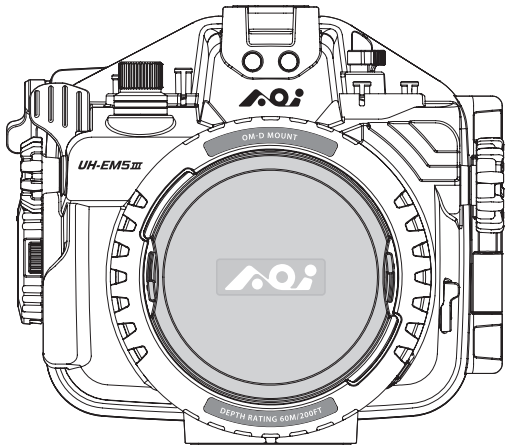


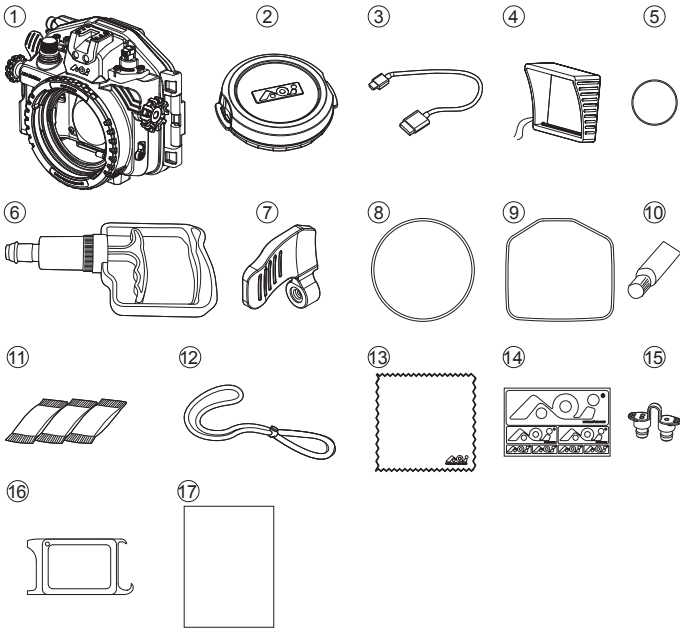


AOI UH-EM5III UNDERWATER HOUSING  
GENERAL GUIDE



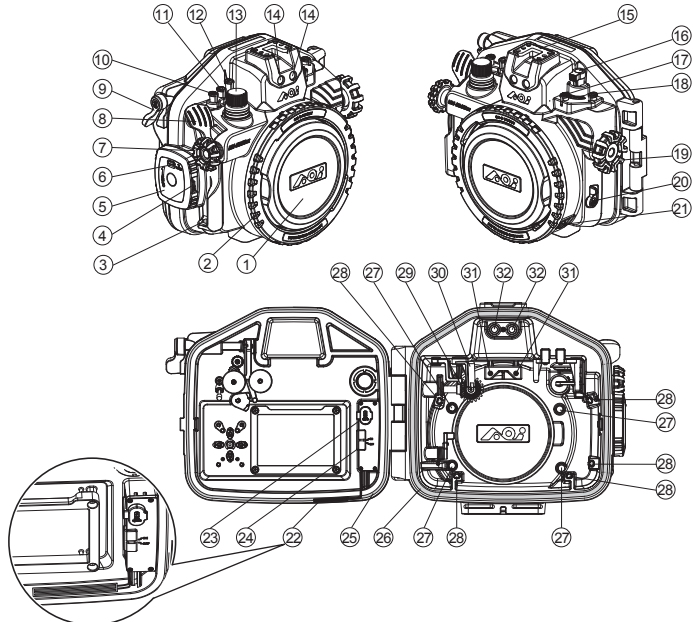
Thank you for your purchase of an AOI product. Please read this general guide prior to using the housing. It will provide an overview of how this product can be used for optimal performance. For additional information, please consult your local dealer or write to [info@aoi-uw.com](mailto:info@aoi-uw.com)

