 24-200mmf/4.0-6.3 and a 180-600mm f/5.6-6.3), along with two favourite F mount lenses (used via a mount adaptor), the

◀ *Storm Over Fields* by J. Fritz Rumpf (USA), winner of the 12th International Landscape Photographer of the Year.

▶ **Top:** *Winter Meditations* by J. Fritz Rumpf (USA), winner of the 12th International Landscape Photographer of the Year.

▶ **Middle:** *Whispers* by J. Fritz Rumpf (USA), winner of the 12th International Landscape Photographer of the Year.

▶ **Bottom:** *River And Dunes* by J. Fritz Rumpf (USA), winner of the 12th International Landscape Photographer of the Year.

105mm f/2.8 and 70-200mm f/2.8.

"Even though I believe that ultimately it is the photographer who creates the art, there is no denying that good quality equipment is essential and makes a big difference."

"I like to keep an open and curious mind when photographing, not limiting myself to just landscapes, but photographing everything that catches my eye. New techniques that I try in other genres often translate beautifully to landscapes, keeping things fresh and interesting."

Slow Down

Winner of the International Landscape Photograph of the Year prize for 2025, Austrian Lukas Trixl was given his first camera – a Canon EOS 1000D DSLR – by his brother in 2018. A molecular biologist by profession, it wasn't until 2022 that Lukas started getting really interested in landscape photography... along with his girlfriend.

"We motivated each other," comments. We both invested in full-frame cameras and spent countless hours developing a better eye for composition and improving our post-processing skills."

Lukas upgraded his camera kit a Canon EOS R5 mirrorless camera along with a variety of lenses – Canon RF 14-35mm f/4.0, Laowa 12mm Zero-D f/2.8, Canon EF 70-200mm f/2.8 and Canon RF 200-800mm f/6.3-9.0. He also uses a camera drone, but says he rarely uses a tripod unless he's using ND filters for longer exposures.

"Landscape photography has taught me to be more aware when spending time outdoors. Nowadays, I feel that we take too many things for granted – especially nature. Photography is a wonderful way to slow down, take your time, notice things that would otherwise remain unseen and view the world from new perspectives. That's what I love about it.

"I always strive for strong compositions. To me, a good photo is well-composed from front to back."

You can see all the 'Top 101' finalists in the 2025 competition – and an additional 101 highest-scoring images – at www.internationallandscapephotographer.com You can also order the 2025 awards book from this site.



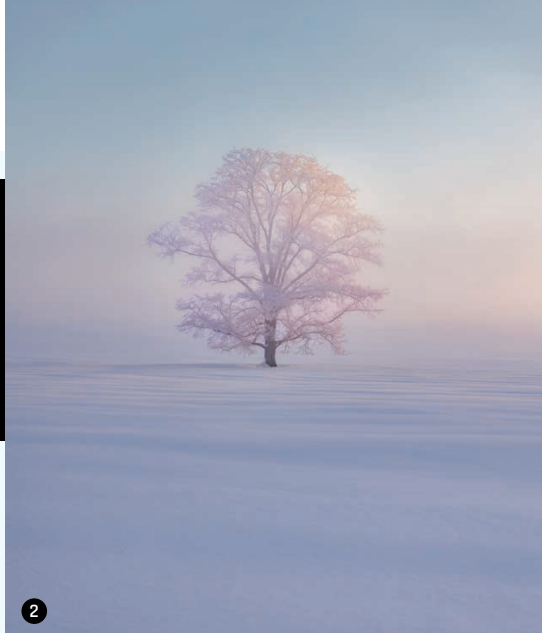
COMPETITION

The competition also includes five special subject categories – which vary each year – and these winners were...

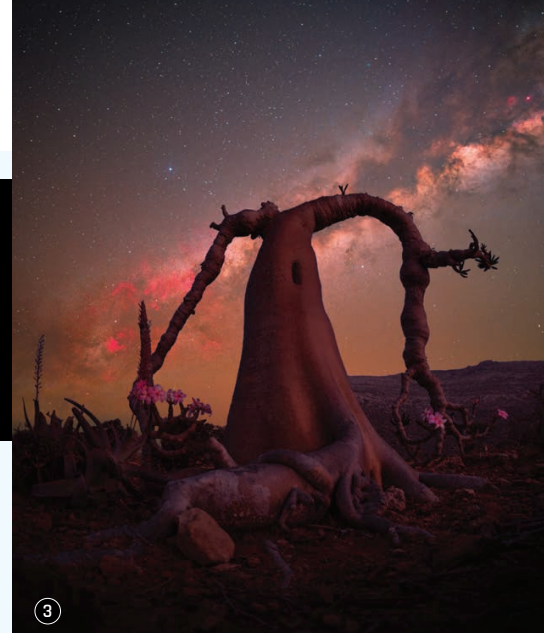
1

The Stormy Sky Award

Dennis Hualong Zhang
(Armenia)



2



3



1

2

The Snow & Ice Award

Kung-Fu Li (Taiwan)

3

The Lone Tree Award

Benjamin Barakat
(Switzerland)

4

The Black & White Award

Torsten Pull
(United Kingdom)

5

The Seascape Award

Jeroen Van Nieuwenhove
(Iceland)



4



5



①

① *Shiprock* by Karol Nienartowicz (Poland), second place in the 12th International Landscape Photographer of the Year.

② *Delta Pool* by Karol Nienartowicz (Poland), second place in the 12th International Landscape Photographer of the Year.

③ *Salar De Gorbea* by Karol Nienartowicz (Poland), second place in the 12th International Landscape Photographer of the Year.

④ *Ah-Shi-Sle-Pah* by Karol Nienartowicz (Poland), second place in the 12th International Landscape Photographer of the Year. Ah-Shi-Sle-Pah is a wilderness area in New Mexico, USA.



②



③



④

COMPETITION



1



2



3



4

1
Fitz Roy And Cascade by Joyce Bealer (USA), third place in the 12th International Landscape Photographer of the Year.

2
Gracefully by Joyce Bealer (USA), third place in the 12th International Landscape Photographer of the Year.

3
Starry Night by Joyce Bealer (USA), third place in the 12th International Landscape Photographer of the Year.

4
Fairytale Sunrise by Joyce Bealer (USA), third place in the 12th International Landscape Photographer of the Year.

The Land Before Time by Lukas Trixl (Austria), winner of the 12th International Landscape Photograph of the Year.

