SPORTS & ACTION PHOTOGRAPHY

- BASIC KNOWLEDGE
- CAMERAS AND LENSES
- SHOOTING TECHNIQUES

Canon Academy

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At the Canon Academy you will find inspiration and expertise for your photography and videography. Whether in a workshop with our trainers or in our online programme (available live or 24/7):

We share our experience with enthusiasm and passion.

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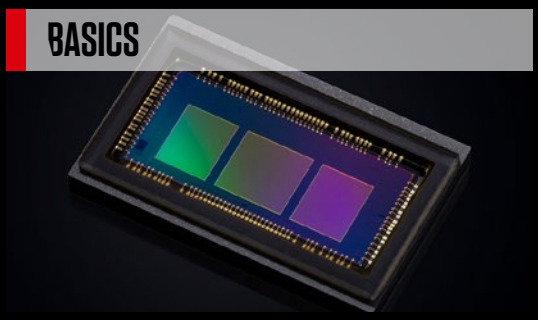

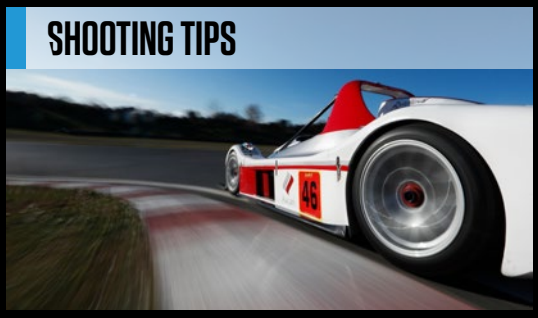

Basics

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SPORTS PHOTOGRAPHY – THE ULTIMATE CHALLENGE

Intro

Sports and action photography is one of the most exciting - and challenging - types of photography. But thanks to innovations in cameras and lenses, even beginners can take professional-level sports and action photos. Here you will learn how to capture dynamic motion, capture the decisive moment and tell exciting sports stories from both sides of the action. We also look at important creative and technical aspects of the genre, and give tips on the right approach and equipment.

Pure action: For fun sports like this, wide-angle lenses and a low shooting position produce exciting "in the thick of it" shots.

SPEED PLUS EXPERTISE: CATCHING THE DECISIVE MOMENT

A dramatic header duel, a foot on the finishing line, celebrations after a penalty: Successful sports and action photography thrives on the decisive moment. Capturing that magic moment requires two things: knowledge of the sport and its typical movements, and a fast camera system.

Getting close is the answer in most genres of photography - and especially in sports photography.

But very few sports allow you to be physically close to the action - street sports or BMX competitions, for example. Photographers are much more likely to need to get 'close' to the action with a lens from many tens of metres away from the edge of the pitch or the stands. This is only possible with long focal lengths. Telephoto and telephoto zoom lenses are therefore generally the best choice.

Sports photography is about capturing the decisive moment, but it is also about telling exciting stories away from the competition.

Freeze the moment: Capturing fast action in razor-sharp detail. Compared to moving images, photography is literally capable of something unique: it can "freeze" a specific moment in a sequence of movements, revealing details that remain hidden to the human eye. This "freezing" of action scenes is a classic in almost all sports - from duels in ball games or martial arts to spectacular jumps in athletics, motorcycling or winter sports. In principle, this requires one thing above all else: short exposure times of around 1/500th of a second.

Stories away from the main action: When trivialities tell the more interesting story. Goals, jumps, finishes: the key scenes are almost always at the centre of photographic interest.

This is true of both professional and amateur sports photography. In reality, however, the more exciting stories sometimes take place away from the main action: The sad loser, the nervous coach, the player's wife thrown from her seat after a goal, or details such as the starting block: those who consciously include the peripheral events often tell the more compelling story.

Tip: Split up your story: In football, for example, you can cover the highlights of the first half of the game and then look out for exciting side-stories in the second half.

LIGHT AND EXPOSURE

Know-how

Canon Academy's Creative Flash guide introduces you to the many ways flash can be used in photography. The Basics section explains the characteristics of this type of lighting and the technical requirements. The practical section explains how flash can be used in both indoor and outdoor photography, and what options are available for shaping and directing the flash. The Equipment section focuses on Canon Speedlite flash units and accessories. The glossary explains technical terms related to flash.

COLOUR TEMPERATURE, WHITE BALANCE AND NATURAL VIEWING

The human eye is extremely adaptable and can fool us into thinking that a sheet of paper is white, even in warm incandescent light. Digital cameras mimic this "natural white balance".

