

Explore your imagination with advice, photographer's stories and our guide to the world of possibilities that Canon EOS system cameras and lenses offer.

EXPLORE EOS

Issue 1: Summer 2014

Canon Inc.
canon.com



facebook.com/CanonUKLtd

Canon Europe
canon-europe.com



youtube.com/CanonEurope

English Edition 0181W815
© Canon Europa N.V., 2014



twitter.com/CanonUKandIE

WHAT'S INSIDE

A whole world of possibilities.

There's never been a better time to be a photographer. The ever-increasing sophistication of digital cameras has opened up a whole new world of creative possibilities for everyone – from the amateur to the professional.

When you buy a Canon EOS DSLR, you aren't just buying a camera. You're investing in a system of lenses and accessories that empower you with the creative flexibility to make incredible images and movies. With the right lens, anything is possible – and we'll help show you how.

GO DIGITAL!



Packed with extras, this brochure is also available to download for both iOS and Android tablets. Just search for 'Canon Brochures' in the relevant app stores. Enjoy interviews with professional photographers, discover how to shoot in new styles, and get advice on which lenses and accessories can make a difference to your photography.

canon-europe.com/brochures-eos-01



4
**HISTORY
OF EOS**



6
**CAMERA
BODIES**



24
**Speedlite
FLASHES**



8
PEOPLE



26
PLACES



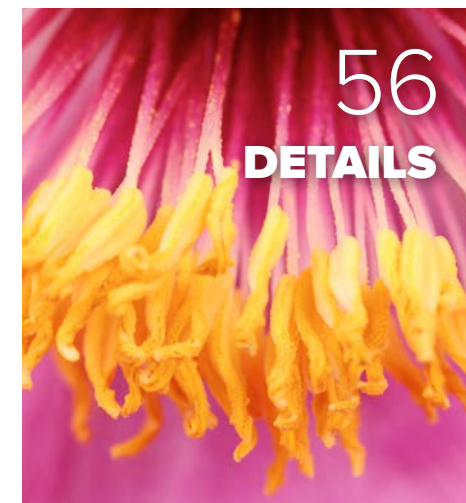
40
LIFE



48
ACTION



64
EOS MOVIE



56
DETAILS

ISSUE HIGHLIGHTS

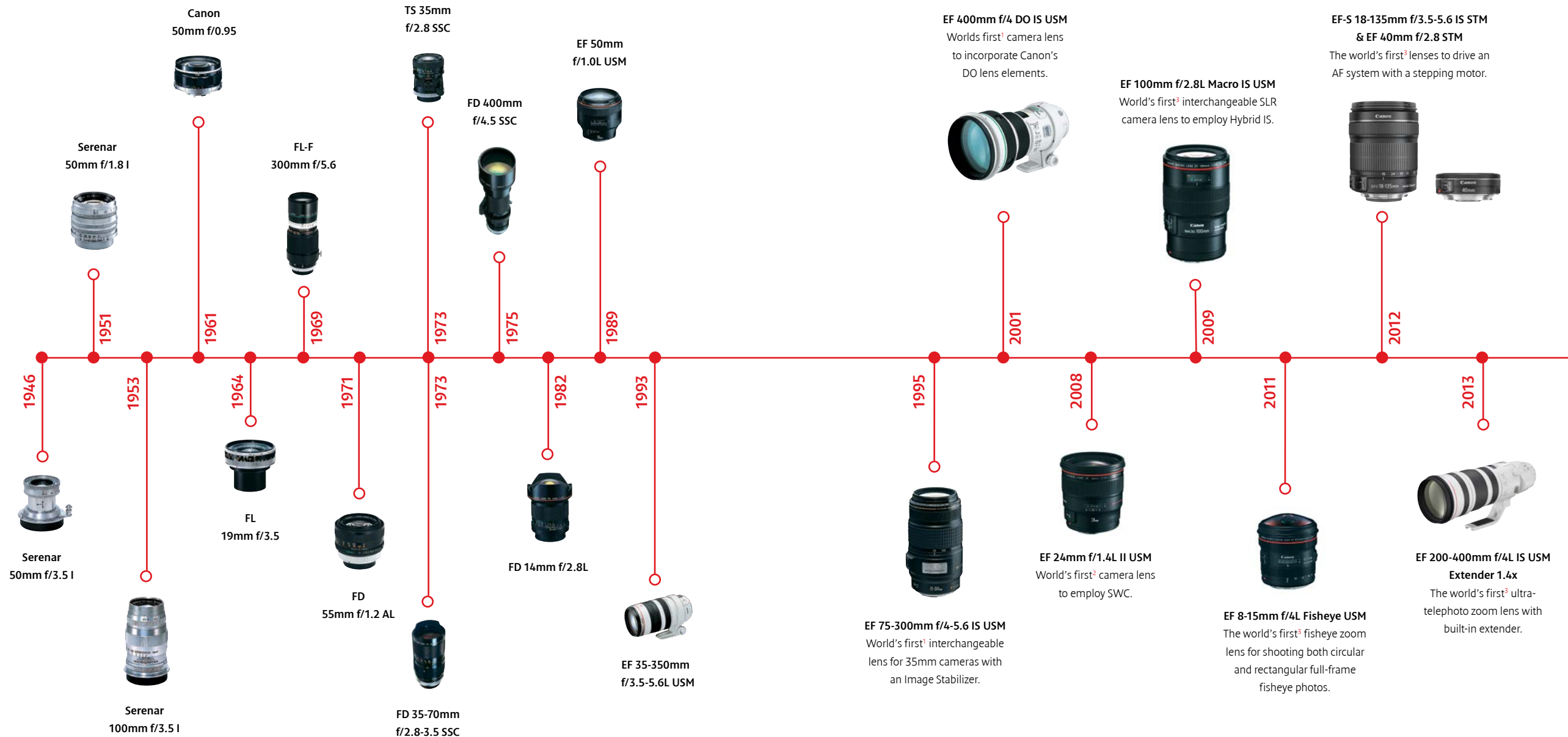
Exclusive interview with Canon Explorer
Jörg Kyas on **p16**

Spotlight on Prime Lenses on **p32**

Focus on Tilt and Shift on **p36**

INNOVATION ALWAYS

Starting with our first lens in 1946, we've been constantly developing our technologies and manufacturing processes. In 1987, we launched the Canon EOS Camera system. Now there are EOS cameras for every type of photographer, from beginners to professionals. And that's just the beginning. More than 70 lenses give you unlimited scope for creative control – so you can take exactly the shots you want.



Claims were valid at the launch time of the respective lens.

¹ For 35mm SLR cameras with interchangeable lenses. ² Among photographic lenses. ³ For an SLR camera with an interchangeable lens.

CHOOSE YOUR BODY

Finding the right camera for your needs depends very much on how experienced you are as a photographer.

If you're just starting out, you need a high-quality camera which is easy to use and offers creative opportunities for you to grow as a photographer – you might want to start off using automatic mode and then gradually exert greater control over exposure and depth of field by changing the lenses you use.

If you're an experienced photographer, you'll need high-quality equipment that can take you to the next level – you might want to shoot semi-professionally and need the image quality to back you up.

WHICH SENSOR?

EOS cameras use one of two sensor sizes. The smaller of these is called APS-C, and measures 22.5 x 15mm (approx.) in size. The larger 36 x 24mm sensor is known as full-frame. Since APS-C sensors crop the picture more than full-frame sensors, they give a narrower field of view. This is often useful for photographers wanting to get closer to their subjects – such as wildlife, sports and action.

APS-C bodies can use both EF and EF-S lenses, whilst full-frame bodies can use EF lenses only. The EOS-M body uses EF-M lenses or, with a Mount Adapter EF-EOS M, it can use both EF and EF-S lenses. A cinema lens with EF mount can be used by all EOS bodies.

BEGINNERS

EOS M

APS-C

An 18-megapixel, interchangeable-lens compact system camera small enough to take anywhere. Enjoy simple creative controls and superb low-light performance for stunning images.



EOS 1200D

APS-C

Embrace every opportunity. Capture the emotion of the moment with a DSLR camera that's easy to use and delivers results you'll love.



EOS 100D

APS-C

A small and responsive DSLR to take everywhere. The 18-megapixel EOS 100D delivers superb photos and video, and features an optical viewfinder and intuitive touch screen controls.



EOS 700D

APS-C

Step into DSLR photography and let your creativity grow. Produce superb photos and video with an 18-megapixel sensor and enjoy shooting with an easy-to-use Vari-angle Clear View LCD II touch screen.



ENTHUSIASTS

EOS 60Da

APS-C

Designed specifically for astrophotography, the EOS 60Da is more sensitive to infrared light thanks to a modified low-pass filter that sits in front of the camera's 18-megapixel CMOS sensor.



EOS 70D

APS-C

Capture the moment in stunning stills and Full-HD movies with the high-performance EOS 70D, featuring 7fps full resolution shooting, an advanced 19-point AF system and Canon's unique Dual Pixel CMOS AF technology.



EOS 7D

APS-C

The EOS 7D combines high performance, versatility and cinematic-style HD movies. 18-megapixel resolution delivers superb quality and 8fps continuous shooting keeps you ahead of the action.



EOS 6D

Full-frame

A 20.2-megapixel DSLR featuring a full-frame sensor and compact design. Ideal for portrait photography and travel, offering tight control over depth of field and a large choice of wide-angle EF lenses.



PROFESSIONALS

EOS 5D Mark III

Full-frame

The EOS 5D Mark III is a full-frame, 22.3-megapixel DSLR with 61-point autofocus and 6fps continuous shooting. Capture high-quality Full-HD movies with manual control over everything from frame rate to audio.



EOS-1D X

Full-frame

The EOS-1D X combines speed with image quality to create the next generation camera for professionals. Full-frame, 18-megapixel sensor with Dual "DIGIC 5+" processors sets the standard, and up to 12fps shooting takes it beyond.