COMPETITION



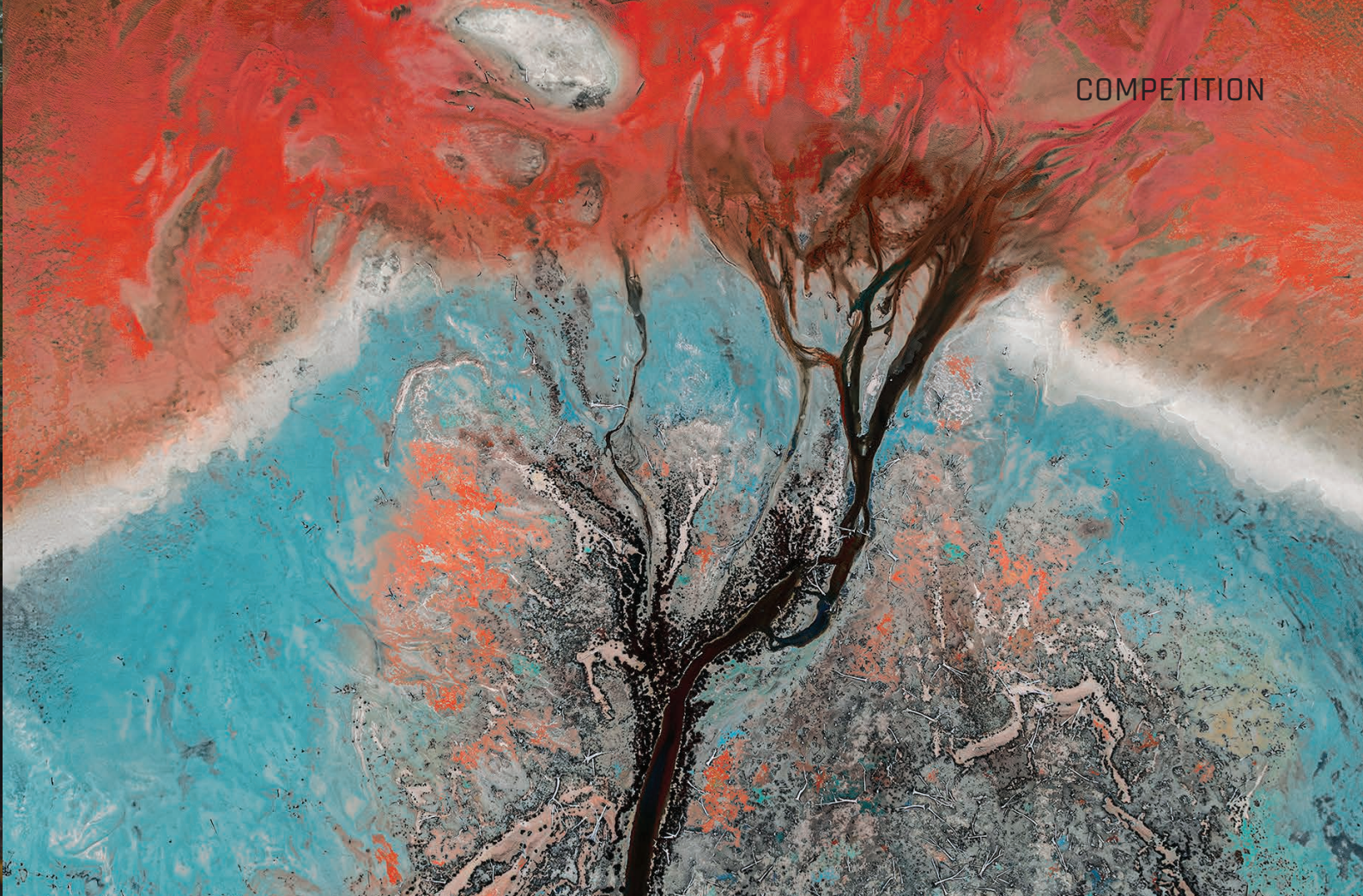
COMPETITION



▲ *Procelain Shrooms* by Albert Dros (Netherlands), second in the 12th International Landscape Photograph of the Year.

▼ *White Pocket* by Dave Drost (USA), third in the 12th International Landscape Photograph of the Year.





▲ *Nature's Veins* by Claire Gilham-Martin (Australia), Top 101 finalist, the 12th International Landscape Photographer of the Year.

▼ *Cono De Arita* by Ignacio Palacios (Australia), Top 101 finalist, the 12th International Landscape Photographer of the Year.



COMPETITION

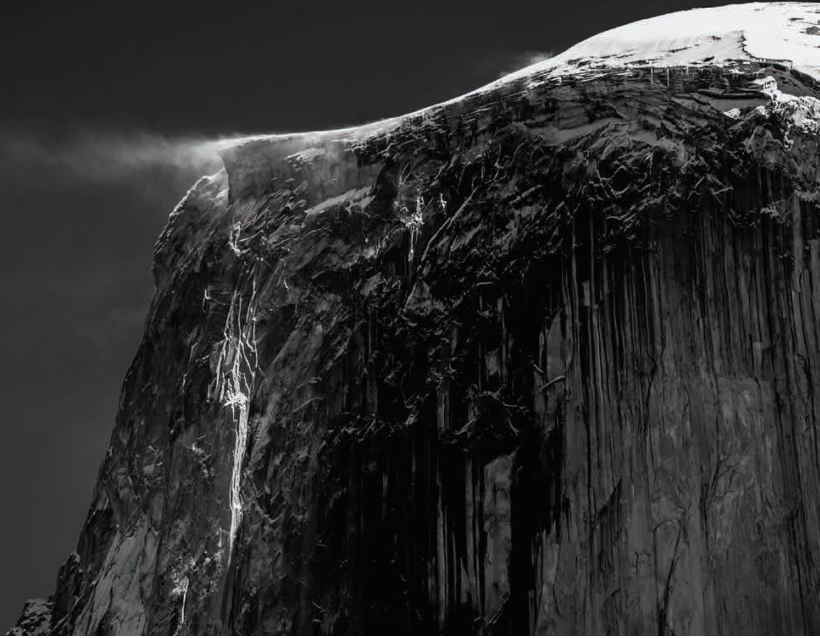
Incoming by Shaun Pau (Hong Kong), Top 101 finalist, the 12th International Landscape Photographer of the Year.



▼ *Cathedral* by Marcin Zajac (Poland), Top 101 finalist, the 12th International Landscape Photographer of the Year.

▼ *See You on the Other Side* by Catherine Simard (Canada), Top 101 finalist, the 12th International Landscape Photographer of the Year.





▲ *Half of Something* by Stephen Leonardi (USA), Top 101 finalist, the 12th International Landscape Photographer of the Year.

▼ *Queens Dance* by Gianluca Rubinacci (Italy), Top 101 finalist, the 12th International Landscape Photographer of the Year.



