



# PORTRAIT PHOTOGRAPHY STUDIO & LOCATION

Shooting expressive portraits with natural  
or artificial light

- KNOW-HOW
- PRACTICAL TIPS
- EQUIPMENT







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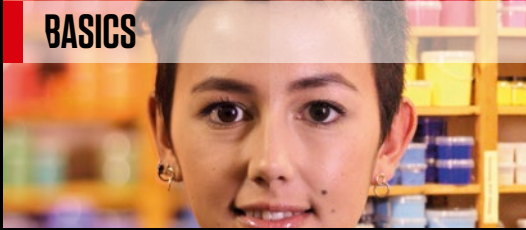
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# PORTRAIT PHOTOGRAPHY – FOCUS ON PEOPLE

## Intro

Portrait photography is the most personal form of photography - and has been a classic since the early days of photography.

Portrait photography is an exciting mix of technical and creative challenges. It's about camera technique, lighting and framing, but above all it's about the person in front of the camera. The aim is to show interesting facets of the person - whether for a framed family portrait or a Facebook profile picture. This guide will show you how to achieve this.

# PORTRAIT PHOTOGRAPHY HAS MANY FACES

Portraits show people in many different ways. Depending on the type and purpose, portraits have different photographic and content requirements.



## Individual portraits

The classic is the individual portrait. Whether in the studio or out and about, photographer and model work together to create the most attractive image of the person. There are no creative limits.



## Application photos

The subject should be attractive, positive and/or interesting. Especially in application photography, not every detail and not every lighting is useful or desirable.



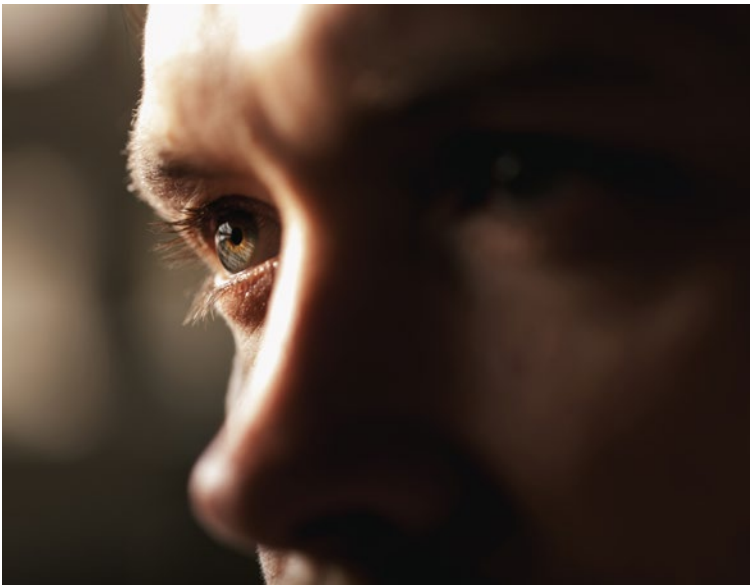
## Group portraits

With four or five people, you can get close or semi-close. For larger groups, such as a wedding party, you can use simple aids such as chairs or benches to ensure that no one in the group disappears.



## Self-portraits

The subject is the photographer. In the past, selfies were taken with a remote shutter release or a self-timer. Today, selfies are taken at (almost) every opportunity with a smartphone or a camera with a rotating and tilting display.



## Experimental portraits

Almost anything goes in experimental portraiture: a play on sharpness and blurriness, extreme perspectives or close-ups, colour play or monochrome designs. There are no limits to creating a new and exciting view of your subject. With TS-E lenses, the focal plane can be moved out of the usual arrangement parallel to the image plane. This creates interesting sharpness accents, for example around the eyes.



## Close-up

The close-up or head shot shows the face and part of the shoulders.



## American portrait

Shows the person up to about halfway up the thigh. A full-length shot is no longer considered a classic portrait.

**Tip:** If the subject leans slightly towards the photographer, they appear more positive and speak more directly to the viewer.





# CREATIVE BLURS AND LIGHTING

## Composition

One technical aspect of composition is the use of focus. A photo is said to be in focus when the important part of the image is precisely in focus. You can play around with sharpness and blurriness in your portrait photos. For a job application photo, the entire face from the eyes to the tip of the nose should be in focus; for group portraits, each person in the group should be in focus. For experimental portraits, you can focus on just one eye.