Items Included in the package

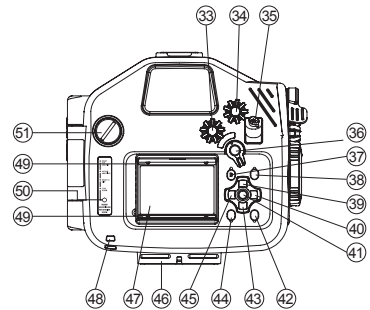


- 1 AOI UH-EM5III Housing Body
- 2 Body Cap / Storage Box for OM-D Mount Housing
- 3 USB Type-C Charging Cable
- 4 Monitor Hood
- 5 Spare O-Ring for Vacuum Valve Protection Cap x1pc
- 6 Vacuum Pump (AOI VP-01)
- 7 Extended Shutter Release Lever
- 8 Spare Main Seal O-Ring x1pc
- 9 Spare Secondary Seal Ring x1pc
- 10 Silicone Grease (AOI SIGR-5)
- 11 Silica Gel (AOI SIGE-3) x3pcs
- 12 Lanyard
- 13 AOI Lens Cleaning Micro Fiber Cloth
- 14 AOI Logo Sticker
- 15 Fiber Optic Cable Port Plug x2pcs
- 16 AOI O-Ring Remover
- 17 White Balance Card (AOI ORR-01)

Names of the Parts



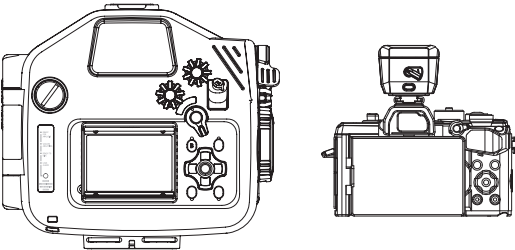
- 1 Body Cap (Storage Box)
- 2 Port Locking Ring
- 3 Lanyard Eyelet
- 4 Cam Lock Release
- 5 Cam Lock
- 6 Security Lock
- 7 Front Dial
- 8 Shutter Release Lever
- 9 AEL/AFL Button Lever
- 10 Button
- 11 Video Button
- 12 LOCK Mode Dial
- 13 Vacuum Valve
- 14 Fiber Optic Cable Ports
- 15 Cold Shoe Mount
- 16 Camera ON/OFF Lever
- 17 Button
- 18 Button
- 19 Gear Control Knob
- 20 LENS RELEASE Lever
- 21 Security Lock for Port Locking Ring
- 22 Wet Detection Strip
- 23 USB Type-C Charging Port
- 24 Power ON/OFF Switch for Vacuum Analysis and Wet Detection System (VWS)
- 25 Main Seal O-ring
- 26 Secondary Seal Ring
- 27 Camera Front Stoppers
- 28 Camera Positioning Bumpers
- 29 Bridge Gear for Lens Gear
- 30 Camera ON/OFF Actuation Lever
- 31 Camera Top Stoppers
- 32 LED Flash Trigger Ports



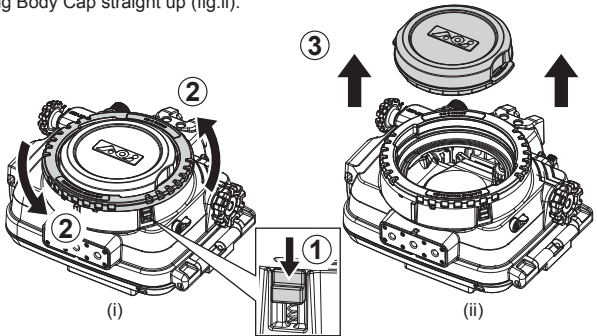
- 33 Mode Dial
- 34 Rear Dial
- 35 ISO Button
- 36 AEL / AFL Lever
- 37 MENU Button
- 38 INFO Button
- 39 Arrow
- 40 Arrow
- 41 OK Button
- 42 Button
- 43 Arrow
- 44 Button
- 45 Arrow
- 46 1/4"-20 (x3) Tripod Sockets
- 47 LCD Monitor Window
- 48 LCD Hood String Eyelet
- 49 LCD Monitor Hood Rail
- 50 Vacuum Analyzation & Wet Detection System Status Indicator
- 51 Spare M16 Port