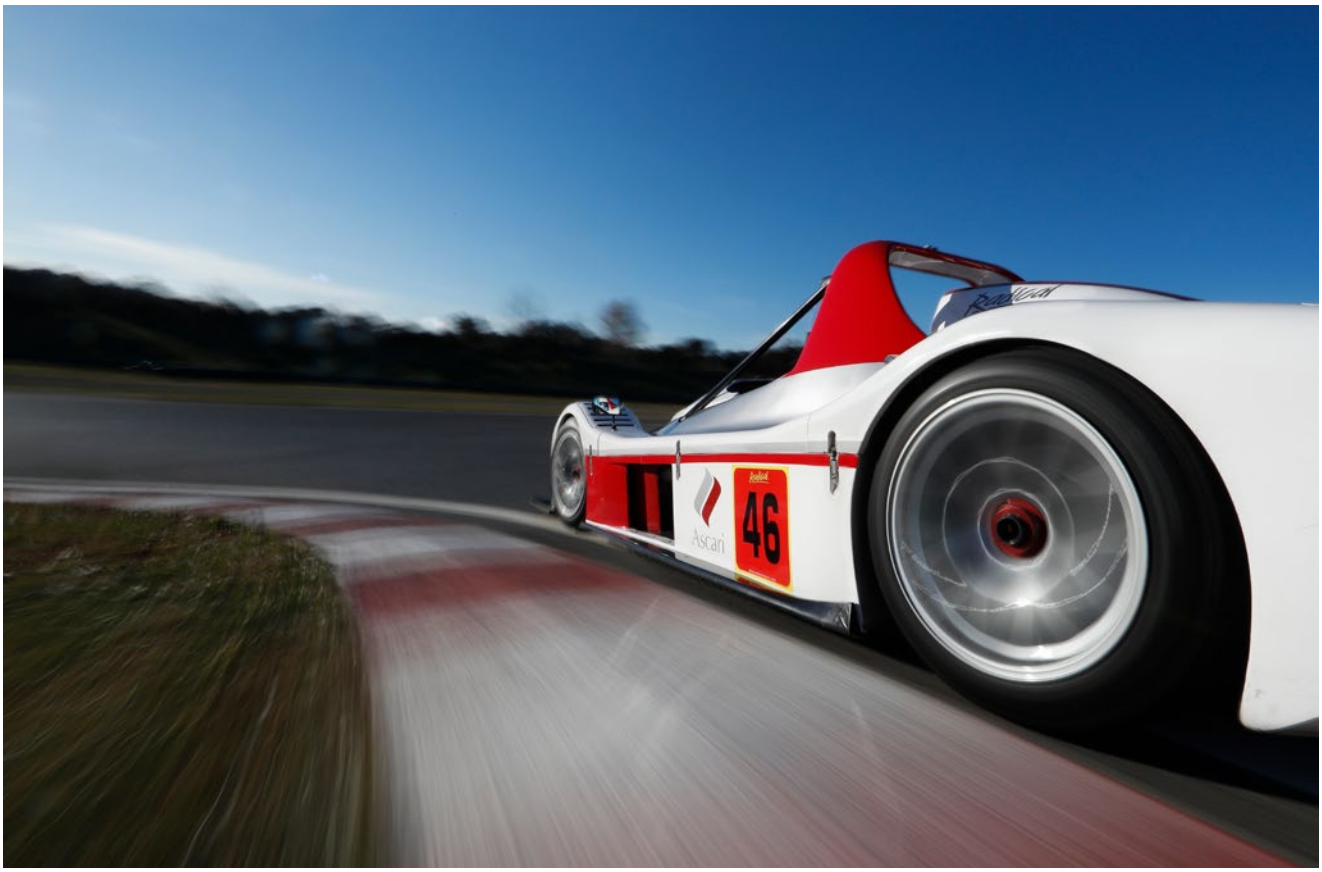
The quickest way to do this is with automatic white balance (AWB), which ensures colour-neutral image results in different types of light.

In constant light situations, one of the presets for direct sunlight/sun, cloudy sky or artificial light (incandescent lamps, fluorescent lamps warm/cold) is selected for constant colours.

When the colour temperature changes - for example, when sun and clouds or different light sources alternate in the hall, or when daylight and artificial light mix - the automatic white balance often gives the best results.

Tip: If you have the time and inclination to edit your photos afterwards, RAW is the way to go. Files shot in RAW mode can be optimised for exposure and white balance. Canon provides users with a comprehensive, easy-to-use RAW editing software package - Digital Photo Professional
(DPP) - free of charge on its website.

Canon Digital Photo Professional allows you to sort and select your images, while advanced RAW processing tools ensure high quality.



Here the camera is attached to the race car with a wide angle lens. Racing photographers usually stand at the track with long telephoto lenses.

SHUTTER SPEED AND APERTURE

Apart from the "blur" effects that can be achieved with long exposures, sports photography is usually about capturing dynamic situations in razor-sharp detail.

This 'freezing' of a subject is best achieved with short exposures - flash is not an option at long distances.

Depending on the speed of the sport (e.g. serve in tennis, shot on goal in ice hockey), shutter speeds between 1/500s and 1/8,000s are required. A case for the automatic exposure mode (Tv). Unlike automatic Program mode (P), where the shutter speed and aperture are set automatically, here the shutter speed is set and the camera determines the appropriate aperture.

Tip: The selection of a special scene programme can also be particularly useful for beginners in sports photography. Apart from the professional models, Canon EOS cameras have a so-called "sports mode", which automatically calls up the tracking AI focus and the continuous shooting function of the camera and at the same time ensures sufficiently short exposure times with an ISO sensitivity optimised with regard to the lighting conditions. The EOS R1, R5 Mark II and R3 also feature Eye Control AF, which focuses on the subject by looking through the viewfinder.