# APERTURE CONTROLS DEPTH OF FIELD

Depth of field is a result of focal length, aperture, focusing distance and sensor size. The longer the focal length, the shallower the depth of field at the same aperture compared to a shorter focal length. The smaller the aperture, i.e. the larger the f-number (e.g. aperture 22 = small aperture, aperture 2.8 = large aperture), the larger the sharp area.

And the closer you get to the subject, the smaller the depth of field will be for the same aperture and focal length. You should bear this in mind when taking experimental portraits, for example, when you want to get close to the details of a person's face. With selective focus, you can make a person stand out against a blurred back-ground.

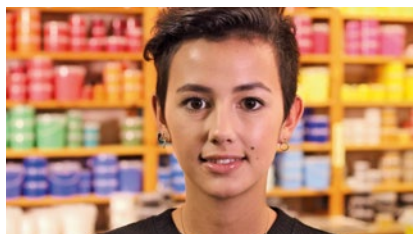
## Aperture Value



F16

### Large aperture value F

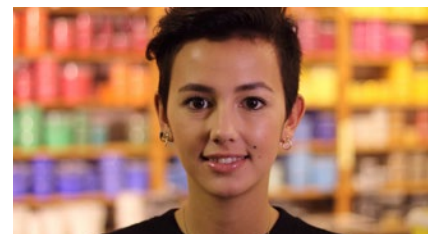
- ▶ small aperture
- ▶ high depth of field



F5.6

### Small aperture value F

- ▶ wide aperture
- ▶ shallow depth of field



F2





# PLAY WITH SHARPNESS

Typical lenses for portrait photography are lightweight telephoto lenses. In addition to a pleasant perspective, they offer a good ratio of focal length, focusing distance and depth of field at medium apertures, the range where a lens has the highest image quality.

Bokeh is a made-up Japanese word meaning blurred or out of focus. It has become a common term in photography to describe the quality of blur. Depending on the design of the lens and especially the aperture, this blurring has different effects. For example, points in the subject can be circles or rings of blur.

As a rule of thumb: The rounder the aperture, the softer the blur. Examples of portrait lenses with beautiful bokeh are the Canon RF 135mm F1.8 L IS USM or the Canon RF 85mm F1.2L USM.



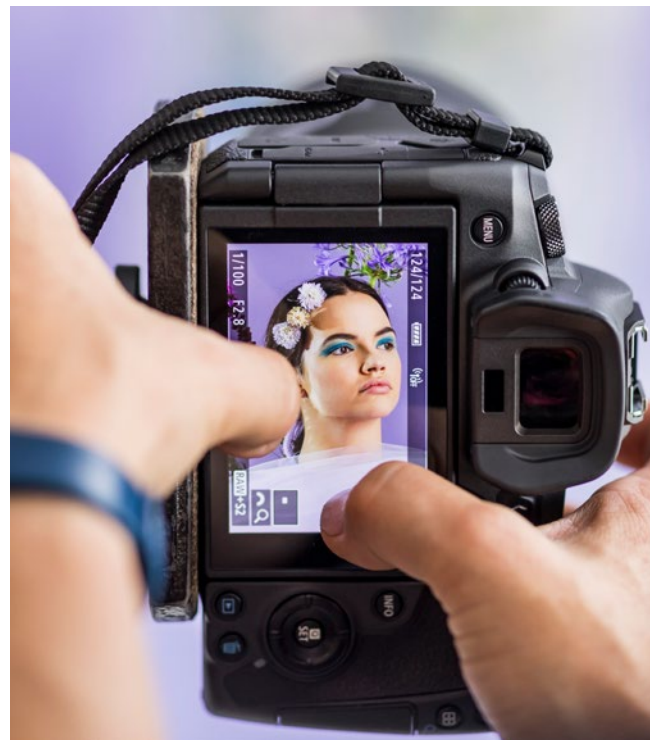


# STUDIO OR LOCATION, ARTIFICIAL OR NATURAL LIGHTING

You can take portraits almost anywhere. In photo studios, studio LED or flash is often used because it provides a lot of light with a defined color temperature (similar to daylight). The camera's white balance should, therefore, be set to daylight or, if known, to the Kelvin value of the light source. There are a variety of light shapers available for professional lighting systems that diffuse or direct the light in different ways, thereby changing the character of the light.