Installing camera in the housing

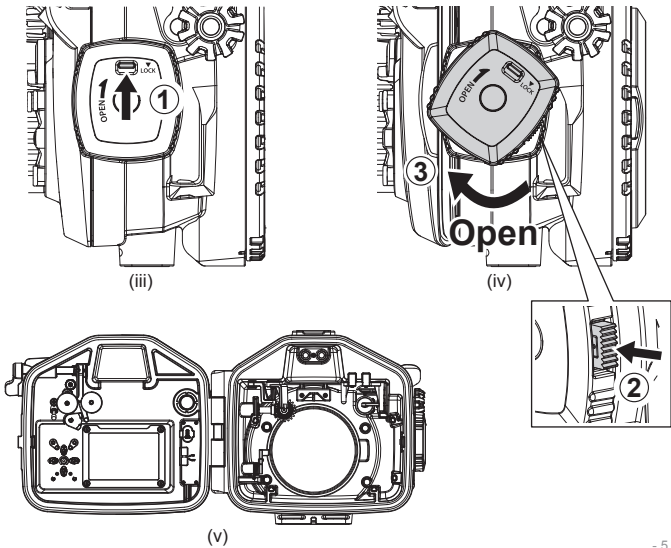
a. Before use, ensure the camera (Olympus OM-D E-M5 Mark III) and camera lens are compatible with the housing, lens port and lens gear.



b. Slide down the Security Lock for the Port Locking Ring and rotate the Port Locking Ring counter-clockwise (fig.i). Align the Port Locking Ring (two) cut-outs with the Body Cap's cut-outs, remove by lifting Body Cap straight up (fig.ii).



c. Unlock the Security Lock on the Cam Lock (fig.iii). Press down the Cam Lock Release and rotate the Cam Lock clockwise at the same time (fig.iv). Rotate the Cam Lock until the Rear Cover is fully separated from the Cam Lock.



d. Turn-on the Vacuum Analysation & Wet Detection System (VWS). If its battery power is low, the Signal Indicator will blink rapidly (4 times/sec), connect the supplied USB Type-C Charging cable to the USB Type-C Port in the inner side of the Rear Cover and the other end to a USB Charger DC 5V, minimum 0.5A (not supplied). It will take approx. 1.5 hours to fully charge the battery. Table 1 below shows the status of the battery charging and the corresponding light of the Signal Indicator.

e. Battery operation time per charge is approx. 100 hours.