COMPETITION



▲ *The Levitating Tree* by Giacomo Feroldi (Italy), Top 101 finalist, the 12th International Landscape Photographer of the Year.

▼ *Icebound Portal* by John Meraglia (Canada), Top 101 finalist, the 12th International Landscape Photographer of the Year.





WE MAKE A DIFFERENCE

PRODUCTS AND SERVICES THAT DISPLAY THE TIPA
LOGO IS YOUR ASSURANCE OF THEIR OUTSTANDING
QUALITY, DESIGN AND PERFORMANCE

Every year since 1991, TIPA awards have been given to the best photo, video and imaging products and accessories, including smartphones and equipment for printmaking, image editing and display. The TIPA logo is awarded by a large group of respected editors of technical magazines and websites from around the world, including the Camera Journal Press Club of Japan.



Visit our website to learn more about our
organization and TIPA World Awards
www.tipa.com



IN THE DEEP END

TAMARA DEAN'S UNDERWATER STUDIO

Keen to take her underwater photography projects a lot further, Tamara Dean turned to an expert in building freshwater swimming pools to create a custom underwater studio on her property.

Sometimes the quest to perfect a photographic technique can become a consuming passion that drives the quest for perfection. Tamara Dean's has already achieved great things with her various series of underwater photographs, but this is an environment that is often unpredictable and the conditions hard to manage. Yes, Tamara has proved it's possible to achieve great results even when nature isn't co-operating, but the physical challenges could be compromising and so she began to think about creating a custom-made location for her underwater photography projects where she would have a lot more control over key elements such as the characteristics of the water. She needed a swimming pool, but a very special type of swimming pool that would serve as unique underwater studio.

This is where a company called Naked Pools came into the picture. It specialises in designing and building custom freshwater swimming pools. It's also developed advanced sanitisation systems for these pools, eliminating the need for large amounts of chlorine, other chemicals or salt. Notably, Naked Pools claims its system uses less chlorine than tap water which also has environmental benefits. From a photography point-of-view, fresh water has significant better clarity and is also easier on the skin

and eyes which is an important consideration when models have to spend long periods in the pool.

"My art looks at how we interact with nature," Tamara explains. "So, when I'm doing a photo shoot, I need my models to be in the water for anywhere between one and three hours at a time and it's important to me that the water is comfortable, and their connection with the environment feels natural.

"I chose a freshwater system because it's so gentle on your eyes I feel like I can swim with my eyes open, which is really important for me. It's also just got such a beautiful feel on the skin."

Naked Pools co-founder and co-owner Darren Milne notes, "Our system combines advanced digital controls with a carefully designed electrode assembly to keep the water crystal clear. It's perfect for everyday swimmers who want a pristine, low-chemical pool, and for artists like Tamara who need the clarity and quality of the water to create striking, immersive images."

Tamara adds, "I live in an environment where we live on rainwater, so I am pretty

sensitive to the smell and the taste of chlorine and chemicals. Having a pool with a freshwater system that has less chlorine than tap water fits beautifully into the way that I choose to live my life.

"When I look around my property, I'm completely surrounded by the most amazing natural environment, and so the fluidity between the environment I'm standing within and the water environment that I'm photographing in has a really lovely synchronicity."

Unlocking Potential

Essentially, it was the desire to more fully explore her creative ideas and underwater projects that convinced Tamara to take the big step of building a dedicated swimming pool.

"Prior to installing the pool, I created a series titled *Endangered*, working in the waters of the Great Barrier Reef and Jervis Bay. That body of work revealed the potential for exploring new ways of representing the figure within the landscape through an underwater lens. The underwater studio ultimately unlocked what was to come. Before this, I had limited control over both my positioning and the conditions I was photographing in. The pool offered a level of control and consistency that wasn't previously possible, and it remains a space that continues to inspire and delight me when creating new work."

As her pool had to do more than just be a place to swim, Tamara had some very specific requirements for its design, particularly in terms of how it had to work for her photography.

"There were several key design requirements. Firstly, as noted earlier, I needed water that was gentle on both the eyes and skin, so my models could remain comfortable for long periods of time. And I needed a system that was easy to manage as I am the one in my household that looks after the pool maintenance. The Naked Pools fresh-





water system has proved ideal for all this.

"I also needed the ability to carefully regulate the water temperature. Keeping it at, or just above, 30 degrees Celsius allows my models to spend extended periods in and under the water without discomfort. In terms of scale, the pool was built to 4x12 metres, with a depth of two metres at the deep end, giving the models space to move freely. A special viewing window – 1x3 me-

tres in size – was also installed at the deep end, enabling me to work from outside the pool and still maintain full control over my camera equipment."

Seeing Clearly

The construction started with excavating quite a way into the hill in which the pool was to be sited. This was followed by the installation of the plumbing, filtration and

heating systems which was done before the concrete shell was poured. Then the acrylic viewing window was then lowered into position, and finally the pool surfacing and tiling were completed.

Not surprisingly, there were some special requirements for the clear end, not just in terms of strength and safety, but also the clarity needed for photography?

"On professional advice," Tamara comments, "we opted for acrylic rather than glass as it offers superior optical clarity for shooting through. The window is also extremely thick in order to withstand the significant water pressure, ensuring both safety and image quality."

Obviously, a key aspect of Tamara's pool studio is that it allows her to photograph her subjects from the outside the pool rather than shooting underwater with all the additional considerations that that brings.

"My preference is to photograph through the window," she states. "I find working with underwater camera housings quite limiting in terms of camera functionality... from setting up the camera to responding to changes in light and focus. Shooting from outside the pool also allows me to review images easily, make adjustments, and communicate more clearly with my models. I've yet to find an underwater housing system that makes these processes seamless."





Another plus of her custom pool is that it works well when shooting with natural lighting.

"I mostly work with natural light," she says. "When I want to sculpt or control it, I block light strategically using large sheets of black material."

Maintaining the clarity and cleanliness of the water over time is also extremely important and even more so as Tamara needed a low-maintenance pool.

"The Naked Pools freshwater system has proved to be ideal for my practice because it produces incredibly clear water without relying on chlorine, lots of salt or any added minerals. Consequently, the water feels very soft and natural, more like swimming in a freshwater environment than a conventional pool which makes a huge difference for both comfort and image quality.

"From a photographic point-of-view, the clarity is key. The system keeps the water consistently clean and optically clear, which is essential when I'm shooting through the window. Ultimately, it removes a lot of variables and lets the water support the work, rather than becoming something I have to work around."

Leap Of Faith

Although she's essentially shooting in daylight, Tamara notes that there are still some specific camera adjustments to consider when photographing into her pool.

