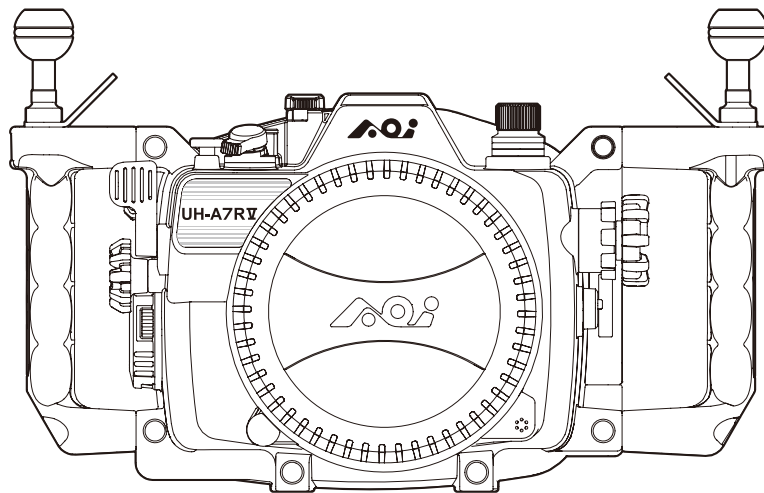


V1.0



# UH-A7RV

## UNDERWATER HOUSING GENERAL GUIDE

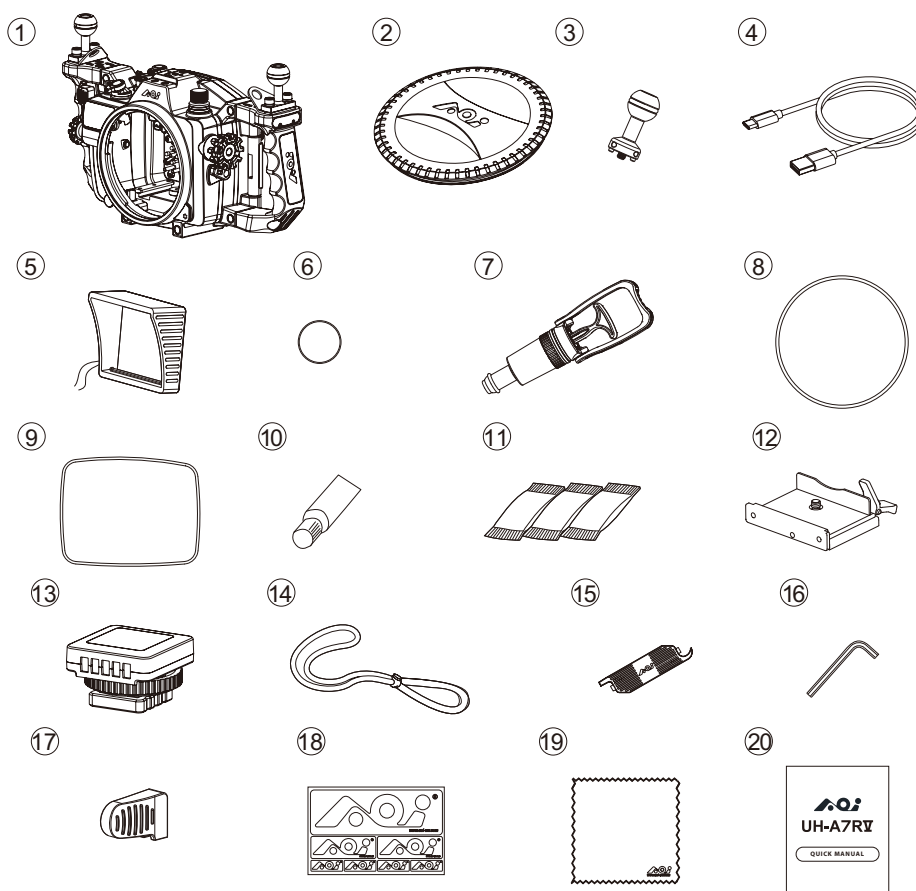


Thank you for your purchase of an AOI product. Please read this general guide prior to using the housing. It will provide an overview of how this product can be used for optimal performance. For additional information, please consult your local dealer or write to [info@aoi-uw.com](mailto:info@aoi-uw.com)

