

The Canon EOS R Full-Frame Mirrorless Camera and the new RF Lens Mount

Canon Inc. has always invested in bringing innovative technologies and futuristic features to the camera manufacturing industry. From launching the prototype of first-ever 35mm camera in Japan in 1934 to launching the first-ever camera embedded with a microcomputer in 1976, the company works on futuristic technologies in the craft of camera manufacture.

Today, the big brand has diversified into a range of other electronics like printers, but the intuitive touch and innovative spirit present in its lenses and camera bodies are simply brilliant and unmatched. Other notable brands like Sony and Nikon follow its example when it comes to camera technological upgradations.

A brand known for its varied collection of Canon DSLR cameras, mirrorless cameras and interchangeable lenses is now coming up with advanced experiments in the mirrorless camera technology's category. In 2018, Canon launched RF lens range for [EOS R full-frame mirrorless cameras](#), which is another futuristic step in photography and videography. Let us understand the need for up-gradation from conventional EF lens mount, and how it is better suited.

Why the shift towards RF lens mount for Canon?

The RF lens mount is an improvement over conventional EF mounts in many ways. The new lens mount comes with a lens control ring that brings intuitive control and customizable options over the ISO and shutter speed values. The new generation machine is compact in size. The lens size for an RF mount is smaller by approximately 25% or more as compared to an EF mount lens! The significant loss in size is a one-of-its-kind feature in the camera industry. The smaller body and lenses mean that the whole kit is easy to carry and durable for travellers and wildlife photographers who are always on the move.

The new generation range mount comes with a reduced "flange distance" as well. Flange distance is the distance between a lens mount and a camera sensor. The shorter distance means that the sensor receives the light from a close distance, reducing the chances of ghosting and flaring in a photograph. So, next time you shoot with this system, you are sure to get a crisper picture both at the centre and at the edges. Also, the aperture value for a given focal length is larger than the conventional lens mount system.

'These characteristics minimize aberrations and facilitate more effective lens arrangements, making possible higher image quality and high spec performance in more compact designs,' Canon says.

Canon EOS R Full-Frame Mirrorless Camera



Canon EOS R is a revolutionary product that introduced RF-mount lenses technology into the mirrorless category of cameras manufactured by Canon Inc. The initial product faced minor limitations when launched in 2018. But the firmware update v1.6 in 2019, a set of improved RF lenses, and slightly lower price range have made it one of the best mirrorless cameras to purchase in 2021!

Key Features of Canon EOS R full-frame mirrorless Camera :

- 30.3MP Full-Frame Dual Pixel CMOS Sensor
- DIGIC 8 Processor
- Dual Pixel CMOS Autofocus: 5655 AF Points
- Screen: 3.69m-Dot OLED Electronic Viewfinder
- UHD 4K video recording
- ISO range 50-102400
- 8fps or frame per second shooting speed

- Wi-Fi and Bluetooth, SD UHS-II Card Slot

Specs:

The deep grip, sturdiness, and ergonomic built assure long-time holding of the camera with an easy and a firm grip. The equipment has easy-to-locate buttons that are easy to find with its comfortable curved design.

The full-frame 30.3 MP sensor (just like Canon EOS 5D Mark IV) and Dual Pixel CMOS AF combine to create high resolution, spectacular and crisper results like never seen before! The DIGIC 8 processor and in-camera Digital Optimizer bring faster results and enhanced low-light performance.

The DLO or Digital Lens Optimizer capability reduces the chances of aberrations in the picture and gives cleaner pictures that you can proudly post without any edits! The native ISO range of 100-40,000 is expandable to a range of ISO50 and 102,400, just like the great Mark IV.

The new generation RF lens mount:

Of many innovations, the introduction of an [RF lens mount](#) is a futuristic development by Canon. The 54mm diameter and 20mm flange distance is a welcome feature that reduces aberrations or ghosting elements in a photograph, especially at edges. The advanced 12-pin connection is promising due to a fundamental increase in data transfer between the lens and the camera body.



Another striking feature upgraded in the RF lens mount is the winning 12-pin connection. It is an improvement over the earlier 8-pin connection that was present in the EF lens mount.

The technology increases the speed of data transmission between a lens and the camera body. So, in short, it gives you faster speeds for AF, real-time DLO, and better IS. The RF lens combines hybrid IS and dual-sensing IS, creating images with pretty decent image stabilization.

Superb autofocus:

Dual Pixel autofocus spec integrates two different photodiodes to create 5,655 phase-detection gathering elements. Go ahead and shoot with 5,655 focus positions that open limitless options in a single frame! Size of focus area covers 100% of the screen vertically and 88% from side to side. Focus peaking and focus guide is also an interesting feature. It is really useful for both macro and landscape photography as it allows a wide range of focusing options on a full-frame.

So, that means no post-shoot cropping effort for you!

Video quality:

Interestingly, the EOS R is only third in line when it comes to 4k video quality in Canon. Here, unlike many other competitors, there is an issue of slight cropping of 1.7x value in the videos.

Many videographers see this as a limitation when compared to other brands which offer seamless 4k shooting experience.

Other features:

The Multi-Function Bar above the cam is a good up-gradation and praised by many photographers. It is easy to adjust key settings from the display once you get used to it. The ability to articulate the screen is worth it and is a step up from earlier models.

The focus ring at the end is a great addition! The equipment can go at full manual mode by adjusting the camera from one hand and adjusting the ISO value with the other hand.

The electronic viewfinder or EVF of a mirrorless cam shows a live view of what is, and is considerably better than a DSLR! The 3.6 million dot OLED viewfinder combined with a magnification of 0.76 brings the resolution range closer to Nikon Z7 or Z6. The touchscreen feature allows easy tracking of the subject. The Vari-Angle touch screen at the rear end allows multiple angles for capturing a scene.

Performance:

The mirrorless camera offers great features for wildlife, travel and landscape photographers. The performance is superb in outdoor photography when tested with varying degrees of temperature. The dust and drip-resistant weather sealing is a big bonus when used for travel or landscape purposes.

The Vari-Angle feature allows multiple perspectives for photography of a single subject. The control ring on Control Ring Mount Adapter EF- EOS R takes customization to the next level. How it eases changing values of ISO, shutter speed or aperture makes it easy and convenient for both a beginner and an expert artist.

For portrait photography, feel free to use face detection and eye autofocus feature. You can easily track the face but also find the closest eye with these settings.

For a street photographer, the Silent Shutter functionality is a big bonus.

Few Shortcomings:

Like any other device, there are a few shortcomings in this model as well. For example, the absence of a second card slot, built-in flash, AF joystick, IBIS, and NFC mode in the camera drew some criticism.

For videographers and vloggers, crop value in 4k videos is a major issue. Nikon usually is a winner in this category and is preferred for exceptional non-cropped 4k videos. Though the brand has tried to include customization via M.Fn Touch Bar and Lens Control Ring, the

absence of Register or recall custom shooting function is a limitation when compared with the traditional DSLRs.

The next-generation RF lens mount technology, spectacular autofocus, and other features make it a superb camera to buy. For a first full-frame mirrorless camera, Canon might need to make little changes, but overall it is a fine piece of equipment. Enthusiasts around the world use it for shooting photos, videos, and vlogging. The expert level camera is futuristic equipment designed and built by the favourite brand in the camera manufacturing industry - Canon Inc.