

A Year with OM Systems OM1 and an AOI UH-OM1 housing

by Andrew McLachlan

While living in Ontario, Canada I became a seasoned, topside, nature photographer. I dabbled in underwater photography using an Ewa Marine flexible housing for my Nikons with bullfrogs and snapping turtles during summer months in a wetland near our family cottage.

In 2022 I made a switch to a Micro Four Thirds format with Olympus / OM System and the feature laden OM-1 breathed new life into my photography.

The following year plans to relocate to Grand Cayman were on the horizon and a journey into photographing the mesmerizing realms of the underwater world had begun.

As I researched options to take my OM-1 camera beneath the surface I decided on products available from AOI. The contenders in my decision making were Nauticam, Ikelite, and AOI.

Nauticam was naturally the high-end contender but also far from my financial budget. This led me to weigh the options between Ikelite and AOI. I opted to purchase the AOI UH-OM1

Housing.

This housing is only slightly bigger than the camera itself and offers features and functionality that allow me to make the most of the OM-1 underwater. It is not only very affordable, but comes with a built-in vacuum analyzation and Wet Detection System (VWS) that continuously monitors the pressure to provide ample warning of potential leak issues.

The housing also includes, as standard, a built-in flash trigger that is RC compatible. Vacuum systems and flash triggers are add-on options for both Nauticam and Ikelite.

The UH-OM1 housing allows access to all the buttons on the OM-1 camera with the exception of the multi-selector joystick or the two custom buttons on the front of the camera. This is by no means a hindrance whatsoever as I simply assigned custom functions to other buttons that are accessible through the housing allowing me to effortlessly change various settings and move focus points accordingly while beneath the waves.



Green Sea Turtle photographed at Spotts Beach using the OM1 and M. Zuiko 8mm Fisheye Lens in my AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL ISO 200, f8 @ 1/250 sec.



8mm wide angle set up

The AOI UH-OM1 housing is made from injection moulded polycarbonate and is rated to 45 meters (147 feet) that is perfect for my needs as I spend most of my dives in the 30–60-foot range.

I am new to scuba diving having recently completed my refresher course and completed 20 dives here on Grand Cayman thus far. I do spend a lot of time snorkeling for photography and can easily descend to 10–15 feet to photograph marine life and reefscaapes when needed.

The UH-OM1 housing uses the AOI / Olympus PEN Port System, and an excellent assortment of lens ports are available for many of the M. Zuiko lenses.

Choosing a housing that supports the lenses you plan to use for underwater photography is crucial. I am currently using the DLP-06 port for the



A large female Southern Stingray being followed by Bar Jacks at the sandbar in North Sound on Grand Cayman photographed using the OM1 and M. Zuiko 8mm Fisheye lens in an AOI UH-OM1 housing with available light. ISO 500, f5.6 @ 1/640 sec.

M. Zuiko 8mm Fisheye Lens, the FLP-08 lens port for my M. Zuiko 7–14mm lens, and the FLP-02 Flat Port for my M. Zuiko 60mm Macro lens.

Most often I use the M. Zuiko 7–14mm and M. Zuiko 8mm Fisheye lenses for shallow water available light imagery with the latter being favored

over its smaller size and easier handling underwater given the small 4” dome port when compared to the 8” dome port for the M. Zuiko 7–14mm lens.

When I add my dual AOI Q1-RC Strobes (more on these later) to my fisheye or macro set-up I use two StiX adjustable buoyancy floats on each strobe



60mm macro set up

arm which leaves the rig slightly negative in the water. It is comfortable but not perfect. I plan to add one more float to each strobe arm to improve the buoyancy slightly.

As mentioned earlier the UH-OM1 housing comes with a built-in LED flash trigger, which is compatible with both manual flash trigger and the Olympus RC Mode. The built-in Vacuum Analyzation and Wet Detection System is powered by a built-in rechargeable lithium polymer battery that is charged by a USB-C charging port. The battery takes roughly 1.5 hours to be fully charged and is good for approximately 4 days (based on 3 one hour dives per day).

The controls and accessibility on the housing provide me with easy access to essential camera controls, buttons, and settings and allow for smooth operation of functions like shutter release, focus, and zooming of my M. Zuiko 7-14mm lens when it is in use.

Standard accessories included with the UH-OM1 housing are body cap, USB-C charging cable, LCD monitor hood, spare O-ring for vacuum valve protection cap, vacuum pump, spare main O-ring,



Christmas Tree Worms photographed using the OM1 and M. Zuiko 60mm Macro Lens in an AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL. ISO 200, f8 @ 1/250 sec.

spare secondary seal ring, silicone grease, silica gel, O-ring remover, and hot shoe connector.

For lighting I am using dual AOI Q1-RC Strobes. These are very compact in design with an underwater weight of 90 grams including batteries.

They have a guide number of 22, color temperature of 5,600K, and a beam angle of 85

degrees. A diffuser is included as standard gear with the strobes, but an optional dome diffuser (AOI SD-02) is available that increases the beam angle of the strobes to 110 degrees.

I find these compact strobes perfect for my macro and close focus wide angle requirements. The Q1-RC Strobe has three settings, RC, i-M,



and Manual. The RC mode syncs beautifully with the RC setting on the OM-1 for perfect TTL functionality. At this point in time this is my preferred go to setting. The i-M mode is essentially a TTL setting for more extreme macro photography and the Manual mode allows the photographer full creative control over the light output with 6 different light output settings for creative lighting techniques.

