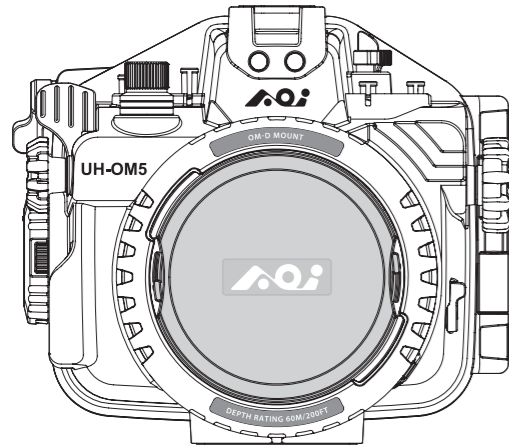




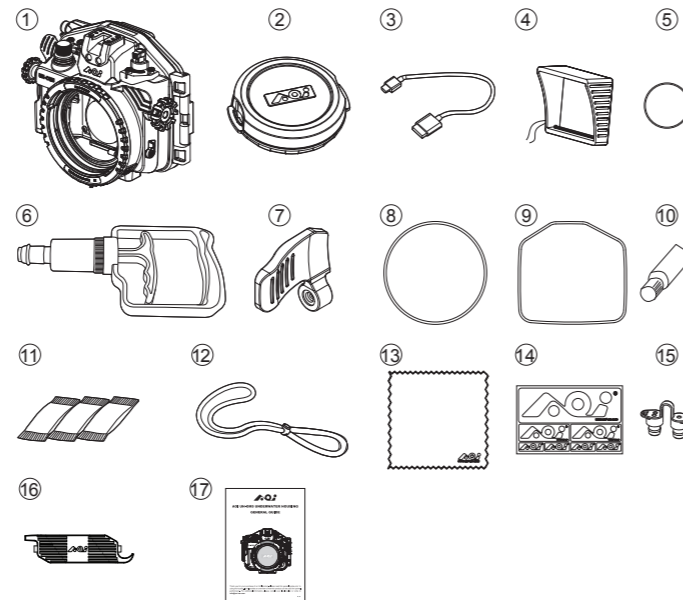
# AOI UH-OM5 UNDERWATER HOUSING

## GENERAL GUIDE



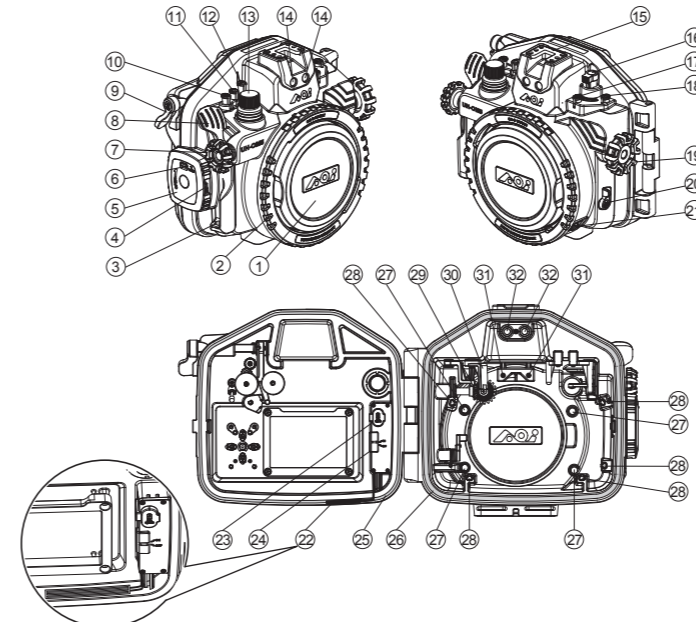
Thank you for your purchase of an AOI product. Please read this general guide prior to using the housing. It will provide an overview of how this product can be used for optimal performance. For additional information, please consult your local dealer or write to [info@aoi-uw.com](mailto:info@aoi-uw.com)