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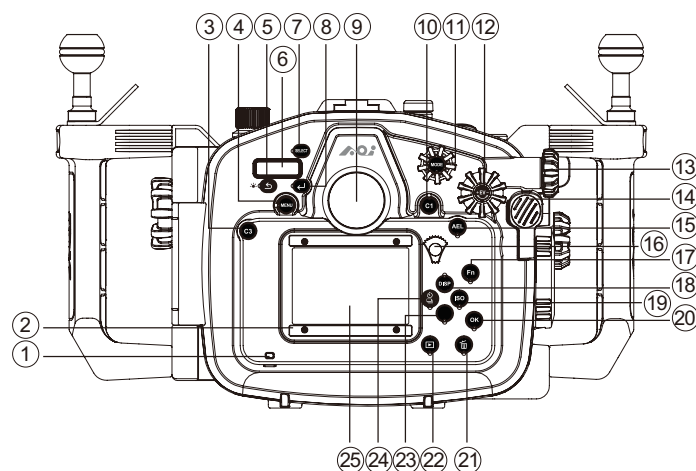
## Items Included in the Package



- ① AOI UH-A7RV Housing Body with Hand Grips
- ② Body Cap (AOI BC-101) x1pc.
- ③ Ball Mount Base (AOI BM-01-BLK) x1pc.
- ④ USB Type-C Charging Cable (AOI USBC-02) x1pc.
- ⑤ LCD Hood (AOI LCDH-01) x1pc.
- ⑥ Spare O-Ring for Vacuum Valve Protection Cap (AOI SRVV-01) x1pc.
- ⑦ Vacuum Hand Pump (AOI VP-03) x1pc.
- ⑧ Spare Main Seal O-ring (AOI SOR-07) x1pc.
- ⑨ Spare Secondary Seal Ring (AOI SSR-05) x1pc.

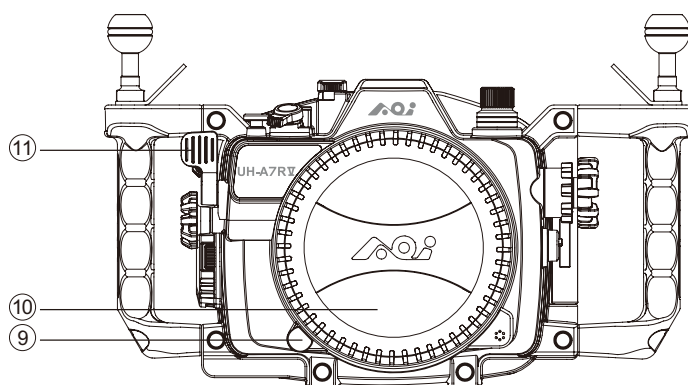
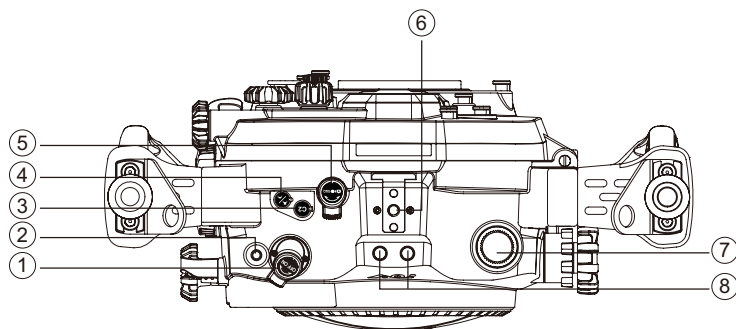
- ⑩ Silicone Grease (AOI SIGR-5) x1pc.
- ⑪ Silica Gel (AOI SIGE-3) x1pc.
- ⑫ Camera Tray-02 x1pc.
- ⑬ Hot Shoe Connector (AOI HSC-03) x1pc.
- ⑭ Lanyard (AOI LYD-01) x1pc.
- ⑮ O-ring Remover (AOI ORR-02) x1pc.
- ⑯ Allen Key for M6 x1pc.
- ⑰ Extended Shutter Release Lever x1pc.
- ⑱ AOI Logo Sticker
- ⑲ Micro-Fiber Cleaning Cloth (AOI MC-01) x1pc.
- ⑳ Quick Manual


