

Sony Alpha A7 II & Nauticam NA-A7II review

by Phil Rudin

The Sony Alpha A7 II is the fourth in the lineup of Sony full frame mirrorless cameras and the first to include sensor based in-body image-stabilization.

The Sony A7 & A7r released in early 2013 were the first mirrorless interchangeable lens cameras to feature a full-frame sensor in a mirrorless package the size of the current Olympus E-M1 & E-M5 II mirrorless cameras. Sony has made it quite clear that they intend to challenge Canon and Nikon in the pro and pro-summer markets by focusing heavily on their full-frame line of cameras.

Sony Alpha A7 II camera

The Sony A7 II is the first in the Alpha line to offer 5-axis sensor-based image-stabilization on a full-frame 24MP CMOS sensor. It is also first in the new Mark II lineup replacing the A7 with a somewhat larger and 25% heavier (600 v. 474 g) magnesium alloy body like the A7s.

The rugged new build quality enlarges the grip size making the

camera easier to hold out of water and also includes improved weather sealing.

The custom buttons are well laid out and any number of functions can be assigned to better assist with your photo needs. I have auto focus assigned to the AF/MF AEL switch button for rear AF control. By pushing the trash button the AF reverts to the shutter button and then resets to the AEL button when pushed again. This is very helpful if you use the camera to shoot above and below water allowing rear focus for U/W and shutter control for above water.

The A7 II includes improvements to the AF system with on-sensor phase-detect points and Bionz X image processor, a 3-inch tilting LCD with 1.23 million dots, an excellent and industry leading 2.36M dot OLED electronic viewfinder, 1080 video footage at up to 50Mbps (XAVC S) and a flat 'S-logs', Wi-Fi with NFC and more at the same US price point of around \$1700.00 as the past A7. My big gripe with Sony remains the fact that they don't provide a simple battery charger with



the camera instead providing a USB charger with a very short cable not long enough to reach from an outlet to the top of my desk. A simple Sony branded wall plug-in battery charger is under \$30.00 why not include it with a camera being marketed as

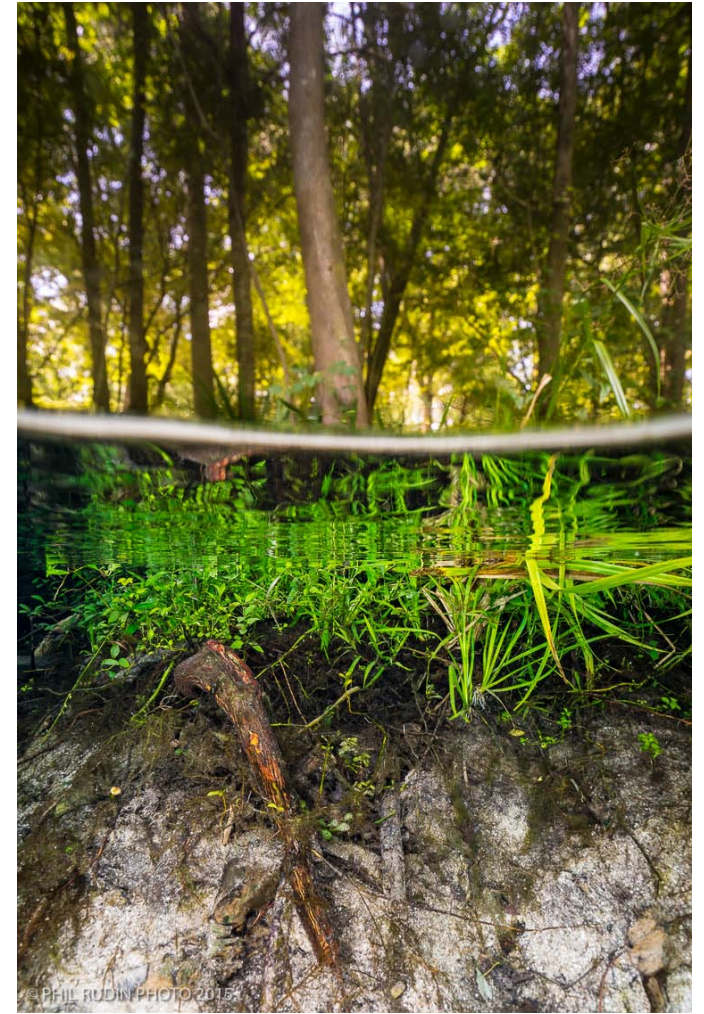
“professional”.

Battery life is also an issue with all mirrorless cameras compared to DSLR's without an EVF. My last gripe is the media card door - it opens with just the slightest bump. This is an issue I have never had with other



© PHIL RUDIN PHOTO 2015

Both shots taken in Ginnie Springs Florida, Sony A7II, Nauticam Na-A7II Housing, Sony 16-35mm At 16mm, Iso-400, F/5.6, 1/125th, Two Inon Z-240 Strobes.



© PHIL RUDIN PHOTO 2015

digital cameras and is a real bummer regarding the integrity of the weather sealing.

