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Photography week



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PRO TIPS FOR SHOOTING MAGICAL FAMILY PORTRAITS

W E L C O M E

Photography Week



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essential shooting and editing techniques, and in-depth reviews of the latest camera kit.

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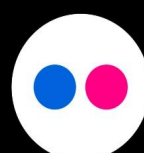
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WHAT'S HOT

THE WEEK'S TOP HEADLINES IN PHOTOGRAPHY

LAOWA'S NEW 9MM LENS IS THE WIDEST FULL-FRAME OPTIC YET

9mm f/5.6 FF RL offers 'one of a kind' perspective on mirrorless cameras



© Laowa

LaoWa has announced the 9mm f/5.6 FF RL, a rectilinear wide-angle lens that offers the widest angle of view yet seen for full-frame cameras. For comparison, most ultra-wide full-frame lenses are zooms, with a few starting at 12mm, some at 14mm and most at 16mm.

The lens has a 135-degree angle of view to offer what Laowa describes as "one of a kind" perspective. This is made possible by the very short flange distances of mirrorless cameras – it won't fit DSLRs – and the lens will be

available in Leica M, Sony FE, Nikon Z and L-mount versions.

Something has to give in a design as extreme as this, and in this case it's the maximum aperture, which is a modest f/5.6. The lens is also manual focus only, though that shouldn't be an issue given the huge depth of field enabled by the focal length/maximum aperture combo.

The optical design comprises 14 elements in 10 groups, with two aspherical elements and two ED elements for 'outstanding' corner to corner sharpness and chromatic

aberration correction. This design gives the lens a minimum focus distance of just 0.12m, so it should be possible to create some dramatic foreground/background scale differences.

The lens measures just 62.4 x 66mm and weighs 350g. Amazingly for such a wide lens, it can accept front-mounted filters in the common 100mm width without 'serious' vignetting.

The Laowa 9mm f/5.6 FF RL is available now, priced at \$899 for the Leica M mount version and \$799 for Sony FE, Nikon Z and L-mount models.



30 PRO TIPS FOR FAMILY PORTRAITS

Make good use of lockdown by capturing stunning portraits of your family – and the family pets – at home

For creative people, being unable to leave the home and explore the outdoors can either be a blessing or exceptionally difficult. While this unprecedented period gives us an unusual opportunity to concentrate on perfecting certain artistic skills, if you're a photographer who usually loves capturing landscapes or environmental portraits in exotic locations it can be highly frustrating to be limited to the confines of the house and garden.

This is because many of us see little potential for awe-inspiring images in these settings, and they present challenges in terms of balanced lighting and engaging backdrops, simply

because they're so familiar to viewers – most kitchens and gardens look pretty similar. However, by employing a professional approach we can take this opportunity to capture wonderfully engaging family portraits.

The key here is to look at our own home as we would a location for a client photoshoot. Take a few moments to analyse the core challenges you might expect to find while shooting, the ideal spots for even lighting, and where to position your camera for optimal background contrast and interest. Next, select which gear will give you the best results, and finally decide how you'll direct your subjects during the shoot.

The home location can be perfect for gorgeous, intimate portraits of your loved ones – the reason many photographers choose to shoot clients in a home location is to inject a sense of personal style and emotional relevance. Once you start to look at your home as an asset, you can begin to see how best to use it to capture cosy yet energetic portraits.

Here we'll explore 30 essential tips and techniques from some of the top pros working in family portraiture. Use these to capture striking shots of your own family, and use this time to hone some new skills that you can apply to your portfolio going forward.



FEATURE

GROUP IDENTITY

Pro portrait photographer Nina Mace provides some essential advice for shooting images of families at home

While individual portraits of your loved ones can make for beautiful photographic studies, group shots of your family all together are likely to be the ones that get framed and prominently displayed. It's for this reason that it pays to perfect your group portrait skills – as well as appealing to your own family, such images tend to sell well to clients.

There are a specific set of challenges you face when shooting family groups, from impatient infants, and needing to capture each group member at their best, to technical aspects such as focusing, lighting, and colour balance.

It's important to develop your communication skills, so that you can effectively instruct each member of

your group, but you may also need to adapt your camera work to account for multiple faces in your frame. When shooting groups, anything we can do to streamline the shooting process and ensure a high success rate per image will help to make the experience more enjoyable for all.

Here, Nina Mace outlines some key steps for capturing better group shots.



01 USE A FAST TELEPHOTO
Nina says: "I shoot with Canon kit, and I carry three main Canon EF lenses: the 200mm f/2.8L and 135mm f/2L primes, and the 70-200mm f/2.8L zoom, which I keep almost permanently at 200mm for lovely background separation to ensure that my subjects stand out."

02 CONSIDER POSING AND EXPRESSIONS
"People often worry if their subjects aren't looking directly towards them, but you can sometimes capture more evocative shots by doing the opposite," Nina explains. "In the image above, you can see that you don't always need people to be looking straight down your lens – it works well when they're looking at each other, as if it's a shared moment, caught on camera."

03 RIDE THE SHUTTER
"When shooting, I tend to leave the aperture wide open at f/2.8 and ISO on 100 or 800, depending on light levels, then ride my shutter speed if the sun is dipping in and out," Nina says. "This can be up to four stops of difference, starting at 1/500 sec and going up to 1/4000 sec. I constantly check images on the LCD, adjusting the shutter speed if I need to."



GROUP IDENTITY CONTINUED



04 CHOOSE WARMER COLOURS

"With portrait shots, photographers need to find a white balance to suit their image style," says Nina. "I set my white balance on my Canon 5D Mark III to 6400K – warmer skin tones are my preference, whether indoors or outdoors. This also means the white balance stays consistent, so images look good together for clients' galleries. I sometimes even go up to 8000K in the golden hour, but 5500K is much better for accurate colours that still have warmth, so see what works best."