EOS-1D C

Full-frame

A groundbreaking multimedia camera that excels at both stills and movie shooting, EOS-1D C brings 4k movies and advanced video functions like Canon Log Gamma to a high-performance DSLR body.



Download the digital version of Explore EOS for more information on EOS bodies. See page 3 for download details.

PEOPLE

It's often said that a face can tell a thousand stories. It might be your daughter's journey through childhood or the depth and wisdom in the eyes of an old friend. But the real beauty of portrait photography is that every shot is as individual as the person in it. Capturing a face can be one of the most satisfying and rewarding types of photography. And, with a good lens and the right technique, it's easy to get the results you want.

EF 50mm f/1.4 USM

1/2000 sec @ f/2, ISO 400

© Claudia Wycisk

TURNING HEADS

How to make your portraits stand out from the crowd.

People make the most incredible subject for photographers of any level. And the potential for creativity is infinite. No two shots of a person will ever be the same – the slightest difference in focus, lighting or expression can uncover a different aspect of mood or personality.

While there is no one approach to shooting portraits, there are lots of factors that can change the look and feel of a photo. Do you want to pose your subject or shoot them naturally? Do you want to shoot from up high or low down?

For close-up portraiture, it's important to choose a lens with a focal length long enough to let you stand a little distance away, so you don't crowd your subject. A 50mm lens on an APS-C camera is perfect for filling the frame with

someone's face or just their head and shoulders. It'll give you biting sharpness and contrast so your subject will really stand out from their surroundings, backed up by silky smooth out-of-focus areas that will hint at the subject's location without causing distraction. Or, if you are a full-frame photographer, look at the EF 85mm f/1.8 USM or the EF 135mm f/2L USM if you want to stand a little further away.

Choosing a larger aperture such as f/1.8 will allow you to pinpoint the focus to an area as specific as the eyes. If you're shooting your subject side on, you could set the lens even wider at f/1.2, so that just one eye is in focus – such shallow depth-of-field can create incredibly intense portraits. Just be careful to focus accurately, as there's not much room for error.

EF 85mm f/1.2L II USM

1/4000 sec @ f/1.2, ISO 250

© Thorsten Milse, Canon Ambassador



EF 50mm f/1.4 USM

A higher performance 50mm lens, with faster USM focusing and a larger f/1.4 maximum aperture that's ideal for close-up portraiture.



EF 85mm f/1.8 USM

A classic portrait lens, particularly for those working with full-frame DSLRs. It allows you to shoot with the flattering perspective and shallow depth of field that professionals love.



EF 50mm f/1.2L USM

1/6000 sec @ f/2, ISO 250

Shot by Lili Love

It's Child's Play

Kids can be brilliant at posing for the camera but sometimes it can be hard to get natural shots of them playing or simply being themselves. The solution? Keep your distance. Use a telephoto zoom like the EF-S 55-250mm f/4-5.6 IS STM and you can capture all the mischief and mayhem without the little ones noticing a thing.

Children often lose interest in being photographed quite quickly. You can use toys to help capture their attention and keep them absorbed, or set up an environmental portrait where you deliberately show your subject in context – for example, on a climbing frame or playing a game.



It's important to be comfortable when shooting. Investing in an external battery grip makes your camera easier to hold vertically, when shooting in portrait orientation. Each one is specific to an EOS camera and offers a shutter-release button for vertical shooting, as well as space for an extra battery – useful if you're shooting all day.

Try to make the most of natural lighting, from a window for example. If this isn't possible, flash can help, although you should take a few simple precautions to ensure a natural result.

Using flash directly from on top of your camera can look harsh and lacks atmosphere. Instead, try using an external Speedlite flash – bouncing its light off a wall or ceiling by rotating the flash head. Alternatively, position a Speedlite away from the camera and trigger it remotely, using a Speedlite transmitter. Try aiming it at your subject from one side or point it at a large reflective surface. And, if you have several Speedlite flashes, you can light the background and subject at the same time.


EF 70-200mm f/2.8L IS II USM, 1/250 sec @ f/11, ISO 250 © Joe Petersberger
**EF-S 55-250mm f/4-5.6 IS STM**

This versatile, affordable and lightweight telephoto lens lets you keep your distance while shooting, so children will never notice you are there.

**EF 70-300mm f/4-5.6 IS USM**

Get even more telephoto reach with a 300mm max zoom setting. USM focusing helps track movement quickly – perfect for energetic kids.

The Big Day

Weddings provide a unique opportunity for photographing friends and family when they're looking their best. The shots you take can capture memories that will last a lifetime.

Think about how you can best capture the mood and feeling of the day. It might mean looking down from the top of some stairs or crouching down to capture a view of the smallest bridesmaid. Finding a new or interesting angle can be a great way of creating a distinct and memorable set of pictures.

Lighting can be a challenge during an indoor wedding – you can't have your flash going off throughout the ceremony. To overcome this, consider increasing the ISO sensitivity on your camera. Take a few test shots (to see if your shutter speed is fast enough to stop any blur) before the bride arrives – you won't have time to make adjustments once she walks down the aisle.

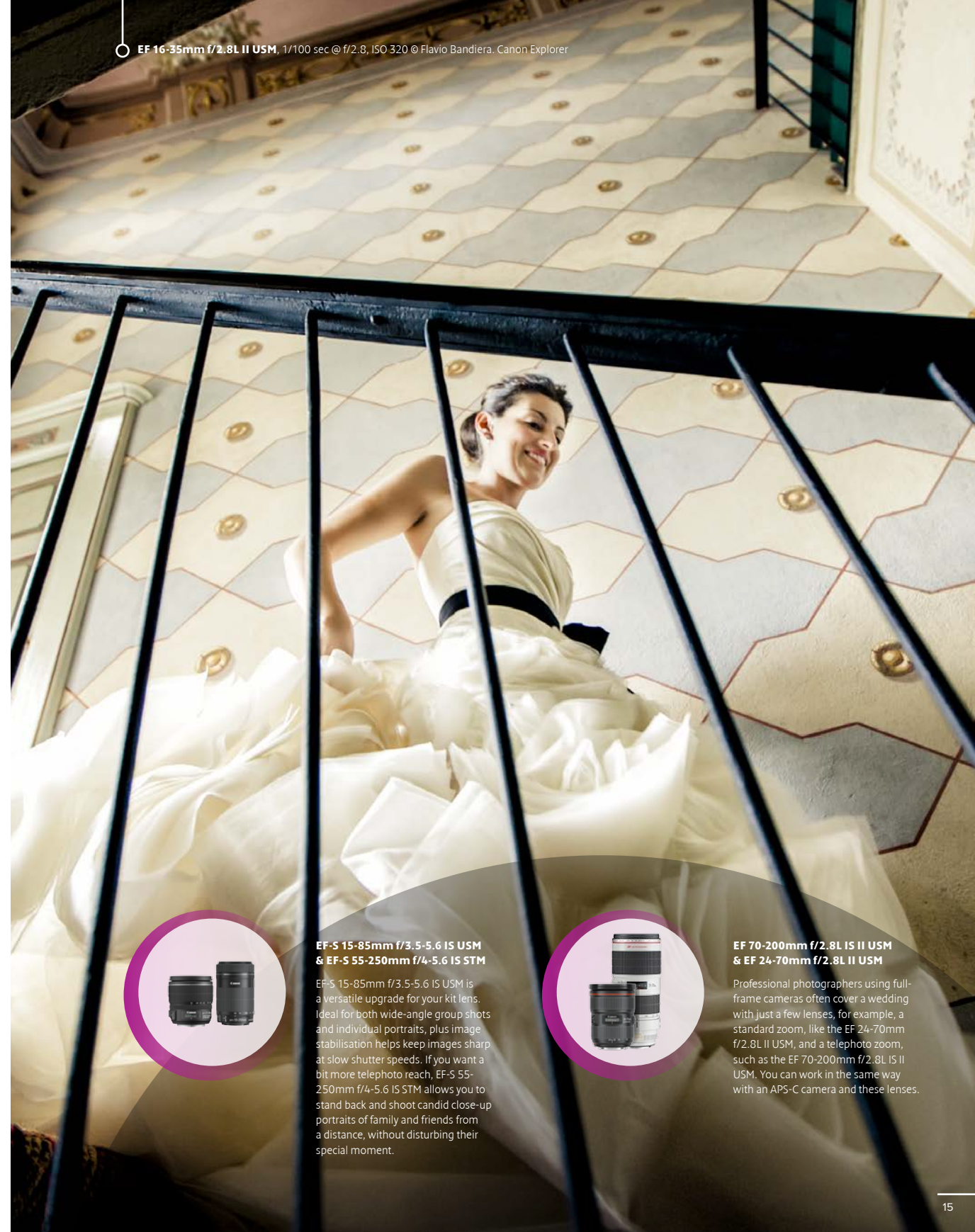
Professionals using a full-frame camera often use a wide-aperture zoom lens like the EF 24-70mm f/2.8L II USM because it can take fantastic quality shots in low light, such as during the ceremony and reception. Plus, it covers a useful range of focal lengths and maintains its large f/2.8 aperture at all zoom settings.

A good alternative for APS-C cameras is the EF-S 17-55mm f/2.8 IS USM. It has the range to capture all types of shots, as and when they happen (from portraits to group shots), and it shoots well in low light.

A wide-aperture fixed focal length lens also makes an excellent option for shooting a wedding, as they are great at letting in lots of ambient light. Try the EF 85mm f/1.8 USM: it's lightweight, delivers fantastic image quality and gives plenty of control over depth of field.