"I always adjust my colour settings when shooting underwater to counteract the aqua cast. Water also alters perspective, so there's some trial and error involved in positioning objects, people and backdrops. Exposure is adjusted as I would in any situation where the light is changing, it's a familiar variable to manage. All of these decisions are made by eye while shooting through the window.



The pool has exceeded all my expectations, and I continue to love the endless creative possibilities it offers."



"I tend to mostly work with only two lenses on my Fujifilm medium format camera – the GF45mm f/2.8 and the GF63mm f/2.8 primes. Both allow me to best capture the physical dimensions of the space, as well as the relationships between the figures and objects within it."

You won't at all be surprised to learn that Tamara's custom pool studio represents a significant investment. But she's absolutely sure that the advantages and conveniences – not to mention the increased scope for her to pursue her underwater photography projects – will make it worthwhile over the long term.

"It was definitely a major investment and a leap of faith," she concludes. "My hope was that it would open up new ways of exploring the effects of shooting underwater within my practice. And here it has ex-

ceeded all my expectations, and I continue to love the endless creative possibilities it offers.

"When the team at Naked Pools approached me about collaborating with them on a campaign, it seemed a natural fit. I've loved working with their freshwater system and truly am the biggest supporter of their product, so getting the opportunity to work with them to show others just how special swimming in a freshwater pool feels was a no brainer." 🌊

To see more of Tamara Dean's photography visit www.tamaradean.com.au

For more information about Naked Pools freshwater pool systems visit naked-pools.com



There's nothing shy and retiring about the Mamiya RB67... quite simply, it's a big brute.

MAMIYA RB67 PROFESSIONAL S

BIG SHOT

The super-sized Mamiya RB67 is an attention-grabber from the way it looks to the way it works, and everything about this mechanical 6x7cm format SLR is B-I-G.

There was a time when a big camera was a badge of honour, especially for professionals who needed to set themselves apart from the amateurs equipping themselves with ever more sophisticated 35mm equipment. In many areas of professional photography, the medium format film SLR became the

tool of choice, especially after Hasselblad revolutionised the design with its modular concept of interchangeable everything – lenses, viewfinders, grips and motorised film winders. Hasselblad settled on the 6x6cm format for its flexibility, but the Japanese branched out to 6x4.5cm for more compact cameras and lenses, and 6x7cm (or even 6x8cm) for an even larger frame

area with more scope for cropping without compromising image quality.

When digital capture came along, the first workable systems were in the form of digital backs which replaced the film magazines on the most widely used medium format SLRs. These systems were expensive, slow – some of earliest examples used scanning sensor arrays – and restricted to studio use, but the conveniences for high volume work such as catalogues were undeniable and the digital imaging revolution began with professional commercial/advertising photographers leading the way. Initially, the film-era bodies were adapted so that the sensor and shutter could be synced (often by an external cable using the PC flash socket), but subsequent developments saw integrated contacts for communication between the camera and the capture back which ultimately led to the latter also being powered from the former.

While studio-based pros embraced digital capture, the future for everybody else was less clear and the 35mm DSLR was still some way off (in fact, digital compacts were the next big thing). The uncertainty saw the demise of Bronica, Contax and, eventually, Rolleiflex which Fujifilm exited the rollfilm camera market (but, of course, eventually

returned to medium format photography). However, medium format area sensors are extremely expensive to manufacture so they've never been any bigger than 6x4.5cm for photography applications. With the exception of Phase One, today all the digital medium format systems now use a version of the smaller "33x44" (its dimensions in millimetres) imager, and the mirrorless cameras aren't much bulkier than the full frame

Consequently, the 6x7cm, 6x8cm and 6x9cm cameras once considered to be the pinnacle of rollfilm photography performance have long since disappeared and with them went the slow-but-steady 'big camera' experience. Mamiya and Bronica made modular-design 6x7cm SLRs while Pentax opted for a configuration for the 6x7 and later 67 which became known as the '35mm SLR on steroids'. Fujifilm's GX680 used the 6x8cm format and the company also made a line of 6x7cm and 6x9cm fixed-lens medium format rangefinder 'compacts'. Mamiya also made a 6x7cm rangefinder camera, but with interchangeable lenses, and it's highly sought-after today as a classic rollfilm camera by virtue of still being comparatively portable... and a lot less daunting to use than the company's 6x7cm reflexes.

In their day, though, Mamiya's long-serving RB67 became a workhorse for a great many pro photographers, but its considerable size and weight – not to



mention the high cost of putting together a kit of lenses – put off many amateurs who likely opted for the smaller M645 and its many descendants. Now though, the big Mamiya is one of classic rollfilm photography's great challenges and you can't take things casually. This camera absolutely demands your total involvement... a bit like driving a vintage tractor. It's slow, but it will do what you want it to do as long as you're patient and methodical.

▲ Film backs have their own advance lever so driving an RB67 is a different experience, but from the Pro S model onward, a double exposure safety lock made life easier.

devising an interchangeable film back which could be rotated through 90 degrees while on the camera, allowing for quick and convenient switching between horizontal and vertical framing. This gave rise to the model designation 'RB' which stands for "revolving back" and the convenience factor was considered to outweigh the drawbacks which were primarily an increase in the overall size of the film back and the need for it to have its own film advance lever. This means recocking the shutter and advancing the film are separate functions performed by separate levers rather than being interlinked. The original cameras required some discipline here because it wasn't until the upgraded Pro S model was released in 1974 that a double exposure prevention lock was introduced. The next upgrade didn't come until 1990 when the Pro SD version was introduced with a revised lens



THIS CAMERA ABSOLUTELY DEMANDS YOUR TOTAL INVOLVEMENT... A BIT LIKE DRIVING A VINTAGE TRACTOR."

OUTSIDE THE SQUARE

Mamiya launched the RB67 Professional in 1970 with the objective of breaking Hasselblad's dominance of the medium format SLR market. Mamiya decided that cropping the square frame to obtain a rectangular one potentially compromised image quality so it stepped up to the 6x7cm frame size.

The orientation problem – the big box-form SLR would have been a challenge to hold in the vertical – was solved by



▲ The focusing bellows extend to 46 millimetres, enabling the 90mm standard lens to be focused down to just 19 centimetres (versus one metre using the lens's helicoid drive).



▲ The RB system lenses incorporate leaf shutters so flash sync was available at all speeds up to 1/400 second. Long exposures are made via a 'T' (time) setting.