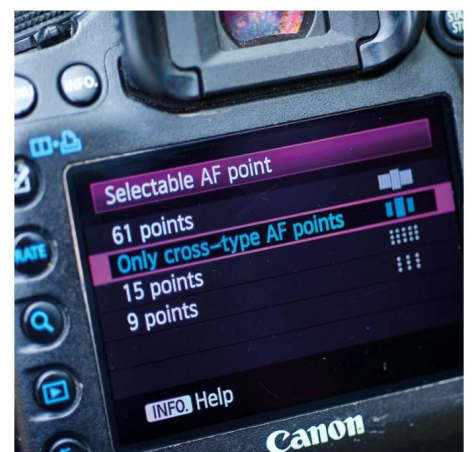


05 USE OVERCAST LIGHT

"On an overcast, cloudy day, the sky works like a giant softbox, diffusing the light that's falling on your subjects," Nina explains. "You still need to avoid top light – when the sun is directly overhead, as it is during the day in summer – so consider heading under tree canopies or similar areas of shade for your shoot. Always try and avoid direct sunlight, otherwise you'll get harsh shadows on your subjects, and they'll be squinting."

06 REDUCE AF POINTS

Nina sets up her 5D Mark III so that only the cross-type AF points are active. This way she can access them quicker than if using all 61 points. She also switches autofocus modes for rapid AF responses. "I prefer to use the AI-servo AF mode, as my family subjects are always moving around, so I use this focus-tracking method for a better hit rate. I set back-button focus, then constantly hold down the AF-On button so my camera is continually adjusting the focus for sharp shots."



FEATURE

GROUP IDENTITY CONTINUED

07 GO FOR 'PAPARAZZI' MODE

For the shot mode, Nina says, "Most cameras have two burst modes: Continuous and High-speed Continuous, with the latter offering at least seven frames per second, which is ideal for family portraits. By firing off multiple shots you'll have a better chance of success, so that even if somebody blinks or pulls a face, you'll likely have a few winners."

On an overcast, cloudy day, the sky works like a giant softbox, diffusing the light



08 MAKE THE MOST OF GROUPS

"When photographing the family as a group, get them to squeeze together for a better pose and shape that's not too spread out. Get the family to mess about – the dad tickling the kids works well – rather than holding a pose. This is also a good opportunity to grab some close-up headshots of each subject, especially if the kids look more comfortable with the rest of the family, as you can get better facial expressions. These shots can also look nice in black and white, as the faces stand out against everybody else's clothes."

09 BACK-BUTTON FOCUS

"I use the back-button focusing method," says Nina. "I find that it's faster and more accurate, since I'm constantly refocusing as families move around and kids fidget. In the Custom Function menu of your camera, you set it up so that the AF-on button is exclusively used to focus – you need to disengage focusing from half-pressing the shutter button, so that's only used for metering. Once you get used to back-button focusing, I can pretty much guarantee that you'll never go back."



GROUP IDENTITY CONTINUED



10 CONSIDER COLOUR WHEEL & CLOTHING CHOICES

"Analogous colour schemes use colours that are next to each other on the colour wheel. They usually match well, are often found in nature, and are harmonious and pleasing to the eye. Ideally, I choose one colour to dominate, a second that supports, and a third colour that is then added (along with black, white or grey) as an accent. The dominant colour is that of the backgrounds we intend to use outdoors, so at this time of year it's green, which means that blues and yellows work especially well, alongside neutrals like greys and whites."

11 FACING GARDEN CHALLENGES

"Sunlight reflecting off green grass can make people look like the Incredible Hulk!" Nina warns. "Move your subjects to a different part of the garden so that you can ensure their skin tones don't pick up a green cast."



Nina Mace is a professional family portrait photographer based in Hemel Hempstead, UK.

She won the 2014 Children, Family & Lifestyle Photographer of the Year award with the Guild of Professional Photographers, and runs masterclasses for the Society of Wedding and Portrait Photographers (SWPP). She offers 1-2-1 mentoring and photography workshops.
ninamacephotography.com



F E A T U R E

WORK WITH CHILDREN

Catherine O'Donnell reveals how to focus on the younger members of your family and work with the cutest but most demanding clients

Conducting children on a photoshoot is one of the most challenging aspects of a portrait photographer's working day. Not only do images of kids require a specific set of creative skills, but your subjects are often excitable, with a limited attention span, and are very rarely stationary for long. This gives you a narrow window in which to capture your images as planned. Developing your skills at working with children is

a useful strategy, however, as infant portraiture is one of the most popular genres of high street photography, and can be lucrative. So what better way to bolster your confidence in this challenging area than by working with your own family at home?

For any shoot that involves children, speed and efficiency are the key to successful images. The process requires a streamlining of both your directing skills and the functionality

of your equipment. Setting up your camera to capture rapid-fire images will enable you to shoot as many frames as possible in your restricted window, so this is another area where possessing a thorough knowledge of your kit, and how it can be customised, is of great benefit.

Over the next few pages, portrait professional Catherine O'Donnell offers some of her tips for capturing engaging portraits of youngsters.



12 LOWER YOUR CAMERA

"Portraits of children generally look better when they're shot at eye level, so that you're not looking down or up at your subject," Catherine says. "This might mean you have to get down on one knee, or lie prone on the ground to get the shot – it's a good idea to wear clothes you don't mind getting a little dirty on these kind of shoots. Shooting at eye level will make the background further away too, which makes it easier to throw it into a pleasing blur when using a wide aperture like $f/1.8$."



WORK WITH CHILDREN CONTINUED

13 FOLLOW THE LEADER

"Kids will be kids, and they just want to run around – so let them," says Catherine. "You can get some fantastic impromptu shots when they're running around, climbing trees, swinging from the branches, and just generally having fun. Shoot photos with them leading the way and going where they want to go, and you'll soon win them over. After this you'll find it much easier to round them up for family group photographs later. You just need to strike the right balance between fun and posed shots – the last thing you want during your photoshoot is bored, irritable children."

14 GO MANUAL

Shooting in Manual mode ensures that you can get consistent exposures during a shoot, even when the background or clothing changes. Catherine checks her pictures on the back of the camera regularly to make sure they're correctly exposed and sharp. She also shoots in raw format, to give her that extra editing flexibility with the exposure and white balance when she's back at her computer.



15 DON'T FORCE SMILES

When shooting in any setting, Catherine always tries her best to capture the kids and families looking as natural as possible, and avoids attempting to force any smiles out of her family subjects. "Just let the kids be themselves, and shoot any magical moments that come up along the way," she advises.



WORK WITH CHILDREN CONTINUED



PRO PORTRAIT LENS

An 85mm f/1.4 or f/1.2 lens is the perfect portrait tool, especially if you're working in tight environments, such as a small garden. The wide aperture allows backgrounds only a few feet behind the subject to be beautifully de-focused, while the longer focal length provides better compression than a 50mm optic.