The classic lighting setup for a portrait in the studio is based on natural daylight: the main light comes from the side, from the front and a touch from above. You can also brighten the side away from the light with a bright reflector.

This will soften the resulting shadow. Depending on your taste, you can light up the background or leave it dark.







For portrait shoots in the studio, flash units, here from Hensel, show their power with reflectors.

Octalights, a special type of softbox with an almost round shape that creates a beautiful reflection in the eyes, are ideal for portraiture. The shadows of softboxes are soft and the transitions from light to dark are beautifully graduated.

This light is particularly flattering for portraits of women. Characterful portraits of men or women can be lit more harshly. Either with an umbrella, or without a brightening effect and much more from the side. A popular light shaper for portraits is the Beauty Dish, a flat, bowl-shaped metal reflector that provides a powerful but not too harsh light. Professional studio flash systems are available from various manufacturers, including Hensel and Profoto.

But it doesn't have to be an expensive and large flash system: The Canon Speedlite system flashes are also ideal for portraits. Multiple units can be synchronised and controlled individually or in groups (transmitter-receiver). Third-party light shapers are available. A practical feature of Speedlite flashes is their small size and the fact that they can be powered by a rechargeable battery or battery pack.





# CREATIVITY IN PORTRAIT PHOTOGRAPHY

## Practical examples

Having mastered the basics of portrait photography, you can get creative.





# PORTRAITS IN DAYLIGHT

For portrait photography "on location", the available daylight is the main light. Each time of day has its own light. The best times are morning and evening. If the weather is good, this is when the light is softest and can be used directly. A little side light is also pleasant. A fill light will help to avoid unattractive shadows. In balanced lighting conditions, you can either use the camera's automatic Portrait mode or, to achieve the same depth of field with every exposure, the Av automatic shutter speed. With Av, you set the aperture and the camera adjusts the shutter speed according to the brightness.



**Important:** When it gets dark, make sure the shutter speed is not too slow to avoid blurriness.

Direct light at midday is not ideal for portraits. It is very harsh, comes in steeply from above and casts unattractive shadows under the eyes and nose. It is better to look for a location in the shade. Side effect: the background becomes bright in the light, making the subject stand out. In this situation, it is best to use the automatic portrait mode on your EOS camera and set the exposure metering to selective or spot.

In backlit situations, the face is in shadow. Depending on the brightness, the exposure needs to be corrected by several f-stops above the measured value in the direction of "brighter". You should also avoid light falling directly into the lens. To reduce the contrast between light and shadow in backlit situations, you can use a Speedlite on the camera, which acts as a "fill light" in manual mode M to lighten the shadows to a greater or lesser extent.



# PORTRAITS WITH AVAILABLE LIGHT

You do not always need a flash or plenty of daylight to take great portraits. Using the available light without using a flash or artificial light is called available light photography. This can be dim daylight, the light in the room or a candle on the table.

The exposure parameters are adapted to these conditions. This means an open aperture, a longer exposure time and a higher ISO sensitivity. Canon EOS cameras have very good high ISO performance, with only a moderate increase in noise at higher ISOs.

**Tip:** If the available light is constantly changing in intensity, it is advisable to use the automatic ISO setting. But be careful: Image noise also increases at extreme ISO settings.

This means that modern cameras are making it increasingly easy to achieve usable exposures in low light. If there is very little light, the meter will usually give you an exposure setting that is too bright.

In such cases, set the manual exposure control to M and use the light meter in the viewfinder and a little trial and error to find the right exposure.

**Tip:** Place your model in front of a large window on a cloudy day. There is no better lighting for a very atmospheric portrait.



Low brightness is not the only challenge in available light photography; different light colours in the scene also affect the result.

For example, when daylight and artificial light or different types of artificial light are present in the scene, this is known as a mixed light situation. A camera can only be set to one colour temperature via the white balance. For example, if you have daylight and incandescent light in a room, you can set the white balance to one or the other.

