

Canon ROS R7

A field review

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Introduction

The Canon EOS R7 (hereafter referred to as the R7) is an APS-C, 1.6x crop sensor mirrorless camera, currently the top of the APS-C series mirrorless bodies offered by Canon. It is a smaller sized body of more compact dimensions than the bigger brothers, the R6 and R5, but not by much.

I reviewed this camera from the approach that it is the enthusiastic photographer using the camera in everyday activities, weekend outings, and so on. I will not delve into serious detail about set-up and how the complete menu system works; there are plenty useful YouTube videos already available on the internet. Instead I will concentrate on more important consumer information for the actual use of the camera in different genres.

Basic Specifications

Sensor: APS-C, CMOS, 32.5M effective pixels with integrated sensor cleaning system

IS: Sensor shift in collaboration with lens IS for up to 8 stops stabilization effect, depending on the lens used.

RF Lens mount. Also supports RF-S lenses (crop factor applies), as well as EF and EF-S lenses using the EF-RF adapter.

DIGIC X processor

Focus: Dual Pixel CMOS AF II

Focus points: Automatic selection: 651 Available AF areas when automatically selected
Manual selection: 1-point AF (AF frame size can be changed) 5915 AF positions available stills (4823 Movies)
Manual selection: AF point Expansion 4 points (up, down, left, right)
Manual selection: AF point Expansion surrounding
Manual selection: Flexible Zone AF 1-3 (all AF points divided into minimum 9 to 567 maximum focusing zones)
Manual selection: Whole Area AF (Entire focusing area with 651 maximum focusing zones)

AF Tracking: Humans (Eyes/Face/Head/Body), Animals (Dogs, Cats and Birds) or Vehicles (Racing cars or Motor bikes)

Metering: Real-time with image sensor, 384-zone metering.
(1) Evaluative metering (linked to All AF points)
(2) Partial metering (Approx. 6% of viewfinder at centre)
(3) Spot metering: Centre spot metering (Approx. 3% viewfinder at centre) AF point-linked spot metering not provided
(4) Centre weighted average metering

ISO: Auto, 100-32000, expand to 51200

Shutter: Mechanical focal plane shutter, or electronic controlled in sensor

White balance: Auto white balance with the imaging sensor. AWB (Ambience priority/White priority), Daylight, Shade, Cloudy, Tungsten light, White Fluorescent light, Flash, Custom, Colour Temperature Setting

Viewfinder: EVF, 2.36 million dots, 100% coverage, with dioptre adjustment

LCD Monitor: 7.5 cm TFT colour LCD monitor, 1.62 million dots, fully articulating, touch control, non-smudging

Drive modes: single shot, continuous low, high continuous high+, self timer (various)

Frame rate: 15 fps mechanical, up to 30 fps electronic

Movie: 4K UHD and down scalable, Canon Log 3.

19 Custom functions, dual card slots SD/SDHC/SDXC and UHS-II, connectivity includes wireless LAN and Bluetooth 4.2.

No integral flash

Weight 612g with battery and card

For the full set of detailed specifications, visit the Canon website:

<https://www.canon.co.za/cameras/eos-r7/>

In the hand

The relative compact size of the R7 makes it the ideal travel camera when used with a suitable compact lens. I can also see this camera as the ideal soccer mom/dad (or rugby mom/dad for that matter) camera when paired with a medium tele-zoom lens such as the quite nice RF 100-400, or the RF 600 f11 lens for the birders and wildlife photographers, and the family portrait or enthusiast landscape and general photography combo with typically the RF 24-105 f4-7.1 IS STM.

I planned the review to accommodate those genres and applications that the average family or user will use this camera for and found it to be very versatile in all areas. At the same time the serious amateur and semi-pro would also benefit from this camera as main use or back-up. I do recommend the user learn the menus and set up the camera with the custom functions to his/her liking though.

A note on the new to R-series cameras, the FV Flexible Priority (or flexi value) mode. At first, I was sceptical as to the usefulness of this new Creative Zone mode, as I saw it as an enhanced M, Tv or Av mode, but found that it could be quite useful for quick changes to any of the parameters required, either shutter speed, aperture, ISO and exposure compensation all in one setting. Useful for changing lighting conditions, scenes etc.

