

Sony A7 IV camera review

by Jim Decker

The Sony a7 IV boasts an all-new sensor and other significant performance upgrades from the previous Sony a7 III camera. The “middle” child of the a7 series, the base model has often been looked over. But at 33MP resolution, it’s knocking on the door of being called a hi-res camera. Can this be a Sony a1 on a budget that deserves a second look?

A More Affordable a7 Series Camera

Probably the biggest headline for this camera is the price point. At the time of writing this camera comes in at \$2499, which is a bargain compared to the \$4000 more you’ll spend on a Sony a1.

Previous a7 base models lacked some specs and performance when compared to their S or R model siblings. While there was a price difference for the base a7 models, in the grand scheme of things by the time a complete underwater camera system was put together, it just didn’t seem to make sense when the only difference in the cost of the underwater camera system is just the camera body, and a lot of times it amounted to \$1500

or less of a difference. Most of our customers at Backscatter wound up going either to the S or R models, and as a result, we had very few takers for the base a7 model cameras.

With the specs and performance of the Sony a7 IV being a significant upgrade to other base models in the past, it’s worth it to take another look. With that being said, let’s dive into what you get with the Sony a7 IV and what you give up compared to the a7S, a7R, or a1 models.

Much Greater Resolution Than Previous a7 Base Cameras

The sensor is all-new for Sony and is coming in at a 33MP compared to the 24MP sensor of the previous Sony a7 III. While the resolution is much lower than the 50MP of the Sony a1 and the 61MP of the Sony a7R IV, 33MP is still a lot of resolution for big prints and crops in post. While the Sony a7 IV won’t capture the detail of either of those cameras, it’s still pretty darn good and would have been considered a top camera with these specs just a few years ago. The images captured with the Sony a7 IV look great.



The Sony a7 IV and Sony a1 are extremely similar in terms of size and control layout, but are completely different cameras under the hood. Luckily some of the good tech advancements of the Sony a1 has made it into the Sony a7 IV.

Continuous Shooting Speed

The Sony a7 IV will shoot up to 10 frames per second in a lossy compressed RAW format, and 6 frames per second in uncompressed RAW. I really wouldn’t recommend

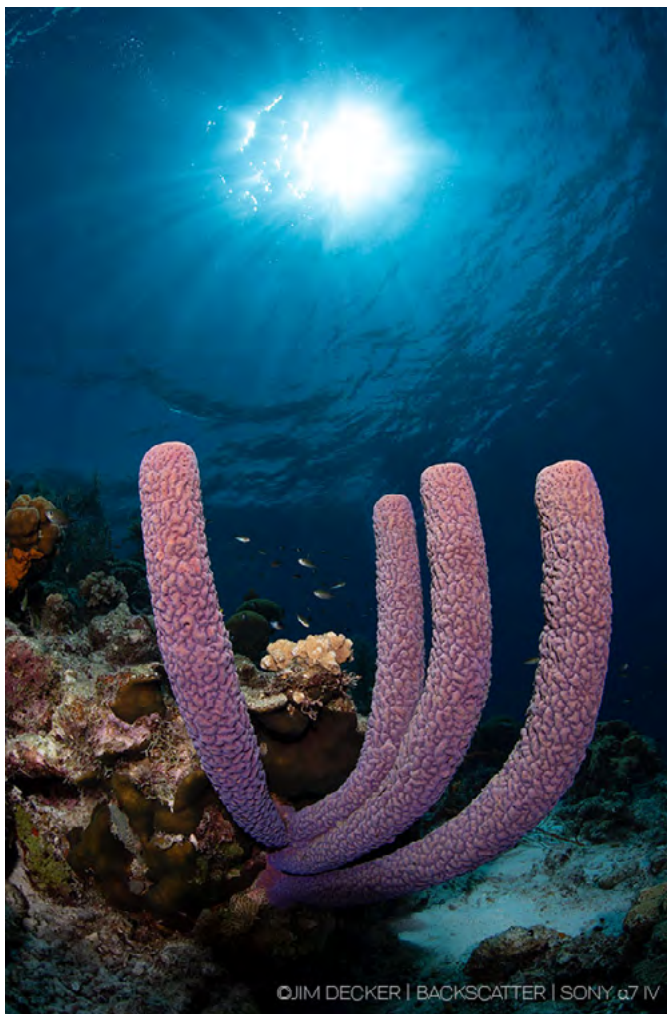
the lossy RAW format as it will cut down dynamic range. In underwater wide angle shooting dynamic range is everything, with the blue channel from the RGB sensor taking the biggest hit, and will show loss of

detail and banding before any of the other color channels. Six FPS isn't bad, and most people shooting with strobes will probably won't shoot that fast. Pro-level shooters will probably find this spec to be inadequate as we've been accustomed to at least 10 FPS and having pro-level big battery strobes keep up at lower power levels.

I shot the Sony a7 IV alongside the Sony a1 during testing and one thing not in the specs that I noticed is there seemed to be a bit of a shutter lag when taking a picture compared to the Sony a1. Sure the Sony a1 is blazing fast and super responsive, and after being spoiled on it, little things become noticeable. After a day of shooting the Sony a7 IV I got used to it and I guess most people not coming from a high-end camera such as the Sony a1 probably wouldn't notice.