EF 24-70mm f/2.8L II USM, 1/30 sec @ f/6.3, ISO 1000 © Flavio Bandiera, Canon Explorer



EF 16-35mm f/2.8L II USM, 1/100 sec @ f/2.8, ISO 320 © Flavio Bandiera, Canon Explorer



**EF-S 15-85mm f/3.5-5.6 IS USM
& EF-S 55-250mm f/4-5.6 IS STM**

EF-S 15-85mm f/3.5-5.6 IS USM is a versatile upgrade for your kit lens. Ideal for both wide-angle group shots and individual portraits, plus image stabilisation helps keep images sharp at slow shutter speeds. If you want a bit more telephoto reach, EF-S 55-250mm f/4-5.6 IS STM allows you to stand back and shoot candid close-up portraits of family and friends from a distance, without disturbing their special moment.



**EF 70-200mm f/2.8L IS II USM
& EF 24-70mm f/2.8L II USM**

Professional photographers using full-frame cameras often cover a wedding with just a few lenses, for example, a standard zoom, like the EF 24-70mm f/2.8L II USM, and a telephoto zoom, such as the EF 70-200mm f/2.8L IS II USM. You can work in the same way with an APS-C camera and these lenses.



PERFECT PORTRAITS: JÖRG KYAS

What is it about people photography that you like so much?

I think it's the communication – getting to know people and getting in close to them. It's my approach really; I am often curious about people and I like getting to know them through taking pictures.

When I was working as an assistant, I was involved in lots of shoots with bands and the music industry. That continued when I went solo as a photographer, and now I also shoot for advertising agencies and magazines too.

What are your favoured lenses? What approach do you take for portrait photography?

By far my two favourite lenses are the EF 85mm f/1.2L II USM and the EF 50mm f/1.2L USM. I'd say I shoot more 80 per cent of my work on these two. And when they aren't quite what I need, I use either the EF 24-70mm f/2.8L USM or EF 70-200mm f/2.8L IS USM. With these four lenses we do everything.

The two fixed focal length lenses are great not only because of their sharpness, but also because

of their bokeh – the character of the out-of-focus backgrounds. I like to shoot with a wide-open aperture. I think it somehow simulates how we see with our eyes. If I need more front-to-back sharpness, I can stop down to get more depth of field.

There is also a creative challenge that comes with working with lenses that don't zoom. That concentrates my mind on the subject I'm photographing. In a way, when a lens' focal length is fixed, there is one less thing to worry about.

Would you recommend that approach to a less-experienced photographer?

I would, yes. When you are new to photography, there are lot of things you need to have your mind on. Shooting with a fixed focal length lens that doesn't zoom removes one of the things you have to think about. Keep things as simple as possible and concentrate on the picture you are making.





Do you use flash or daylight?

I prefer flash. I believe you should control as much as you can in photography, so I like to take control over where my light is coming from.

When I started out in photography, flash was tricky to get right. But nowadays, the Canon E-TTL II flash system makes it very easy. I have six Speedlite 600EX-RT flashes with an ST-E3-RT Speedlite Transmitter that sits on my EOS 5D Mark III. They work brilliantly – I use them for advertising work and portraits on location in offices. I can shoot at wide apertures for shallow focus and I can use fast shutter speeds.

It's a great lighting system to get into. You can start small with just one flash, plus a Speedlite Transmitter so you can use it off camera. Then maybe later you can borrow a friend's flash when you are shooting together or buy a second Speedlite. But really, for good pictures you just need one source of light. It's like I always say with good photography: keep it simple.



Download the digital version of Explore EOS and read more Ambassador & Explorer interviews.

canon-europe.com/brochures-eos-02

GET THE KIT

Take a look inside Jörg's portable kit bag. This is a selection of the equipment he uses for photographing people.



01. Speedlite Transmitter ST-E3-RT

02. Speedlite 600EX-RT

03. EOS 5D Mark III + battery grip

04. EOS 5D Mark II as backup body + battery grip

05. EF 24-70mm f/2.8L USM

Now available: EF 24-70mm f/2.8L II USM

06. EF 85mm f/1.2L II USM

07. EF 50mm f/1.2L USM

08. EF 70-200mm f/2.8L IS USM

Now available: EF 70-200mm f/2.8L IS II USM

imagePROGRAF iPF6450 printer

"The two fixed focal length lenses are great not only because of their sharpness, but also because of their bokeh – the character of the out-of-focus backgrounds."

"I have six Speedlite 600EX-RT flashes with an ST-E3-RT Speedlite Transmitter that sits on my EOS 5D Mark III. They work brilliantly... it's a great lighting system to get into."

EF 16-35mm f/2.8L II USM, 1/160 sec @ f/13, ISO 100,
© Brent Storton/Reportage by Getty Images. Canon Ambassador



ULTIMATE FLASH SETUP

When shooting with a flash, more creative results can be achieved by moving the flash away from your camera, so light falls on your subject from a different direction. The easiest way to do this is to link the flash to your camera's hot shoe using a Remote Cord OC-E3. This allows modest distances between flash and camera, but more creative options are available using wireless triggering.

Some EOS bodies have an Integrated Speedlite Transmitter that allows a second flash to be fired from up to 10m* away using flashes of visible or infrared light. This 'optical wireless triggering' gives you more options when it comes to positioning your lights.

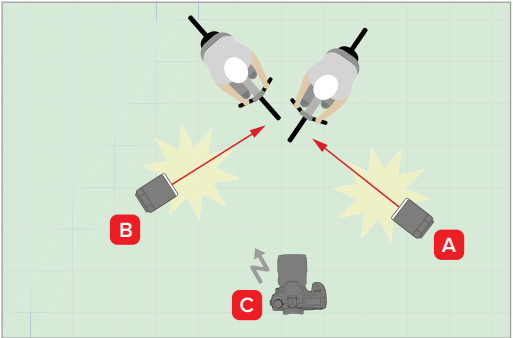
If your camera does not have a built-in flash, use the ST-E2 Speedlite Transmitter which sits in your camera's hot shoe. Alternatively, some Speedlites (such as the 600EX or 600EX-RT) can be mounted on-camera and used to trigger a second flash positioned some distance away.

The Speedlite 600EX-RT can also be controlled with radio triggering, using the ST-E3-RT Speedlite Transmitter or a second 600EX-RT. This allows greater camera-flash distances (up to 30m) and allows Speedlites to be positioned in locations that don't have direct line of site with the camera. Up to 15 flashes can be positioned off camera and fired remotely.

*Distance outdoors may be less.



EF 24-70mm f/2.8L USM, 1/200 sec @ f/11, ISO 200



- A Main flash: Speedlite 600EX-RT
- B Fill flash: Speedlite 600EX-RT
- C Camera: EOS SD Mark III with ST-E3-RT

PEOPLE LENSES

APERTURE		LENS	FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm	24mm	40mm	85mm	135mm	300mm	800mm	Places	Life	Details	Action	Movies
EF-S	f/3.5 → f/5.6	EF-S 15-85mm f/3.5-5.6 IS USM IS USM												
	f/2.8	EF-S 17-55mm f/2.8 IS USM IS USM												
	f/4 → f/5.6	EF-S 17-85mm f/4-5.6 IS USM IS USM												
	f/3.5 → f/5.6	EF-S 18-135mm f/3.5-5.6 IS STM IS STM												
	f/3.5 → f/5.6	EF-S 18-200mm f/3.5-5.6 IS IS												
	f/4 → f/5.6	EF-S 55-250mm f/4-5.6 IS STM IS STM												
	f/2.8	EF-S 60mm f/2.8 Macro USM USM												
EF (Fixed Focal Length)	f/2	EF 35mm f/2 IS USM IS USM												
	f/1.4	EF 35mm f/1.4L USM L USM												
	f/2.8	EF 40mm f/2.8 STM STM												
	f/1.8	EF 50mm f/1.8 II II												
	f/1.4	EF 50mm f/1.4 USM USM												
	f/1.2	EF 50mm f/1.2L USM L USM												
	f/1.8	EF 85mm f/1.8 USM USM												

	APERTURE	LENS	FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm	24mm	40mm	85mm	135mm	300mm	800mm	Places	Life	Details	Action	Movies
EF (Fixed Focal Length)	 f/1.2	 EF 85mm f/1.2L II USM L II USM				○								
	 f/2	 EF 100mm f/2 USM USM				○								
	 f/2	 EF 135mm f/2L USM L USM					○							
EF (Zoom)	 f/2.8	 EF 16-35mm f/2.8L II USM L II USM	—							●	●			●
	 f/2.8	 EF 24-70mm f/2.8L II USM L II USM	—							●	●			●
	 f/4	 EF 24-70mm f/4L IS USM L Hybrid IS USM	—							●	●	●		
	 f/4	 EF 24-105mm f/4L IS USM L IS USM	—							●	●			
	 f/2.8	 EF 70-200mm f/2.8L USM L USM				—							●	
	 f/2.8	 EF 70-200mm f/2.8L IS II USM L IS II USM				—							●	●
	 f/4	 EF 70-200mm f/4L USM L USM				—				●			●	
	 f/4	 EF 70-200mm f/4L IS USM L IS USM				—				●			●	
	 f/4 →  f/5.6	 EF 70-300mm f/4-5.6 IS USM IS USM				—				●			●	
	 f/4.5 →  f/5.6	 EF 70-300mm f/4.5-5.6 DO IS USM DO IS USM				—				●			●	
	 f/4.5 →  f/5.6	 EF 70-300mm f/4.5-5.6L IS USM L IS USM				—							●	

Macro	 f/2.8	 EF-S 60mm f/2.8 Macro USM USM			○						●		
	 f/2.8	 EF 100mm f/2.8 Macro USM USM				○					●		
	 f/2.8	 EF 100mm f/2.8L Macro IS USM L Hybrid IS USM				○					●		●
Tilt & Shift	 f/2.8	 TS-E 90mm f/2.8				○					●		

Technologies

- IS

Image Stabilizer
Detects 'camera-shake' movements that can cause blur in pictures and corrects for this by moving a lens element to compensate.
- USM

Ultrasonic Motor
Lenses featuring a USM AF motor focus very quickly and in near silence.
- DO

Diffractive Optics
Lenses incorporating DO technology offer superb image quality from a dramatically smaller and lighter design, great when portability is important.
- Hybrid IS

Hybrid Image Stabilizer
Compensates for the two types of camera shake encountered in macro photography: angular rotations and lateral shift movements.

