

Olympus E-M5 Mk11 & Ikelite TTL housing

by Phil Rudin

Ikelite Underwater Systems, a US company with world distribution debuted a new housing and port system for the Canon EOS 100D/SL1 at DEMA 2013 which I reviewed in issue #78 of UWPMAG.com. At DEMA 2014 Ikelite again debuted a line of mirrorless camera housings using the same port system as the Canon EOS 100D housing. I had a chance to test drive one of these new housings designed for the new Olympus E-M5 MKII M43 mirrorless camera while instructing the Underwater Digital Fiesta 2015 Workshop in Cozumel Mexico.

OLYMPUS E-M5 MKII

The Ikelite housing is designed around the very tiny Olympus E-M5 MKII camera which uses the 16MP micro four-thirds CMOS sensor. This camera is an upgrade to the original Olympus E-M5 which is one of the most successful mirrorless cameras for underwater use.

Updates include an improved 5-axis image stabilization system for both still and movie modes which has a CIPA rating of 5 stops, 10fps continuous shooting, 5fps with AF, 1/8000 maximum shutter speed with 1/16000 using the electronic shutter, built-in WiFi, a redesigned clip-on rotating bounce flash which only works with this camera, 1080/60p max video resolution rate, better battery life over E-M5, 44 grams less weight and



the E-M1 electronic viewfinder, rear LCD screen, 81-point AF and AF system speed.

Image quality wise EM5 and E-M5 MKII are the same and still lag a bit behind E-M1. Since the original Olympus E-M5 was introduced several new camera lines have entered the market giving the E-M5 MKII much more competition than the original camera had.

While some of these cameras have slightly higher video quality or overall image quality none is a more complete system or has as complete a line of quality lenses suited to underwater photography.

The Olympus 12-50mm with macro function, the dedicated 60 mm macro, the new 7-14 mm F/2.8 Pro, 9-18 mm zoom and 8 mm F/1.8 Pro fisheye and the 12 mm F/2 are some of the best lenses for underwater photography that I have used.

Panasonic also has quality M43 lenses like the 45 mm F/2.8 macro, 30 mm F/2.8 macro, the 7-14 F/4 and 8 mm fisheye F/3.5.



IKELITE E-M5 MKII HOUSING AND PORT SYSTEM

Ikelite Underwater Systems has been making underwater photography equipment for over fifty years. The company has an outstanding reputation for customer service with new equipment and aging equipment, offering upgrades and fast service turnarounds to their many loyal customers.

Ikelite's housings are made with a high grade polycarbonate blend which is extremely strong yet remains clear and lightweight. These clear polycarbonate housings provide an excellent view of all of the camera controls and O-rings after the housing is sealed.