In the field

The AF on the R7 was quite fast and accurate in single shot mode, with AF tracking, with or without subject detect also locking on fast and tracking quite effectively used with the RF 100-400 lens. Keeper rate was at least 70% on fast or erratic moving subjects such as field sports, rugby in my case, and better than 75 % with fast but smooth motion subjects such as race cars.

I used the R7 with the RF 100-400 lens to cover the Bulls Daisies semi-final match against the Boland Dames in the 2023 SA Rugby Women's Premier Division competition.



Canon EOS R7, RF 100-400 f5.6-8 IS USM, 281mm, 1/500, f8, ISO 400

Played at mid-day, good lighting conditions helped the AF, set to AI Servo, centre point expand, no subject recognition setting due to the many players in a team sports and using Case Study 2 to get me the shots I needed, so much so that the photo above was published in the editorial match report in one of the local newspapers. In that series 4 of 5 images were tack sharp. A good camera for the pro therefor, in the right conditions.

The try-scoring photo below was one in a series of 4 shots, all perfectly focussed.



Canon EOS R7, RF 100-400 f5.6-8 IS USM, 100mm, 1/800, f8, ISO 400

Viewing the results from that match proved to me that the soccer mom/dad (or rugby version) will do well with this camera capturing the memories of their children's school matches, etc.

Next up in the sporting environment was giving the camera a bash at motorsports, with a championship event hosted at a local track providing the ideal opportunity.

Sticking with Case study 2, vehicle subject tracking and Tv mode, I could see how the enthusiastic motorsport fanatic could get really good results using the R7. Head-on tracking was very good, usually keeping all frames in a 3-4 series sharply focussed. Changing direction through a fast sweep would have me loose a frame or two until the AF could adjust to the change in direction, and back on to locked tracking again on the big banging V8 monsters. Remember this adjusting of focus happened at 15 fps, losing two frames is not even $\frac{1}{4}$ second reaction time. Refer to the Shelby Daytona image below.

Using the IS helped to get slow shutter speed panning shots whilst reducing subject blur and still retain those soft flowing backgrounds such as the green Lola T70 speeding through a fast lefthand sweep. Remember there is no option to mount a monopod or tripod, so all images were captured handheld.



Shelby Daytona, Canon EOS R7, RF 100-400 f5.6-8 IS USM, 300mm, 1/250, f13, ISO 200



Lola T70, Canon EOS R7, RF 100-400 f5.6-8 IS USM, 100mm, 1/60, 29, ISO 200

Another family activity and where the enthusiastic photographer can apply his camera equipment, is birding or wildlife photography whilst visiting one of the many nature reserves this country has to offer. Animal-detect focus tracking was used on the Yellow-billed Duck on flypast, and the R7 kept 5 of the 7 frames perfectly sharp, very good performance from a camera in this price range using a budget-priced RF 600 f11 lens.

I also used the opportunity with the RF600/11 lens to check the high ISO noise handling of the R7. Using a Yellow-billed duck in the shadows, early morning, I pushed the ISO up to 10,000 and did some noise reduction in Lightroom, no Noise Ninja, Topaz etc was used. I was quite surprised by the results, with the normal NR algorithms in Lightroom doing a rather splendid job of reducing visible noise in the image. Top image on the next page, normal conversion from Raw, bottom image NR applied with same development settings. One can see the neutralised noise in the brown feathers just below the head / neck area of the duck.

I have to admit that even for an ISO 10,000 setting the noise handling of the sensor is very good, technology has certainly made for huge improvements in this area. Really hoping that gone are the days of noise at ISO 800.