- L

L-series
Canon L-series lenses offer the highest levels of performance in the range and are built to deliver professional-level image quality and durability.
- STM

Stepping Motor
Lenses using STM technology focus smoothly and quietly when shooting video, and extremely quickly when capturing stills.
- II

Lens version
Lenses are sometimes replaced with new and improved models and have numerals after their name to indicate which version it is.



Download the digital version of Explore EOS and view more information on lenses, including sample images, MTF charts and lens diagrams.
canon-europe.com/brochures-eos-03

TAKING CONTROL OF LIGHT

Finding the right flash for your photography depends very much on the subjects you like to shoot. A flash should enable you to take creative control over how you light your shot – whether it’s night or day, indoors or out.

MACRO FLASHES

Macro Ring Lite MR-14EX II

A high-performance Macrolite flash delivering creative lighting solutions for photographers shooting close-up images, both on location and in the studio.



Macro Twin Lite MT-24EX

Take control of your macro photography lighting with the Macro Twin Lite MT-24EX. Designed for macro specialists, it provides versatility in both light direction and power.



TRANSMITTERS

Speedlite Transmitter ST-E2

Small, lightweight and portable, the ST-E2 is a dedicated infrared transmitter to control two groups of remote wireless slave Speedlites.



Speedlite Transmitter ST-E3-RT

Fire compatible Speedlite flashguns over distances of up to 30m. Radio-frequency control provides reliable operation, even when direct line of sight is not possible.



Speedlite FLASHES

Speedlite 90EX

A compact, high-performance flash that delivers superbly lit everyday shots, such as portraits and indoor scenes, plus creative lighting effects. The ideal companion for the EOS M.



Speedlite 270EX II

Explore the creative side of lighting with the Canon Speedlite 270EX II – a compact flashgun that is as easy to use off camera as it is in your camera’s hotshoe.



Speedlite 320EX

Featuring Wireless Slave technology, a bounce/swivel head and a constant LED light source for video work, the Canon Speedlite 320EX opens up new creative possibilities for EOS photographers.



Speedlite 430EX II

A powerful and versatile flash, the Speedlite 430EX II will expand your shooting options with a Guide Number of 43, wireless slave flash ability and nine custom functions.



Speedlite 600EX

A powerful flash gun for use both on and off the camera.



Speedlite 600EX-RT

A powerful flash gun for use both on and off the camera. Built-in radio triggering offers remote lighting control over distances up to 30m.



Download the digital version of Explore EOS for more information on flashes.

canon-europe.com/brochures-eos-04

PLACES

We often use our cameras the most when we're travelling – incredible landscapes, bustling marketplaces and stunning architecture all make irresistible subjects. Your adventure in photography begins here too. These shots bring their own creative challenges and opportunities for experimentation with your chosen lenses. Think big.



EF 16-35mm f/2.8L II USM

3.2 sec @ f/7.1, ISO 100

© Brent Stirton/Reportage
by Getty Images. Canon Ambassador

ON THE ROAD

Choose the right kit for your next big trip.

If you are going away for a long trip, there can be a temptation to try and pack for every eventuality. The same goes for photography – we want our best lenses, flashes and accessories. But baggage space and weight is often restricted. Some subjects have obvious lens choices – wide angles for landscapes, telephoto for safaris – but if you're planning a mixture of activities and destinations, how do you choose the right kit? The trick is to see the restriction to one or two lenses as a creative challenge rather than a problem. Allow it to open up different ways of working, for example without a flash or with smaller maximum apertures.

The most important considerations when deciding which lenses to take will be their versatility and weight. If you're shooting street scenes or wildlife, you won't have much time to change lenses – a zoom will

give you the flexibility to quickly get the framing you want without missing the moment.

A good way to compromise between convenience and performance is to take a pair of lenses. A standard 18-55mm zoom will cover wide angle for landscapes and enough zoom for portraits. Match it with a telephoto zoom, like the EF-S 55-200mm f/4-5.6 IS STM, to get a closer view of far-off subjects.

But if you really want to travel light, only take one lens which includes a larger zoom range. The EF-S 18-200mm f/3.5-5.6 IS makes an excellent all rounder for an APS-C camera. And full-frame photographers should look at the EF 28-300mm f/3.5-5.6L IS USM for similar flexibility or the EF 24-105mm f/4L IS USM for superb image quality and zoom range for many types of subject.

WHICH LENSES TO PACK?



EF-S 55-250mm f/4-5.6 IS STM

The EF-S 55-250mm f/4-5.6 IS STM is an affordable, lightweight and compact telephoto zoom lens that gives you huge framing flexibility – perfect to take on the road.



EF 24-70mm f/4L IS USM & EF 70-200mm f/4L IS USM

Or if you're shooting with a full-frame camera, consider the lightweight and compact pairing of the EF 24-70mm f/4L IS USM and the EF 70-200mm f/4L IS USM. The EF 24-70mm f/4L IS USM is a spectacular all-round zoom lens that's as at home shooting landscapes as it is shooting on the street. And for professional-level image quality without the weight of a wide-aperture telephoto, look at the EF 70-200mm f/4L IS USM. Both have Image Stabilizer technology.

WIDE OPEN SPACE

It's not difficult to see the attraction of landscape photography. Natural subjects give you a huge palette to work with. As many of the elements of a landscape are static, they are also ideal places to experiment with camera settings and creative executions. Try moving your camera to change the position of the horizon into the bottom or top third of your frame and you will vastly increase the impact of your shot – you can apply the same technique with buildings and interiors too.



EF-S 10-22mm f/3.5-4.5 USM

25 sec @ f/25, ISO 100

© Lucie Debelkova. Canon Explorer



Ultra wide-angle lenses are the ideal tools for landscapes and their use is not limited to getting more in the frame. Used well, an ultra wide-angle lens can add drama and manipulate perspective, creating a photo that is dynamic and mesmerising. A good wide-angle shot should make you feel like you are being drawn into the photograph.

The EF-S 10-22mm f/3.5-5.6 USM will give you dramatic breadth and perspective when used on an APS-C camera. With a focal length range equivalent to 16-35mm on a full-frame EOS, and a minimum focus distance of 0.24m, it's great for getting close to foreground details while the rest of the scene fills the frame. If you're shooting a busy crowd or market scene, don't be afraid to get very close to your subject. Your photos will really feel like they are amongst the action.

If you're using a full-frame EOS camera, the EF 24-70mm f/2.8 II USM is a professional-grade zoom that's a good choice for landscape photography. The lens boasts image quality that rivals many prime lenses and features a range of focal lengths for flexibility while on the move. The EF 17-40mm f/4L USM or EF 16-35mm f/4L IS USM also make a good choice if you want a portable, ultra wide-angle lens that is great for big skies and wide-open spaces.

You may be a fan of fixed focal length lenses. If so, consider the EF 14mm f/2.8L II USM for a tremendous field of view – 114°. And if you want the widest angles possible, the EF 8-15mm f/4L Fisheye USM can capture circular and rectangular images with a 180° diagonal angle of view.

There's also an ultra wide-angle lens for EOS M cameras. The EF-M 11-22mm f/4-5.6 IS STM is ideal for those big-sky landscapes or for getting in lots of foreground detail. Whichever wide-angle lens you choose, find your subject and see how you can make the most of your frame.



EF-S 10-22mm f/3.5-5.6 USM



EF 14mm f/2.8L II USM



EF 16-35mm f/4L IS USM



EF 17-40mm f/4L USM



EF 24-70mm f/2.8 II USM

PRIME LENSES

It might seem strange to go for a lens that provides only one angle of view. After all, zooms offer the convenience of having a range of focal lengths in just one lens. But fixed focal length lenses – those that don't zoom – have advantages of their own. They deliver superb image quality and many professionals use them for this reason alone. There is also a creative advantage that comes from only having one focal length. Zooms can make you lazy, whereas a fixed focal length forces you to move to find the right composition.

Fixed focal length lenses often feature very wide maximum apertures, which makes them a great choice when you want to shoot in low-light conditions. Or when shallow depth of field is needed for creative effects.

Landscape photographers using an EOS camera should look to the wide-angle prime lenses in the EF range. The EF 14mm f/2.8L II USM and EF 20mm f/2.8 USM lenses offer ultra-wide angles of view and extended depth of field, so you can make the most of foreground detail. The EF 24mm f/2.8 IS USM and EF 28mm f/2.8 IS USM are more conventional wide-angles that cover focal lengths loved by landscape photographers, thanks to their broad coverage and dramatic perspective. Lenses like the EF 24mm f/1.4L II USM are popular with documentary photographers, who often shoot in unpredictable lighting conditions.

Prime lenses offer fantastic sharpness, even at the edges of the frame, meaning you'll be able to capture a huge level of detail from a landscape scene. Their compact design makes them highly portable, so you can take plenty of different focal lengths with you wherever you go.