## Names of the Parts



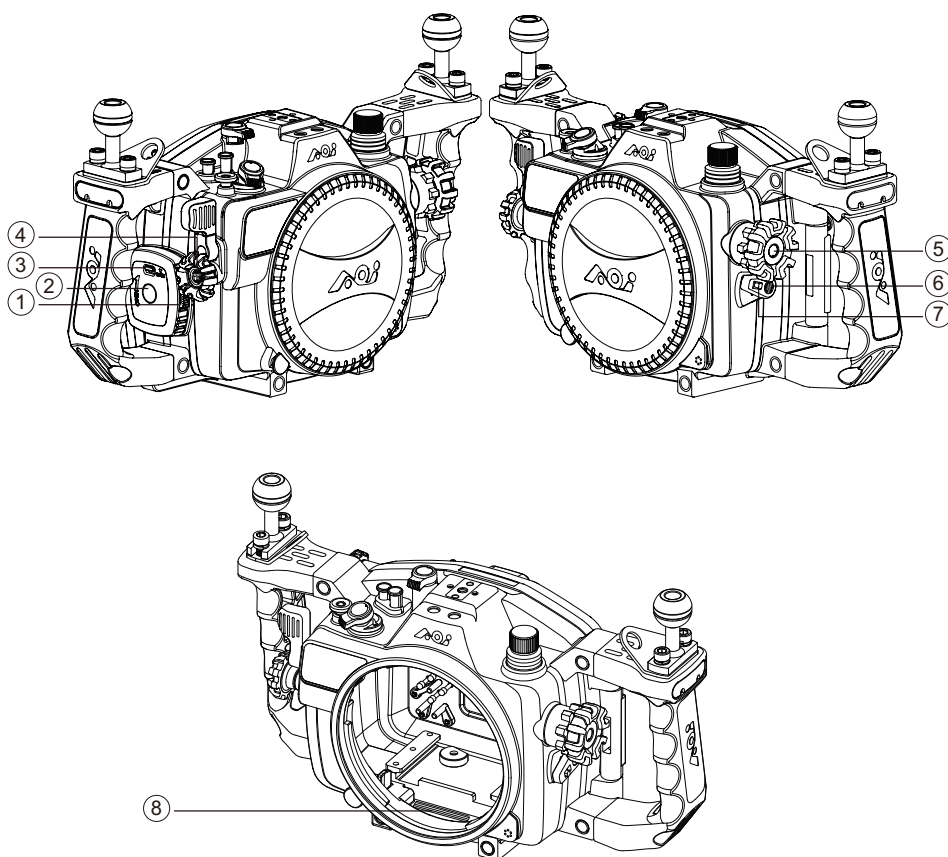
- |                                       |                                |
|---------------------------------------|--------------------------------|
| ① LCD Hood String Eyelet              | ⑬ Rear Dial Control Knob       |
| ② LCD Monitor Hood Rails              | ⑭ AF-ON Lever                  |
| ③ <b>C3</b> Button                    | ⑮ <b>AEL</b> Button            |
| ④ <b>MENU</b> Button                  | ⑯ Multi-selector Button        |
| ⑤ <b>S</b> Button                     | ⑰ <b>Fn</b> Button             |
| ⑥ Multi-control Device Display Window | ⑱ <b>▲/DISP</b> Button         |
| ⑦ <b>SELECT</b> Button                | ⑲ <b>►/ISO</b> Button          |
| ⑧ <b>L</b> Button                     | ⑳ <b>OK</b> Button             |
| ⑨ Viewfinder Window                   | ㉑ Erase Button                 |
| ⑩ <b>C1</b> Button                    | ㉒ Playback Button              |
| ⑪ <b>Mode</b> Dial Knob               | ㉓ <b>▼/</b> Button             |
| ⑫ <b>EV</b> Control Knob              | ㉔ <b>◀/On/Off / LCD</b> Button |
|                                       | ㉕ LCD Monitor Window           |