### Items Included in the package

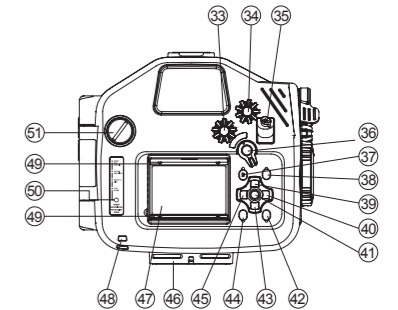


- ① AOI UH-OM5 Housing Body
- ② Body Cap / Storage Box for OM-D Mount Housing (AOI BC-01)
- ③ USB Type-C Charging Cable (AOI USBC-02)
- ④ LCD Monitor Hood (AOI LCDH-01)
- ⑤ Spare O-Ring for Vacuum Valve Protection Cap x 1pc. (AOI SRVV-01)
- ⑥ Vacuum Pump (AOI VP-02)
- ⑦ Extended Shutter Release Lever (AOI ESL-02-TGRY)
- ⑧ Spare Main Seal O-Ring x 1pc. (AOI SOR-02)
- ⑨ Spare Secondary Seal Ring x 1pc. (AOI SSR-02)
- ⑩ Silicone Grease (AOI SIGR-5)
- ⑪ Silica Gel x 1pc. (AOI SIGE-3)
- ⑫ Lanyard (AOI LYD-01)
- ⑬ Micro-Fiber Cleaning Cloth (AOI MC-01)
- ⑭ AOI Logo Sticker
- ⑮ Fiber Optic Cable Port Plug x 2pcs. (AOI OCP-PS-05)
- ⑯ O-Ring Remover (AOI ORR-02)
- ⑰ General Guide

### Names of the Parts



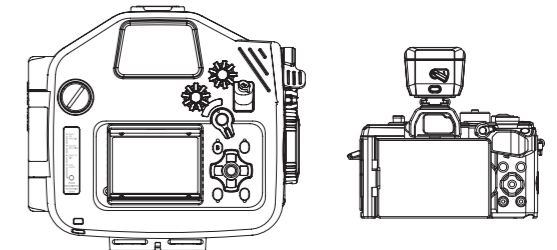
- ① Body Cap (Storage Box)
- ② Port Locking Ring
- ③ Lanyard Eyelet
- ④ Cam Lock Release
- ⑤ Cam Lock
- ⑥ Security Lock
- ⑦ Front Dial
- ⑧ Shutter Release Lever
- ⑨ AEL/AFL Button Lever
- ⑩  $\square$  Button
- ⑪  $\bullet$  Video Button
- ⑫ LOCK Mode Dial
- ⑬ Vacuum Valve
- ⑭ Fiber Optic Cable Ports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



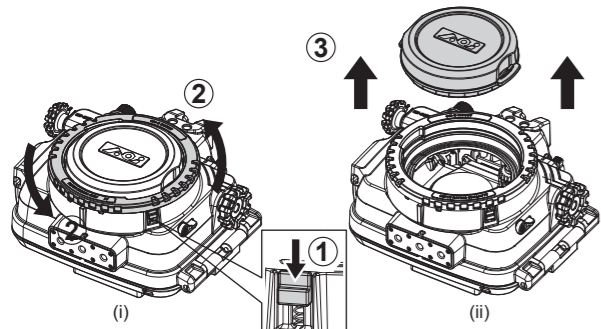
- ③ Mode Dial
- ④ Rear Dial
- ⑤ ISO Button
- ⑥ AEL / AFL Lever
- ⑦ MENU Button
- ⑧ INFO Button
- ⑨  $\blacktriangle$  Arrow
- ⑩  $\blacktriangleright$  Arrow
- ⑪ OK Button
- ⑫  $\square$  Button
- ⑬  $\blacktriangledown$  Arrow
- ⑭  $\square$  Button
- ⑮  $\blacktriangleleft$  Arrow
- ⑯ 1/4"-20 (x3) Tripod Sockets
- ⑰ LCD Monitor Window
- ⑱ LCD Hood String Eyelet
- ⑲ Vacuum Analysis & Wet Detection System Status Indicator
- ⑳ Spare M16 Port