EF 14mm f/2.8L II USM

20 sec @ f/4.0, ISO 12800

© David Noton. Canon Explorer



EF 14mm f/2.8L II USM



EF 20mm f/2.8 USM



EF 24mm f/1.4L II USM



EF 28mm f/2.8 IS USM

LIVING IN THE CITY

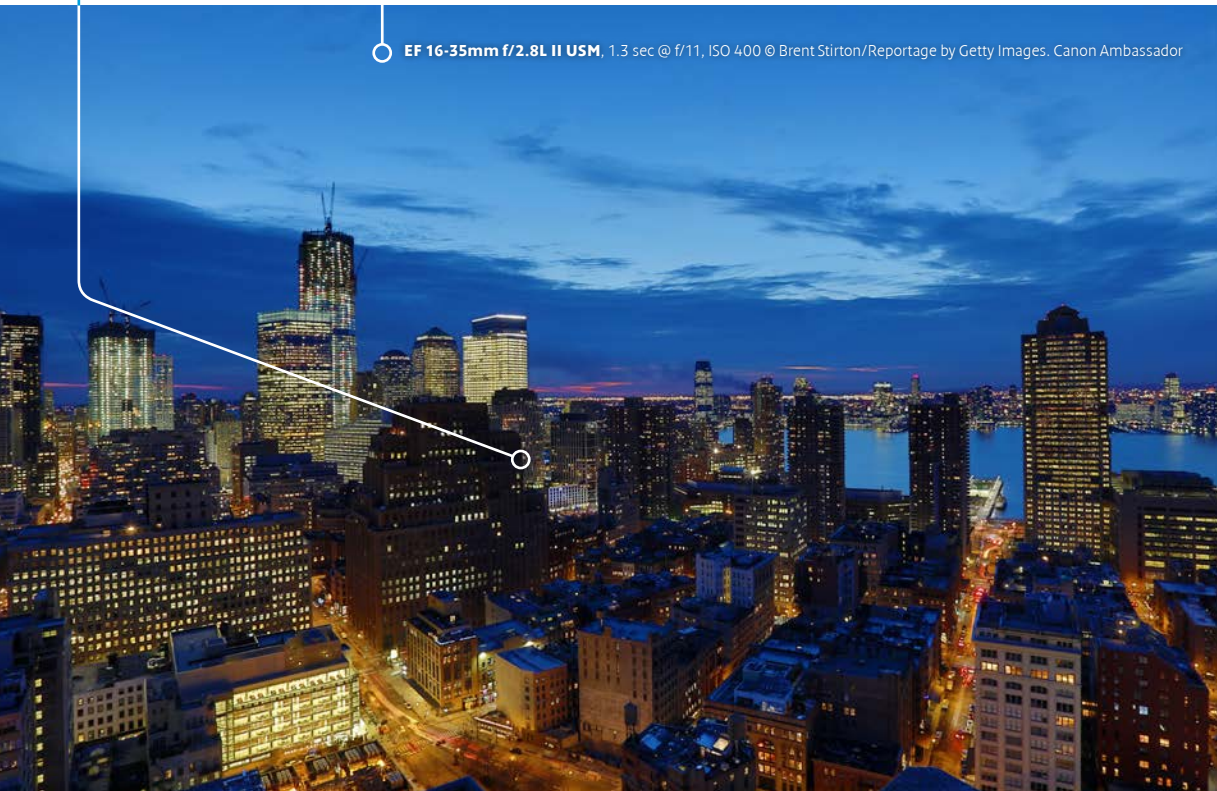
Cityscapes are filled with photographic opportunities. It might be reflections in a glass tower block. Or the sun setting over famous landmarks. Even the morning commute can make an incredible subject to shoot.

Try capturing sweeping panoramas and impressive architectural photos. Ultra-wide angle lenses are useful as they let you get more in the frame when space is tight and you can't move back any further. Plus, looking upwards with such lenses can add drama and exaggerate perspective.

Alternatively, you could use a telephoto lens to pick out details – modern architecture is full of abstraction. Isolate a few floors of an interesting building or use reflections to your advantage.

If you are after a more natural view of architecture, you may want to avoid the converging perspective that appears when looking up at tall buildings with wide-angle lenses. Professional architecture photographers find this distracting and often use tilt-shift lenses (like the TS-E 24mm f/3.5L II) to avoid the effect.

EF 16-35mm f/2.8L II USM, 1.3 sec @ f/11, ISO 400 © Brent Stirton/Reportage by Getty Images. Canon Ambassador



EF-S 10-18mm f/4.5-5.6 IS STM

Gives an ultra wide angle view of the world on APS-C cameras. Perfect for capturing dramatic landscapes and an entire scene when shooting in restricted spaces.



EF 16-35mm f/4L IS USM

A flexible ultra wide-angle zoom lens that gives a spectacular view of architecture when used on a full-frame camera. Perspective is exaggerated, particularly when the lens is aimed upwards at tall buildings.

EF-S 10-22mm f/3.5-4.5 USM

1/320 sec @ f/8, ISO 100

Shot by Karl Blackwell



FOCUS ON TILT SHIFT

Wide-angle lenses are essential for architectural photography, but they can make the side of buildings converge, so they appear to be falling over backwards. Specialist architectural photographers use tilt-shift (TS-E) lenses to overcome this problem.

By using up-down shift movements, a Canon TS-E lens can shift your point of view upwards, without angling the camera. This avoids perspective problems, and ensures that buildings look like they are standing straight and tall. Additionally, angular tilt movements can extend depth of field for maximum front-to-back sharpness or limit it for a 'toy-landscape' look.

The TS-E 17mm f/4L is an ultra-wide angle lens that's great for shooting in confined spaces and including foreground detail. Tilt and shift movements help deliver natural perspectives. And the TS-E 24mm f/3.5L II is a conventional wide-angle focal length that's loved by landscape and architectural photographers.



Photographed using tilt



Photographed using reverse tilt



Photographed without using shift



Photographed using shift



Download the digital version of Explore EOS to read our exclusive interview with Canon Explorer David Noton.

canon-europe.com/brochures-eos-05

PLACES LENSES

		APERTURE	LENS	FOCAL LENGTH							ALSO SUITABLE FOR				
				18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Life	Details	Action	Movies
EF-M		f/4 → f/5.6	 EF-M 11-22mm f/4-5.6 IS STM IS STM												
		f/2	 EF-M 22mm f/2 STM STM												
EF-S		f/4.5 → f/5.6	 EF-S 10-18mm f/4.5-5.6 IS STM IS STM												
		f/3.5 → f/4.5	 EF-S 10-22mm f/3.5-4.5 USM USM												
		f/3.5 → f/5.6	 EF-S 15-85mm f/3.5-5.6 IS USM IS USM												
		f/2.8	 EF-S 17-55mm f/2.8 IS USM IS USM												
		f/4 → f/5.6	 EF-S 17-85mm f/4-5.6 IS USM IS USM												
		f/3.5 → f/5.6	 EF-S 18-135mm f/3.5-5.6 IS STM IS STM												
		f/3.5 → f/5.6	 EF-S 18-200mm f/3.5-5.6 IS IS												
		f/4 → f/5.6	 EF-S 55-250mm f/4-5.6 IS STM IS STM												
EF (Fixed Focal Length)		f/2.8	 EF 14mm f/2.8L II USM L II USM												
		f/2.8	 EF 20mm f/2.8 USM USM												
		f/2.8	 EF 24mm f/2.8 IS USM IS USM												

● Entry-level Lens ● Mid-level Lens ● Professional Lens



✓

	APERTURE	LENS	FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Life	Details	Action	Movies
EF (Fixed Focal Length)	f/1.4	EF 24mm f/1.4L II USM L II USM SWC		○						●				
	f/2.8	EF 28mm f/2.8 IS USM IS USM		○						●				●
	f/1.8	EF 28mm f/1.8 USM USM		○						●				
	f/2	EF 35mm f/2 IS USM IS USM		○						●	●			●
	f/1.4	EF 35mm f/1.4L USM L USM		○						●	●			
	f/2.8	EF 40mm f/2.8 STM STM			○					●	●			●
EF (Zoom)	f/4	EF 8-15mm f/4L Fisheye USM L USM SWC	○											
	f/4	EF 16-35mm f/4L IS USM L IS USM		○						●				
	f/2.8	EF 16-35mm f/2.8L II USM L II USM		○						●	●			●
	f/4	EF 17-40mm f/4L USM L USM		○						●				
	f/4	EF 24-70mm f/4L IS USM L Hybrid IS USM		○						●	●	●		
	f/2.8	EF 24-70mm f/2.8L II USM L II USM		○						●	●			●

	APERTURE	LENS	FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Life	Details	Action	Movies
EF (Zoom)	f/4	EF 24-105mm f/4L IS USM IS USM L		○						●	●			
	f/3.5 → f/5.6	EF 28-300mm f/3.5-5.6L IS USM IS USM L		○									●	
	f/4	EF 70-200mm f/4L USM USM L			○					●			●	
	f/4	EF 70-200mm f/4L IS USM IS USM L			○					●			●	
	f/4 → f/5.6	EF 70-300mm f/4-5.6 IS USM IS USM			○					●			●	
	f/4.5 → f/5.6	EF 70-300mm f/4.5-5.6 DO IS USM DO IS USM			○					●			●	
Tilt & Shift	f/4	TS-E 17mm f/4L L SWC	○											
	f/3.5	TS-E 24mm f/3.5L II L II SWC		○										
	f/2.8	TS-E 45mm f/2.8			○									
	f/2.8	TS-E 90mm f/2.8				○				●				
	f/2.8													

Technologies

IS	Image Stabilizer Detects 'camera-shake' movements that can cause blur in pictures and corrects for this by moving a lens element to compensate.	USM	Ultrasonic Motor Lenses featuring a USM AF motor focus very quickly and in near silence.
L	L-series Canon L-series lenses offer the highest levels of performance in the range and are built to deliver professional-level image quality and durability.	Hybrid IS	Hybrid Image Stabilizer Compensates for the two types of camera shake encountered in macro photography: angular rotations and lateral shift movements.
STM	Stepping Motor Lenses using STM technology focus smoothly and quietly when shooting video, and extremely quickly when capturing stills.	SWC	SubWavelength Structure Coating Inspired by the surface of a moth's eye, this coating allows more light to pass through to the image sensor with lower levels of flare and ghosting.
DO	Diffractive Optics Lenses incorporating DO technology offer high image quality and a dramatically smaller and lighter design, great when portability is important.	II	Lens version
		III	Lenses are sometimes replaced with new and improved models and have numerals after their name to indicate which version it is.