## Names of the Parts



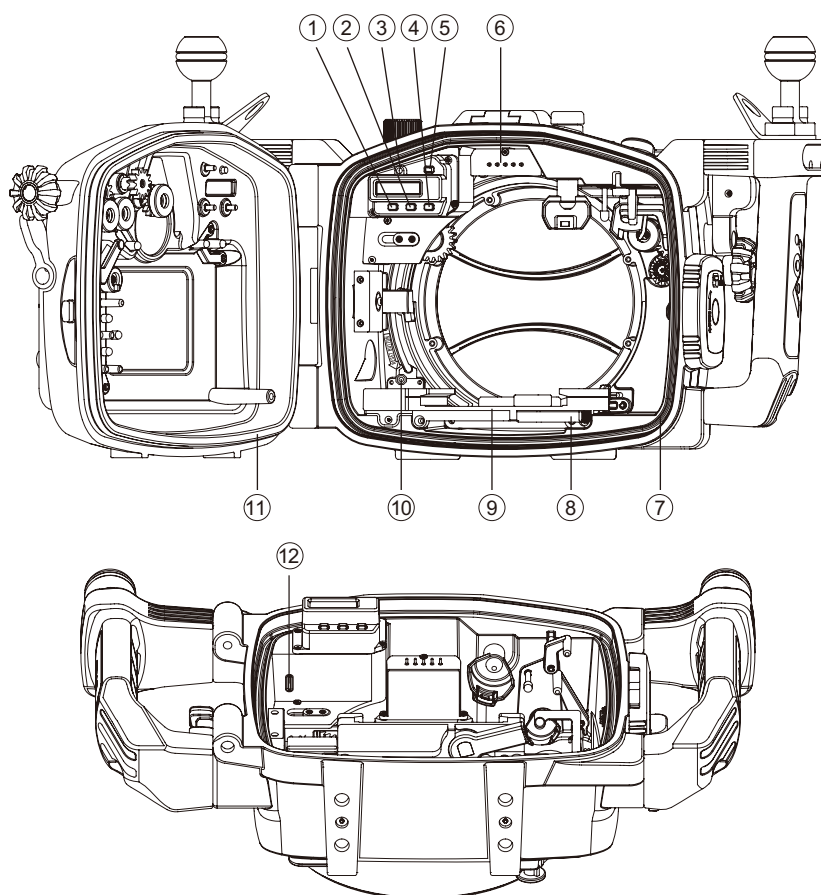
- |   |                         |
|---|-------------------------|
| ① Camera <b>ON/OFF</b> Lever  | ⑨ Lens Release Button   |
| ② Movie Button  | ⑩ Body Cap              |
| ③ <b>C2</b> Button  | ⑪ Shutter Release Lever |
| ④ Lock Button   |                         |
| ⑤  <b>S&amp;Q</b> Dial Lever |                         |
| ⑥ Cold Shoe   |                         |
| ⑦ Vacuum Valve  |                         |
| ⑧ Fiber Optic Cable Ports   |                         |

## Names of the Parts



- |                           |                           |
|---------------------------|---------------------------|
| ① Cam Lock Release        | ⑥ Lens Port Release Lever |
| ② Cam Lock                | ⑦ Lens Port Release Lever |
| ③ Security Lock           | Security Lock             |
| ④ Front Dial Control Knob | ⑧ Wet Sensor Strip        |
| ⑤ Lens Gear Control Knob  |                           |

## Names of the Parts



- |                              |                            |
|------------------------------|----------------------------|
| ① ↶ Button                   | ⑦ Secondary Seal Ring      |
| ② Power ON/OFF Switch Button | ⑧ Camera Tray Holder Lock  |
| ③ Indicator                  | ⑨ Camera Tray Holder       |
| ④ ↵ Button                   | ⑩ Reset Button             |
| ⑤ <b>SELECT</b> Button       | ⑪ Main Seal O-ring         |
| ⑥ Build-in Strobe Trigger    | ⑫ USB TYPE-C Charging Port |