EOS R3: The high sensitivity of up to ISO 102,400 and the back-illuminated stacked sensor allow short exposure times, here 1/64,000s, with the electronic shutter.

Acrobatics in the circus means lots of movement in low light - fast lenses and high ISO settings help to produce razor-sharp images.

HIGH ISO IN LOW LIGHT

As already mentioned, sports photography primarily requires short exposure times. This is generally not a problem for outdoor sports on a bright, sunny day.

The situation is different indoors, or in dull, dirty weather. There are only two ways to compensate for the "missing" light: use faster lenses or increase the camera's ISO sensitivity.

By doubling the ISO sensitivity (e.g. ISO 1600 instead of ISO 800), you can halve the exposure time, e.g. 1/1000s instead of 1/500s.

Canon EOS cameras allow the use of very high ISO sensitivities with an acceptable loss of quality. The current Canon EOS R cameras use full-frame or APS-C image sensors which, depending on the camera model, allow sensitivities of ISO 12,8000 and higher with low noise.

Professional sports photographers use high ISO settings based on the rule that a sharp, low-noise photo is better than no photo or a blurry one.

Tip: If you want to automatically achieve the shortest and most correct exposure times in low light or changing light conditions, use the automatic ISO function on EOS cameras.

The autofocus tracking function keeps track of the main subject as it moves.

AUTOFOCUS: READY FOR ACTION

Fast, accurate autofocus (AF) with multiple points and intelligent motion detection is essential in sports photography: Few of the action-packed, sharply focused images seen in the sports press would be possible without sophisticated AF systems. Dual Pixel CMOS AF technology uses almost the entire sensor area for AF.

Difference between AF tracking and AF servo

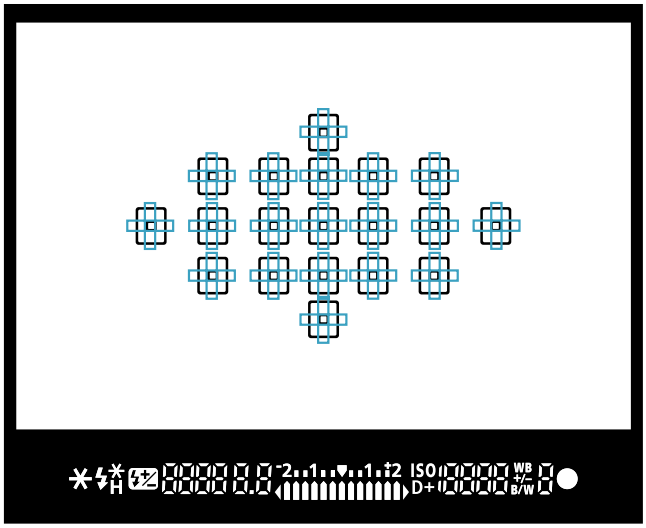
AF Tracking tracks people, vehicles and animals in the scene. The AF units on EOS cameras offer settings for typical movement patterns, while Servo AF mode continuously tracks the focus in parallel with AF tracking.

This mode is ideal for sports and action photography, but can also be used in conjunction with Single Shot AF mode, which focuses once and holds the focus.

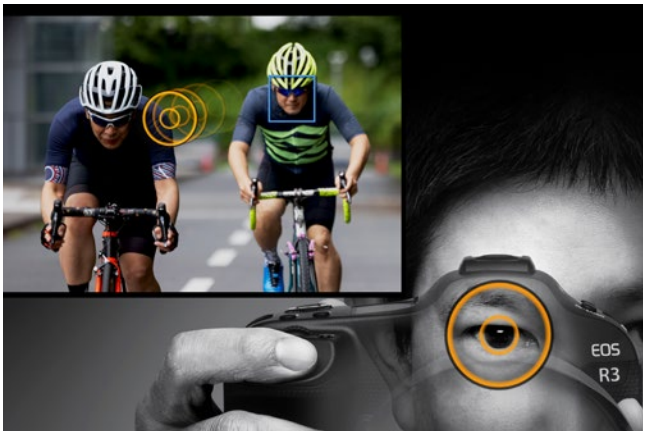
Moving subjects approaching the camera (left) are more challenging for the AF system than those moving "across" the field of view.

There are two types of this continuous mode on Canon EOS cameras: AI Focus initially focuses on an object - such as a ball resting on the penalty spot - and adjusts the focus as soon as the ball is kicked. In AI Servo mode, the autofocus sensor continues to track the subject as long as the shutter-release button is pressed halfway.

This mode is recommended for dynamic shooting situations, such as a quick counter-attack in a football match. The AF literally stays on the ball. Thanks to predictive tracking, the focus is always on the pre-calculated position of the subject at the moment the shot is taken.



AF fields with cross-type sensors provide fast, accurate focusing for great results in sports photography.



Eye Control: focus with your eyes

The Canon EOS R3 features the new Eye Control function. The AF point is selected in the viewfinder by aiming the eye at the desired focus point. The camera then focuses on the selected AF point with the shutter button pressed halfway and tracks the subject.