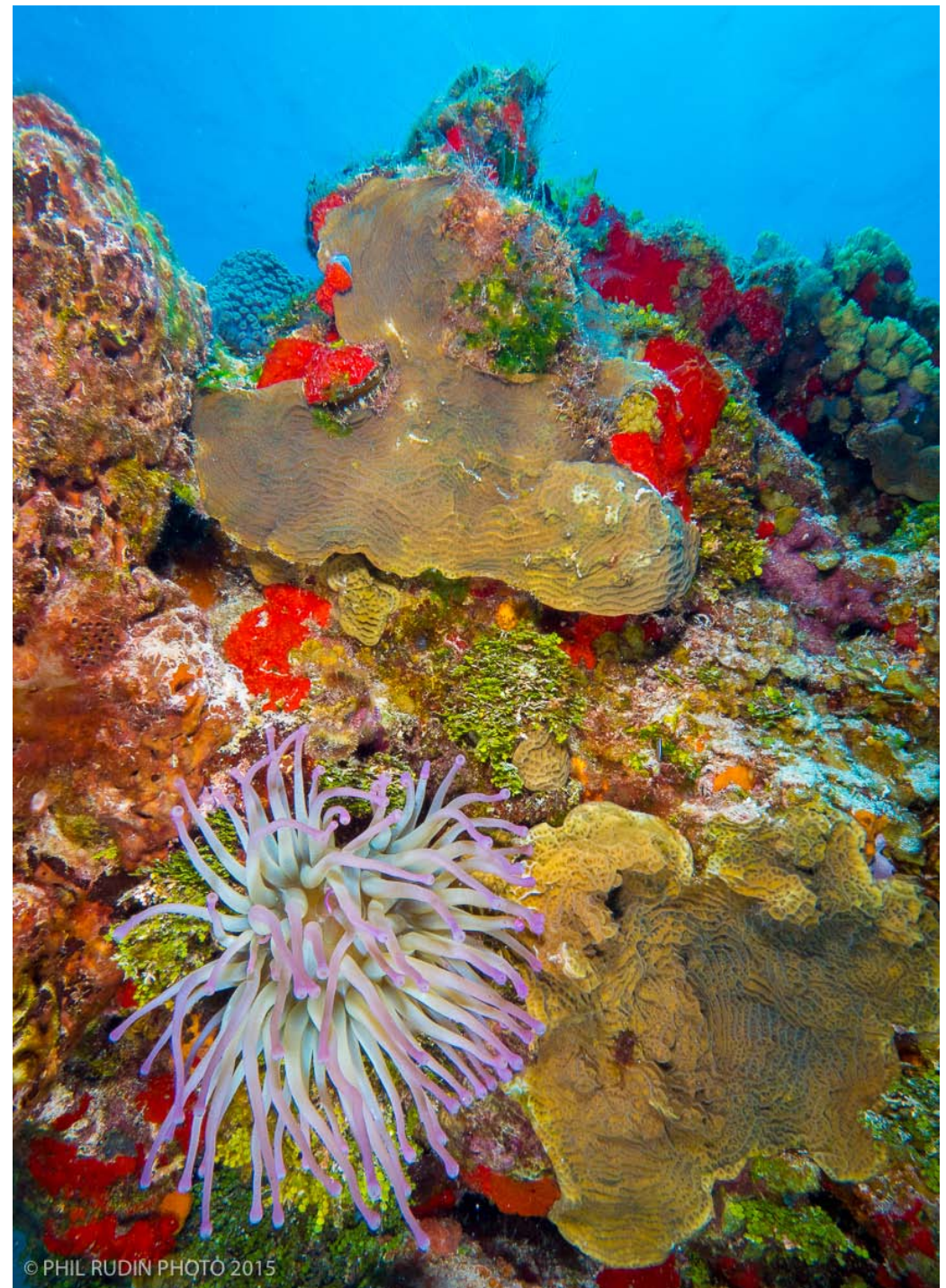
The very first thing you will notice about all of Ikelite's mirrorless housings is how small they are. The Olympus E-M5 MKII housing is even smaller than the Canon EOS 100D housing I reviewed last year. This is because the housings use the Ikelite proprietary TTL strobe sync ports which do not require use of the cameras on-board flash to fire external strobes.

The Olympus E-M5 MKII has a quite tall clip-on strobe which adds to the size of the bump over the camera in other housings using fiber optic cords to fire external strobes. Ikelite

sync ports come with Ikelite and Nikonos wiring configurations for the type of strobe cord you may be using.

My housing was a prototype which did not have the TTL circuitry so all of my images were shot using manual settings on the Ikelite DS161 strobes I was using. The upside to the

***Giant Anemone and Sheet Coral,
Olympus E-M5 MKII,
Olympus 9-18 mm zoom mm lens at
9mm, Ikelite housing, two Ikelite
DS161 strobes, ISO-320, F/9, 1/320th
sec.***





Candy Cane Lobster, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, Nauticam CMC-1 C/U lens, ISO-200, F/20, 1/320th sec.

manual strobe settings is that you can cheat on the max flash sync to get higher shutter speeds.

The M-E5 MKII has a top flash sync speed of 1/250 with the onboard flash, but I was able to extend that to 1/400 shooting manual which can be quite useful for both wide angle and macro shooting. I tested the system with my E-M1 which syncs to 1/320 and was also able to trigger the flash at 1/400.