16 SHOOT FROM AFAR

"Make use of short telephoto lenses," Catherine says. "Optics that have a focal length of around 70-200mm will give you a much more compressed perspective. This enables you to get frame-filling shots from further away, and makes it possible to capture the candid reportage-style shots that are on trend right now."

17 EMPLOY DISTRACTION TACTICS

Props are a great way to keep the kids interested, and they can help to get you out of a jam when their energy levels start to dip and they get distracted, which tends to happen after about an hour of shooting. With little children, Catherine sometimes waves a cuddly toy next to her camera to get them to look in her direction and increase eye contact with the camera.

18 GET KIDS INVOLVED

"The hardest part of a family shoot is winning the kids over, so get them involved by showing them some of the pictures you're taking as you go along," Catherine advises. "And be sure to give them a high five so they know they're doing a good job too!"



WORK WITH CHILDREN CONTINUED

19 CAPTURE SPONTANEITY

Catherine tells us that imperfection can itself be perfect sometimes, so watch out for these moments of spontaneity, where the children are running around or doing things they shouldn't be doing. They can often make for great picture opportunities.

20 USE A REFLECTOR

"Lighting is exceptionally important with portraits, and a reflector is a great way to bounce some of the available light back at your model, to make the image brighter and reduce harsh shadows," Catherine says. "Using the silver side of a 110cm 5-in-1 reflector injects a slightly cool silver light back onto the subject, to lift the shadows, and is great for creating catchlights in the eyes too."

21 MONITOR SUN POSITION

Catherine's final tip is: "Keep an eye on the position of the sun when you're out shooting in your garden – bright sunlight will give you faster shutter speeds, but it also creates harsher shadows. It's best to guide the family towards a shady spot for more gentle and even lighting, and this will also stop them squinting!"



Catherine is an award-winning portrait photographer who has been published in magazines globally. She's known for her laid-back approach to family portraiture, which helps her capture natural poses and special moments that don't look forced. Being a mum of two keeps her on her toes, but also gives her ample opportunities to perfect her portraits.
catherineodonnell.co.uk



For any shoot involving children, speed and efficiency are the key to successful images



CAPTURE PETS LIKE A PRO

Turn your attention to capturing the furry members of your family for stunning pet portraits at home. Pro Phil Hawley shares his top tips

Just as with children, pets make some of the most photogenic subjects, but are also among the most technically challenging. Dogs, cats and other small animals are extremely agile and fast-moving, which results in difficulties if you're looking to set up a stationary lighting arrangement. This can be even more challenging at home, where we might have limited space to work in.

Another issue is that, with restricted space, it's difficult to put enough distance between the lens, the subject, and the background to sufficiently control background detail through depth of field. It's therefore essential to master ways of positioning the animal to create the ideal composition, giving the subject space in the frame while pushing the surroundings out of focus. The aim with pet portraits,

or any family portraits in the home environment for that matter, is to convey enough of the setting to provide images with context, while tightly controlling what the viewer can see to avoid unsightly distractions.

In this section we hear from pro pet photographer Phil Hawley, who gives us some invaluable insider tips for easy pet exposures in the comfort of your own home or garden.



22 WORK AS A TEAM

"Since you'll be spending most of your time looking through or at the back of your camera, you'll need someone to look after your pet between shots, as well as to get them in position so you can photograph them," Phil says. "For this reason it's essential to work with a family member. Animals can very easily get bored, distracted, and overexcited, especially if you're more interested in your camera than in play time!"



CAPTURE PETS LIKE A PRO CONTINUED



23 CREATE A SET Set up a fake background if you're shooting in your garden or house. Old pieces of wood can look like doors when out of focus, or you can employ a seamless background. Phil says "I use backdrops from Seamless Photo in Ireland for the studio, but you can use a Lastolite pop-up backdrop or even just a black sheet if you're shooting at home. Just make sure that you iron it first!"

24 KEEP YOUR DISTANCE Your choice of lens is important not just for the shot itself and the end result, but also for the animal's comfort. "A 50mm lens is good for wider shots, but it's no good for shooting tighter. Some photographers use it and get in really close, but a lot of animals don't like you getting into that proximity," Phil explains. "Use an 85mm prime, or around 100mm on your zoom lens, to get those close-up shots; this enables you to shoot at a comfortable distance, where the animal doesn't feel that you're in their personal space."



25 CONTROL EXPOSURE Pets with dark or light fur often cause difficulties when you're using the camera's internal exposure meter, which can sometimes become confused into underexposing or overexposing the frame. In addition, dogs won't sit around for lengthy periods of time while you test lights and play around with your settings. Phil's Sekonic Litemaster Pro L-478DR enables him to keep control of what his lights are doing quickly and accurately, to make the process as smooth as possible.

26 EXPERIMENT WITH ORIENTATION "I almost always shoot in landscape orientation, Phil says. "Sometimes I'll shoot in portrait format for bigger dogs, for example, but most of my work is in landscape – and I always try my best to make use of the negative space."

Pets with dark or light fur often cause difficulties when you're using the camera's internal exposure meter



CAPTURE PETS LIKE A PRO CONTINUED

27 CONSIDER APERTURE ESSENTIALS

Depth of field control is critical in any portrait shoot, whether you're working with people or pets. When shooting at home we need to control background detail, but we must also adapt our approach to aperture choice for our furry subjects. Phil's approach is to "keep the aperture at around f/11 – while shooting at f/8 is okay for people, humans don't tend to have the long noses that dogs do, so you need that depth of field if they're looking straight at you".

**28 PREPARE BEFORE THE SHOT**

"Dogs and cats don't like sitting still for photos, they don't like having lights flashed in front of them, and they don't like having things shoved in front of their faces," says Phil. "So how are you supposed to meter your lights? Simple: just meter the light where you want the animal to sit, make your lighting and camera adjustments, then lead your pet into position."

29 STAKE, RATTLE AND ROLL

"Puppies can often wander off sniffing and exploring right when you're ready to start shooting. Using a dog-lead stake (also known as a tether or anchor) will stop your pup straying too far, and in conjunction with an assistant out of shot can help get the pooch in exactly the right spot for the shot," Phil says.