A new Alpha 7r II will be released by the time this article posts in this issue of UWPMAG.com for around \$3200.00 and I am sure we will be seeing an Alpha 7s II upgrade in the near future as well.

Nauticam NA-A7II Housing and Ports

One of the big advantages of the A7, A7r, A7s lineup is that all of these cameras were built on the same frame with almost the same button placement so one housing can be used with all three cameras.

Most popular among underwater photographers have been the A7r for its 36MP high resolution still images and the A7s for its excellent 12MP low light

video capability. Two completely different purpose built cameras that both fit into the same housing using the same ports and accessories is rare indeed.

The Nauticam NA-A7II housing is a new design to accommodate the larger Mark II camera bodies and the A7r II will work in the A7 II housing as well although future housings will at the very least have a control for the mode locking button on top of the A7r II mode dial which is not featured on



A7 II housing.

The A7 II housing retails for a US price of \$2850.00 which is the same price as the A7, A7r, A7s housings. The Nauticam NA-A7II housing is also \$450.00 less than the Nauticam NA-6D housing for Canon's 20MP 6D full frame DSLR camera and \$650.00 under the Nauticam NA-D750 housing for the Nikon D-750 which uses the same 24MP Sony sensor.

The Nauticam NA-A7II housing has all of the same features as the excellent lineup of Nauticam DSLR housings but is built around the 100 mm port mounting system rather than the 120 mm mount used on the DSLR housings. This places the housing size squarely between housings like the NA-EM1 M43 housing with its 85 mm port mount and the NA-D810 and D750 housings with weight differences of 1.80kg for NA-EM1, 2.9kg for the NA-D810/750 and 2.35 kg for the NA-A7II housing.

The NA-A7II housing has the same excellent twin locking system used on all of the Nauticam DSLR housings. This secures the front of the housing to the read by turning the locking device 90 degrees. To unlock push the two red safety locking buttons in and turn the locks.

The housing has corresponding levers, push buttons, control dials and switches for every function on the camera body. These controls are very well placed and should be easy to use even with heavy gloves. The rear half of the housing has a large LCD window with an optical glass, quality pickup finder for viewing the EVF. I have replaced this with Nauticam's excellent 45 degree optical viewfinder. This is at least the sixth Nauticam housing where I have used this same viewfinder. Switching between the pickup finder and the 45 degree viewfinder takes me less than a minute and the larger viewfinder really helps those with aging eyes who are seeking better critical focus and composition.

The signature Nauticam red port locking lever is on the front righthand side of the housing and the lens release level is on the left. These allow you to remove the port and install lenses without removing the camera or even opening the housing, a feature I find very useful from time to time.

An M14 accessory port is located on the top rear half of the housing for the integrated vacuum system check and leak detection valve. The switch to turn on the vacuum system electronics is located in the rear half of the housing along with the audible



Model Romen, Sony A7II, Nauticam NA-A7II Housing, Sony 16-35mm AT 35mm, ISO-100, F/4, 1/800th, A/V light, wide open at 35mm

alarm and LED warning light. This is an accessory I highly recommend since the housing already comes with all of the electronics and flood alarm built in. The M14 valve is \$220.00 and includes the pump and a tool for user removal and installation of the valve.



Polka-Dot Batfish, Sony A7II, Nauticam NA-A7II housing, Sony 90mm macro, ISO-200, F/11, 1/125th, two INON Z-240 strobes.

The M16 accessory port on the front half of the housing can be used for electrical bulkheads when they arrive for the new Sony hot-shoe allowing manual flash connection with Nikonos, Ikelite and other sync cords. This port can also be used for HDMI out to devices like Atoms Ninja2 and small monitor housings like DP4 monitor, plus hydrophone installation.

The included handgrips are rubberized and very comfortable to use, they accept a verity of ball heads for video and strobe lighting as well as other accessories. Two additional

ball mounting points can be added to the housing over the included support brackets for the handgrips. The top of the housing also features two fiber optic threaded ports for optical sync cords. These are triggered using the Nauticam flash trigger for Sony Alpha 7-series cameras. The accessory flash trigger (\$220.00US) fires a verity of fiber optic compatible strobes like the Inon and Sea & Sea flashes in the manual mode.

The two included batteries provide thousands of flashes and reduce the drain on the cameras



Northern Stargazer, Sony A7II, Nauticam NA-A7II housing, Sony 90mm macro, ISO-200, F/14, 1/125th, two INON Z-240 strobes.

battery since no on-board camera flash needs to be recycled.

Nauticam has a verity of port options for the 100 mm port mount and some excellent port adapters for the 120 mm DSLR ports as well. This will allow users moving over from Nauticam DSLR housings to use some of their ports and to migrate some DSLR lenses using lens adapters like the Metabones EF and several other lens adapters. Also make sure that if you are migrating from the A7 housing to A7 II housing that you check the new and expanding A7 II

port chart as some lens configurations have changed.