▲ Darkslide needs to be removed before the shutter will operate. It was a mark of Mamiya's attention to detail with the RB67 that a storage slot for the darkslide was provided at the rear of the film back. Nobody had thought of that before.

mount designed to allow the use of faster lenses. However, the basic specifications have remained unchanged throughout the RB67's life with Mamiya choosing to retain its fully mechanical model alongside the later RZ67 which appeared in 1982 and had an electronic shutter as well as electronic interfaces between its components. Significantly, the RZ67 integrated the shutter recocking and film advance actions, and offered conveniences such as an auto winder and an AE metering prism, but with a distrust of automation still common among working photographers at the time, many stuck with the tough-as-nails fully-mechanical RB.

IN THE HAND

Boy, it's a lot of camera! And, if it looks imposing visually, this is nothing to the sheer physicality of its handling. Alongside the 6x6cm Hasselblad 500C/M looks positively petite and much more approachable because at least it looks like it can be comfortably cradled in your palm. The first challenge with the RB67 is just where to grab hold of it. Such is its bulk, it's clearly a two-handed job, but there doesn't seem to be anywhere obvious to put your hands because there are knobs and levers in the way. In the end, the best option is to cradle the lens and the film magazine and hoist the RB67 up that way, rearranging things mid-flight so the body is supported by your left hand and the right is left free to operate the controls.

The camera featured here is a Pro SD variant fitted with the 90mm f/3.5 standard lens and the folding waistlevel viewfinder hood so it weighs in the region of 2.7 kilograms which is a lot to support with one hand. Not surprisingly, in its heyday the RB67 was considered more of a studio camera than anything else so it was often used mounted on a tripod. It can be hand-held, but it doesn't take long for those kilos to start making their presence felt as your forearm works hard to counter gravity.

► Lenses, viewfinders, focusing screens and film backs are interchangeable. Even with the lightweight waistlevel hood fitted, you're still looking at over 2.7 kilos worth of camera.



However, Victor Hasselblad definitely had something with his box-form design for a medium format SLR and, while weight works against the RB67, it's not unduly uncomfortable to hold cradled in the left hand.

Don't think that the right hand has it easy, though, because there's a lot involved in driving an RB67. With the standard waistlevel hood fitted, the camera doesn't have any built-in metering so carrying a separate exposure meter is the price you pay for saving some additional on-camera weight and having a viewing configuration that's much more conducive to hand-held shooting.

You can't really contemplate using the RB67 with an eyelevel finder unless it's on a tripod or fitted with an optional handgrip (which, of course, is the case with any box-form SLR). The big deal with the big Mamiya is, of course, the big viewfinder image.

It's totally mesmerising and immensely involving even if the image is reversed. Depending on the focusing screen fitted,

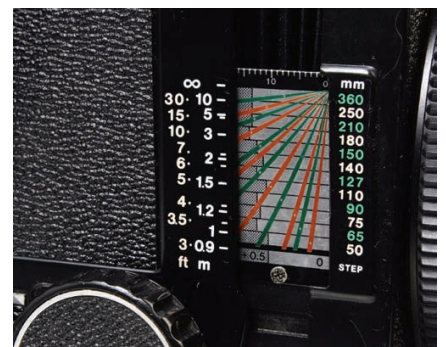
the image area for both the vertical and horizontal framing is marked and there is a split-image rangefinder to guide focusing although even with the plain old matte screen it's very easy to see what's going on with image sharpness. In its bid to better the Hasselblads, Mamiya fitted the RB67 with bellows for focusing which also add to the camera's bulk, but allow for increased close-up capabilities with all lenses. The 90mm standard lens, for example, can be focused down to 19 centimetres via the maximum bellows extension of 46 millimetres, versus one metre without it. The penalty is some loss of illumination associated with the extension so a scale – which extends with the bellows – indicates the amount of exposure correction required in stops for a given focal length and subject distance. It takes a bit of de-ciphering at first, but the main thing is to remember to adjust the exposure settings accordingly because everything on the RB67 is done manually. Big wheels on either side of the body drive the bellows' rack-and-pinion



▲ The Pro SD model was launched in 1990 and introduced a larger diameter lens mount core to allow the use of faster lenses as well as leverage the enhanced performance obtained from new optical technologies. Production ended in 2000.



▲ Mamiya overcame the limitations on using a box-form SLR in the vertical orientation by designing clever rotatable film backs. 'RB' stands for "rotating back".



▲ Focusing is via bellows and a rack-and-pinion drive which allows for excellent close-up capabilities with all lenses. Scale indicates the amount of exposure correction required at a given focal length and subject distance.



▲ The 6x7cm film format has been called the 'Ideal Format' because of its aspect ratio which converts perfectly to popular print sizes such as 16x20 inches. The imaging area is typically 56x72 mm.

mechanism and there's a locking lever on the left-hand control.

The lenses have built-in shutters so all the exposure adjustments are made here. The Seiko mechanical shutters have a speed range of 1-1/400 second with a 'T' setting instead of 'B'. 'T' is short for "time" (as in exposures) and, unlike a 'B' setting which requires that the shutter be locked open for the required duration, one press of the shutter release opens the shutter, a second press closes it. Yes, it's definitely much more convenient to use than a 'B' setting which really requires a cable release.

The original lenses introduced in 1970 are, today, For More Mags check sastatus.com known as the Original series and only had single-layer anti-reflective coating. The Mamiya-Sekor C series – now with a more effective multi-coating to counter ghosting and flare – were introduced in 1974 along with the Pro S body. The K/L-series lenses – of which this 90mm is one – arrived in 1990 with the Pro SD model and, at f/3.5, was a little faster than the f/3.8 speed model it replaced. This was made possible by the Pro SD's increased lens mount bore – from 54 mm to 61 mm – which allowed for faster



PRESSING THE SHUTTER RELEASE IS FOLLOWED BY A 'KERRR-LUNK' THAT YOU FEAR MIGHT RECORD ON THE NEAREST SEISMOLOGICAL ACTIVITY PLOTTER."

lenses across the range and leveraged the improved centre-to-corner performances being made possible by the optical technologies of the 1990s. Most K/L lenses will fit the older Pro and Pro S bodies after a metal adapter ring at their rear is removed, but obviously these cameras won't make use of the increased image circle. L series lenses only fit the Pro SD model, and a mount adapter is needed to fit Original or C series lenses to this body.

Across all variants, Mamiya retained a breech-lock bayonet lens mounting arrangement – also called a spigot mount – which you'll only know anything about if you were around at the time of Canon's R, FL or early FD mounts. After the lens is located on the camera body, it's locked into place by turning a ring rather than the whole barrel. The advantages are that the lens is always fitted correctly orientated (i.e. not at an angle) and, more prosaically, there's no wear and tear on the lens-to-body coupling surfaces which could potentially lead to optical problems (specifically with focusing). That said, it's another aspect of the RB67's operation which will most likely need to be relearned.