30 KEEP IT SIMPLE

When you're working with active subjects such as pets, especially in a home environment in which you have limited room to manoeuvre, use a simple lighting setup – preferably a one-light arrangement with just a single flashgun or strobe. For his studio shots Phil uses Gemini GM500Pro units, with the key light modified with a 75-degree Softlite Reflector with BW-1866 Grid Diffuser. Hard directional light is delivered by a honeycomb in the middle, surrounded by soft-diffused light with a ratio of 3:1 – perfect for home pet portraits.



Based in rural Gloucestershire, UK, Phil has worked as a professional photographer across multiple genres.

However, he found his true calling in dog portraiture. He runs a successful indoor and outdoor studio near Newent, where the stress-free environment and private grounds provide the ideal location to create perfect pooch portraits.

photopurity.co.uk

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G A L L E R Y

XPOSURE

THE WEEK'S MOST INSPIRING READER PHOTOS



SILVIADAS
RANI GEORGE

"A portrait of a fisherman, taken in a small coastal town in southern India."
<https://bit.ly/3bWy4pF>

GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



MALE EASTERN BLUEBIRD (SIALIA SIALIS)

DOUG GRIFFITH

"These beautiful members of the thrush family are found throughout rural Ontario, and are among the first birds to return here each spring."

<http://tiny.cc/fe88gz>

GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



DARE TO BE DIFFERENT

LEO KRAMP

"This was taken in one of the tulip fields around Hillegom in the Netherlands; the lone yellow tulip likely came from a remaining bulb from last year."

<https://bit.ly/2LU6yQ>

GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



CASTLE OF NOUDAR

SÉRGIO CONCEIÇÃO

"This is the Castle of Noudar in Barrancos, in the Alentejo region of Portugal. You can see the Milky Way and the dark nebula, and the brightest body to the left is Saturn, with Jupiter the most prominent body on the right; the yellow star below is Antares."

<http://bit.ly/2VLeEzH>



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<http://bit.ly/2VlgsJO>

PHOTOGRAPHY WEEK WANTS YOUR PHOTOS!

Taken a portrait you're particularly proud of? Shot a sensational sunset you'd like to show off? Then join the *Photography Week* Facebook community and share your best photos today! You'll get feedback from fellow readers and the *Photography Week* team, plus the chance to appear in *Xposure*, or even on our cover!

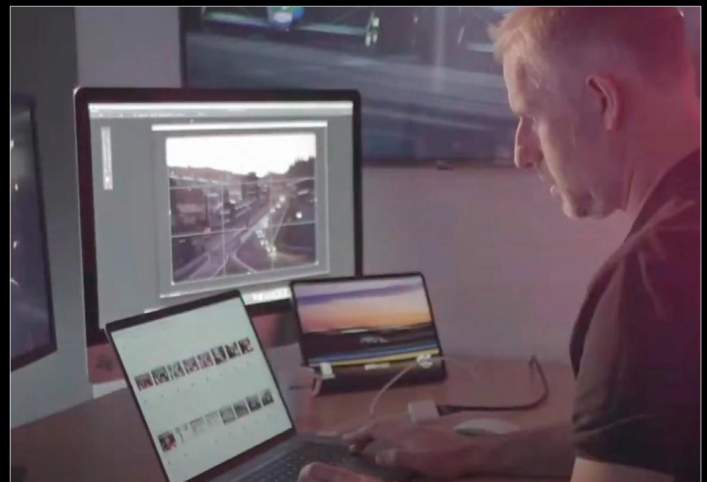
I N S P I R A T I O N

IT'S COOL, THAT

THE BEST THING WE'VE SEEN THIS WEEK



Image credits: Gran Turismo/Getty Images



PHOTOGRAPHERS FOCUS THEIR VIRTUAL LENSES ON ESPORTS

Getty Images becomes official photographer for PlayStation's Gran Turismo league

Getty Images has an illustrious history in sports photography, and now it's moved into the world of esports by becoming the official photographer for the Gran Turismo league on Sony PlayStation.

So how do you take photos of a virtual motor racing event? Well, it's the latest evolution of virtual photography – a rapidly growing genre that enables photographers to use the same in-game cameras that display the action in video games. By making the same choices as they would in 'real' photography – focal length, aperture,

location, lighting, position and composition – photographers can take shots in-game using the same technical acumen as they would employ at the side of a race track.

Getty's Ken Mainardis said: "This partnership with [Gran Turismo developer] Polyphony Digital signifies the next phase of sport photography, and the true growth that is occurring across the esports landscape."

Click the link to watch a video introducing the Getty/Gran Turismo tie-up. You can see the in-game images captured by Getty photographers at <https://bit.ly/2YNmji7>.