Field Testing the Alpha A7 II System

Let me say upfront that the Sony A7 II system is a three year old work in progress that has been taking giant leaps with each new Alpha 7 release. The Sony lens line offers eleven FE lenses with twenty coming by 2016 and while incomplete compared to Canon, Nikon, Olympus and others each new Sony lens release has been



Conch eye. *Sony A7II, Nauticam NA-A7II housing, Sony 90mm macro, ISO-200, F/9, 1/125th, two INON Z-240 strobes.*



Sand Diver. *Sony A7II, Nauticam NA-A7II housing, Sony 90mm macro, ISO-200, F/11, 1/125th, two INON Z-240 strobes.*

brilliant.

For my review I have been using the newly released Sony FE 90mm F/2.8 macro G OSS and the Sony Vario-Tessar T* FE 16-35mm F/4 ZA OSS lenses. Both lenses are excellent and should be able to handle the higher resolution of the Alpha 7r II (42MP) with ease.

The 90 macro is without question the best macro lens I have ever used on a film or digital camera. The 16-35mm zoom on full frame can produce sharp images all the way

into the corners using the Nauticam 180mm optical glass port which is the same port recommended for the Olympus 7-14mm zoom on an M43 sensor. To attempt to equal these results on a full frame DSLR you would need a 230mm dome port. I can't say enough about how impressed I am with this equipment and I can't wait to test these lenses with the new Alpha 7r II when it arrives.

By design full frame mirrorless cameras require larger lenses than smaller sensor mirrorless cameras

but they don't need excessively large dome ports which makes the system about as easy to pack and travel with as mirrorless system.

The port extensions and dome for the 16-35mm zoom are 120mm so quite a bit of air is trapped inside the housing making it very well balanced in the water, however the port does have a tendency to want to point up a bit. This is not so far out of control that you will need to add weight but something to be aware of. Sony has not yet released a quality

FE fisheye lenses and has offered W/A (21mm) and fisheye adapters that can be mounted on the Sony FE 28mm F/2 lens much like the adapters for the E mount 16mm for NEX and A5000/6000. The difference is that the FE 28mm has much better native image quality than does the E 16mm. Nauticam has port solution's for both lens adapters using the 28mm F/2 but I would wait a few months to see what Nauticam may be offering going forward. I am not keen on adapting any of the manual focus



© PHIL RUDIN PHOTO 2015

Ginnie Springs Florida, Sony A7II, Nauticam NA-A7II housing, Sony 16-35mm AT 17mm, ISO-400, F/5.6, 1/800TH, A/V light NOTE THAT THIS IMAGE WAS PUSHED FIVE STOPS OF LIGHT FROM ISO-400 IN LIGHTROOM AND WAS TAKEN WITH AUTO FOCUS IN NEAR DARKNESS.

wide or fisheye offerings although some choices like the Rokinon 12mm fisheye are getting great reviews.

When testing new equipment I will often be using prototype or make shift solutions rather than finished products. This was the case while testing the 90mm macro which I tested before the release of the N100 Macro Port 105 for Sony FE 90mm macro with A7 II housing. My test port was an adapter to 120mm two extensions and a DSLR macro port. This configuration left the lens sitting about 12mm from the inside glass and rendered it mostly useless for shooting with closeup lenses like the SMC-1. I did however find that the 90mm macro lens focus was fast and very accurate in most all lighting conditions and the new port when it arrives will of course have the 67mm threads for closeup lenses with and without flip adapters. I carry a focusing light but did not find much need for it with the macro lens.

I had the lens set at the 0.5M to 28cm range lock which renders life size

(1:1) and found that most of the subjects I wanted to photograph fit well within that shooting range. As I have said in past reviews it takes a few dives to get the hang of shooting within this rather short focus range. I find that the lens will hunt less at this setting and if I need to get more than half a meter from the subject I am probably using the wrong lens for the subject size.

The 16 to 35mm zoom with the Nauticam gear has a buttery smooth zoom action and I found my best results for adequate depth of field and sharpness were in the F/5.6 to F/13 range with F/8 to F/13 being ideal. I was impressed with the of the corner sharpness of the 16 to 35 zoom and the 180mm port considering this is a full frame formate camera.

For most images I was using two Inon Z-240 strobes with two 10 inch carbon fiber float arms and two 8 inch double ball arms. My focus light was mounted on the macro port and was not necessary for wide angle. Spoiler alert, for those of you thinking of moving from

a sub-full frame system to any full frame system. The larger number of MP's and the reduced depth of field at any given F/stop over sub full frame present a few issues. First, high megapixel cameras tend to highlight flaws associated with many lenses, so chose wisely when making lens purchases. Second the shallower DOF associated with full frame cameras requires more critical focus so taking a machine-gun approach to shooting may result in high numbers of poorly focused images.

If you are seeking the very best in image quality and a full frame camera and quality lenses are within your budget one of the Sony Alpha II series cameras should be at or near the top of your wish list. Thanks to Reef Photo/ Video and Nauticam USA teams for assistance with some of the equipment used for this review.

Phil Rudin