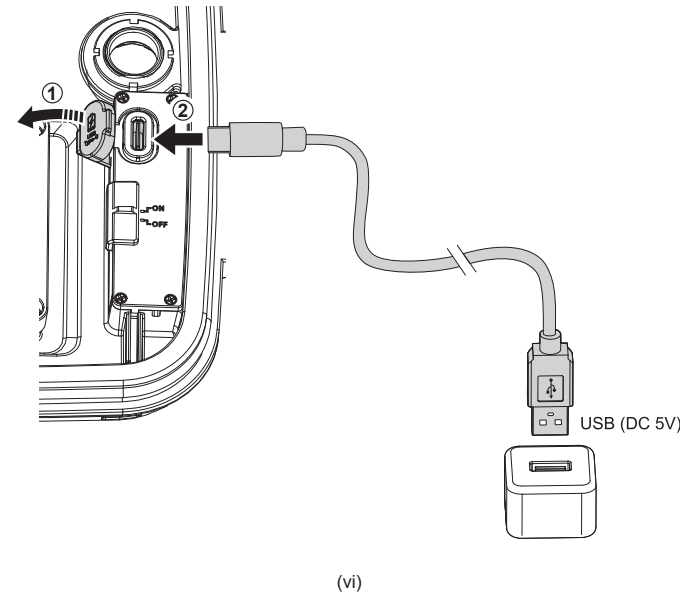


Table 1

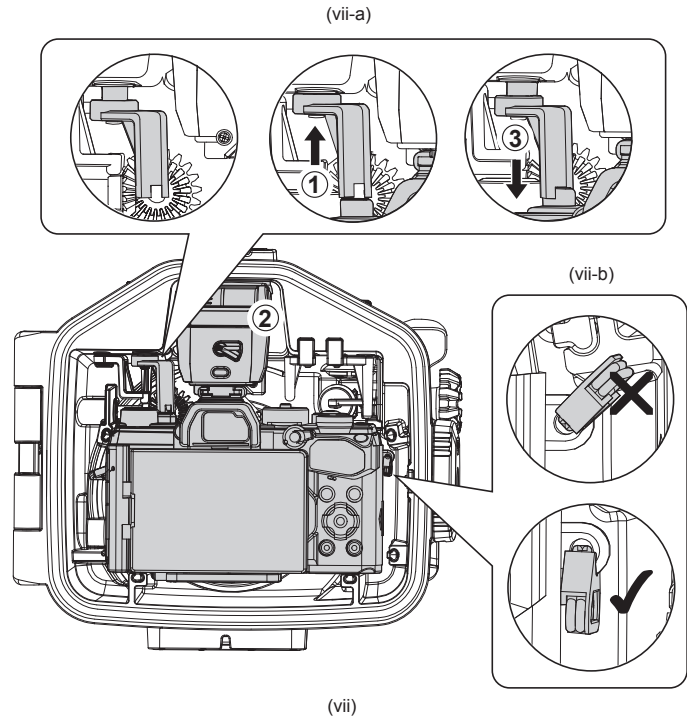
Signal Indicator	Indication	Next Action
Fast Blinking BLUE light (4 times/sec)	Charge is required	Connect it to a USB charger for charging
Fast Blinking GREEN light	Charging in progress	Continue charging
Still GREEN light	Charging is completed	Remove from USB charger and stop charging

f. Turn off the camera before installing into the housing. Remove all camera accessories such as Lanyard, Lens Filter or Hand Grip., etc.

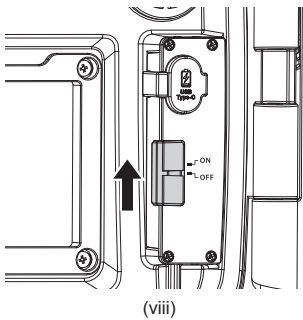
g. Pull up the Camera ON/OFF Actuation Lever up before you install the camera into the housing (fig.vii-a).

h. Return the Camera Monitor back to its original position with the display facing outside and make sure the Camera Strap Eyelets are folded down against the camera body (fig.vii-b). Load the camera into the housing gently and do not hold the camera by the Monitor Screen while inserting.

i. After the camera is properly loaded, push down the Camera ON/OFF Actuation Lever and engage with the camera ON/OFF Lever



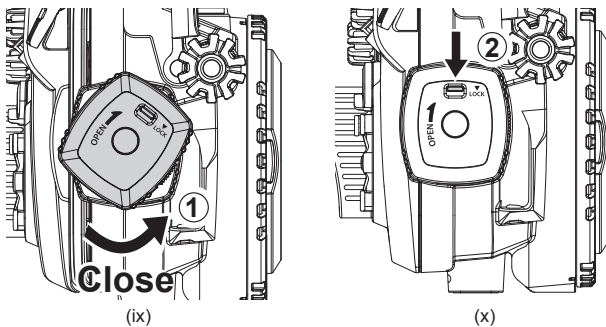
j. Turn-on the power of Vacuum Analysation and Wet Detection System (VWS) (fig.viii).