The Olympus E-M5 MKII housing has four main components, the front “box” where the camera sits, a flat rear door, the removable front port and the camera tray which attaches to two mounting points on the bottom of the housing. The front part of the housing where the camera sits has a track at the bottom that the camera tray slides into.

Once the camera is aligned in the housing the TTL bulkhead connector is mounted on the camera

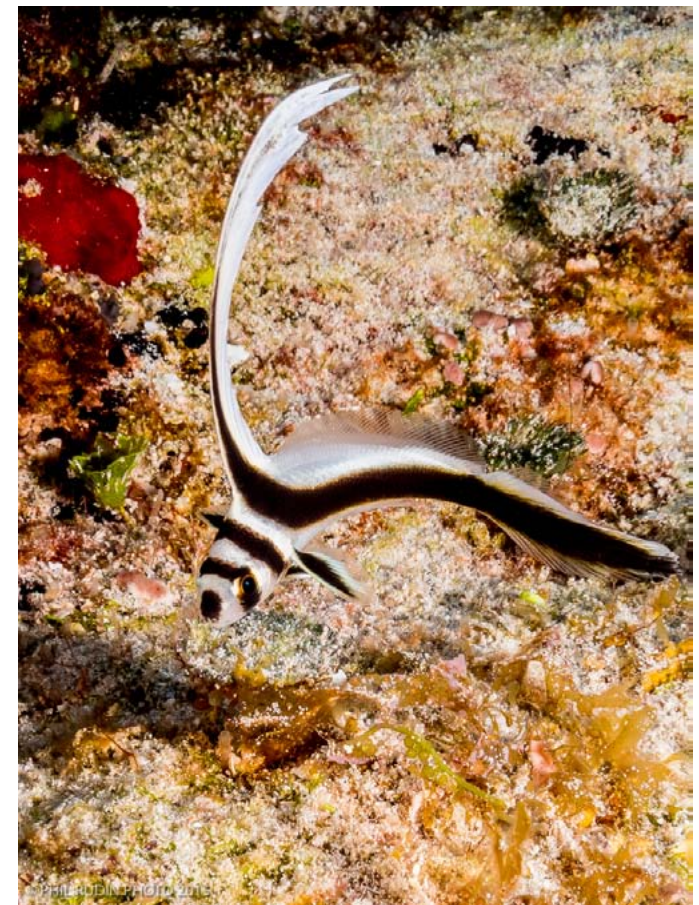


Bluestriped Grunts, Olympus E-M5 MKII, Olympus 9-18 mm zoom mm lens at 9mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/8, 1/400th sec.

hotshoe and the housing is ready close. The rear door of the housing is then secured by facing the housing down and making sure that the rear door O-ring has properly seated in the front half of the housing.

The two heavy duty lid snaps are then secured by pushing down. You should hear the lid snaps click into the locked position and you should not be able to lift the snaps without pushing in the snap locking device. I like to use equal pressure on both lid snaps so that they lock simultaneously.

Once the camera is secured inside the housing you can see the controls on the camera and align then with the housing controls. The right hand side of the housing has the vertical shutter release, while the left hand side has the lens release control which allows you to change lenses by removing the port and not the camera from the housing.



Jackknife Fish, Olympus E-M5 MKII, Olympus 9-18 mm zoom mm lens at 18mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/13, 1/400th sec.

The left hand top of the housing has the sync port for the strobe cord and an on/off dial which also allows access to the locking control for the mode dial. On the right top of the housing are dials to control the two right control wheels which I had programed for Shutter speed and Aperture control, four push buttons also operate the HDR control, live view control, the video start/stop control (which is



in a great location where it won't be accidentally activated) and an additional programable control.

The rear door has the pickup viewfinder which can be replaced with an optional straight or 45 degree optical magnifier to enlarge the view of the electronic viewfinder which is already quite large for a camera of this size.