Optimise AF configuration: The custom functions. If you want to quickly recall certain AF settings, you can use custom functions. These customisable routines let you set the preferred AF area, continuous AF tracking speed and other parameters at the touch of a button. To make the range of options as user-friendly as possible, professional EOS cameras feature 'cases'. These optimise the various AF parameters for typical sports and other shooting situations.

Tip: For subjects that move smoothly, a single AF point or a small group of AF points is most effective. However, in situations where movement is difficult to predict (e.g. boxing, rugby), Intelligent Tracking and Recognition (iTR) is the safer option. It keeps the focus on the main scene of the action once it is in focus, even if it is momentarily obscured by another athlete.

Tip: The custom functions also allow you to choose whether the autofocus works with focus or shutter priority. The latter is usually recommended for fast sports such as ice hockey. In this mode, image rejection is slightly higher. However, you can be sure that the decisive shots are 'in the bag'.

High-speed burst shooting helps capture the perfect moment with dynamic subjects like this one.

CONTINUOUS SHOOTING

At the top of the full-frame EOS R system cameras, the new EOS R1 achieves up to 40 continuous shots per second with the electronic shutter. For fast and dynamic action, a new Action Priority mode identifies and tracks the main subject when shooting soccer, basketball or volleyball.

The EOS R6 Mark II also achieves 40 fps with full AF and AE tracking, while the EOS R3 achieves 30 fps, both with the electronic shutter.

With this kind of speed, you can, for example, be relatively sure of the moment at which the ball leaves the tennis racket.

EOS cameras with an APS-C sensor such as the EOS R7 (up to 30 fps with electronic shutter, 15 fps with mechanical shutter) are also well suited to sports and action photography.

EOS R1

EOS R5 Mark II

EOS R3

EOS R6 Mark II

EOS R7

EXCELLENT PERFORMANCE

Equipment

Choosing the right equipment is essential for professional-level sports photography, especially the choice of camera and lenses.

The Canon EOS R1 is the natural choice for professional sports photographers.

LENSES FOR TOP PERFORMANCE IN ALL DISCIPLINES

The ideal sports lens covers a wide range of focal lengths, has low distortion, is fast, light, compact, quick to focus and affordable. What the ideal lens should and can be depends on the type of sport and, of course, the budget. Long telephoto or telephoto zoom lenses are standard equipment for sports photographers.

This class includes the **RF 100-400mm F4-5.6 IS USM** with Nano USM technology. This ensures an extremely fast focusing speed, allowing the subject to be precisely in focus in a fraction of a second. The Canon 'L' series of professional lenses, which are also sealed against dust and splashing water, deliver even higher image quality. This includes the **RF 100-500mm f/4.5-7.1L IS USM** with 5x magnification.

Many sports photographers use a fast 70-200mm zoom lens to get close to the action.

These mid-telephoto zoom lenses are available in both EF and RF mounts. The **RF 70-200 mm F2.8L IS USM** is smaller and lighter than the EF version - with higher image quality.

Two telephoto zoom lenses for EOS R system cameras: the RF 100-400mm F4-5.6 IS USM on the left, and the RF 100-500mm F4.5-7.1 L IS USM on the right. Both lenses feature optical image stabilisation. The L-series lens offers even higher image quality and is sealed against dust and water.

Left: The EF 70-200mm F4L IS II USM with optical image stabilisation is a good choice for those starting out in sports photography with a DSLR.
Right: The RF 70-200mm F4L IS USM is significantly more compact with the same focal length range and speed.

Focal length extension

Extenders or teleconverters are a "lens extension". If you only need extra-long focal lengths from time to time, and you want to save weight and money, you can consider buying a converter instead of a second, longer focal length lens. The Canon RF and EF Extenders extend existing focal lengths by a factor of 1.4 or 2, while reducing speed by the same factor. The converters are compatible with suitable L-series RF and EF lenses.

LENS ADAPTERS FOR EOS CAMERAS

The EOS R adapters allow EF and EF-S lenses to be used on EOS mirrorless cameras with an RF mount.

	RF Mount	EF Mount	EF-S Mount
EF lenses	❶❷❸	✓	✓
EF-S lenses	❶❷❸	x	✓
RF/RF-S lenses	✓	x	x

❶ EF-EOS R

❷ EF-EOS R mount adapter with control ring

❸ EF-EOS R mount adapter for drop-in-filters

Image stabilisation modes 1, 2 and 3

Some stabilised lenses offer a choice of stabilisation modes.

Mode 1 stabilises both vertial and horizontal camera movement.

Mode 2 stabilises only one axis of the image. This mode is mainly intended for 'dragging', so that the photographer does not actually get dizzy during long periods of use. **Background:** Although the "stabilised view" through the viewfinder provides the eye with a more stable image, the human brain is unable to process the simultaneous information from the sense of balance, which can actually lead to this phenomenon during prolonged use, especially with repeated movements.