Either way, some part of the scene will always have the "wrong" colour. If you set the white balance to daylight, everything lit by the bulb will be yellow. Conversely, if you set it to tungsten, everything in daylight will be blue. Another mixed light situation is when you are shooting with a system flash in a room with tungsten light. You can use a colour filter to match the colour temperature of the flash to that of the room light. Then all you have to do is set the camera's white balance to artificial light and you will get neutral colours throughout.

**Tip:** If you have a variety of artificial light sources in the frame at the same time, such as incandescent, neon and LED lights, simply set your camera to auto white balance, which will select the best value for the situation.

A special challenge is to create atmospheric portraits by candlelight, for example around a Christmas tree when giving presents. The light from real candles is usually too weak to illuminate a person. The trick is to add artificial light to the scene while maintaining the lighting mood.

When using a system flash, it is advisable to use a colour filter in front of the flash to match the light to the low colour temperature of the candles (about 1,500 to 2,000 Kelvin). Then reduce the flash output in manual mode until you achieve a balanced lighting mood.





## FINE ART STYLE WITH BLACK AND WHITE

Black and white in portrait photography is a "trend classic". Reducing the palette to grey tones creates a classic, sophisticated look. In addition, the portrait focuses more on the subject than on coloured accessories. EOS cameras offer the Monochrome Picture Style, which converts the image produced by the camera directly into black and white. Monochrome filter settings allow you to control contrast and skin tone during the shooting process.

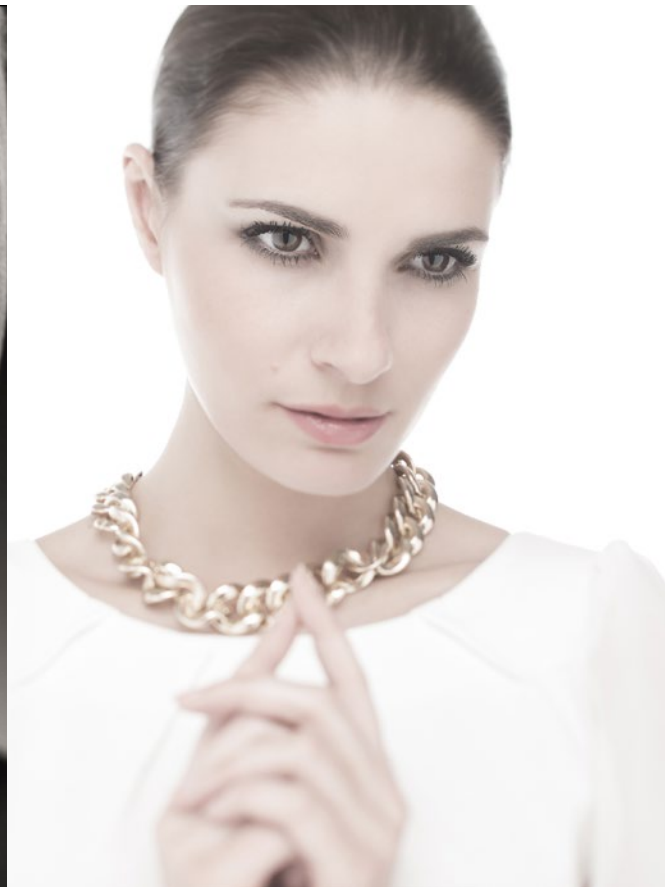
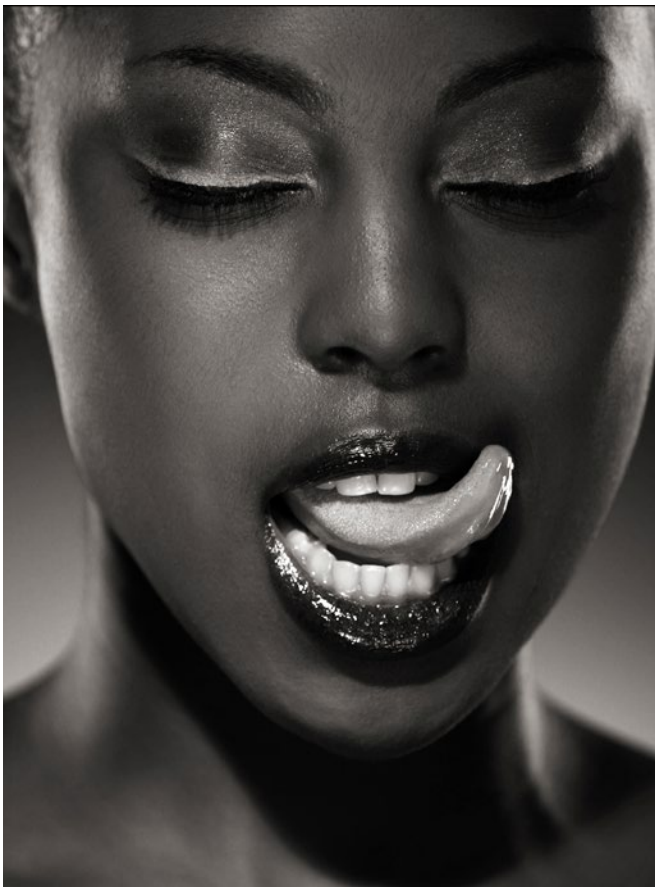
With RAW, you can choose the image style after shooting.