k. Before closing the housing, ensure the camera is positioned properly against the Camera Positioning Bumpers in the front of the housing. Check that the Main Seal O-ring and Secondary Seal Ring are clean, intact, and properly positioned. There are no obstacles such as the lanyard or strips preventing the secure closure of the housing.

l. Close the Housing Rear Cover by rotating the Cam Lock counter-clockwise until a "Click" sound is heard (fig.ix). If you encounter resistance, clear obstacles before continuing.

m. Switch the Security Lock on the Cam Lock to the "LOCK" position in order to prevent Cam Lock from opening accidentally (fig.x).

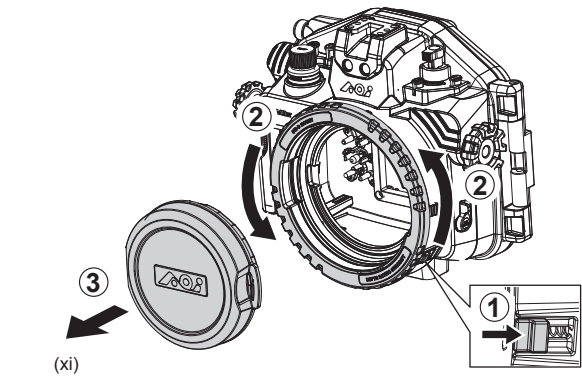


n. Once the camera is installed and housing is closed, turn-on the power of the camera and make sure all housing controls and lens gear function properly. If you prepare to use external flash light, check that the Olympus Flash FL-LM3 or AOI LED Optical Strobe Trigger STR-04 (optional accessory) is functioning with the external slave strobe(s).

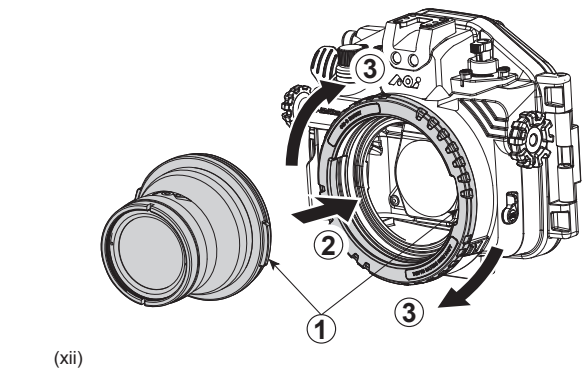


Installing Lens Port in the housing

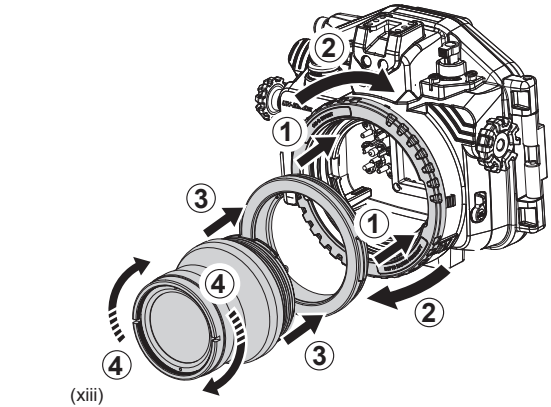
a. Remove Body Cap.



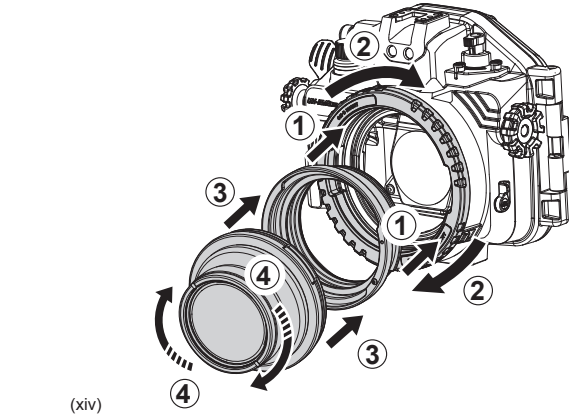
b. Installing an OM-D Mount Port in the housing body.



c. Installing PEN Mount Port with the AOI AD-LP-01 (Adapter for PEN Port to OM-D Port) in the housing body.



d. Installing OM-D Mount Port with AOI ER-OD\_OD-22 ( Extension Ring 22mm OM-D Port to OM-D Mount Housing) in the housing.