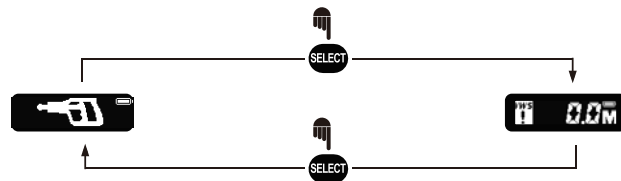
## Status Display Description

| STATUS DISPLAY | DESCRIPTION   |
|----------------|---|
|                | Greeting Front Page   |
|                | Require to Close the Housing  |
|                | Ready for Vacuum Pumping  |
|                | Unit Selecting Menu   |
|                | Depth Setting Menu  |
|                | Flash Mode Selecting Menu   |
|                | Select TTL Flash  |
|                | Select Manual Flash   |
|                | Select M-HSS Flash  |
|                | Select Meter Unit   |
|                | Select Feet Unit  |
|                | Internal Pressure Reach Desired Pressure and Stop Vacuuming                             |
|                | Continue Vacuuming  |
|                | Over Vacuuming, Required to Release Some Air through the Vacuum Valve, refer to page 17 |
|                | Stabilizing Internal Pressure   |
|                | Vacuum Analysis in Progress with Count-down Timer                                       |
|                | PASSED in the Vacuum Analyzation Process  |
|                | FAILED in the Vacuum Analyzation Process  |
|                | Depth Display Screen with Vacuum Analyzation Passed                                     |
|                | Depth Display Screen without Vacuum Analyzation   |
|                | Depth Setting Screen  |
|                | Wet Sensor has Detected Water Droplets and / or Heavy Moisture inside the Housing       |
|                | Current Water Depth has Reached to the Pre-set Warning Depth (Current Depth Blinking)   |
|                | Charging Complete (Screen Solid On)   |
|                | Charging in Progress (Screen Animating)   |
|                | Air Pressure Sensor Error   |
|                | Water Pressure Sensor Error   |