Canon EOS R7, RF 600mm f11, 1/1000, f11, ISO 1600

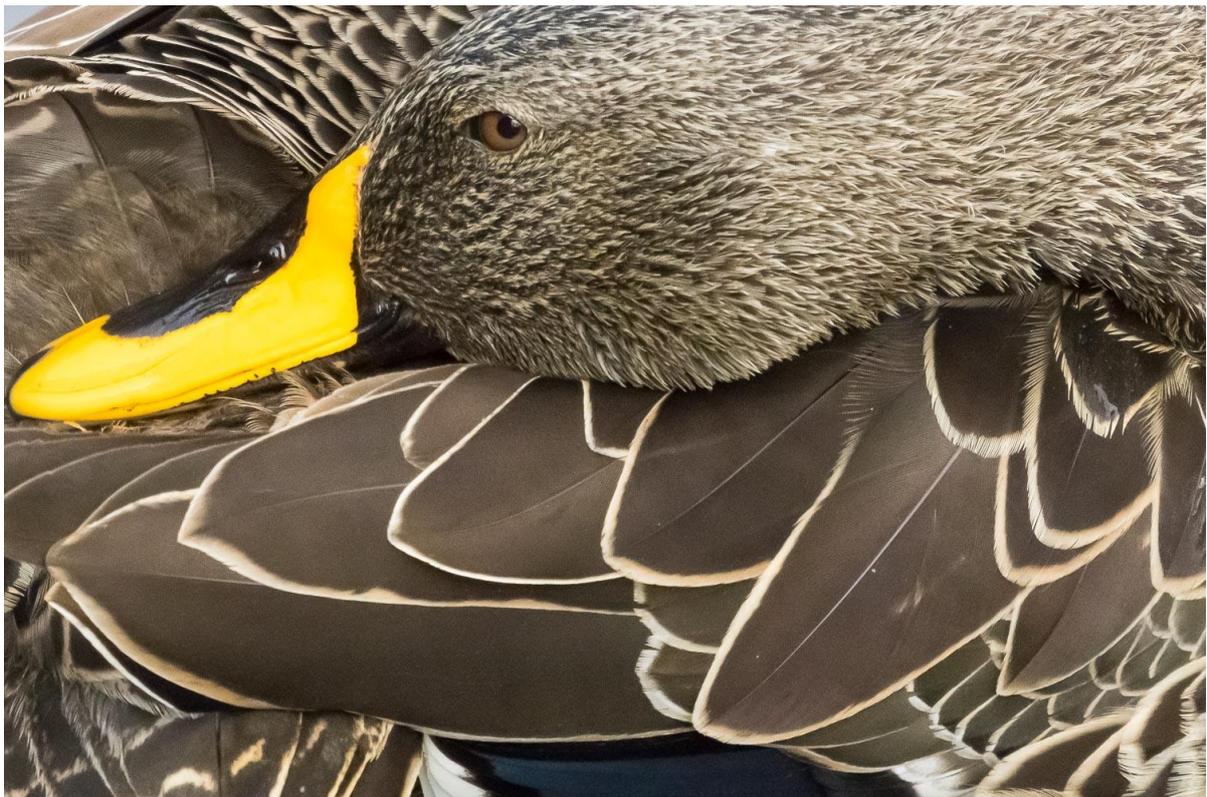
What I liked about the R7:

Basic layout of buttons and dials, very familiar to other models.

Frame rate

AF system on stills and tracking subjects

Image quality, even at higher ISO settings



Top: No NR, Bottom NR from Lightroom. Canon EOS R7, RF 600 f11 IS STM, 1/1250, f11
ISO 10,1000

What I liked about the R7 (continued):

AF/MF switch at the front of the body

Fully articulating LCD screen

Battery life quite good, I could get 650+ shots on a charge.

What I didn't like:

AF tracking in low light levels not as accurate

Video AF tends to hunt on faster subjects, or sudden changes in direction of movement, but catches up after a few seconds (note – I am not into video, could be my set-up also)

The AF joystick is somewhat difficult to operate inside that rear control wheel, leads to me accidentally adjusting settings I didn't want to change. One has to operate it rather carefully.

No top dial. Info displayed on rear LCD screen very informative though.

No option for an extended battery grip

Conclusion

I found the EOS R7 to be a very capable camera, good for anything the semi-pro, serious amateur or enthusiastic photographer would like to photograph. As with any other piece of photographic equipment, it will do the user well to learn the menu functions, the set-up of the camera, as well as its capabilities and limitations. It is not the perfect camera but will present the photographer with a very capable tool to capture images of high enough quality for most uses.

Many thanks to **Roger Machin at Canon SA** for arranging the camera under review.

Feel free to ask questions, request more specific information etc on this review or any of the other items I have reviewed so far.

Drop me an email: simondp@actionimage.co.za

or

See link : http://actionimage.co.za/equipment_reviews.htm