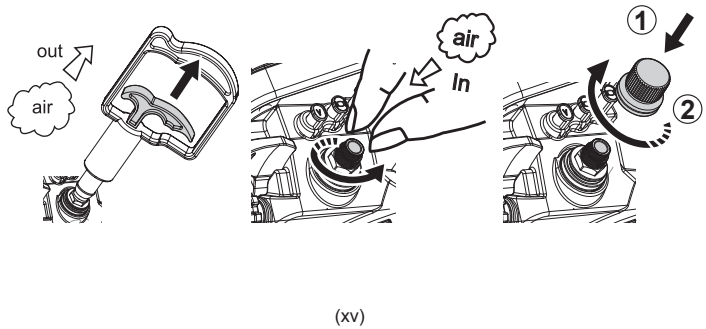
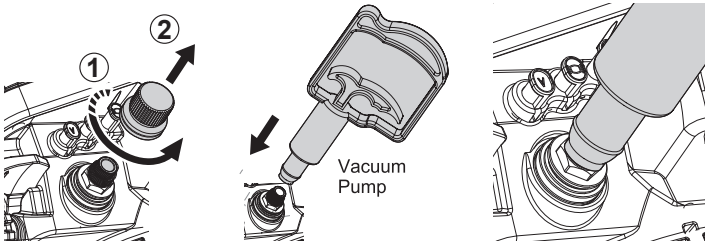


★★ For more information about AOI UH-EM5III Expansion Pathway and OM-D Mount Lens Ports System, please download the OM-D PORTS CHART from [www.aoi-uw.com](http://www.aoi-uw.com)

Pre-checking before Diving

1. Perform Vacuum Analyzation

- Power on the Vacuum Analysation and Wet Detection System (VWS), if the Signal Indicator shows Blinking BLUE (1 time/sec), that means the Vacuum Analysis and Wet Detection Sensor is on standby mode. Close the Rear Cover according to the steps described in "Installing camera into the housing".
- Take off the Protection Cap from the Vacuum Valve and connect the Vacuum Pump onto the Vacuum Valve Tip. Pull and Release the Vacuum Pump handle gently and repeatedly for Vacuum Pumping. During the Vacuum Pumping process, check carefully for changes in colour on the Signal Indicator.