At the top left is the mode control dial and on the right is the dial which controls the 1 and 2 program level, below that are push buttons for Menu, Info, trash and review, these surround the four-way arrows and OK button. These four buttons can be programmed to control any number of functions.

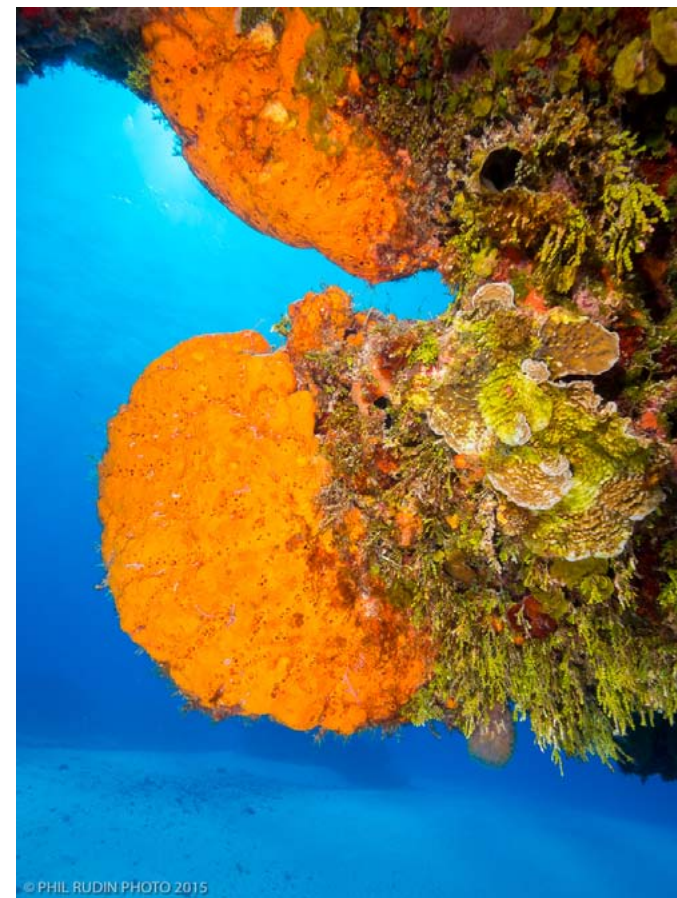
The E-M5 MKII is the first of the OMD cameras that defaults to the super menu screen which I use frequently for changing ISO, AF settings, AF area settings and much more. Not included with the housing is an AEL/AFL control level for rear auto focus. This is a function I use on my E-M1 housing all the time to focus in both wide angle and macro work rather than using the shutter half push. I hope Ikelite will offer an AEL/AFL control as an option for those of use who want that



extra bit of control.

Ikelite's port mounting system is simple and ingenious. Rather than having an O-ring on each of the ports the O-ring is located on the port mount on the front of the housing. Just push the port onto the port mount and secure the three small thumbs screws supplied with the port into the grove behind the O-ring to secure the port in place. I found this system to work quite easily and the ports have a very secure feel when mounted. Ikelite has macro ports for the Olympus 60 mm and Panasonic 45 mm macro lenses, both with 67 mm threads for mounting closeup lenses.

Ikelite also has a six inch dome port with built-in zoom control for Olympus 9-18 mm, 12-50 mm without macro control, 12-40 with a 1.2-inch extension, all of the 14-42 mm lenses, Panasonic 7-14 mm, a fisheye port for the Panasonic 8 mm and



Orange Sea Sponge, Olympus 9-18 mm zoom mm lens at 9mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/8, 1/400th sec.

gears for most of these lenses.

A mirrorless port adapter for the modular 8-inch dome is also available with more to come. Ikelite is already designing an extension and gear for the new Olympus 7-14 mm F/2.8 Pro and an extension for the 8 mm F/1.8 fisheye Pro lenses. I favored the 9-18 mm zoom over the Panasonic 7-14 mm zoom during my tests due to better corner

sharpness.