LIFE

One of the joys of photography is using your camera to tell the stories of everyday life. There is beauty in the simplest of subjects – reflections in a shop window or someone you pass in the street. And once you start looking for these shots, you'll see them everywhere.

Taking your camera with you everywhere means you want lenses that are small, discreet and flexible enough for all eventualities. Then it's just a case of finding your shots.

EF-S 18-55mm f/3.5-5.6 IS II

1/160 sec @ f/5.6, ISO 100

Shot by Patrick Harrison

Aussi :

ONE FOR ALL

Find your walkaround lens and you'll never look back.

Most photographers have a favourite lens that they'll always take with them when space is limited – a tried and tested go-to lens for all eventualities. The right lens for street photography usually comes down to a compromise between portability and versatility. It should be small enough that you can carry your camera comfortably with you all day, yet with the flexibility of varied focal lengths and the ability to shoot in low-light conditions.

The EOS 100D and EF 40mm f/2.8 STM pancake lens make an excellent combination for everyday documentary photography. It's small and discreet enough to fit in your bag and its f/2.8 maximum aperture lets you keep shooting when the light starts to fade.

Everyday life presents a myriad of photography opportunities. Try to see the mundane with fresh eyes. Look for things that don't initially seem

photogenic, such as washing on a balcony, a dog waiting for its owner or a greengrocer selling fruit.

If your EOS came with a standard 18-55mm zoom, you could use this as your go-anywhere lens. They're lightweight and cover a useful range of focal lengths. A more advanced and versatile alternative is the EF-S 15-85mm f/3.5-5.6 IS USM. It offers a wider angle of view at the short end of the zoom and more telephoto reach at the long end.

It's perfect for shots on the go – Image Stabilizer helps keep pictures sharp in low light and USM auto focusing snaps a scene into focus quickly and quietly.

If you shoot with an EOS-M, you already have one of the most portable street photography cameras available. Pair this with an EF-M 22mm f/2 STM and you'll have an EOS that's not much bigger than a compact camera.

READY FOR ANYTHING

Find the right walkabout lens for you.



EF-S 18-135mm f/3.5-5.6 IS STM

With a wider focal length range than an 18-55mm, this is a great lens to travel with.



EF-S 17-55mm f/2.8 IS USM

Enhanced quality and a wide f/2.8 aperture at all zoom settings, perfect for low-light work and depth-of-field control.



EF 24-70mm f/4L IS USM

A more portable 24-70mm standard zoom lens that's lighter than the f/2.8 version. The EF 24-70mm f/4L USM uses an Image Stabilizer to guard against camera shake.

EF-S 18-55mm f/3.5-5.6 IS II

1/40 sec @ f/5.6, ISO 400

Shot by Patrick Harrison

How to Shoot in Low Light

Fixed focal length lenses often have much larger apertures than zooms and this is a huge advantage when shooting in low light conditions. By opening up a lens' aperture to f/1.4, you let through four times as much light as a zoom lens used at f/2.8. This is enough to take a shutter speed of 1/15sec up to 1/60sec – fast enough to shoot hand-held without camera shake or subject movement spoiling the sharpness of the image.



EF 28mm f/2.8 IS USM, 1/400 sec @ f/4, ISO 800 © Jeff Ascough. Canon Ambassador



EF 50mm f/1.8 II

3.2 sec @ f/9, ISO 400

© Ulla Lohmann. Canon Explorer



Documentary photographers tend to shoot with wide-aperture prime lenses for this reason. Fixed focal length lenses allow them to shoot using the ambient light available, resulting in atmospheric pictures that capture the mood of the occasion. Try to get in close to your subject and fill the frame for a dramatic result.



EF 24mm f/1.4L II USM

A super wide-angle lens, with a huge aperture to match. Popular with photojournalists shooting close to their subject, this lens is perfect for photographers who demand the highest levels of performance.



EF 28mm f/2.8 IS USM

A smaller wide-angle prime lens that uses an Image Stabilizer to deliver sharp images in low light conditions.



EF 35mm f/1.4L USM

A classic reportage lens used by photojournalists. On a full-frame camera this offers a broader field of view than a traditional 50mm lens, whilst maintaining a natural perspective.



Download the digital version of Explore EOS to read our exclusive interview with Canon Ambassador Brent Stirton. See page 3 for download details.

LIFE LENSES

APERTURE		LENS	FOCAL LENGTH								ALSO SUITABLE FOR				
			18mm	24mm	40mm	85mm	135mm	300mm	800mm		People	Places	Details	Action	Movies
EF-M	f/3.5 → f/5.6	EF-M 18-55mm f/3.5-5.6 IS STM	[Bar: 18-55mm]												
	f/2	EF-M 22mm f/2 STM	[Dot]												
EF-S	f/3.5 → f/5.6	EF-S 15-85mm f/3.5-5.6 IS USM	[Bar: 15-85mm]												
	f/2.8	EF-S 17-55mm f/2.8 IS USM	[Bar: 17-55mm]												
	f/4 → f/5.6	EF-S 17-85mm f/4-5.6 IS USM	[Bar: 17-85mm]												
	f/3.5 → f/5.6	EF-S 18-55mm f/3.5-5.6 IS II	[Bar: 18-55mm]												
	f/3.5 → f/5.6	EF-S 18-135mm f/3.5-5.6 IS STM	[Bar: 18-135mm]												
	f/3.5 → f/5.6	EF-S 18-200mm f/3.5-5.6 IS	[Bar: 18-200mm]												
EF (Fixed Focal Length)	f/2.8	EF 24mm f/2.8 IS USM		[Dot]											
	f/1.4	EF 24mm f/1.4L II USM		[Dot]											
	f/2.8	EF 28mm f/2.8 IS USM		[Dot]											
	f/1.8	EF 28mm f/1.8 USM		[Dot]											
	f/2	EF 35mm f/2 IS USM		[Dot]											
	f/1.4	EF 35mm f/1.4L USM		[Dot]											

		FOCAL LENGTH												
		18mm	24mm	40mm	85mm	135mm	300mm	800mm						
EF (Fixed Focal Length)	f/2.8			[Dot]										
	f/1.8			[Dot]										
	f/1.4			[Dot]										
	f/1.2			[Dot]										
EF (Zoom)	f/4													
	f/2.8													
	f/4													
	f/4													
	f/2.8													
	f/4													

Technologies

- IS

Image Stabilizer
Detects 'camera-shake' movements that can cause blur in pictures, and corrects for this by moving a lens element to compensate.
- L

L-series
Canon L-series lenses offer the highest levels of performance in the range and are built to deliver professional-level image quality and durability.
- STM

Stepping Motor
Lenses using STM technology focus smoothly and quietly when shooting video, and extremely quickly when capturing stills.
- USM

Ultrasonic Motor
Lenses featuring a USM AF motor focus very quickly and in near silence.

- Hybrid IS

Hybrid Image Stabilizer
Compensates for the two types of camera shake encountered in macro photography: angular rotations and lateral shift movements.
- SWC

SubWavelength Structure Coating
Inspired by the surface of a moth's eye, this coating allows more light to pass through to the image sensor with lower levels of flare and ghosting.
- II

Lens version
Lenses are sometimes replaced with new and improved models and have numerals after their name to indicate which version it is.



EF 500mm f/4L IS II USM

1/3200sec @ f/4.5, ISO 100

ACTION

One of the great challenges of photography is how to capture a world full of movement in a single static image. You can use a long exposure to let parts of a scene blur. Or you can freeze movement into the briefest of moments, using very fast shutter speeds. And then there's every variation in between.

But it's not just about selecting the right camera settings. When you're shooting sports, animals or any fast-moving action, choosing the correct lens for the job is crucial.

EXPLORING THE URBAN JUNGLE

Amazing wildlife shots are closer than you think.

Backyards, gardens and empty streets are all havens for urban wildlife. You might want to capture the moment a heron lands on your bird table or a fox returns from its nightly forage. Stunning wildlife photography doesn't always need an exotic location. Everything you need to create a spectacular shot is around the corner from your home.

The first thing to consider is how close you can get to your subject. If you're photographing birds in your back garden, you won't be able to get too near without scaring them away. A telephoto zoom will allow you to really close in on your subject and fill the frame.

The EF-S 55-250mm f/4-5.6 IS STM is a good entry-level telephoto zoom – you'll get plenty of reach and high image quality. Used on an APS-C camera, its focal length is equivalent to 88-400mm on a full-frame EOS – enough to fill the frame with fast-moving subjects such as birds or squirrels. With built-in optical Image Stabilizer technology, you can shoot

handheld images at slower shutter speeds than normal, without unintentional blur from camera shake.

Preparation can help you get the shots you want – put out food on a bird table or hang a feeder from a tree which has good leaf colour. You can also use your home as a hide – if you shoot from an open window, birds will be less likely to notice you.

If you want a bit more magnification, look for a zoom that extends to 300mm, such as the EF 70-300mm f/4-5.6 IS USM. Used on a full-frame camera, this will fill the viewfinder with subjects from your garden or park. And on an APS-C sensor camera it will give a view equivalent to a 480mm lens, which takes you even closer.

Further afield, look for juxtapositions between man-made and natural worlds. Unusual contrasts help keep images interesting – a bird on a branch is expected, a starlings' young contrasting with neon or concrete isn't.



EF-S 55-250mm f/4-5.6 IS STM



EF 70-300mm f/4-5.6 IS USM

CHOOSING THE RIGHT BODY

Photographers shooting with APS-C sensor cameras can enjoy greater telephoto reach than those shooting with the same lens on a full-frame camera. This is because the smaller sensor crops the image by 1.6 times. EF-S lenses, which are designed for use only with APS-C cameras, are smaller, lighter and often more affordable too.