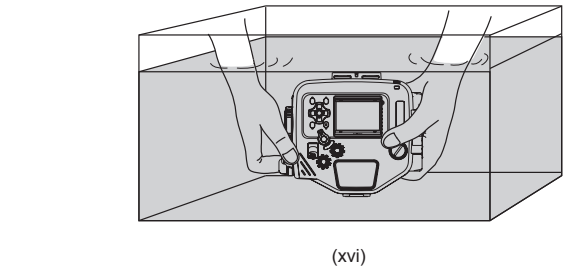


- c. Colour Codes Indication:
- **Fast Blinking YELLOW**  
Internal pressure has started to drop. Continue to pump.
  - **Slow Blinking YELLOW**  
Internal vacuum level is close to the desired value. Slow down pumping.
  - **Still YELLOW**  
Internal vacuum level has been reached. Stop pumping and the Vacuum Analyzation Process will start automatically.
  - **Blinking alternate YELLOW & RED**  
Internal vacuum level is above the desired value. Stop pumping and carefully release air by gently twisting the Vacuum Release Tip counter-clockwise slightly until the Signal Indicator turns to Still YELLOW. If too much air is released from the housing, the Signal Indicator will change back to Blinking YELLOW again. Resume vacuum pumping until Signal Indicator turns to Still YELLOW.
- d. The Vacuum Analysation Process will start automatically once the Signal Indicator turns Still YELLOW. Disconnect the Vacuum Pump from the Vacuum Valve carefully and then put back Protection Cap to the Vacuum Valve. Do not move or shake the housing or put the housing under the sun when the analyzation process has started.
- e. The Vacuum Analyzation Process takes approx.4 minutes. Once the process is completed, the Signal Indicator will turn either RED or GREEN, depending on the result:
- **Blinking GREEN** – Vacuum Analyzation passed and Housing is ready to go into the water.
  - **Blinking RED** – Vacuum Analyzation failed and inspection for leak is required.
- f. In case of a significant air leakage detected anytime during/after the Vacuum Analyzation Process, the Signal Indicator will turn Blinking RED.
- g. Below (Table 2) is the summary of Signal Indicator Colour Codes Indication.

Signal Indicator	Indication	Next Action
Slow Blinking BLUE (1 time/sec)	Ready for Vacuum analyzation	Vacuum Pumping
Blinking YELLOW	Vacuum below desired level	Continue pumping
Blinking Altern YELLOW - RED	Vacuum above desired level	Twist the Vacuum Release Tip counter-clockwise
Still YELLOW	Vacuum analyzation in progress	Wait for 4 minutes for vacuum analyzation
Slow Blinking GREEN	Vacuum analyzation test has Passed	Ready for going into water
Blinking RED	Vacuum analyzation test has Failed	Inspect the housing for any potential air leakage sources
Steady RED with audible alarm	Wet Sensor Strip detects water droplet or moisture	Inspect the housing for any potential water leakage sources

2. Perform Water Leakage Test

Once Vacuum Analysation is completed successfully and Vacuum Valve Protection Cap is secured, review the housing further by checking for water leakage. Submerge it in a shallow tub of water or rinse tank. While submerged, activate all the control buttons, control switches, and control knobs in order to have a dynamic test to prove all the sealed moving parts are water sealed properly. If there is no water droplet observed inside the housing after Underwater Dynamic Test, it means the housing is fully watertight. If water leaks into the housing, the water droplets will be detected by the Wet Sensor Strip located in the lowest part of the housing. Signal Indicator will turn Still RED and audible alarm "BEEP-BEEP-BEEP" will be heard.



Using the Housing and Camera after testing passed

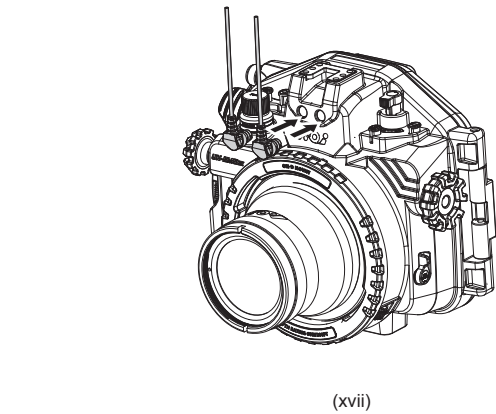
- Please ensure that the Vacuum Valve Cap is in place and completely closed.
- When using the housing, make sure that it is properly secured to you and accessories are properly secured to the housing.
- Do not exceed the housing maximum depth rating of 60 meters (200 ft.)
- If the Wet Detection alarm is triggered during use, it means water has entered into the housing. If that happens, try to position the housing lens port facing down and exit the water safely in accordance with diving procedure and regulation. Upon returning to land, remove the camera from the housing. If only a few droplets of seawater entered the housing, thoroughly wipe off the seawater droplets with a moist towel and dry the inside of the housing thoroughly with tissue paper.
- If seawater leaked into the housing and the Multi-control Device is flooded, take out the camera, rinse the housing cavity thoroughly with running fresh water for a few minutes. Then, dry the housing cavity completely and bring it to your local dealer for servicing immediately.