### Installing camera in the housing

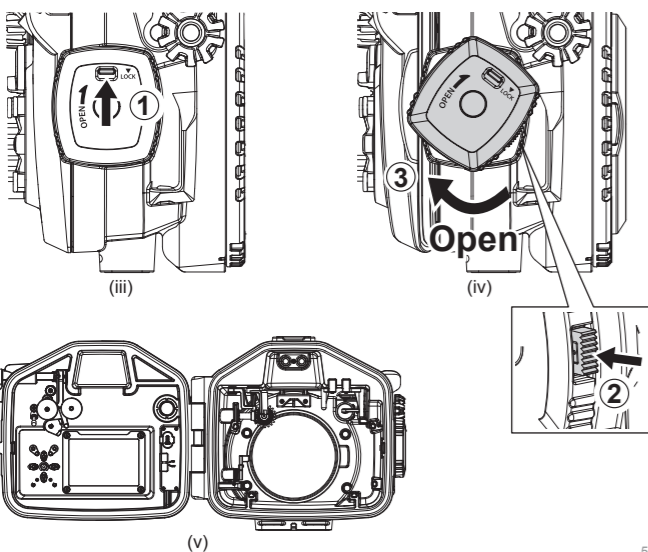
a. Before use, ensure the camera (OM System OM-5) and camera lens are compatible with the housing, lens port and lens gear.



b. Slide down the Security Lock for the Port Locking Ring and rotate the Port Locking Ring counterclockwise (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).

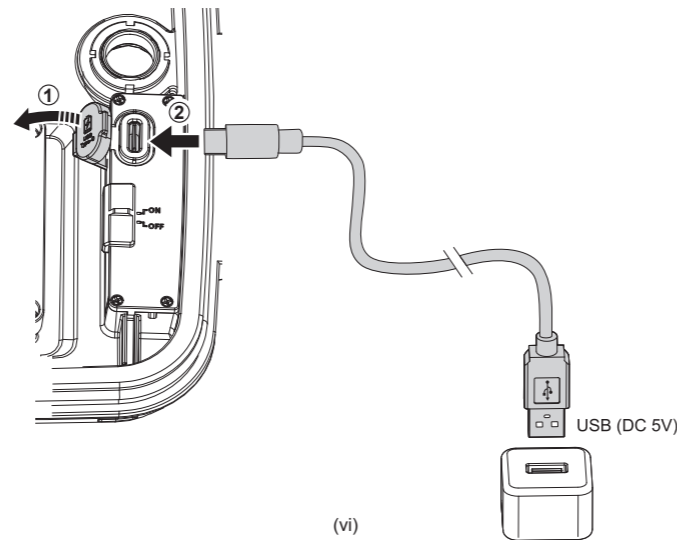


c. Unlock the Security Lock on the Cam Lock (fig.iii). Press down the Cam Lock Release and rotate the Cam Lock clockwise at the same time (fig.iv). Rotate the Cam Lock until the Rear Cover is fully separated from the Cam Lock (fig.v).



d. Turn on the Vacuum Analysis & Wet Detection System (VWS). If its battery power is low, the Signal Indicator will show Blue Quick Blinking (4 times / sec). You should connect the supplied USB Type-C Charging cable to the USB Type-C Port on the Vacuum Analysis & Wet Detection System (VWS) and the other end to a USB Charger DC 5V, minimum 0.5A (not supplied) (fig.vi). 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 colors of the Signal Indicator.