IN OPERATION

Pressing the shutter release is followed by a 'kerrrr-lunk' that you fear might record on the nearest seismological activity plotter. There's no shutter in the camera body, of course, so all the excitement is created by a large slab of reflex mirror flapping up. It's not even the instant return type and isn't restored to the viewing position until you recock the shutter. This is done via a large dog-legged lever which looks like a vertically-orientated film

advance lever only about three times bigger. Pushing it down firmly recycles the shutter and mirror, but as noted earlier, film advance is performed via a dedicated lever on the magazine.

Prior to the Pro S model with its double

▼ Front-on view shows the twin focusing knobs... everything on the RB67 is super-sized.



exposure prevention interlock, it was rather too easy to accidentally make multiple exposures by forgetting to advance the film. Another interlock prevents you recording nothing on a frame because you haven't removed the darkslide. Even on digital medium format cameras, darkslides are a thing of the past, but they were a key part of using a 120/220 rollfilm reflex with interchangeable film backs. The darkslide slots into the front of the film back and prevents the film being fogged if the back is removed mid-roll. Conversely, the locking system prevents the film back being removed from the camera without the darkslide inserted. While Hasselblad left you wondering what to do with a detached darkslide, Mamiya provided a handy storage slot at the rear of each film back. At one stage, Mamiya offered eight different backs for the RB67 Pro SD, including one in the 6x8 cm format and one with a built-in autowinder.

The standard RB back comprises an insert, a casing and the adaptor plate which allows it to be rotated on the camera body. You can detach the back from the adaptor plate or, if preferred, the whole assembly. If the film is finished, you can reload without removing the entire back from the camera, just the insert. The back is opened by shifting a pair of locks – separately, of course – and removing the insert and then the full take-up spool. Unlike 35mm film which is returned to its cassette after being exposed, rollfilm is transferred during its time in the camera from the feed spool to the take-up spool... the empty feed spool is then transferred to the take-up position, something every regular user of medium format film cameras came to do automatically.

On the RB67, the spool hubs are spring-loaded so they can be retracted to enable the changeover and fitting of the new roll.



THE FIRST CHALLENGE WITH THE MAMIYA RB67 IS JUST WHERE TO GRAB HOLD OF IT. SUCH IS ITS BULK, IT'S CLEARLY A TWO-HANDED JOB, BUT THERE DOESN'T SEEM TO BE ANYWHERE OBVIOUS TO PUT YOUR HANDS."



Exceptional reliability made the RB67 popular with professional photographers, particularly for high-volume studio work. However, it's also a very capable field camera and can be used hand-held (provided you've been in training).

With threading it's necessary to visualise how the film will be exposed in the camera and understand that it's packed on the spool with a backing paper. Consequently, it's necessary for the film to essentially do a 'backflip' from the take-up spool and pass around the front of the insert before looping around to the take-up spool... this means the emulsion surface will face the film gate and the backing paper is on the insert's pressure plate. It's counter-intuitive to the way 35mm film is loaded and, of course, a complete mystery if all your experience is with digital cameras. The trick is to think it through and then proceed slowly and methodically. The Mamiya keeps you occupied right through to the very end because those two locking keys for the back's hinged cover now have to be manually pushed back into place... no spring-loaded automation here (and this is also true of the locks for the back itself).

THE VERDICT

Despite the fact that the RB67 Pro SD makes you work hard – both physically and mentally – it's still a camera that you can fall in love with... or at least be fascinated by. With time, the procedures become second nature (and, of course, fully understood) and even the size and weight becomes familiar... strangely comforting even.

Given everything works with the simple mechanical logic of cause-and-effect, the big Mamiya simply won't let you make mistakes... if something won't budge it's because it's locked and you've forgotten to complete a step. It's very easy to see how this camera became the trusted workhorse of many professionals who also treasured

the inherent reliability of its rugged construction.

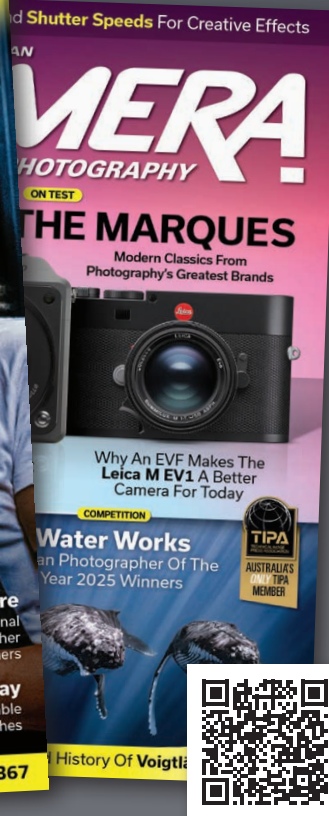
Yet, the precision of the bellows focusing is astounding and you'll never, ever tire of the wonderful viewfinder which thoroughly spoils you for anything smaller (which now is pretty much everything).

The K/L-series lenses hold up well in terms of optical performance (primarily again the multi-coatings), but actually aren't really that much better than the C lenses. High on the list of desirable RB lenses is the Mamiya-Sekor C 50mm f/4.5 (equivalent to a 25mm wide-angle in 35mm terms), the Mamiya-Sekor C 140mm f/4.5 macro (equivalent to 70mm) and the Mamiya K/L 210mm f/4.5 APO (130mm). It's a funny thing with medium format SLRs (of any flavour); you suddenly seem to be able to live quite happily with just a couple of prime lenses.

And you can learn to live very happily with the Mamiya RB67 too. The Pro SD model is arguably the one to have because it's a little less idiosyncratic and certainly more goof-proof. It stayed in production until 2000 so there are lower-mileage examples to be had if you do some searching. For a big camera, it's far more manageable than it looks and a whole lot more convenient to use than any large format field camera... especially in the field. A 6x7cm colour transparency is a joy to behold and the economics make more sense than sheet film even if you are only getting ten frames to a 120-length roll. You'll make every one of them count and, courtesy of the mighty RB67, everyone will be a memorable experience. 📷

THE FUTURE OF MAGAZINES

SUBSCRIBE AND SAVE



➔ Subscribe at www.techmags.com.au

Free delivery across Australia | Never miss an issue | Save money



2025 SIGMA SHOWCASE GRAND PRIZE WINNER

The 2025 competition was one of our biggest for a few years and the standard of entries was very high so Grand Prize winner **Genny May** has much to be proud of. The Grand Prize winner is selected from all the images published during the run of the competition.