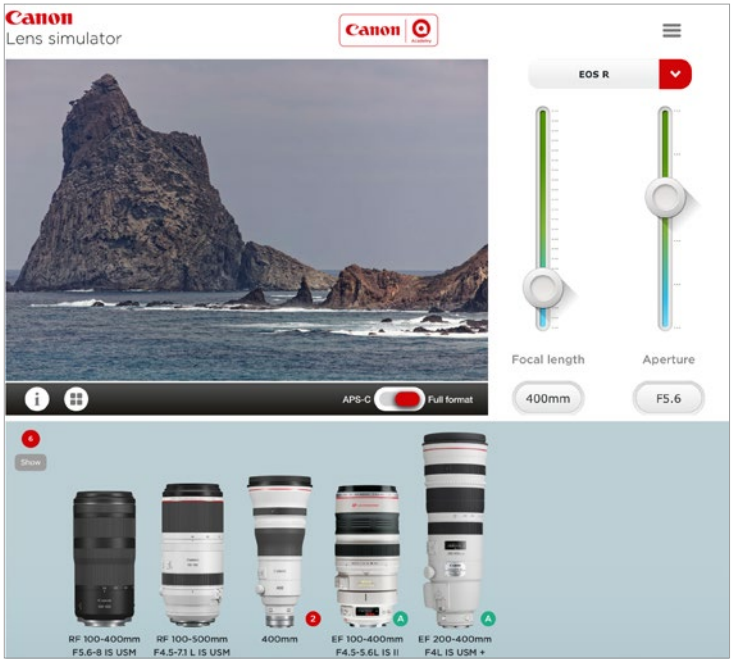
Mode 3 is found on newer professional EF and RF telephoto lenses. This is so advanced that stabilisation does not take place while the subject is being tracked, but only when the image is captured. The eye is unaware of this, so you can shoot with confidence.

CANON LENS SIMULATOR

The Lens Simulator clearly shows how focal length and aperture influence and depth of field. The online tool automatically shows which Canon lenses are suitable for the selected settings.

Select one of six themes from the home screen: Portrait, Landscape, Street, Wildlife, Macro or Architecture. Then use the two sliders to change the focal length and aperture. The image field and depth of field in the app's viewfinder window will automatically change to match the selected setting. The 1.6 crop factor for APS-C sensor cameras can also be selected via a slider, and the Lens Simulator automatically displays all Canon lenses that match the selected focal length and aperture combination.

You can also use the drop-down menu to restrict the selection to lenses that are compatible with EOS DLSR, EOS R and EOS M cameras. Additional information is available for all lenses at the click or touch of a button. Use the comparison list to compare the specifications of your favourites. The Lens Simulator is accessible via web browser and works on Mac, PC and mobile devices.