Connecting the Fiber Optic Cable

- You can install Olympus Flash FL-LM3 or AOI LED Optical Strobe Trigger STR-04 on the camera hot shoe and use either one for the external Slave Flash(es) triggering.
- This housing is equipped with two Fiber Optic Cable Ports and they are compatible with AOI Fiber Optic Cables with SS cable plug or other fiber optic brands using the standard of Sea & Sea plug.
- Insert one end of the fiber optic cable into the Fiber Optic Cable Port of the housing (fig.xvii) and then insert the other end into the fiber optic cable port on the external flash or strobe.

IMPORTANT:

- Check the compatibility of the Filter Optic Cable and multicore fiber optic cable is recommended and preferable.
- When you use Olympus Flash FL-LM3 and use only one side of the Fiber Optic Cable Port, the other blank out Fiber Optic Cable Port must be closed by a Fiber Optic Plug (included in housing accessories). Otherwise, flash light will emit out from the blank port and create backscatter in front of the housing. (fig.xvii)
- Rinse the Fiber Optical Cable Ports with running fresh water after every use, then let it dry naturally. Do not dry inside of the ports with any tool, this may result in scratches and reduce the capacity of the optical signal transfer.



Care and Maintenance

- Rinse the housing exterior thoroughly with running fresh water after every use. Depress buttons and rotate knobs/dials repeatedly in fresh water to eliminate trapped salt water or debris. Dry the housing and Lens Port with a soft, clean cloth to avoid water spotting and damage.
- To clean the Lens Port Glass, use a mild soap solution or lens cleaner. Do not rinse the inside of port glass. Do not use alcohol or window cleaner on the Lens Port Glass.
- In order to better inspect, position, clean or lubricate the Housing Main Seal O-ring or Lens Port O-rings, carefully remove the required O-ring by using the provided AOI O-Ring Remover/White Balance Card.
- Clean the O-ring and the O-ring groove by using a microfiber cloth only. Use AOI O-Ring Remover/White Balance Card to clean the O-Ring groove. Do not use cleaning substances other than fresh water. Remove sand, dirt, hair or fibers that can prevent a proper housing seal.
- To lubricate O-rings, apply a small amount of silicone grease (AOI SIGR-5) on your fingertips, gently pull the O-ring through the fingertips. This will lightly coat the entire O-ring with silicone grease. Only use the AOI Silicone Grease supplied or those approved by AOI. Using other brands of silicone grease may damage the O-ring. Do not over stretch the O-ring.
- Do not leave the camera and housing in direct sunlight for prolonged periods. Heat may damage the camera and housing.
- Dry well and remove the camera prior to travel and storage.
- Store the housing in a cool and dry place.

**IMPORTANT:** Wipe the housing dry and keep water away prior to opening the housing. Do not allow water to be in contact with the interior of the housing. This will cause irreparable damage to the Vacuum Analysation and Wet Detection System (VWS) and other electronic/electrical components!

Specifications

Model Number	AOI UH-EM5III	
Housing Colour	AOI UH-EM5III-BLK	AOI UH-EM5III-CAM
	Black	Camo Blue
Compatible Camera Model	Olympus OM-D E-M5 Mark III	
Main Material	Housing Body : Polycarbonate	
Depth Rating	60 Meters (200 ft.)	
Operating Environment	Operation : 0°C ~ 40°C (32°F ~ 104°F)	
	Storage : -20°C ~ 60°C (-4°F ~ 140°F)	
Battery for Vacuum Analysation and Wet Detection System (VWS)	Built-in Rechargeable Lithium Polymer Battery (3.7V)	
	Charging : USB Charger DC 5V, 0.5A (not included) Approx. 1.5 hours for a full charge	
	Battery Operation Time : Approx. 100 hours	
Dimensions	Approx. 206.20mm (W) x 181.70mm (H) x 113.55mm (D)	
Weight	Approx. 1340g (LCD Monitor Hood and Lanyard included, camera and accessories not included)	

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