Full-frame users can enjoy the benefits of a larger sensor, which include greater control over depth of field in order to isolate a subject against an out-of-focus background. Full-frame cameras also let you take advantage of the full field of view offered by the range of EF lenses. Also look for cameras that can shoot continuously at high frame rates – 7fps in the case of the EOS 70D or 8fps for the EOS 7D, and up to 14fps in the professional EOS-1D X. Cameras that have multiple autofocus points can track subjects as they move quickly around the frame.

SAFARI SHOTS

Make the most of once-in-a-lifetime opportunities for shooting exotic wildlife.

Whether you're whale watching in Iceland, orangutan spotting in Borneo or gorilla tracking in Uganda, animal safaris are one time when you need to be sure you have the right kit for the job. But the right kit depends very much on your level of experience as a photographer, the subjects you will be photographing and how much you want to spend.

If you're planning the trip of a lifetime, consider investing in some serious lenses. You'll get better image quality, bigger apertures (crucial when shooting at fast shutter speeds) and quicker autofocus. Lenses higher up the EF and EF-S ranges use USM autofocus, which is super fast and near silent.



EF 400mm f/2.8L IS II USM, 1/400 sec @ f/5.6, ISO 1000 © Joe Petersberger



EF 70-300mm f/4-5.6L IS USM
1/2000 sec @ f/6.3, ISO 500
© Brutus Östling, Canon Ambassador

BIG LENSES FOR BIG TRIPS



EF 70-300mm f/4-5.6 IS USM

A 70-300mm zoom combines useful telephoto focal lengths into just one lens – great when you need to travel light. The EF 70-300mm f/4-5.6 IS USM is ideal for those starting out in photography, while the EF 70-300mm f/4-5.6L IS USM uses L-series design and construction to professional-level performance.



EF 100-400mm f/4-5.6L IS USM

Providing even more reach, this versatile lens is popular with photographers going on safari. Image Stabilizer technology guards against camera shake.



EF 300mm f/4L IS USM

The 300mm prime lens is a good choice for those wanting the best image quality from a telephoto lens. The EF 300mm f/2.8L IS II USM is a classic choice for professional wildlife photographers. The EF 300mm f/4L IS USM offers the same magnification but is more affordable. A smaller maximum aperture makes it smaller and more portable.



Download the digital version of Explore EOS to read our exclusive interview with Canon Ambassador Frits van Eldik. See page 3 for download details.



EF 600mm f/4L IS II USM +1.4x III, 1/400 sec @ f/6.3, ISO 3200 © Brutus Östling, Canon Ambassador

ACTION LENSES

		FOCAL LENGTH							ALSO SUITABLE FOR				
		18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Places	Life	Details	Movies
EF-S	APERTURE	LENS											
		EF-S 18-200mm f/3.5-5.6 IS											
		IS											
		EF-S 55-250mm f/4-5.6 IS STM											
		IS STM											
EF (Fixed Focal Length)		EF 200mm f/2.8L II USM											
		L II USM											
		EF 200mm f/2L IS USM											
		L IS USM											
		EF 300mm f/4L IS USM											
		L IS USM											
		EF 300mm f/2.8L IS II USM											
		L IS II USM SWC											
		EF 400mm f/5.6L USM											
		L USM											
		EF 400mm f/4 DO IS USM											
		DO IS USM											
		EF 400mm f/2.8L IS II USM											
		L IS II USM SWC											
		EF 500mm f/4L IS II USM											
		L IS II USM SWC											
		EF 600mm f/4L IS II USM											
		L IS II USM SWC											
		EF 800mm f/5.6L IS USM											
		L IS USM											
		EF 28-300mm f/3.5-5.6L IS USM											
		L IS USM											
		EF 70-200mm f/2.8L USM											
		L USM											

		FOCAL LENGTH							ALSO SUITABLE FOR				
		18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Places	Life	Details	Movies
EF (Zoom)		EF 70-200mm f/2.8L IS II USM											
		L IS II USM											
		EF 70-200mm f/4L USM											
		L USM											
		EF 70-200mm f/4L IS USM											
		L IS USM											
	 → 	EF 70-300mm f/4-5.6 IS USM											
		IS USM											
	 → 	EF 70-300mm f/4.5-5.6 DO IS USM											
		DO IS USM											
	 → 	EF 70-300mm f/4-5.6L IS USM											
		L IS USM											
	 → 	EF 75-300mm f/4-5.6 III											
		III											
	 → 	EF 75-300mm f/4-5.6 III USM											
		III USM											
	 → 	EF 100-400mm f/4.5-5.6L IS USM											
		L IS USM											
		EF 200-400mm f/4L IS USM Extender 1.4x											
		L IS USM											
Extenders		Extender EF 1.4x III											
		Extender EF 2x III											

Technologies*

IS	Image Stabilizer	DO	Diffractive Optics	STM	Stepping Motor	II	Lens version
USM	Ultrasonic Motor	L	L-series	SWC	SubWavelength Structure Coating	III	

● Entry-level Lens ● Mid-level Lens ● Professional Lens

*For explanations of technologies please refer to page 39.

A macro photograph of a pink flower, likely a chrysanthemum, showing the intricate details of its yellow stamens and pink petals. The stamens are long and thin, with bright yellow anthers. The petals are a vibrant pink color. The background is a soft, out-of-focus pink.

DETAILS

Discovering macro photography can open up a whole new way of seeing the world. You might want to capture the exquisite detail in the wing of a butterfly or a flower bud. Or you might choose to get creative – you can find the most stunning patterns and effects by magnifying the surface of everyday objects. The possibilities are endless.

EF 100mm f/2.8L Macro IS USM

1/250 sec @ f/9, ISO 400

© Joe Petersberger

WHAT'S COOKING?

How to use a macro lens for food photography.

Food photography is a great way of showing off your talents – both culinary and photographic – to the world. You might blog your pictures and recipes or even be putting together your own recipe book.

Good food photography often focuses on details, from the preparation of the raw ingredients to those all-important finishing touches. Using a macro lens to shoot a close-up of some peppercorns or a few spices is highly evocative, and gives a great idea of the flavour of your dish. True macro lenses magnify at life size. This means the lens can reproduce an image on your camera's sensor at the same size it is in real life – known as a 1:1 ratio.

Macro lenses come in different focal lengths.

Those that are more telephoto in nature allow you to stand further back from your subject, which can be handy when photographing insects or other easily scared wildlife.

The very shallow depth of field available when shooting close-ups means you need to be accurate and precise with focusing. But you can use shallow focus to highlight just a few details, such as the sprinkles on the top of a cupcake. For those shooting with APS-C cameras, the EF-S 60mm f/2.8 Macro USM is a great choice, delivering superb image quality and focusing down to just 20cm.



EF 100mm f/2.8L Macro IS USM, 1/200 sec @ f/14, ISO 160 © Gary Schmid, Canon Explorer



EF-S 60mm f/2.8 Macro USM, 1/50 sec @ f/5.6 ISO 800, Shot by Patrick Harrison



One of the 100mm macro lenses in the EF range offers a similar shooting perspective for full-frame users.

Lighting is another consideration when shooting close up. Professional food photography makes use of sophisticated flash lighting, but you can achieve similar results using daylight from a window. Your kitchen is a near-perfect location for a food shoot,

with worktops at an ideal height. Choose one with a window to one side or behind or try using a large piece of white card as a reflector to bounce light back on to your subject. Blur from camera shake can be an issue when shooting macro photography, but using a tripod or a lens with an Image Stabilizer will help ensure crisp images.



EF 100mm f/2.8L Macro IS USM

A versatile Macro lens offering superb performance at any aperture, right across the frame.



EF-S 60mm f/2.8 Macro USM

Designed exclusively for use on APS-C cameras, where it gives a similar angle of view to a 96mm macro lens on a full-frame camera. Excellent for general macro photography and close-ups with shallow depth of field.

EF-S 60mm f/2.8 Macro USM

1/250 sec @ f/3.5, ISO 500

© Brutus Östling, Canon Ambassador

TAKE A CLOSER LOOK

The natural world is teeming with life, from insects and spiders to flowers, grasses and seeds. Patterns, textures and details are everywhere. And you don't have to go far to find them – with a macro lens and a keen eye, you'll be amazed at what you can discover in areas as familiar as your own back garden.

Much macroscopic wildlife is easily frightened off by the presence of a photographer, but there are a few ways to improve your success rate when stalking insects, spiders and other such critters.



It may sound obvious, but make sure you don't get too close. Try shooting with a more telephoto macro lens – you'll get the same degree of 1:1 life-size magnification, but from a further distance away. The EF 180mm f/3.5L Macro USM is great for insect photography for this very reason – and it's suitable for both full-frame and APS-C shooters. The EF 100mm f/2.8L Macro IS USM is also a good choice, though you'll need to get a little closer to fill the frame.

Such a large distance from your subject is not as crucial when photographing still objects like wild flowers or fungi. A more conventional macro lens is also more lightweight and portable – try one of the two 100mm macro lenses in the EF range if you shoot on a full-frame camera; APS-C photographers can get a similar angle of view from the EF-S 60mm f/2.8 Macro USM.

Blur due to camera shake is also magnified when shooting with a macro lens and can rob you of that biting sharpness that makes close-up photos so evocative. Plus, the small apertures needed to get reasonable depth of field often require long shutter speeds. So try using a tripod to achieve impeccably sharp close-up work.

The EF 100mm f/2.8L Macro IS USM lens also features Hybrid Image Stabilizer technology, which helps combat camera shake. Conventional IS corrects for shake in two angular directions, but Hybrid IS also detects and compensates for lateral shift movements, which means you can shoot handheld at longer shutter speeds. This can be a huge advantage when working quickly – you can recompose quickly to frame that spectacular-looking butterfly.

EF-S 60mm f/2.8 Macro USM, 1/1250 sec @ f/3.2, ISO 500
© Brutus Östling, Canon Ambassador



EF 180mm f/3.5L Macro USM



EF 100mm f/2.8L Macro IS USM



EF-S 60mm f/2.8 Macro USM

Shot on MP-E 65mm f/2.8 1-5x Macro Photo. Shot by Nikola Rahmé. Focus stack of this sleeping wasp found on late afternoon. 24 natural light shots taken at 3.9x magnification, combined in software, uncropped.