In any case, a black and white image needs more contrast in the lighting to look sharp.

**Tip:** With the new R-series of Canon EOS mirrorless cameras, you can view your black and white portrait directly in the electronic viewfinder, virtually live as you take it.







Photos: Sascha Hüttenhain

# LIGHT & SHADOW: HIGH AND LOW KEY

Two sophisticated stylistic techniques in portrait photography are low-key and high-key shots. In low-key, the contrast is high and light is only used to accentuate contours, everything else disappears into black.

High-key is the opposite: The light is soft, contrasts are low, and light tones dominate. This technique is popular for portraits of women,

Both high-key and low-key look particularly elegant in black and white.

In both cases, you can use a camera reading as a starting point and then adjust the aperture, shutter speed and ISO sensitivity in the manual mode towards dark (minus correction) or light (plus correction).

**Tip:** Canon EOS cameras offer a menu setting called Picture Style, which includes a monochrome option for shooting in black-and-white mode. Picture Styles apply only to JPEG files. If you decide to shoot in both RAW and JPEG, you keep the option to choose a different Picture Style later.





Photo: Sascha Hüttenhain

# PLAYING WITH LIGHT

## Equipment

Camera, lens and light - that's all you need to create exciting portraits. Find out which equipment is best for you here.





# WHICH CAMERA – FULL FRAME OR APS-C?

In principle, all Canon EOS R cameras are suitable for portrait photography. However, there are a few things to bear in mind to find the camera of your dreams.

You need a high enough resolution - at least 20 Megapixels - to be able to edit and print portraits well.

A high ISO rating is also important if you want to shoot in available light or other low light conditions.

A fast, accurate autofocus is also useful, as the subject may not always be still - for example, when taking portraits of children.



## Sensor size

The difference between a full frame sensor and an APS-C sensor is particularly interesting for portrait photographers in terms of depth of field: the larger the sensor, the smaller the depth of field for the same aperture, focal length and focusing distance. With a shallow depth of field, selective focus is particularly useful for focusing on a face or person against a blurred background.

But the APS-C sensor is also huge compared to a smartphone or compact camera, offering more opportunities to play with depth of field.

The EOS R range of mirrorless cameras includes models with either a full-frame or APS-C sensor,

all of which are ideal for portrait photography. These models range from the entry-level EOS R50 to the 45-megapixel EOS R5 Mark II. A major advantage of all EOS R cameras for portrait photography is the Dual Pixel CMOS Autofocus with Face and Eye Detection.

The Canon EOS R10 is recommended for ambitious newcomers to portrait photography. With an APS-C sensor and fast AF, it offers excellent value for money. If you prefer a full-frame camera but want to keep your budget under control, the Canon EOS R8 is the right choice. Portrait professionals will love the Canon EOS R5 or EOS R5 Mark II.