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



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

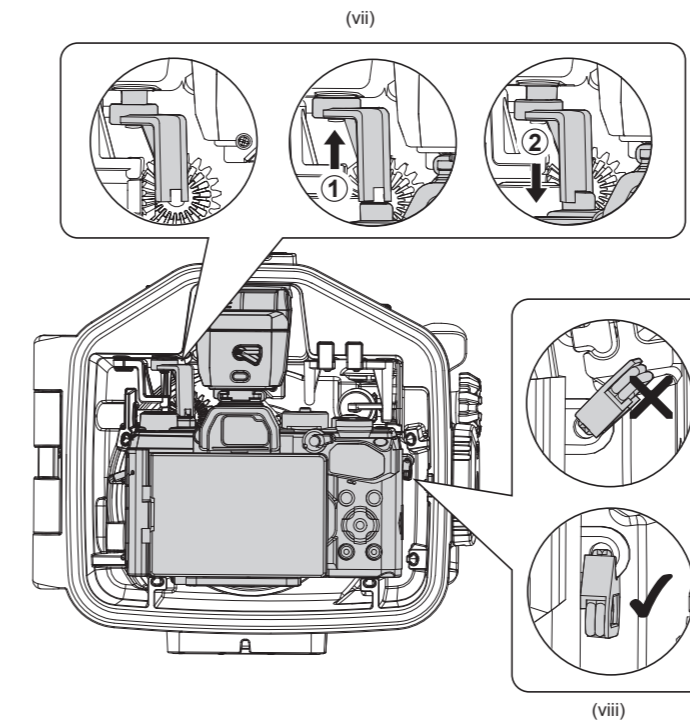
Table 1

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

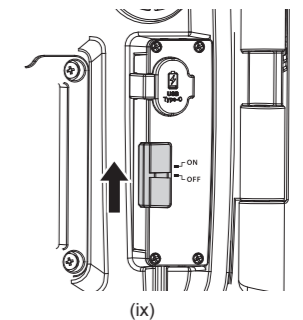
g. Pull up the Camera ON/OFF Actuation Lever up before you install the camera into the housing (fig.vii).

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.viii). 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 (fig.vii).



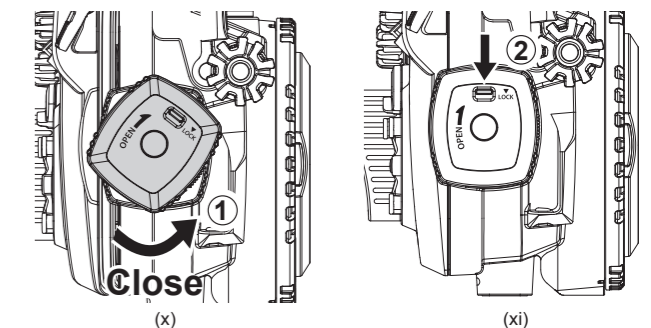
j. Turn on the power of Vacuum Analysis and Wet Detection System (VWS) (fig.ix).



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 counterclockwise until a "Click" sound is heard (fig.x). If you encounter resistance, clear obstacles before continuing.

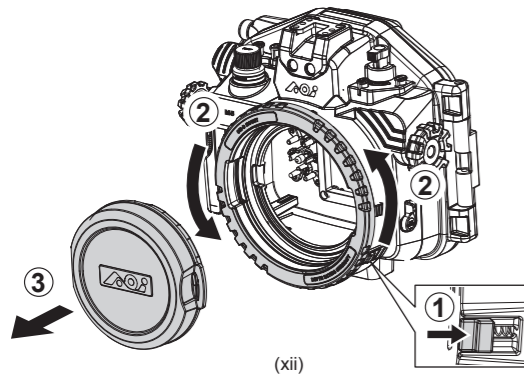
m. Switch the Security Lock on the Cam Lock to the "LOCK" position in order to prevent Cam Lock from opening accidentally (fig.xi).



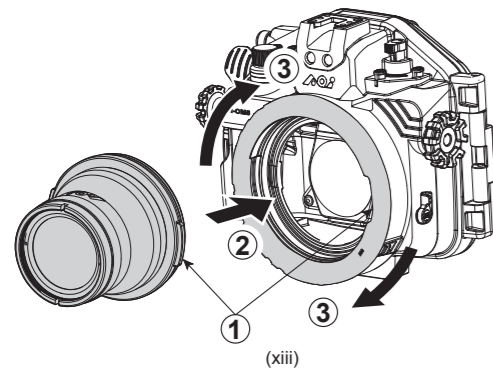
n. Once the camera is installed and housing is closed, turn on the power of the camera and make sure all housing controls and lens gear function properly. If you prepare to use external flash light, check that the Olympus Flash FL-LM3 or AOI LED Optical Strobe Trigger STR-05 (optional accessory) is functioning with the external slave strobe(s).