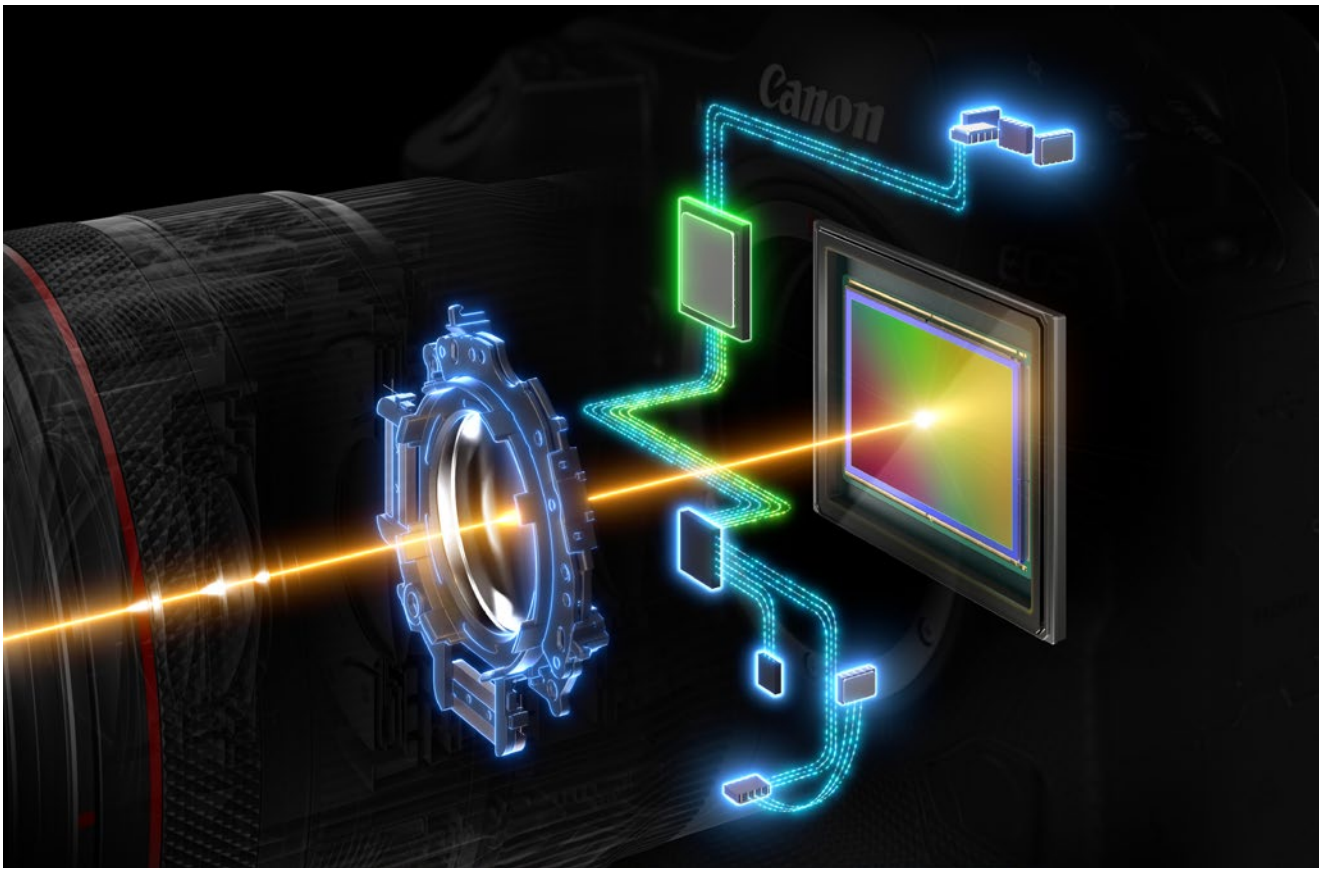


Image stabilisation in the EOS R3: The image stabiliser in the lens (left) and the IS system in the sensor unit work together to provide up to 8 levels of combined image stabilisation.

IMAGE STABILISATION BY LENS AND CAMERA

Camera shake is caused by exposure times that are too long. What constitutes "too long" depends on the subject and the focal length of the lens: in general, the less light available and the longer the focal length, the shorter the exposure must be to achieve a sharp image without blur.

The following rule of thumb can be used as a guide: The exposure time should be at least the reciprocal of the focal length (e.g. 1/500s or less for a 500mm lens).

Sports photographers often have to cope with both challenges: they work with long telephoto lenses in "poor" lighting conditions, for example in an indoor arena.

A combination of a fast lens and higher ISO sensitivity is needed to achieve short exposures.

Fast prime lenses such as the RF 400mm F2.8 L IS USM are often used instead of telephoto zoom lenses.

The light-sensitive image sensors of the latest EOS R cameras allow ISO 12,800 or ISO 25,600 to be used with very good image quality, so even slower and cheaper lenses can be used.

Remember: The short exposure times are necessary to 1- Capture sharp images of movement in the subject and 2- Avoid blurred images. Point 2 is also helped by the image stabilisation in the IS lenses and (depending on the model) in the camera.

With the EOS R1, EOS R3, EOS R5 Mark II and EOS R6 Mark II mirrorless models, the camera‘s internal 5-axis image stabilizer (IBIS) works in conjunction with the optical image stabilizer in the lens to provide up to 8.5 stops of coordinated image stabilisation.

SUPER TELEPHOTO LENSES

The RF lens portfolio now includes four super telephoto lenses from the L series. With internal image stabilisation of up to 5.5 f-stops, the RF super telephoto lenses show their full potential in less than ideal lighting conditions. The images above show from right to left:

RF 400mm F2.8L IS USM (5,5 step IS)
RF 600mm F4L IS USM (5,5 step IS)
RF 800mm F5.6L IS USM (4,5 step IS)
RF 1200mm F8L IS USM (4 step IS)

A Dual Nano USM with two motors ensures faster and more efficient focusing, especially for distant and fast-moving subjects, while high-quality lenses and coatings deliver exceptional sharpness with minimal distortion across the entire image field.

Fast telephoto lens for indoor sports

The RF 135mm F1.8L IS USM is a great lens for portrait photography, but it is also ideal for indoor events and sports where you are close to the action. The wide aperture of F1.8 allows fast shutter speeds in low light, while the high quality optical construction ensures brilliant images even at full aperture.

Its 5.5x image stabiliser works in conjunction with IBIS to extend handheld exposures by up to 8 f-stops without blurring, which is particularly useful when shooting static subjects.

4 CAMERA FOR ACTION SPORTS

In sports and action photography, the demands on cameras and lenses are particularly high. A fast continuous shooting speed is essential to capture decisive moments in fast-paced sports. The autofocus must keep up with this shooting speed to ensure that the perfect moment is also perfectly in focus. Short shutter speeds, even in low-light conditions, require excellent high ISO performance. For professional use at major events, connectivity is also crucial for transferring photos to news desks as quickly as possible. Lastly, professional video features are becoming increasingly important for creating engaging content for news and social media.

Until a few years ago, DSLR cameras were the preferred 'sports equipment' for professionals. Today, top-of-the-line EOS R cameras with full-frame sensors, such as the EOS R1, EOS R3, and EOS R5 Mark II, have taken over, thanks to Dual Pixel CMOS AF, Deep Learning-based subject recognition, and advanced tracking capabilities.

Many professionals now benefit from the electronic viewfinder and the superior performance of RF lenses.

Full-frame and APS-C sensors

Two sensor sizes are used with EOS R cameras: the full-frame sensor corresponds to the 36mm x 24mm area of the analogue 35mm format. At 22.3 x 14.8 mm, APS-C format image sensors have approx. 40 percent of the area of the full-frame sensor.