## EOS R cameras for with full-frame size sensor



EOS R



EOS RP



EOS R6 Mark II



EOS R5



EOS R5 Mark II



EOS R8

## EOS R cameras with APS-C size sensor



EOS R10



EOS R7



EOS R50





# TELEPHOTO LENSES PREFERRED

Short telephoto lenses are the most popular portrait lenses. The usual range is between 85mm and 135mm. Why a telephoto lens? If the focal length is too wide, areas close to the subject will appear larger than areas further away. In a portrait, this would overemphasise the nose and underemphasise the ears. On the other hand, if the focal length is too long, depth will be compressed and the face will appear too flat (pancake face).

The RF 50mm F1.2L USM and RF 85mm F1.2L USM lenses for the EOS R-series full-frame mirrorless cameras are the ultimate solution for portraits with selective sharpness or in available light. In the 85mm class, the RF 85mm F2 Macro IS USM is also available in a more affordable portrait version. The RF 135mm F1.8L IS USM with image stabilisation is also ideal for portraits. With the EOS R lens adapters, all EF and EF-S lenses can be used with the EOS R and EOS RP without restriction.



The RF 85mm F1.2L USM offers superb sharpness for portraits, even in low light.



Compact and lightweight, the RF 85mm F2 Macro IS STM allows for versatile close-ups.



The fast RF 50mm F1.2L USM for the EOS R system offers plenty of creative freedom.



The RF 135mm F1.8L IS USM has a high aperture and 5.5 stops of image stabilisation.

The RF 100mm F2.8L Macro IS USM falls between 135mm and 85mm, making it an excellent macro lens for more than just portraiture: it can be used for a wide range of photographic applications, from object and plant photography to children and family portraits.

If you don't want to be restricted to a fixed focal length, you should opt for a zoom lens. The RF 70-200mm F2.8L IS USM, for example, is a professional all-round telephoto zoom for the full frame format. A cheaper version of this focal length range is also available with a maximum aperture of F4.

The Canon RF 24-105mm F4L IS USM is the all-round zoom lens for the EOS R system. The Canon EF-S 55-250mm F4-5.6 IS STM is a perfect match for EOS DSLR cameras with an APS-C sensor such as the EOS 250D, 2000D, 90D or 850D.



RF 100mm  
F2.8L Macro IS USM

Makroobjektive wie das **RF 100mm F2.8L Macro IS USM** eignen sich hervorragend für die Portraitfotografie.



RF 70-200mm  
F2.8L IS USM



RF 70-200mm  
F4L IS USM



RF 24-105mm  
F4L IS USM

Medium telephoto zoom lenses are suitable for close-ups and more open portrait shots.

**Tip:** A compact 50mm lens is considered a standard lens for full-frame cameras. The Canon RF 50mm F1.8 STM costs less than R3,500.00 and, with a crop factor of 1.6 on an EOS R7 or EOS R10, corresponds to a focal length of 80 millimetres on the full-frame sensor.

The EF 50mm F1.8 STM is the recommended lens for EOS DSLR cameras. Faster alternatives are the EF 50mm F1.4 USM and the EF 50mm F1.2L USM for available light photography and creative use of sharpness and blur.



# PORTRAIT LENSES RF-MOUNT



Lens model	RF 24-105mm F4L IS USM	RF 24-70mm F2.8L IS USM	RF 50mm F1.2L USM	RF 70-200mm F2.8L IS USM
Focal length	24-105 mm	24-70 mm	50 mm	70-200 mm
Open aperture	F4	F2.8	F1.2	F2.8
Number of aperture blades (Bokeh)	9	9	10	9
Close focusing distance	0,45 m	0,21 m (W)	0,40 m	0,7 m
AF-motor	Nano USM	Nano USM	USM	Dual Nano USM
Filter diameter	77 mm	82 mm	77 mm	77 mm
Image stabilisation	5 steps	5 steps	no	5steps
Compatible camera connections	RF	RF	RF	RF
Portrait categories	Classic Wedding People Group	Classic Wedding People Group	Portrait Available Light Street-photography Fine-Art	Classisc Wedding People Available Light Studio