Genny's winning image, titled *Icelandic Adventure*, is beautifully composed with the moody lighting creating a real feel of the chilly location. Additionally, the small convoy of 4WDs adds some interest to the foreground and

the small patches of sunlit green really contrast with the essentially monochrome surrounds. The location is the Maelifell Volcano in Iceland.

Shot with an OM System OM-1 Mark II with the M.Zuiko Digital ED 12-100mm f/4.0 IS PRO zoom, this photograph won the sixth round of the 2025 competition and was first published in Issue 435. Genny's prize is a Sigma lens of her choice up to the value of \$1000. Congratulations!

Tell us how you did it! When you enter the Sigma Showcase, remember to explain any tips and techniques you used to achieve the result. Also, let us know the type of camera and lens. Enter by email (see next page).

1. Title _____ Camera _____ Lens _____

2. Title _____ Camera _____ Lens _____

3. Title _____ Camera _____ Lens _____

4. Title _____ Camera _____ Lens _____

Name _____ Telephone _____

Address _____ State _____ Postcode _____



2026 SIGMA SHOWCASE FIRST ROUND WINNER

Ann Somerville-Charles is our first round winner in the 2026 with her nicely-balanced photograph of a couple of roosting Grey-headed Flying Foxes. Ann cropped the image slightly to strengthen the composition which is a perfect example of the 'Golden Rule' of where to position a subject – or subjects – within the frame. The location was Adelaide Botanic Park and Ann used a Canon PowerShot SX60 HS.

2026 SIGMA SHOWCASE – OPEN FOR ENTRIES

Sigma lenses is the sponsor for our Showcase competition, made possible through the generosity of the Australian distributor C.R. Kennedy & Company Pty Ltd. The grand prize for the 2026 Sigma Showcase is a Sigma lens to the value of \$1000 and the winner can pick the

model and the mount that they want. The winner of the grand prize for the 2025 competition will be announced in the next issue (number 436).

Additionally, the winner of each round receives a complimentary six-issue subscription to *Australian Camera* magazine. If you already subscribe, your prize subscription will commence upon the expiry of your paid one. You can enter the Sigma Showcase as many

times as you like during the year, submitting up to four photographs each time. The entries received after the 2025 competition's closing date of 31 December 2026 will be automatically entered in the 2027 Sigma Showcase which kicks off on 1 January 2027.

Note that it is not a requirement that entries to the Sigma Showcase be taken with a Sigma camera or lens. Read the accompanying rules carefully and get snapping.

ENTRY GUIDELINES

You can enter the Sigma Showcase by emailing your entries as attachments to camera@futurenet.com. Please note that we are no longer accepting physical entries.

The requirements for submitting digital files are as follows.

300 dpi resolution, and at a file size which enables a reproduction of up to 20x15 cm. Please avoid submitting overly large file sizes, especially when emailing the images. Up to 2.0 MB in file size is more than sufficient.

- Digital retouching and manipulation is permitted, but the judges will continue to reward good in-camera techniques.

- Full details of the camera, lens and any retouching must be supplied with the image. Images can be titled if you wish, but this isn't essential.
- Up to four images may be permitted per entry.

What We Need To Know: We'd like to know a bit about your entries, so supplying the details below will help the judges better assess your images. Please feel free to add any other information that you feel is important.

- | | |
|--|-----------------------------------|
| • Title (optional) | • Location and/or situation |
| • Camera | • Post camera processing (if any) |
| • Lens | • Additional Comments |
| • Exposure - shutter speed, aperture and ISO | • Your mailing address |



SIGMA

ART
24-70mm F2.8
DG DN II

RRP \$2,099.00

sigmaphoto.com.au

@SigmaPhotoAustralia

Ted's Cameras
Expert Advice. Great Price.