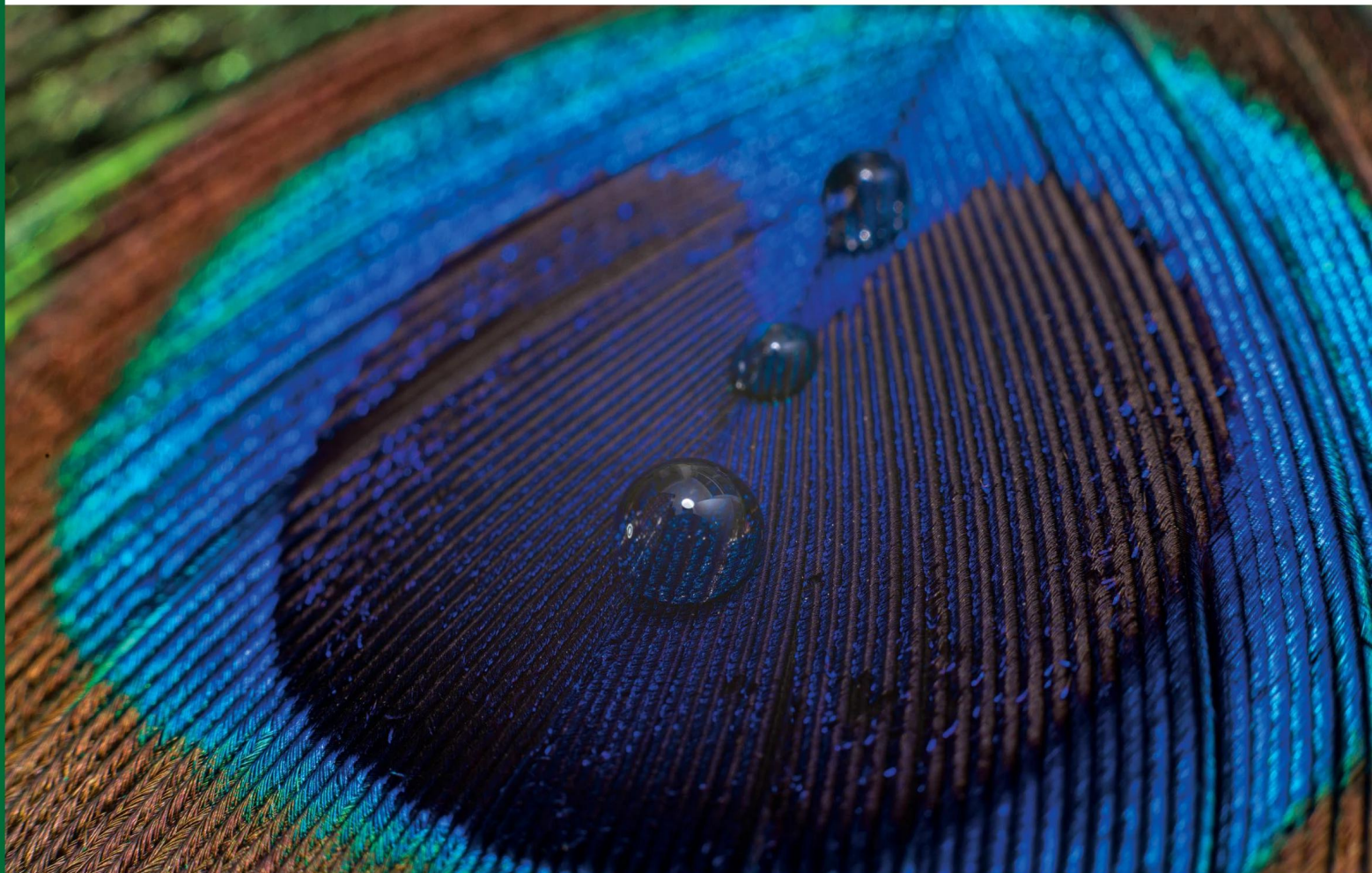


WATCH THE VIDEO
<https://bit.ly/3eR7Gjr>

S K I L L S

CRASH COURSE

ESSENTIAL PHOTO SKILLS MADE EASY



GET CLOSER ON A BUDGET

Mike Harris uses a reversing ring to capture macro photos on a budget, and reveals a few hacks for the economically minded

1
HOURS

Great photographers can make the most of any camera and lens, but they can't work miracles. Some genres or techniques require certain items of kit, and there's really nothing you can do to get around it.

Macro is one of those genres – if you can't focus close enough to your subject, it's impossible to capture a decent close-up image. However, if you've never tried macro before, shelling out on a specialist macro lens

before you've even left the starting blocks might feel like a gamble. If only there was a way to shoot macro with any old lens...

Actually, there is. By reversing your lens, so that the front element is closest to the camera's sensor, you're able to focus much closer to your subject. And reversing your lens isn't the only way to shoot budget macro images; extension tubes and close-up filters are easy to use and economical. Of course, the overall quality of these solutions can't

be compared to the results you'll get with a dedicated macro lens, but there's no reason why you can't capture some stunning close-up shots.

This tutorial is all about shooting macro-style photos on a budget. All of our solutions cost less than £30/\$40, so, whether you opt for a reversing ring, extension tubes or close-up filters, here's how to capture your first macro images without breaking the bank. And who knows – maybe it'll develop into a fully fledged passion!



S K I L L S

HOW TO USE A REVERSING RING



1

ATTACH THE RING

Reversing rings can be picked up for less than £10/\$13. They screw onto the front of a lens, like a filter, and feature a mount so they can be attached to a camera. As such, you need to make sure you buy a reversing ring with the correct thread and mount for your lens – the reversing ring we’re using is compatible with F-mount cameras and has a 62mm thread.

2

THE RIGHT LENS

The shorter the focal length, the closer you can get to your subject. However, since your lens’s connectors will no longer meet the camera, you won’t be able to control your aperture – the solution is to use a lens with an aperture ring, which can be found on older lenses like our Nikon AF-N 28-85mm f/3.5-4.5.



3

APERTURE LEVER

Aperture levers are fixed in the wide-open position when attached to a camera, but revert to the narrowest position when removed. To widen the aperture of a reversed lens with no aperture ring, you’ll need to move the aperture lever with your finger, or fix it with a little masking tape.



QUICK TIP

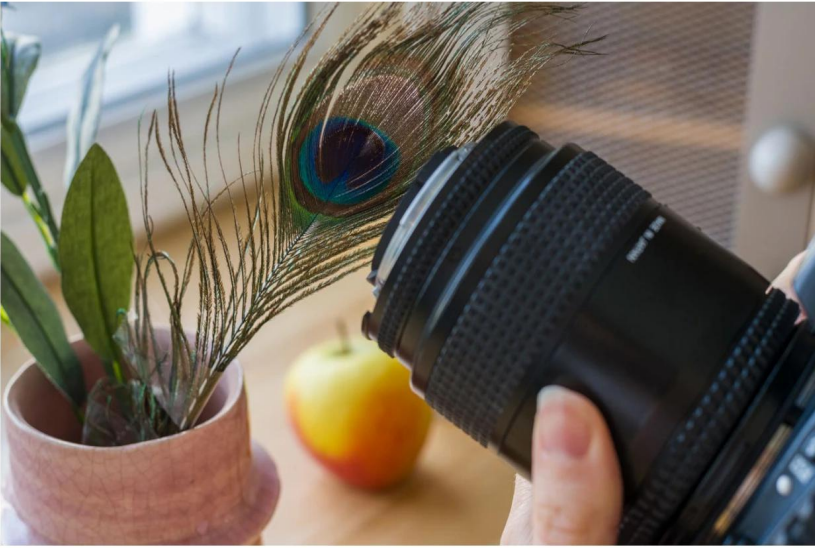
Reversing rings are helpful, but not essential – if you don’t have one you can simply hold your lens up to your camera’s mount. This is a much more uncomfortable

option, and leaves you without a free hand – and it also increases the risk of dirt getting into your sensor. However, it might still prove useful in a pinch.