Lens model	RF 70-200mm F4L IS USM	RF 85mm F1.2L USM	RF 85mm F2 MACRO IS STM	RF 100mm F2.8L Macro IS USM	RF 135mm F1.8L IS USM
Focal length	70-200 mm	85 mm	85 mm	100 mm	135 mm
Open aperture	F4	F1.2	F2	F2.8	F1.8
Number of aperture blades (Bokeh)	9	9	9	9	9
Close focusing distance	0,60 m	0,85 m	0,35 m	0,26 m	0,7 m
AF-motor	Dual Nano USM	USM	STM	Dual Nano USM	Nano USM
Filter diameter	77 mm	82 mm	67 mm	67 mm	82 mm
Image stabilisation	5 steps	no	5 steps	5 steps Hybrid IS 8 steps IBIS x OIS	5,5 steps 8 steps IBIS x OIS
Compatible camera connections	RF	RF	RF	RF	RF
Portrait categories	Classic Street Art	Classic Studio Available Light	Classic Experimental Creative Sharpness Street Art	Classic Experimental Creative Sharpness Street Art	Classic Wedding People, Fashion Available Light

# PORTRAIT LENSES EF-MOUNT



Lens model	TS-E 50mm F2.8L Macro	TS-E 90mm F2.8L Macro	TS-E 135 mm F4L Macro
Focal length	50 mm	90 mm	135 mm
Open aperture	F2.8	F2.8	F4
Number of aperture blades (Bokeh)	9	9	9
Close focusing distance	0,273 m	0,390 m	0,486 m
AF-motor	-	-	-
Filter diameter	77 mm	77 mm	82 mm
Image stabilisation	no	no	no
Compatible camera connections	EF, EF-S, RF*	EF, EF-S, RF*	EF, EF-S, RF*
Portrait categories	Experimental Creative sharp- ness	Experimental Creative sharp- ness	Experimental Creative sharp- ness

\*Mount Adapter EF-EOS R (1,2,3) required (see page 27)



## PORTRAIT ACCESSORIES

Canon Speedlite system flashes are a compact alternative to studio flashes. Two or three of these light sources can be used to create a wide variety of lighting setups. Uncoupled from the camera, they offer creative ways to supplement the available light. The Canon Speedlite EL-5 combines compactness and power with the convenience of wireless control. Combined with the Speedlite Transmitter ST-E3-RT as a wireless control unit, it offers performance and flexibility for portrait photography.

With the Speedlite EL-1 as the master flash, older Speedlite flashes can also be controlled as slaves via infrared.

A wide range of light shapers are available for Canon Speedlite system flashes.



Speedlite EL-5



Speedlite EL-1



Speedlite  
Transmitter ST-E3-RT



## Reflectors

For outdoor use, there are various types of light bouncers that can be folded or stuck together - round, oval or square. If you want something inexpensive, you can buy polystyrene panels from a DIY store. If you leave one side white and paint the other side black, you get a universal reflector to fill in light or, light swallowing.

## Tripod

A tripod is important for portrait photography when you want a very tightly composed image, with the subject positioned exactly in relation to the background and surroundings, or when there is very little light. As photographers prefer to be mobile when shooting, a lightweight tripod, such as one made of carbon fibre, is sufficient.