## Installing Lens Port in the housing

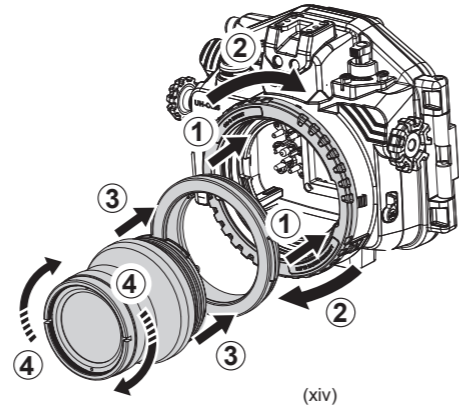
### a. Removing Body Cap.



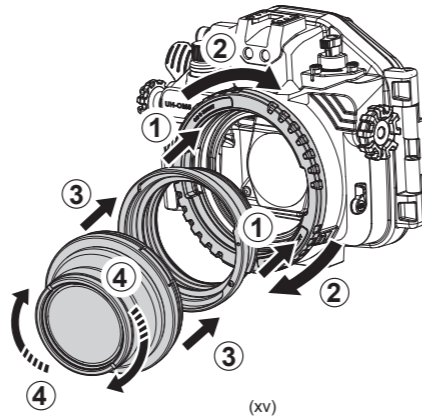
### b. Installing an OM-D Mount Port in the housing body.



### 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.

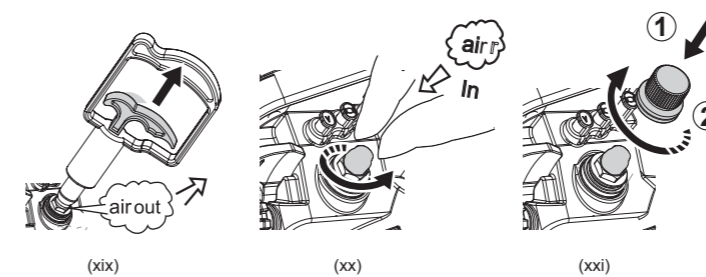
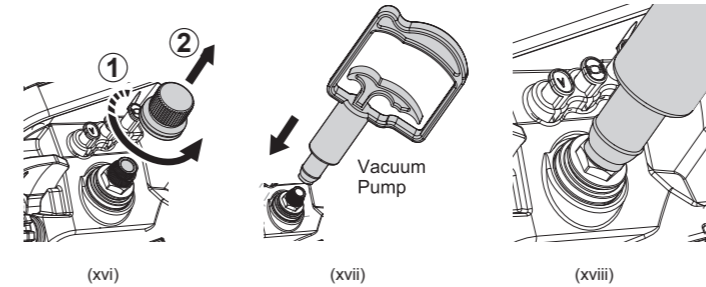


\*\* For more information about AOI UH-OM5 Expansion Pathway and OM-D Mount Lens Ports System, please download the OM-D PORTS CHART from [www.aoi-uw.com](http://www.aoi-uw.com)

## Pre-checking before Diving

### 1. Perform Vacuum Analyzation

- Power on the Vacuum Analyzation and Wet Detection System (VWS). If the Signal Indicator shows Blue Blinking (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 red colored 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 color on the Signal Indicator (fig.xvi-xix).