S K I L L S

HOW TO USE A REVERSING RING



4

FOCUS

You can focus by moving your subject or lens closer or further away. The slightest movement can change the point of focus dramatically, though, so we'd recommend using a tripod if possible. If you're using Live View, magnify the image on your rear LCD to help you focus more accurately.

5

LIGHTING

On a bright day you can photograph subjects in natural light. If you're struggling to shoot at a fast-enough shutter speed while maintaining a suitable ISO, or are working indoors, you may wish to use additional lighting. Our setup consisted of two Lume Cubes and a PIXEL X800N flashgun; specialist macro lighting is also an option.



6

SETTINGS

Since your lens can't actually communicate with your camera body, you'll need to use Manual mode – and in some cases you won't even get metering. Narrower apertures are often preferred when shooting macro imagery, due to the extremely shallow depths of field created at higher magnification ratios. With the help of some additional lighting we settled on an aperture of f/11.





MAGNIFY CLOSE-UP FILTERS

A magnifying glass uses a convex glass element to produce an enlarged image, and you can get a similar device for your camera. Close-up filters screw onto the front of any lens with a suitable filter thread. They reduce the lens's minimum focus distance, allowing you to get closer to subjects.

You can buy close-up filters of varying strengths to suit how close you want to get. The prices of filters vary depending on the quality, but for budget users our four-piece set of Polaroid close-up filters and wallet costs just £13 (\$17), and fits the 58mm thread of our Nikon 50mm f/1.8G.

GO LONG EXTENSION TUBES

Extension tubes sit between a lens (such as our Nikon 50mm f/1.8G) and your camera's body. The larger the gap between the lens and the sensor, the closer the minimum focus distance becomes. Extension tubes come in various lengths, and you can stack them to increase the magnification further.

It's worth noting that not all extension tubes come with the connectors necessary to enable them to communicate with your camera. If this is the case, it's worth using a lens with an aperture ring so that you can at least still control your aperture.



CHEAP GLASS

CLOSE THE GAP

Kit lenses are known for having decent close-focusing distances, and while they aren't designed to produce startling macro results, they're a viable option for those wanting to practise close-ups. The Nikon AF-S DX 18-55mm f/3.5-5.6G VR is a suitable choice for Nikon users, as it boasts a close-focusing distance of just 0.28m. Budget macro lenses also exist. The Nikon AF-S DX Micro 40mm f/2.8G can be found for £200/\$250 secondhand, and creates 1:1 macro shots. Some lenses feature macro modes, like the Sigma 70-300mm f/4-5.6 DG Macro and Nikon AF-N 28-85mm f/3.5-4.5.



STACK 'EM

CREATE A COMBO

You can stack both extension tubes and close-up filters on top of one another to increase magnification. It's even possible to combine extension tubes and close-up filters, or extension tubes and a reversed lens. However, image quality will increasingly suffer, and that's why serious macro photographers use dedicated macro lenses – but, if you're new to macro photography, you can experiment with these techniques, have fun, and see if you get bitten by the bug.



E D I T I N G

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HOW TO...

TURN PHOTOS INTO PAINTINGS

James Paterson shows you how to use Photoshop CC's Mixer Brush Tool to transform any photo into a digital artwork



If you've ever looked through Photoshop's Filter Gallery you'll know there are several filters that can be used to create a painterly look; however, they're mostly rather blunt instruments that apply an effect to the entire image, so in this video tutorial we'll take a more hands-on approach to creating digital art, by using the Mixer Brush Tool to give a photo the look of an

Impressionist painting. You could pick an outdoor scene like ours, or try a different genre, like portraiture or still-life.

The great thing about the Mixer Brush is that it creates painterly strokes based on the details and colours within the image, so you can tailor the effect to the image, rather than applying a generic filter. This involves a little more work – you have to gently push and pull the colours

around with the brush to create your painterly strokes, following along with the lines and shapes in the scene and using short, sharp strokes.

Using several layers allows you to gradually build up the effect – so just as a painter might block out areas of the canvas with colours and rough shapes, you can start by using broad strokes, then pick out finer details later.



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G E A R

GROUP TEST



FAST 35MM PRIMES

Fast 35mm prime lenses are outstandingly versatile for many shooting scenarios. Here are four of the best models on the market

The classic 35mm focal length is popular with all sorts of photographers, covering everything from news and reportage, weddings and environmental portraiture, to landscape and architectural photography. It gives a natural perspective with a more generous viewing angle than a 'standard' 50mm lens, which can feel restrictive by comparison, which is why 35mm is generally the preferred focal length for street photographers who need to react quickly to scenes unfolding before their eyes, often shooting from the hip.

There's a lot to be said for f/1.8

or f/2 35mm prime lenses. They're comparatively compact and lightweight, and are often quite inexpensive to buy. However, serious photographers will generally demand a f/1.4 35mm. These tend to be more robust, with top-flight build quality, catering to the most demanding enthusiast and professional photographers. The extra two-thirds of an f-stop in aperture width naturally enables faster shutter speeds under dull or indoor lighting conditions, so you can carry on shooting handheld without needing to bump up your camera's ISO setting so much.

The extra aperture width also enables

a tighter depth of field. We often reach for 85mm lenses when we're after beautiful bokeh, but a 35mm f/1.4 lens is able to deliver quite a tight depth of field when shooting close-ups, so you can effectively isolate a subject against a blurred background. Being able to get in comparatively close, thanks to the moderately wide viewing angle, can also be a bonus when you want to exaggerate the scene's perspective.

We've picked the top four contenders for Canon and Nikon DSLRs, although the Sigma lens on test is available in a wider range of mount options. Here's how they compare.



Sigma 35mm f/1.4 DG HSM | A

Uncharacteristically small for a Sigma Art lens, it nevertheless packs a hefty punch in terms of performance

Price: £599 / \$699

L launched in 2012, this was the first Art lens in Sigma's Global Vision lineup of Art, Contemporary and Sports lenses. As such, the design ethos emphasises artistic freedom and creativity. Many subsequent Art lenses, including the 50mm and 85mm f/1.4 primes, are particularly large and heavy models for their respective focal lengths, but the 35mm is relatively compact, undercutting the Canon and Tamron lenses for size and weight.

Build quality and handling are very good overall, with a sturdy feel to the barrel and brass mounting plate, and a pleasantly smooth-action manual focus ring. As with other Global Vision lenses, it's compatible with Sigma's optional USB Dock, in this case enabling autofocus fine-tuning and the application of firmware updates. However, unlike a number of subsequent Art lenses, this early model lacks any weather seals.