I think the 8-inch dome may be the best choice for the 7-14 mm lenses and for over/under work with any of the wide zooms. These ports can also be used with the other Ikelite mirrorless housings and Canon EOS D100 housings.

FIELD TESTING

For my review I used the Ikelite housing with Ikelite dual handle tray for compact housings, a double ball arm system with top handle an Ikelite Vega Video/Photo light and two DS161 strobes with an Ikelite dual sync cord.

I found the system because of its small size to be a bit negatively buoyant and would suggest adding foam blocks or float arms for better overall balance control. Once in the water the system is extremely easy to dive or snorkel with being every bit as streamlined as many of the small mirrorless housings I have tested in the past.

I shoot with 45 mm and 60 mm macro lenses and the 9-18 mm and 7-14 mm wide angle zooms. I also used the Ikelite fluorescence equipment and a Nauticam CMC-1 closeup lens for super macro. Both of the small macro ports worked quite well and I had no problem installing and removing the CMC-1 from the front of the port.

The wide angle zoom lenses use a gear which simply pushes onto the lens from the front of the lens once the camera and lens are mounted in the housing. The port is then installed over the gear and is held in place between the port mount and the Port so that it is never misaligned. The gear is moved by a knob on the dome port not on the housing which reduces the size of the housing. The zoom control can be reached while holding the left tray handle if you have fairly long fingers.



Octopus, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, ISO-200, F/18, 1/400th sec.

The vertical shutter release is also easily reached while holding the right handle and I had no problems with locking AF and holding the half press before releasing the shutter. Auto focus seemed every bit as fast as with my E-M1 for all lenses except in the lowest of light where the focusing light came in handy.

I used the EVF and pickup viewfinder for all of my macro work and split between the EVF and live view LCD for wide angle. This camera has excellent response in live view which I would not hesitate to use with moving subjects like sharks.

I am still sticking to S-AF for both EVF and LCD shooting finding C-AF on E-M5 MKII while greatly improved still not on par with equivalent DSLR cameras.

This is an excellent little housing system for travel, those entering underwater photography looking for a moderately priced system, instruction,



Sailfin Blenny, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, ISO-500, F/20, 1/400th sec.

for those invested in the Olympus M43 glass and for photographers of any skill level. Ikelite also has housing of similar size for the original E-M5, E-M10 E-PL7 and an E-M1 housing in the works.

Regarding an upgrade from your current OMD, I am not sure that the switch from E-M5 to MKII will be worth the cost for underwater use. Above water the high resolution mode (40+MP's) may interest still life photographers but in its present form it would be of no use underwater.

In addition to the Olympus line of mirrorless housings Ikelite also has mirrorless housings for the Sony Alpha A6000 with Sony full frame A7/A7R/A7S housings in development, for the Panasonic GX7 and larger GH3/GH4 housings and the Black Magic Pocket Cinema video camera. All but the Panasonic GH line use the same port mounting system and ports as the EM5 MKII.

The Ikelite E-M5 MKII housing and tray

*Olympus E-M5 MKII,
Olympus 60 mm macro
lens, Ikelite housing, two
Ikelite DS161 strobes,
Ikelite fluorescence
equipment, ISO-500, F/3.2,
1/400th sec. Converted to
B&W in LightRoom 6.*

retails for \$1050.00, Ikelite ports range from \$250.00 for the macro ports to \$400.00 for the 8-inch dome port. Ikelite TTL strobes range in price from around \$400.00 to around \$1200.00 for the DS161 strobe/video light with Li-Ion battery technology which produces over 450 full power flashes, quite impressive.

The Olympus E-M5 MKII retails for around \$1099.00. You can contact your local authorized Ikelite dealer for pricing in your area. For further information on this new system including weight and dimensions visit the ikelite.com web site.

I would like to thank Ikelite for their support both for Underwater Digital Fiesta 2015 at Casa Del Mar in Cozumel, Mexico and for the test equipment used for this review.

I would also like to thank Jorge Gonzalez owner and organizer of underwaterdigitalfiesta.com now

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