### c. Color Codes Indication:

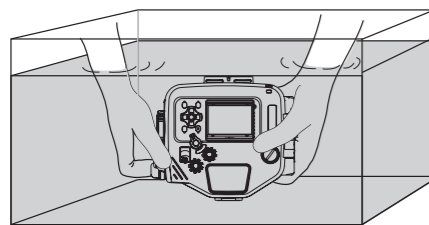
- Yellow Quick Blinking  
Internal pressure has started to drop. Continue to pump.
- Yellow Slow Blinking  
Internal vacuum level is close to the desired value. Slow down pumping.
- Yellow Still  
Internal vacuum level has been reached. Stop pumping and the Vacuum Analyzation Process will start automatically.
- Yellow and Red Blinking alternately  
Internal vacuum level is above the desired value. Stop pumping and carefully release air by gently twisting the red colored Vacuum Release Tip counterclockwise slightly until the Signal Indicator shows Yellow Still (fig.xx). If too much air is released from the housing, the Signal Indicator will change back to Yellow Blinking again. Resume vacuum pumping until Signal Indicator shows Yellow Still.
- d. The Vacuum Analyzation Process will start automatically once the Signal Indicator shows Yellow Still. Disconnect the Vacuum Pump from the Vacuum Valve carefully and then put back Protection Cap to the Vacuum Valve (fig.xxi). 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 show different color depending on the result:
  - Green Blinking – Vacuum Analyzation passed and Housing is ready to go into the water.
  - Red Blinking– Vacuum Analyzation failed and inspection for leakage is required.
- f. In case of a significant air leakage detected anytime during / after the Vacuum Analyzation Process, the Signal Indicator will show Red Blinking.
- g. Below (Table 2) is the summary of Signal Indicator Color Codes Indication.

Signal Indicator	Indication	Next Action
Blue Slow Blinking	Ready for Vacuum analyzation	Vacuum Pumping
Yellow Blinking	Vacuum below desired level	Continue pumping
Yellow and Red Blinking alternately	Vacuum above desired level	Twist the red colored Vacuum Release Tip counterclockwise
Yellow Still	Vacuum analyzation in progress	Wait approx. 4 minutes for vacuum analyzation
Green Slow Blinking	Vacuum analyzation test has passed	Ready to go into the water
Red Blinking	Vacuum analyzation test has failed	Inspect the housing for any potential air leakage sources
Red Still + Audible Alarm	Wet Sensor Strip detects water droplet or moisture	Inspect the housing for any potential water leakage sources

Table 2

## 2. Perform Water Leakage Test

Once Vacuum Analyzation is completed successfully and Vacuum Valve Protection Cap is secured, review the housing further by checking for water leakage. Submerge it in a shallow water 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 Show Red Still and audible alarm "BEEP-BEEP-BEEP" will be heard (fig.xxii).



(xxii)

## Using the Housing and Camera after testing passed

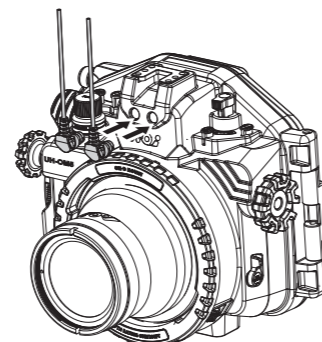
- Please ensure that the Vacuum Valve Cap is in place and completely closed.
- When using the housing, make sure that it is properly secured to you and accessories are properly secured to the housing.
- Do not exceed the housing maximum depth rating of 60 meters (200 ft.)
- If the Wet Detection alarm 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-05 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.xxiii) 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.xxiii).
- Rinse the Fiber Optic 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.



(xxiii)

## 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.
- Clean the Main Seal O-ring and the O-ring groove by using a microfiber cloth only. Use AOI O-Ring Remover 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.  
Note: **DO NOT APPLY** Silicon Grease to the Secondary Seal 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 Analyzation and Wet Detection System (VWS) and other electronic/electrical components!

## Specifications

Model Number	AOI UH-OM5
Description	Underwater Housing for OM System OM-5 Camera
Housing Color	AOI UH-OM5-TGRY Translucent Grey
Compatible Camera Models	OM System OM-5
Main Material	Housing Body : Polycarbonate
Depth Rating	60 Meters
Lens Port System	AOI / Olympus OM-D Ports System
Water Leakage Protection	Built-in Vacuum Analyzation and Wet Detection System (VWS)
Battery Power	Built-in Rechargeable Lithium Polymer Battery (3.7V)
Battery Charging	By USB Charger DC5V, 0.5A (not included) Approx. 1.5 Hours for a full charge
Battery Operation Time	Approx. 100 hours
Dimensions	206.20mm (W) x 181.70mm (H) x 113.55mm (D)
Weight	On Land : Approx. 1340g (Only included LCD Monitor Hood and Lanyard)

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