Although it's about the same size as the Nikon lens, the Sigma has a more complex optical path, based on 13 elements. The optical design is also more high-tech, with two aspherical elements, including a large-diameter one at the front. It also features a top-grade FLD ('Fluorite' low dispersion) element and four SLD (special low dispersion) elements.

The Sigma is marginally sharper than the Canon and Nikon lenses at the centre of the frame, and noticeably sharper than the Canon towards the edges and corners. Corner-sharpness is retained well when shooting wide open, where axial colour fringing is more minimal than with the Nikon, on a par with the Canon. Resistance to ghosting and flare is also good, helped by Sigma's multi-layer coating.

A GREAT LENS FOR ALMOST EVERYBODY

The Sigma is available in Canon EF, Nikon F, Sony A, Sony E, Leica L (suited Panasonic S-series cameras), Pentax K and Sigma mount options



APERTURE F/8

It edges ahead of the Canon lens in this test for sharpness, particularly so towards the edges and corners of the frame



APERTURE F/1.4

There's a smooth transition between focused and defocused areas when shooting at f/1.4, with better control over axial chromatic aberration than the Nikon



Canon EF 35mm f/1.4L II USM

The Mark II edition of Canon's trusty 35mm f/1.4 is a major upgrade over the original, with high-tech attractions

Price: £1,628 / \$1,699

Bigger and heavier than Canon's original 35mm f/1.4 L-series lens, the Mark II was launched four years ago at about twice the price. It has a sturdier build, and adds weather seals plus fluorine coatings on the front and rear elements, which were lacking in the original lens.

The optical design features 14 elements in 11 groups, including UD (ultra-low dispersion) glass and two aspherical elements. Bigger news is that this was Canon's first lens to feature BR (Blue Spectrum Refractive) Optics. It's based on an organic material that's engineered at a molecular level and integrated into a compound element within the lens; the effect is to refract blue light and significantly reduce chromatic aberrations, thus enabling greater sharpness and contrast in images.

As well as having a fast aperture rating, the lens has a speedy ring-type ultrasonic autofocus system. It's not as silent as the stepping motors in many of Canon's more recent lenses, but it's whisper-quiet nonetheless. As usual for this type of system, autofocus comes complete with full-time manual override and a focus distance scale located beneath a viewing window.

True to Canon's claims, the lens delivers superb sharpness and contrast, even when shooting wide-open at f/1.4. However, sharpness drops off towards the edges and corners of the frame a little more than with the competing Sigma and Tamron lenses on test, which are also available in Canon EF mount. Lateral and axial colour fringing are both minimal, and the tiny amount of barrel distortion is negligible. Overall, it's a high-performance lens in all respects.

BEAUTY THAT'S MORE THAN SKIN DEEP

This lens's main claim to fame is that it's Canon's first to feature Blue Spectrum Refractive Optics, but other facets of the design are also impressive



APERTURE F/8

Sharpness is superb across most of the image frame, but it drops off towards the extreme edges and corners a bit more than is the case with the Sigma and Tamron



APERTURE F/1.4

Lateral and axial chromatic aberrations are very minimal and bokeh is good, with a smooth transition between focused and defocused areas



Tamron SP 35mm f/1.4 Di USD

A Tamron f/1.4 prime has been a long time coming, but billed as 'the best Tamron lens of all time', it's been well worth the wait

Price: £929 / \$899

Until recently, Tamron's fastest Di prime lenses for digital cameras had a modest aperture rating of f/1.8, but that changed last year with the launch of this 35mm f/1.4. We've seen some excellent Tamron lenses in the past, especially the latest round of G2 (Generation 2) models, but this one is claimed to be the best yet. It was designed as a showcase item to celebrate 40 years of Tamron SP (Super Performance) lenses.

At 81 x 105mm, the Tamron is almost identical in size to the Canon on test, and larger than the Nikon and Sigma. It's also the heaviest in the group, weighing 815g or 805g for the Canon and Nikon mount editions respectively. Build quality and handling are excellent, with a full set of weather seals, plus a newly developed fluorine-based coating to repel moisture and grease from the front element.

At 14, the Tamron has the same number of elements as the Canon lens. These include three moulded glass aspherical elements and four LC (low dispersion) elements. The exotic coatings include nano-structure BBAR G2 (Broad-Band Anti-Reflection Generation 2) for enhanced light transmission and reduced ghosting and flare. Designed specifically for this lens, the ring-type ultrasonic autofocus system utilises a DR (dynamic rolling-cam) mechanism for optimum speed and accuracy. An optional USB docking station (TAP-In Console) is available for fine-tuning and applying firmware updates.

Sharpness is excellent and incredibly consistent across the entire image frame and throughout the whole aperture range. Distortion and axial as well as lateral chromatic aberrations are negligible, while resistance to ghosting and flare is very good indeed. It's a spectacular lens.

THE SPECIAL ONE

Designed to commemorate 40 years of Tamron SP lenses, the 35mm f/1.4 lives up to Tamron's claim that it's the company's best-ever lens



APERTURE F/8

Sharpness is excellent across the entire frame, and it remains incredibly consistent right the way through from f/1.4 to f/16



APERTURE F/1.4

The quality of bokeh is particularly good for a 35mm lens, and axial chromatic aberration is virtually non-existent



Nikon AF-S 35mm f/1.4G

Launched a decade ago, Nikon's latest and greatest 35mm lens keeps things relatively simple, but still commands a high price

Price: £1,500 / \$1,697

Released in 2010, this lens finally replaced the antiquated 35mm f/1.4 Ai-S that dated all the way back to 1970. The new lens is rather larger and over 50% heavier, weighing in at 600g. It's a similar size and weight to the Sigma lens on test, and noticeably smaller and lighter than the Canon and Tamron optics.

Whereas the original Nikon lens was a manual-focus optic, this model gains a ring-type ultrasonic autofocus system, which is rapid and whisper-quiet. As with the other lenses on test, it comes complete with a focus distance scale beneath a viewing window, and full-time manual override. Priority is given to manual override when in autofocus mode, signified by the M/A M lettering above the auto/manual focus switch. Focusing is entirely internal, so the lens doesn't physically extend at any focus setting, and the front element doesn't rotate, as with the other lenses here.