digiDirect

CameraHouse

**Digital Camera
WAREHOUSE**

GEORGES
SINCE 1961

CameraPro

**Camera
Electronic**

Diamonds

Model	Price (Body Only Unless Noted With Asterisk*)	Megapixels (Effective)	Sensor Size			Sensor Type			File Formats			Memory Cards			Exposure Modes					Features										Weight (Body Only)	Review Issue			
			Full-Frame	APS/DX	Four Thirds	CMOS	Foveon	RAW	TIF	JPEG	Compact Flash	Memory Stick	SD/SDHC/SDXC = microSD	Continuous Shooting Speed (fps)	Buffer Length (Unlimited) Max. Resolution	Autofocus Points	Measuring Zones	Program	Subject Priority	Aperture Priority	Shutter Priority	Manual	Shutter Speeds	Built-In Flash	Anti-Dust	FHD Video	4K Video	Anti-Shake In Body	Wi-Fi			Built-In Viewfinder	Weather Proofing	Monitor Size (cm)
Nikon Z30*	\$1,549	20.9	•	•	•	•	•	•	•	•	•	11	71	209	TBC	•	•	•	•	•	30-1/4000	•	•	•	•	•	•	•	•	•	•	7.5	350	
Nikon Z50II	\$1,599	20.9	•	•	•	•	•	•	•	•	•	30	200	231	TBC	•	•	•	•	•	900-1/4000	•	•	•	•	•	•	•	•	•	•	8.1	495	
Nikon Zfc*	\$2,049	20.9	•	•	•	•	•	•	•	•	•	11	71	209	TBC	•	•	•	•	•	30-1/4000	•	•	•	•	•	•	•	•	•	•	7.5	390	Nov/Dec '21
Nikon Z5	\$2,399	24.3	•	•	•	•	•	•	•	•	•	4.5	100	273	TBC	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	590	Jan/Feb '21
Nikon Z5II	\$2,699	24.5	•	•	•	•	•	•	•	•	•	30	120	299	TBC	•	•	•	•	•	900-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	620	Issue 431
Nikon Z6II	\$3,699	24.5	•	•	•	•	•	•	•	•	•	14	200	273	TBC	•	•	•	•	•	900-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	615	May/June '21
Nikon Zf	\$3,499	24.5	•	•	•	•	•	•	•	•	•	30	120	273	TBC	•	•	•	•	•	900-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	630	Issue 425
Nikon Z6III	\$4,499	24.5	•	•	•	•	•	•	•	•	•	60	1000+	299	TBC	•	•	•	•	•	900-1/16,000	•	•	•	•	•	•	•	•	•	•	8.1	660	Issue 429
Nikon Z7II	\$5,549	45.7	•	•	•	•	•	•	•	•	•	10	200	493	TBC	•	•	•	•	•	900-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	615	
Nikon Z8	\$7,449	45.7	•	•	•	•	•	•	•	•	•	20	1000+	493	TBC	•	•	•	•	•	900-1/32,000	•	•	•	•	•	•	•	•	•	•	8.1	820	Issue 424
Nikon Z9	\$9,899	45.7	•	•	•	•	•	•	•	•	•	30	1000+	493	TBC	•	•	•	•	•	900-1/32,000	•	•	•	•	•	•	•	•	•	•	8.1	1160	Jan/Feb '22
Olympus OM-D E-M10 IV	\$949	20.3	•	•	•	•	•	•	•	•	•	15	49	121	324	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	7.62	335	Nov/Dec '20
OM System OM-5	\$1,499	20.4	•	•	•	•	•	•	•	•	•	30	20	121	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	366	Issue 421
OM System OM-5 Mark II	\$1,699	20.4	•	•	•	•	•	•	•	•	•	30	TBC	121	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	370	Issue 433
OM System OM-1	\$2,699	20.4	•	•	•	•	•	•	•	•	•	120	92	1053	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	511	Mar/Apr '22
OM System OM-3	\$3,199	20.4	•	•	•	•	•	•	•	•	•	120	90	1053	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	413	Issue 430
OM System OM-3 ASTRO	\$3,399	20.4	•	•	•	•	•	•	•	•	•	120	90	1053	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	413	Issue 430
OM System OM-1 Mark II	\$3,599	20.4	•	•	•	•	•	•	•	•	•	120	219	1053	324	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	511	Issue 427
Panasonic Lumix G100D*	\$1,299	20.3	•	•	•	•	•	•	•	•	•	10	480	49	1728	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	7.62	303	
Panasonic Lumix G97*	\$1,599	20.3	•	•	•	•	•	•	•	•	•	9	300	49	1728	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	7.62	484	Nov/Dec '19
Panasonic Lumix GH5 II	\$2,099	20.3	•	•	•	•	•	•	•	•	•	12	999	225	1728	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	7.5	647	Sept/Oct '21
Panasonic Lumix S9	\$2,699	24.2	•	•	•	•	•	•	•	•	•	30	36	779	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	7.62	403	
Panasonic Lumix S5	\$2,799	24.2	•	•	•	•	•	•	•	•	•	7	999	225	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	630	Jan/Feb '21
Panasonic Lumix S5II	\$3,199	24.2	•	•	•	•	•	•	•	•	•	30	300+	779	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	7.62	657	Issue 422
Panasonic Lumix G9 II	\$3,299	25.2	•	•	•	•	•	•	•	•	•	75	225	779	1728	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.62	575	Issue 427
Panasonic Lumix S5IIX	\$3,499	24.2	•	•	•	•	•	•	•	•	•	30	300+	779	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	7.62	657	
Panasonic Lumix GH7	\$3,899	25.2	•	•	•	•	•	•	•	•	•	75	260	315	1728	•	•	•	•	•	60-1/32,000	•	•	•	•	•	•	•	•	•	•	7.5	721	
Panasonic Lumix S1 IIE	\$4,199	24.1	•	•	•	•	•	•	•	•	•	30	300	779	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	7.62	712	
Panasonic Lumix S1 II	\$5,299	24.1	•	•	•	•	•	•	•	•	•	70	300	779	1728	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	7.62	718	Issue 435
Panasonic Lumix S1R	\$5,299	47.3	•	•	•	•	•	•	•	•	•	9	50	225	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	898	Sept/Oct '19
Panasonic Lumix S1R II	\$5,499	44.3	•	•	•	•	•	•	•	•	•	40	80	779	1728	•	•	•	•	•	60-1/16,000	•	•	•	•	•	•	•	•	•	•	8.1	712	Issue 432
Panasonic Lumix S1H	\$5,999	24.2	•	•	•	•	•	•	•	•	•	9	999	225	1728	•	•	•	•	•	60-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	1052	Mar/Apr '20
Sigma BF	\$3,995	24.2	•	•	•	•	•	•	•	•	•	8	1000	49	TBC	•	•	•	•	•	30-/25,600	•	•	•	•	•	•	•	•	•	•	8.1	388	Issue 431
Sigma fp L	\$3,899	61.2	•	•	•	•	•	•	•	•	•	10	14	49	TBC	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	8.1	375	
Sony Alpha ZV-E10	\$849	24.2	•	•	•	•	•	•	•	•	•	11	99	425	1200	•	•	•	•	•	30-1/4000	•	•	•	•	•	•	•	•	•	•	7.5	343	
Sony Alpha 6400	\$1,149	24.2	•	•	•	•	•	•	•	•	•	11	115	425	1200	•	•	•	•	•	30-1/4000	•	•	•	•	•	•	•	•	•	•	7.5	403	Sept/Oct '19
Sony Alpha ZV-E10 II	\$1,499	26	•	•	•	•	•	•	•	•	•	11	1000+	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	292	
Sony Alpha 6700	\$1,999	26	•	•	•	•	•	•	•	•	•	11	143	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	409	
Sony Alpha 7 III	\$1,999	24.2	•	•	•	•	•	•	•	•	•	10	163	693	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	650	Sept/Oct '18
Sony Alpha ZV-E1	\$2,699	12.1	•	•	•	•	•	•	•	•	•	10	1000+	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	400	
Sony Alpha 7C II	\$2,499	33	•	•	•	•	•	•	•	•	•	10	88	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	429	
Sony Alpha 7 IV	\$2,899	33	•	•	•	•	•	•	•	•	•	10	1000+	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	658	
Sony Alpha 7R IV	\$3,799	61	•	•	•	•	•	•	•	•	•	10	68	567	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	665	Jan/Feb '20
Sony Alpha 7CR	\$3,899	61	•	•	•	•	•	•	•	•	•	8	48	693	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	430	
Sony Alpha 7S III	\$3,999	12.1	•	•	•	•	•	•	•	•	•	10	1000+	759	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	7.5	699	Mar/Apr '21
Sony Alpha 7R V	\$4,499	61	•	•	•	•	•	•	•	•	•	10	1000+	693	1200	•	•	•	•	•	30-1/8000	•	•	•	•	•	•	•	•	•	•	8	638	
Sony Alpha 7 V	\$4,699	33	•	•	•	•	•	•	•	•	•	30	185	759	1200	•	•	•	•	•	30-1/16,000	•	•	•	•	•	•	•	•	•	•	8	610	
Sony Alpha 9 II	\$5,790	24.2	•	•	•	•	•	•	•	•	•	20	361	693	1200	•	•	•	•	•	30-1/32,0													

3 YEAR WARRANTY

2 FRAMES 1 STORY



NEW

X half

INSPIRED BY FILM, REIMAGINED FOR TODAY



Creativity. **It's in our nature.**



OM-3

[EXPLORE.OMSYSTEM.COM](https://www.explore.omsystem.com)