With full-frame format, the individual photodiodes or pixels can ‘capture’ more light. They are able to correctly reproduce large differences in brightness in subjects (high dynamic range) and deliver high-quality images even at high ISO settings.

The EOS R cameras with APS-C sensors also excel at capturing impressive action shots. For example, due to the 1.6x crop factor, the RF 400mm F2.8L IS USM lens on the Canon EOS R7 with its 32.5-megapixel sensor provides the same image framing as a 640mm lens on the EOS R6 with its 20.1-megapixel full-frame sensor.

EOS R1

The EOS R1 is the high-performance flagship camera within the EOS R system camera range. It is designed to meet the demands of sports, action, wildlife and news photography.

Its 24.2 megapixel stacked BSI CMOS sensor delivers up to 40 frames per second with full AF/AE tracking. A new Action Priority mode automatically determines the subject in football, volleyball and basketball.

The EOS R1 also features cross-type AF measuring. Its new Dual Pixel Intelligent AF is sensitive to horizontal and vertical lines for greater autofocus precision. The autofocus is incredibly sensitive and works in conditions as dark as -7.5 EV – equivalent to polar light illumination.

The EOS R1's powerful DIGIC accelerator processor and Canon's deep-learning technology allow images from the high sensitivity sensor to be enlarged accurately by up to four times, up to 96 megapixels in the camera, thus enhancing the options for cropping or large printing formats.

The improved Eye Control AF function allows the starting point of the AF point to be controlled and calibrated to the photographer's eye by looking through the viewfinder. Focus is instantly locked on the subject and tracked when the shutter release button is pressed halfway.

In conjunction with the optical IS system of the RF lenses, the camera's internal 5-axis image stabiliser compensates for up to 8.5 steps and minimises blur caused by camera shake.

The EOS R1 will also appeal to videographers with its powerful 6K RAW video up to 60p, 4K up to 120p and 2K up to 240p, all from the full width of the full-frame sensor.

It also features powerful networking capabilities including Wi-Fi 6E and 2.5G BASE-T ethernet. The OLED colour EVF sports 9.44 million dots for perfect visual image control.

Using deep learning algorithms, the EOS R1 sports the new AF Action Priority mode that automatically determines the subject in football, volleyball and basketball.

Using deep learning algorithms, the EOS R1 sports the new AF Action Priority mode that automatically determines the subject in football, volleyball and basketball.

EOS R3

The EOS R3 was designed to capture fast moving action and meet the demands of professional shooters with responsiveness, high sensitivity, reliability and durability.

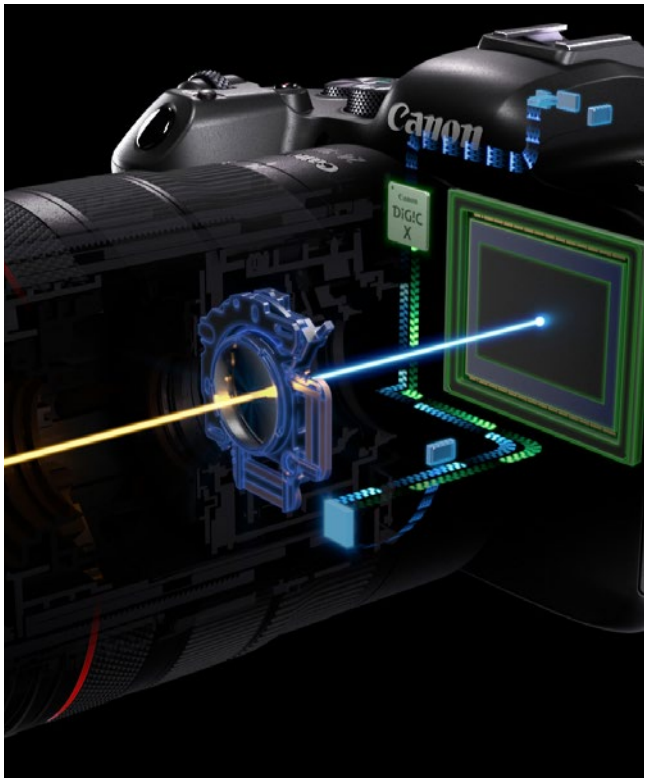
Its 24.1 megapixel sensor offers an ideal balance of image quality, high ISO performance and file size. Sensitivity ranges from ISO 100 to ISO 102,400, expandable to ISO 204,800.

The Eye Control AF tracking system allows to select focus points or subjects to track simply by looking at them. The EOS R3 is capable of up to 30fps continuous shooting and 6K RAW or over-sampled 4K video. An integrated grip and dust/drip-proof performance is designed to meet the demands of rigorous professional use and built in Wi-Fi and ethernet gives instant connectivity.

EOS R5 Mark II

The EOS R5 Mark II opens up new possibilities for sports photographers and videographers. The high resolution of 45 Megapixels ensures that your photos are rich in detail. It shares many of the advanced features with the EOS R1 including the Action Priority mode. Up to 40 frames per second are possible with the electronic shutter and up to 12 frames per second with the mechanical shutter.

With up to 8K RAW video resolution, you can shoot movies of the highest quality. Even if you are shooting at 4K or Full HD, the 8K resolution of the EOS R5 Mark II gives you additional options in post-production, such as cropping and virtual panning. 35.4-megapixel stills can also be extracted from 8K video.