Surprisingly Good Autofocus Performance

Something that took me completely by surprise, and the thing I was most worried about, was how well the autofocus stacked up against the Sony a1. I have to say that in practical underwater usage, I didn't notice much of a difference compared to the Sony a1. Which is mind-boggling when you consider the \$4000 price difference between the 2 cameras. Previous base model a7 cameras had pretty abysmal autofocus performance with the Sony 90mm macro lens that autofocus was pretty useless when getting anywhere near to the minimum focus of the lens. Even the higher-end Sony a7R IV had the same poor performance with the Sony 90mm. This all changed with the Sony a1 and its massively improved AF tracking, where it could track blenny eyeballs through a diopter, and the Sony a7 IV performed the same.



The EVF of the Sony a7 IV is great, allowing me to see both the sunball and tube sponge in the foreground, just like the more expensive Sony a1.
Sony a7 IV | Canon 8-15mm Lens | 1/250 | ISO 100 | f16



Being able to go down to ISO 50 allows for more open apertures while maintaining a dark background while snooting. The image quality bump from less diffraction combined with the nice sensor from the Sony a7 IV makes for a high-quality photo.
Sony a7 IV | Sony 90mm Lens | 1/250 | ISO 50 | f13



While 6 frames per second shooting is respectable and will meet most shooters' needs, some pro-level shooters might be wanting for more.
Sony a7 IV | Canon 8-15mm Lens | 1/250 | ISO 100 | f16



I was surprised by how quick and responsive the tracking autofocus is on the Sony a7 IV. It had little issue in keeping up with an erratic subject such as a fairy basslet.

Sony a7 IV | Sony 90mm Lens | 1/250 | ISO 250 | f11

Same Great Ambient Light White Balance Performance As The a1 And a7S III

Another big question I had before shooting the Sony a7 IV was will it have the same poor ambient light white balance as previous Sony a7 series cameras or will it get the excellent white balance performance of the Sony a7S III and Sony a1. I'm glad to say it performs identically to those cameras. Colors look good even past 70-80 feet and you'll be able to nail top-notch color in-camera with no color correction in post needed. This is a total game-changer for a camera in this price range from Sony.

Respectable 4K60p Video Spec

A video spec of 4K60p is what I would consider the minimum bar to be met to be considered for shooting video in this day and age. This camera will capture that, albeit at a 1.5/Super 35mm crop. Some might snivel at the crop factor, but in reality, I've found it to be a non-issue. Wide video can be shot with an Canon 8-15mm lens that will give some useable zoom range starting around 9mm. Macro video can be done at greater distances with more depth of field due to the crop factor.

A very cool feature of the Sony a7 IV is that it has a separate video/photo switch on the camera rather than being on the mode dial. There is also the ability to separate video and photo settings. One could set up the video side for 1/125, f8, auto ISO and -0.7 exposure comp with a custom white balance and be ready to go at the drop of a hat. This makes it very easy for a hybrid video/stills shooter to make quick switches on the fly.



The custom white balance is massively improved over the Sony a7 III and is on par with the great capabilities of the Sony a7S III and Sony a1.

Conclusion

The Sony a7 IV has been a box of surprises. Most underwater shooters considering Sony full-frame would have looked right past the base model a7 cameras in the past, but the Sony a7 IV is worth a serious look. Let's explore why.

While the Sony a1 is a fantastic no-compromise camera that truly can do it all, it does come at a very premium price that is \$4000 more than the Sony a7 IV. That is a big number that can't be swept under the rug, that prying spouses might give the evil eye to. Previous R series cameras weren't that much more, and the relative performance gap was much larger. Even the Sony a7R IV is only \$1000 more and it is the best hands down image quality we've seen yet. But in the areas of autofocus, white balance, and video, it lags behind the more affordable Sony a7 IV. Kudos to Sony for moving performance forward and not reserving new tech for only the higher-end cameras.

All that being said the only difference in price in a fully outfitted underwater camera rig between the Sony a7 IV, Sony a1, Sony a7S III, and Sony a7R IV is the camera body price. The lenses, ports, arms, strobes, cables, housing, etc. are all the same. So it really comes down to how much ramen you want to eat or if you're willing to live with lower specs.

Overall performance does feel a little sluggish compared to the much higher-end Sony a1, but not enough for me to not recommend this to someone who needs to save a buck or 4000.

Overall this is a really good value camera, that can produce good quality stills, and will work well for a hybrid video/photo shooter.

Who Is This Camera For?

For someone looking for an entry-level full-frame mirrorless camera, my first pick would be the Sony a7 IV. If someone was looking for a smaller rig, this is not it. Despite the lower price point, the camera body size is near identical to the other a7 cameras. Full frame optics mean full-frame sized lens ports. Someone who wants a smaller alternative with great image quality and faster shooting

performance should take a serious look at the OM System OM-1, but only if they are a still shooter with no interest in video.

If someone was primarily a video shooter, the Sony a7S III for \$1000 more will get you 4K120p from full sensor width and a corresponding increase in overall video image quality. At Backscatter it is our current favorite mirrorless camera for video.

For a still shooter who demands the utmost image quality, the Sony a7R IV at \$1000 more will produce the best image quality of anything out there for full-frame. The images are quite stunning. The downside is

video is quite disappointing with only 4K30p and a custom white balance that doesn't really execute past 40ish feet.

The ultimate of speed, image quality, 8K30p, and 4K120p video, and accurate white balance down past 80-90 feet, look no further than the Sony a1 which can do it all and do it well, but albeit at a much higher premium price of \$4000 more.

If you can live with the slower shooting speed, lower resolution, and 4K60p, then the Sony a7 IV deserves a real hard look.

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