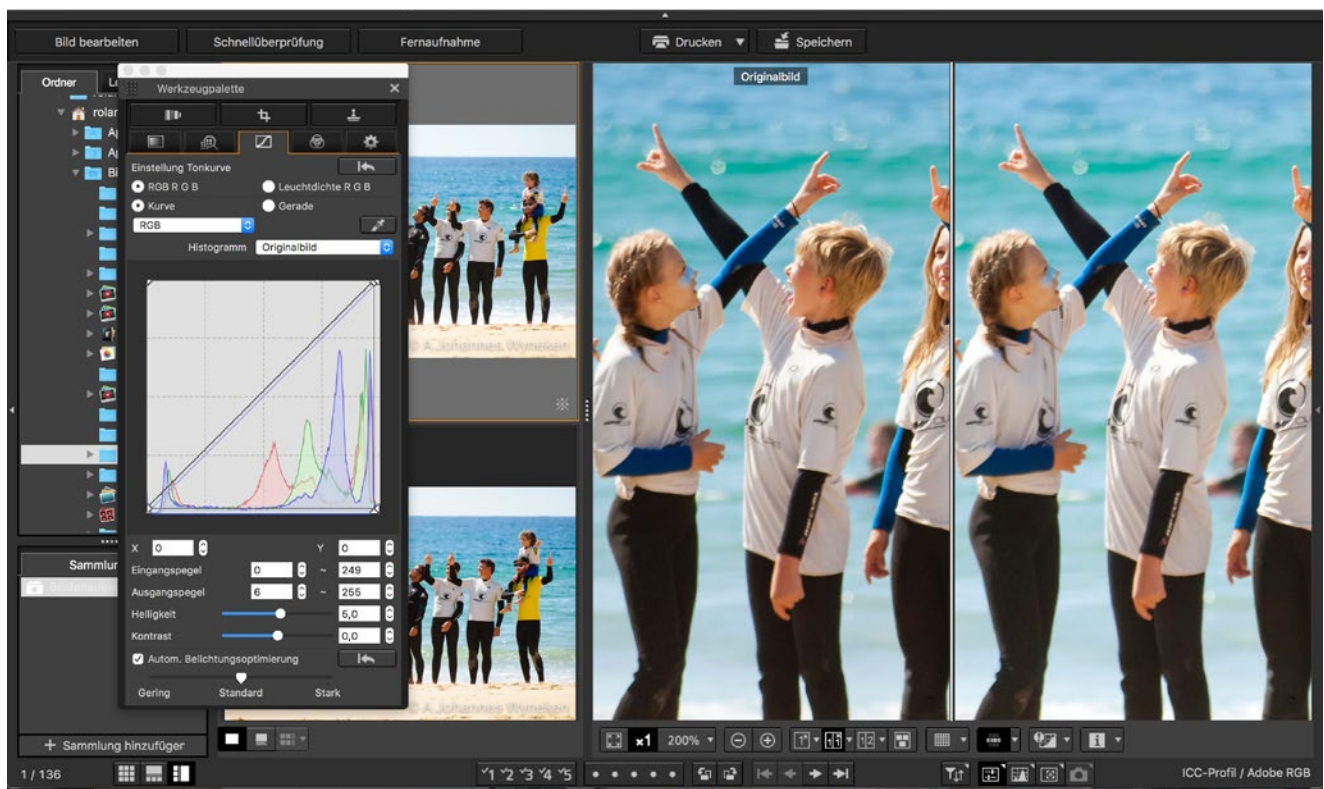
Speedlite with Beauty-Dish  
(Foto: Hensel)



Studio portrait shooting: Lighting is provided by a flash, the main light from the front; the images are displayed via tethered shooting directly in Canon Digital Photo Professional (DPP) via WLAN.  
(Photo: Hensel, Portrait: Jörg Kyas)



Classic Tripod  
(Photo: Manfrotto)



# RAW DEVELOPMENT AND RETOUCHING

For maximum flexibility in image processing, you should shoot in RAW format. Although this requires more storage space, the better image quality and more options for subsequent, loss-free manipulation of the data make up for this. Even incorrect exposures can be corrected retrospectively to a certain extent.

Every Canon EOS camera comes with Canon Digital Photo Professional (DPP). The software is ideal for processing RAW data. Subsequent control over exposure, white balance, image style, sharpness and contrast is simple and the results can be optimised with just a few controls.

Series of corrected images are then converted "in one go" into the desired format for monitor display or printing.

[Download Digital Photo Professional](#)

RAW workflow tools not only optimise and creatively edit RAW files, but also organise large numbers of images, as is often the case with portrait photography.

If you want to delve deeper into image processing, you can use a photo-retouching application. The possibilities for retouching images or combining multiple images into a composite are almost limitless with these specialised programs.

The top retouching software is Adobe Photoshop. An alternative is Affinity Photo from Serif.



## CONCLUSION

Whether in a studio or outdoors, in artificial or natural light, portraits of women, men, couples, families, children or animals are always a great challenge for the photographer. And because it is usually people who are standing or sitting in front of the camera, portrait photography is also the most communicative form of photography.

What's more, you can get started with almost any camera and standard lens, and then adapt your equipment step by step to suit your portrait style.





## MORE OF THIS?

Want to learn more about portrait photography? At the Canon Academy workshops, our trainers will teach you step-by-step how to get the perfect exposure for any subject, but the Canon Academy has much more in store for you.

**Check the Canon Academy website for the latest workshop offers and dates.**