With 10 elements arranged in seven groups, the optical path is fairly simple compared with the other lenses here. There's a single aspherical element, but none of the ED (extra-low dispersion) glass that's featured in many Nikon lenses. Nano Crystal Coat is applied to one of the elements, with the aim of reducing ghosting and flare.

Sharpness and contrast are very good, even when shooting wide-open, and lateral chromatic aberration is taken care of automatically by current and recent Nikon cameras. However, axial chromatic aberration, often called 'bokeh fringing', is problematic when shooting at the wide end of the aperture range – this can be visible as magenta and green fringes around edges that are in front of and behind the point of focus, respectively.

COMPACT AND LIGHTWEIGHT

The build is mostly plastic but fairly sturdy, and like most Nikon lenses it has a weather-seal ring on its mounting plate



APERTURE F/8

Sharpness and contrast are impressive here, while lateral chromatic aberration is minimal, despite the lack of ED glass in the lens



APERTURE F/1.4

Defocused areas are fairly smooth, but these can suffer from axial chromatic aberration when you're shooting at very wide apertures



G E A R

GROUP TEST FAST 35MM PRIMES



SIGMA 35mm f/1.4 DG HSM | A

PRICE £599/\$699
WEB WWW.SIGMA-IMAGING-UK.COM
ELEMENTS 13
GROUPS 11
MINIMUM APERTURE F/16
MAXIMUM APERTURE F/1.4
AUTOFOCUS TYPE ULTRASONIC (RING)
MINIMUM FOCUS DISTANCE 0.3M
MAXIMUM MAGNIFICATION 0.2X
ANGLE OF VIEW 63.4°
DIAPHRAGM 9 BLADES
MOUNT C-EF, N-F, L, P-K, SG, S-A, S-E
FILTER SIZE 67MM
DIMENSIONS (DIA X LENGTH) 77X94MM
WEIGHT 665G

FEATURES

The high-tech optical path is coupled to a fast ring-type ultrasonic autofocus system



BUILD QUALITY

The Sigma packs a lot into a compact and sturdy package, although it lacks weather seals



HANDLING

It's lighter in weight than the Canon and Tamron lenses and also boasts very refined handling



QUALITY OF RESULTS

Sharpness and contrast are very impressive, while distortion and fringing are minimal



VALUE FOR MONEY

Less than half the price of the Canon and Nikon lenses, the Sigma represents outstanding value



CANON EF 35mm f/1.4L II USM

PRICE £1,628/\$1,699
WEB WWW.CANON.CO.UK
ELEMENTS 14
GROUPS 11
MINIMUM APERTURE F/22
MAXIMUM APERTURE F/1.4
AUTOFOCUS TYPE ULTRASONIC (RING)
MINIMUM FOCUS DISTANCE 0.28M
MAXIMUM MAGNIFICATION 0.21X
DIAPHRAGM 9 BLADES
ANGLE OF VIEW 63°
MOUNT CANON EF
FILTER SIZE 72MM
DIMENSIONS (DIA X LENGTH) 80X106MM
WEIGHT 760G

FEATURES

Blue Spectrum Refractive Optics and SubWavelength structure Coating



BUILD QUALITY

The lens has a very robust construction and includes weather seals and fluorine coatings



HANDLING

It's fairly large for a 35mm f/1.4 lens, but it feels nicely balanced on full-frame Canon SLRs



QUALITY OF RESULTS

Image quality is highly impressive, but sharpness drops off a little at the edges and near the corners



VALUE FOR MONEY

The Canon isn't great value, costing much more to buy than the Sigma and Tamron lenses



TAMRON SP 35mm f/1.4 Di USD

PRICE £929/\$899
WEB WWW.TAMRON.CO.UK
ELEMENTS 14
GROUPS 10
MINIMUM APERTURE F/16
MAXIMUM APERTURE F/1.4
AUTOFOCUS TYPE ULTRASONIC (RING)
MINIMUM FOCUS DISTANCE 0.3M
MAXIMUM MAGNIFICATION 0.2X
DIAPHRAGM 9 BLADES
ANGLE OF VIEW 63.3°
MOUNT CANON EF, NIKON F
FILTER SIZE 72MM
DIMENSIONS (DIA X LENGTH) 81X105MM
WEIGHT 815/805G (C/N)

FEATURES

Feature-rich for a fast prime lens, it has top-grade optics and premium autofocus finery



BUILD QUALITY

The standard of construction is superb, complete with weather seals and fluorine coating



HANDLING

It's quite weighty for a 35mm f/1.4 lens, but the handling is a delight in every single respect



QUALITY OF RESULTS

The Tamron is simply the best lens in the group in terms of all-round image quality



VALUE FOR MONEY

Great value for money, it's less than two-thirds of the price of the Canon and Nikon lenses



NIKON AF-S 35mm f/1.4G

PRICE £1,500/\$1,546
WEB WWW.NIKON.CO.UK
ELEMENTS 10
GROUPS 7
MINIMUM APERTURE F/16
MAXIMUM APERTURE F/1.4
AUTOFOCUS TYPE ULTRASONIC (RING)
MINIMUM FOCUS DISTANCE 0.3M
MAXIMUM MAGNIFICATION 0.2X
DIAPHRAGM 9 BLADES
ANGLE OF VIEW 63°
MOUNT NIKON F
FILTER SIZE 67MM
DIMENSIONS (DIA X LENGTH) 83X90MM
WEIGHT 600G

FEATURES

The optical path is relatively simple and straightforward, but it features a Nano Crystal Coat



BUILD QUALITY

The construction feels solid and features a weather-sealing on the mounting plate



HANDLING

It's quite compact and lightweight, with a smooth-action focus ring and good overall handling



QUALITY OF RESULTS

Sharpness and contrast are very good, but wide-aperture axial fringing can be noticeable



VALUE FOR MONEY

At more than twice the price of the competing Sigma lens, it's relatively poor value



OVERALL

This high-performance lens is a terrific buy at the price, and is available in a wide range of mount options.



It's a superb lens, but it doesn't offer any real performance advantage over the less pricey Sigma and Tamron options.



It's a win for this independent lens over the own-brand Canon and Nikon offerings, in terms of both price and performance.



It's a good lens, but it feels overpriced compared with competing lenses from independent manufacturers.





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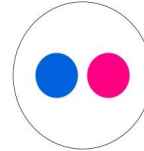
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