I have yet to photograph wide reef scenes at depth with the Q1-RC Strobes so I cannot effectively advise on this aspect of underwater photography.

After using OM System gear underwater since December 2023 I have not regretted my switch from Nikon for a nanosecond. My camera bag dropped by 15lbs because of the switch.

The micro four thirds format for mirrorless systems already has a well-established line up of lenses under the

M. Zuiko designation. M.Zuiko lenses are known for their optical quality, producing sharp and clear images. I purchased many of my M. Zuiko lenses used to save on the cost of switching camera systems.

I am very fond of the OM-1's tracking and animal eye detect system. It is very effective but will get fooled by subjects with noticeable eyespot markings as most eye detect systems will since algorithms used in these AF tracking modes looks for specific contrasts that might resemble an eye.

The OM-1's Underwater White Balance setting is a great feature for creating imagery with available light. I find it reminiscent of using the Magic Filter with my Nikons. I do hope to use my M. Zuiko 8-25mm lens underwater soon and will run a comparison of the Magic Filter vs the OM-1 Underwater White Balance Setting when I do.

By a longshot I find my very favorite set-up to use beneath the



waves is the M. Zuiko 8mm fisheye lens in the DLP-06 4" dome port with available light. I find the close focusing capabilities of the lens inside the small dome to be incredibly versatile for much of my photography. I can photograph frame filling images of Green Turtles at point blank range, split images (yes, splits with a 4" dome) of shallow reef scenes, and stingrays at the sandbar on Grand Cayman.

I also enjoy taking it to depth with dual Q1-RC strobes for close focus wide angle scenes of sponges,



anemones, and corals.

I typically use the OM-1 in Live View mode while underwater rather than the viewfinder. I find this technique to be a little easier for me to work with. I own and occasionally use Aoi's specially designed UMG-05 LCD 90-degree viewer that fits over the LCD screen area on the UH-OM1 housing but I do prefer to simply view the LCD screen through the housing as I can easily contort the housing to frame various subjects and still see the image I am composing.

One nice aspect of the UMG-05 is



Gorgonian and sun rays at Barefoot Beach on Grand Cayman photographed using available light with the OM1 and M. Zuiko 8mm Fisheye Lens in an AOI UH-OM1 housing. ISO 640, f8 @ 1/800 sec.



Purpermouth Moray Eel portrait photographed at Spotts Beach on Grand Cayman using the OM1 and M. Zuiko 60mm Macro lens in an AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL. ISO 200, f8 @ 1/250 sec.

that it can easily be affixed or removed from the housing while underwater, making it useful for the times it may be required and removed for those moments where it isn't necessary.

One of the main attractive features that resulted in my switch to OM System and the OM-1 body was size. The camera and lenses are physically smaller in size and generally less expensive than the full frame camera alternatives. This also

means that housings and lens ports are smaller in size and also less costly than those of the full frame options.

The sensor on the OM-1 is a 20-megapixel sensor that is about half the size of today's full frame cameras. However, the OM-1 is no slouch. When combined with the M. Zuiko line of lenses the images captured have excellent detail and by selecting the OM-1's underwater white balance setting the colours look accurate.

The OM-1 also exhibits excellent low light performance as well as auto-focus performance. In fact, the AF / Animal Tracking capabilities of the OM-1 is on par with the best full-frame options available today at one third of the price.

When I am photographing subjects such as sea turtles or stingrays with ambient light the AF tracking is superb. I will often photograph these subjects with the

20-fps setting on the OM-1, but often only in short bursts of 5-10 frames at a time. The OM-1 is also capable of shooting at 50 fps in the ProCap SH2 setting but do keep in mind faster frame rates mean more editing. I also find the AF Animal Tracking very useful when photographing small reef fish such as Sergeant Majors or various Butterflyfish.

While professional cameras and housings are more expensive



A large female Southern Stingray photographed at Spotts Beach on Grand Cayman using the OM1 and M. Zuiko 8mm Fisheye lens in an AOI UH-OM1 housing using available light. ISO 800, f8 @ 1/800



Common Octopus photographed at the entrance to it's home using the OM1 and M. Zuiko 8mm Fisheye lens and available light. ISO 100, f8 @ 1800 sec.



than consumer options, the benefits they provide in terms of image quality, control, and durability make them essential tools for serious underwater photography.

Selecting a camera with excellent image quality, superb low light performance, excellent auto-focus capabilities, full manual control, durability, customization options, white balance control, RAW file format, and have a strong line of superior optics is within reach with the OM System OM-1 camera.

Equally important is a housing that allows the user to operate the camera effortlessly underwater. The AOI UH-OM1 allows me to operate my OM-1s the same way I do for my topside photography.

The past year exploring the underwater world of Grand Cayman has been utterly fascinating. I am looking forward to the coming year as I will

be diving to depth a lot more often for many new experiences and opportunities through the lens.

Underwater photography is a thrilling and rewarding experience, but it does require some specialized equipment to capture stunning imagery. The AOI UH-OM1 housing, lens ports, and strobes may be considered an entry level system, but they certainly offer professional quality at an affordable price point and emerge as a game-changer for those using the Micro Four Thirds format wishing to explore a trove of underwater wonders.

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