In camera image stabilisation (green), combined with the image stabilisation of Canon's RF lenses (blue), allows you to shoot up to 8.5 stops longer without blurring caused by camera shake.

As the EOS R5 Mark II records 8K video at 30fps, this method is ideal for dynamic subjects in the studio or on location.

EOS R6 Mark II - The EOS R6 Mark II is the perfect hybrid camera for professional-quality stills and video. At 24.2 Megapixels, the sensor of the EOS R6 Mark II offers around 20% more resolution than the EOS R6 (20.1 Megapixels). The sensor is also read out faster. In video mode (up to 4K 60p) this results in a significant reduction of rolling shutter artifacts. The EOS R6 Mark II also performs in speed: with up to 40 fps (with electronic shutter) like the EOS R1 and EOS R5 Mark II. The autofocus system is using advanced deep learning algorithms and can detect persons, trains, planes and horses. The R6 Mark II offers AF presets (AF Cases) for professional level autofocus control in sports photography.

The EOS R6 Mark II is capable of shooting with 40 frames per second and offers excellent AF and High ISO performance. It is an affordable alternative for sports photography enthusiasts.

Photographers like Richard Walch prepare meticulously for their assignments. Here Richard is shooting with the EOS R on the Irish coast.

ACCESSORIES: TRIPOD, REMOTE SHUTTER RELEASE

Tripods: the photographer's "third" hand. Despite image stabilisation and cameras that deliver low-noise images even at high ISO speeds, tripods are still ubiquitous in professional sports photography - at least in sports that require particularly long focal lengths, such as football or athletics. The reason: the extra 'support' provides more stability, especially when using super-zoom lenses. Monopods are the preferred choice here. As the photographer's 'third hand', they are comparatively light and maneuverable, combining stability with flexibility. They are also less bulky than tripods.

Remote shutter release: In particularly shake-prone situations or tight spaces, the use of a wired or wireless remote shutter release can be useful. WLAN-enabled cameras can also be conveniently controlled from a mobile phone or tablet using the free Camera Connect app, available for Android and iOS.

TC-80N3

Sports photography is equipment intensive - but even with small equipment you can tell great stories.

EQUIPMENT CHECK: ALWAYS CARRY THIS WITH YOU

You can never have too many memory cards. This truism is especially applicable to sports photography. That's because sports and action photographers use continuous shooting more than average - and even 64 or 128 gigabyte memory cards fill up faster than you think, especially if you are shooting RAW files.

If you don't want to slow down the (continuous shooting) speed of your camera, use fast SD cards. The fast SDXC cards are UHS-II compliant and write at up to 260 megabytes per second.

Even faster are the CF express cards compatible with the EOS R1, EOS R5 Mark II and EOS R3. With write speeds of up to 1,400MB/second, photographers can shoot long bursts of images or high-resolution video virtually without interruption.

Last but not least, make sure you always have fully charged spare batteries, especially in winter.

CREATIVE GAME PLAN

Shooting tips

Get close. This golden rule for photographers also applies to sport. But even if you don‘t have a long telephoto lens, you can still tell exciting stories away from the action.

Sometimes the light tells the story - and sometimes the shadow, as in this photo.

ANGLE OF VIEW

At some sporting events, the photographer's perspective is strictly limited (e.g. from the press box), while other types of sport give the photographer creative freedom.

An important compositional tool is the distance from the action: Photographing from a greater distance allows you to show sporting situations in context or, when using a telephoto lens, to emphasise central action. This often creates an intense image effect, as telephoto lenses 'compress' the depth of the image and blur the background.

But wide-angle shots can also be attractive, provided the camera and photographer are close to the action. The bird's-eye view (elevated position, step ladder) and frog's-eye view (crouched or prone position) offer further exciting angles.

The mirrorless EOS R cameras tilt and turn screens offer even more photographic freedom.

Tip: Position your main subject about a third of the way from the edge of the frame, in the direction of movement. This allows the scene to 'breathe'. The movement continues in the viewers mind's eye.

Bring movement to photographic stills: The long exposure.

In addition to "freezing", one of the classic creative tools of sports photography is its opposite: the deliberate use of motion blur.

The aim is usually to focus on the background, such as the spectator stands, and blur the main subject, such as a cyclist or skier racing past.

To simulate speed in this way, a relatively long exposure time is required: 1/15th of a second is sufficient for fast sports, while slower sports require correspondingly longer exposure times. In the latter case, a tripod should be used to obtain a sharp image of the surroundings. The opposite effect can be achieved with the so-called "follow shot", which also requires longer exposure times. In this case, the photographer "follows" the movement of the main subject, which becomes sharp, while the background becomes blurred.

A long exposure time creates this spectacular "tunnel vision" effect.

1/4s | 1/8s | 1/15s | 1/30s | 1/60s | 1/125s | 1/250s | 1/500s | 1/1000s

Long exposure time:
▶ more motion blur

Short exposure time:
▶ less motion blur

MORE OF THIS?

Want to learn more about exposure? 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.

Canon Academy