Download the digital version of EOS Explore to read our exclusive interview with leading photographer Joe Petersberger. See page 3 for download details..



Macro Ring Lite & Twin Lite flashes

These flashes are designed especially for even lighting of close-up subjects. They attach to the end of your camera's lens and surround a subject with light. You can then vary the amount of light coming from each side of the flash to emphasize texture and introduce shadow. You may need a Macro Lite Adaptor to attach the flash to the end of the lens.



Extension Tubes

Selected EF or EF-S lenses can be made to focus more closely by using an Extension Tube. The tube fits between a lens and an EOS body and contains no optical elements, although it does maintain camera-lens electrical connections.

Canon EF Extension Tubes are available in lengths of 12mm and 25mm. Fitting the 25mm tube to an EF-S 55-250mm f/4-5.6 IS STM reduces the lens' closest focusing distance from 85cm to 26.6cm.



Extreme macro

The MP-E 65mm f/2.8 1-5x Macro Photo is a macro lens that starts where others finish. It offers magnifications starting from 1x to 5x life-size, for unbelievable close-up views of a secret world.

DETAILS LENSES

APERTURE		LENS		FOCAL LENGTH							ALSO SUITABLE FOR				
				18mm	24mm	40mm	85mm	135mm	300mm	800mm	People	Places	Life	Action	Movies
EF (Zoom)	f/4		EF 24-70mm f/4L IS USM L Hybrid IS USM												
EF-S	f/2.8		EF-S 60mm f/2.8 Macro USM USM												
Macro	f/2.5		EF 50mm f/2.5 Compact Macro												
	f/2.8		EF 100mm f/2.8 Macro USM USM												
	f/2.8		EF 100mm f/2.8L Macro IS USM L Hybrid IS USM												
	f/3.5		EF 180mm f/3.5L Macro USM L USM												
	f/2.8		MP-E 65mm f/2.8 1-5x Macro Photo												

Technologies

- IS

Image Stabilizer
Detects 'camera-shake' movements that can cause blur in pictures, and corrects for this by moving a lens element to compensate.
- L

L-series
Canon L-series lenses offer the highest levels of performance in the range and are built to deliver professional-level image quality and durability.
- Hybrid IS

Hybrid Image Stabilizer
Compensates for the two types of camera shake encountered in macro photography: angular rotations and lateral shift movements.

- USM

Ultrasonic Motor
Lenses featuring a USM AF motor focus very quickly and in near silence.



Download the digital version of Explore EOS and view more information on lenses, including sample images, MTF charts and lens diagrams. See page 3 for download details. canon-europe.com/brochures-eos-06



EOS MOVIE

Movies make a great addition to your photography – particularly for special occasions such as birthdays, parties, weddings or on holiday. You can use the movie mode on any current EOS DSLR to capture great quality Full-HD video clips. Or, if you want to pursue movies to a professional level, the Cinema EOS system and flagship EOS DSLRs can provide everything you need to shoot cinema-quality films and documentaries.

DISCOVER MOVIES

Use your EOS to capture all the action.

It's easy to start using your camera for movies – all the lenses in the EF and EF-S range can be used for shooting moving footage. If your EOS features Hybrid AF or Dual Pixel CMOS AF, look for lenses with STM technology. They'll autofocus smoothly and quietly, so they won't distract attention from what you are filming. You can also use your EOS's Movie Servo AF feature to help keep your subject looking sharp – it will refocus to track objects as they move around the frame.



© Lucie Debelkova. Canon Explorer.



The secret to good movies is not to film one scene for too long. Watch any professionally shot footage and you'll notice that each clip is very short. If your EOS has Video Snapshot mode, use it to limit the length of the clips captured to two, four or eight seconds. The camera will then join the clips together for you and let you edit their order, creating your own mini movie, without you having to do a thing. You can then watch it back either on the camera straight away or at home, on your computer or HDTV.

One thing to consider is camera shake – it can make your videos look amateurish. Lenses with IS can help keep things steady and some lenses in the range include Dynamic IS for an even better result. Another trick is to hold your camera close to your body to steady it – if your EOS has a Vari-angle screen, position it so you can compose your frame with the camera held at chest or waist height. Experiment and see what works best for you.

If you are choosing an EOS camera for the first time, the EF-S 18-55mm f/3.5-5.6 IS STM kit lens is an affordable standard zoom lens suited to a variety of subjects. You'll get smooth, near silent focusing when capturing video, plus swift and accurate autofocus for stills. Or, if you're looking for something more flexible, the EF-S 18-135mm f/3.5-5.6 IS STM is a great all-purpose zoom for the photographer who wants to shoot stills and movies from wide-angle or telephoto viewpoints. It's the perfect travelling companion for APS-C sensor EOS cameras. Another option is the EF-S 55-250mm f/4-5.6 IS STM, a portable telephoto lens that's great for filming closer to the action. Built-in image stabilization helps keep your footage steady.



Download a digital version of Explore EOS to watch the EOS 700D sample movie.
canon-europe.com/brochures-eos-07

HOW TO MAKE A SHORT FILM

Canon EOS DSLRs have opened up the world of movie making to everyone, from the amateur to the professional. Cameras like the EOS 5D Mark II revolutionised the video industry and enabled movies to be shot that would previously have required specialised kit, a big budget and a crew of people. The EOS 5D Mark III continues this legacy and every camera in the EOS range can now capture Full-HD video.

Whatever your level, there are plenty of ways to get creative with EOS movies. You could make a short documentary about a passion in your life or tell the story of a well-known organisation in your community. Or maybe you'd like to interview a relative about stories from their past – something the whole family will enjoy sharing.

Look at how big-budget TV dramas and Hollywood blockbusters are filmed – can you borrow any technique that will give your projects the same look and feel? A static, tripod-mounted camera not only makes shooting easier, but also lends an elegant look to video footage. Compose scenes like a still picture, then let movement happen within the frame without moving the camera to follow it.

All of the tips and tricks that you use for shooting still photos still apply to movies. When people are talking to the camera, make sure you have tight focus on their face, then use a large aperture to blur the background behind them for emphasis. If your EOS allows manual control in movie mode you can experiment with different apertures and shutter speed settings. A wide-aperture 50mm or 85mm prime lens is superb for this job, as is the



telephoto end of a wide-aperture zoom lens, like the EF-S 17-55mm f/2.8 IS USM or EF 24-70mm f/2.8L II USM for full-frame users.

Specialist lenses can also lend a unique look to DSLR video. Try getting close to moving details with a macro lens, like the EF 100mm f/2.8 USM Macro, or using a tilt-shift lens, like the TS-E 24mm f/3.5L II to create a shallow focus 'miniature' effect. You'll be amazed at what you can achieve.



CINEMA EOS

Cameras and lenses in the Cinema EOS system are designed for professional cinematographers, and offer superb tonal accuracy, brilliant colour reproduction and up to 4K resolution. The compact, modular design of the C100, C300 and C500 cameras means they can be used with any of the lenses in the EF range, as well as with specially designed Canon Cinema lenses.



Download the digital version of Explore EOS to read our exclusive interview with Canon Ambassador Richard Walch and watch the EOS 6D sample movie. See page 3 for download details.

MOVIES LENSES

			FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm24mm40mm85mm135mm300mm800mm							People	Places	Life	Action	Details
APERTURE			LENS											
EF-M			EF-M 11-22mm f/4-5.6 IS STM		ISSTM									
			EF-M 18-55mm f/3.5-5.6 IS STM		ISSTM									
			EF-M 22mm f/2 STM		STM									
EF-S			EF-S 10-18mm f/4.5-5.6 IS STM		ISSTM									
			EF-S 17-55mm f/2.8 IS USM		ISUSM									
			EF-S 18-55mm f/3.5-5.6 IS STM		ISSTM									
			EF-S 18-135mm f/3.5-5.6 IS STM		ISSTM									
			EF-S 55-250mm f/4-5.6 IS STM		ISSTM									
EF (Fixed Focal Length)			EF 24mm f/2.8 IS USM		ISUSM									
			EF 28mm f/2.8 IS USM		ISUSM									
			EF 35mm f/2 IS USM		ISUSM									
			EF 40mm f/2.8 STM		STM									
			EF 50mm f/1.4 USM		USM									
EF (Zoom)			EF 16-35mm f/2.8L II USM		LIIUSM									

			FOCAL LENGTH							ALSO SUITABLE FOR				
			18mm24mm40mm85mm135mm300mm800mm							People	Places	Life	Action	Details
			LENS											
EF (Zoom)			EF 24-70mm f/2.8L II USM		LIIUSM									
			EF 70-200mm f/2.8L IS II USM		LISIIUSM									
Macro			EF 100mm f/2.8L Macro IS USM		LHybrid ISUSM									
Maximum relative aperture														
Cinema EOS			CN-E15.5-47mm T 2.8L S		L									
			CN-E14.5-60mm T 2.6L S		L									
			CN-E30-105mm T 2.8L S		L									
			CN-E30-300mm T 2.95-3.7L S		L									
			CN-E14mm T 3.1L F		L									
			CN-E24mm T 1.5L F		L									
			CN-E35mm T 1.5L F		L									
			CN-E50mm T 1.3L F		L									
			CN-E85mm T 1.3L F		L									
			CN-E135mm T 2.2L F		L									
			CN7x17 KAS S/E1 17-120mm											
Technologies*														
			IS		Image Stabilizer		USM		Ultrasonic Motor		L		L-series	
											II		III	
													Lens version	
											STM		Stepping Motor	
											Hybrid IS		Hybrid Image Stabilizer	
Legend														
			● Entry-level Lens		○ Mid-level Lens		○ Professional Lens							
*For explanations of technologies please refer to page 39.														