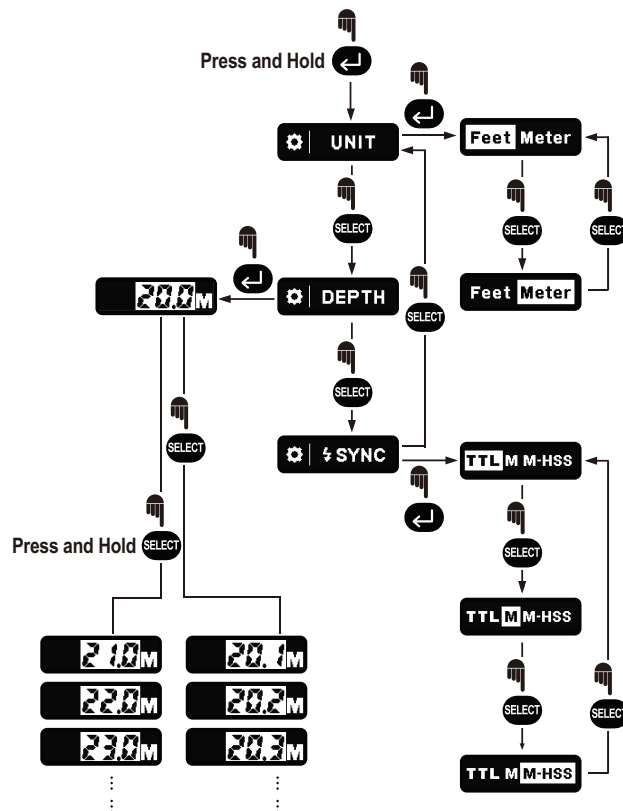


## Multi-control Device Setting



### ① Status Select

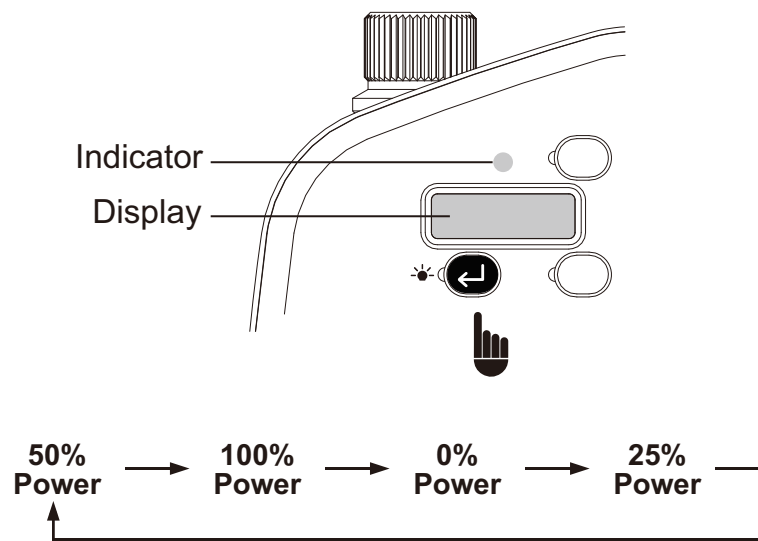


### ② System Setting

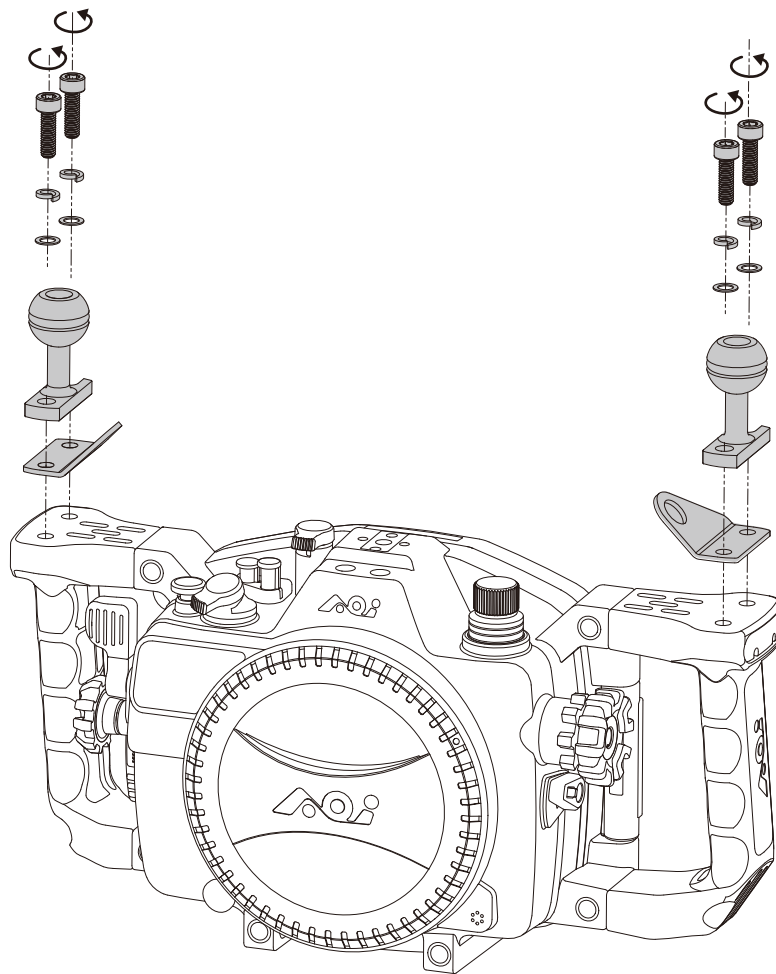


## Display Brightness Setting

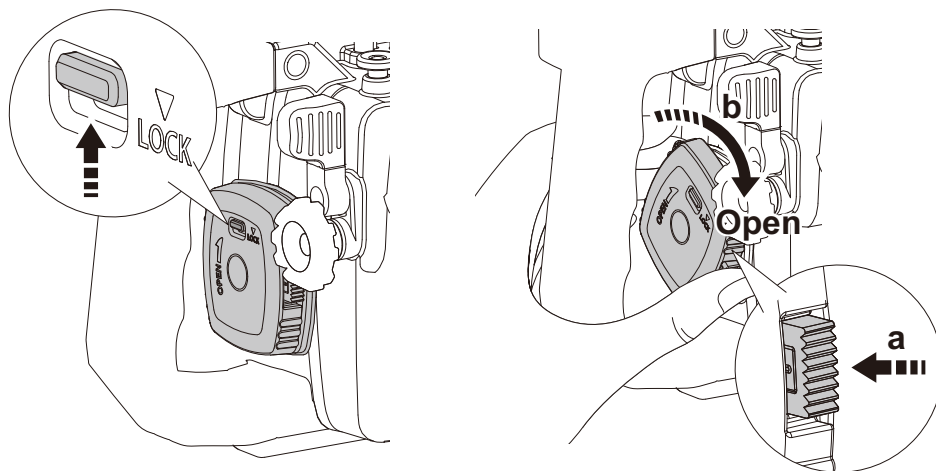
Short Press   Button to adjust the Brightness for Indicator & Display



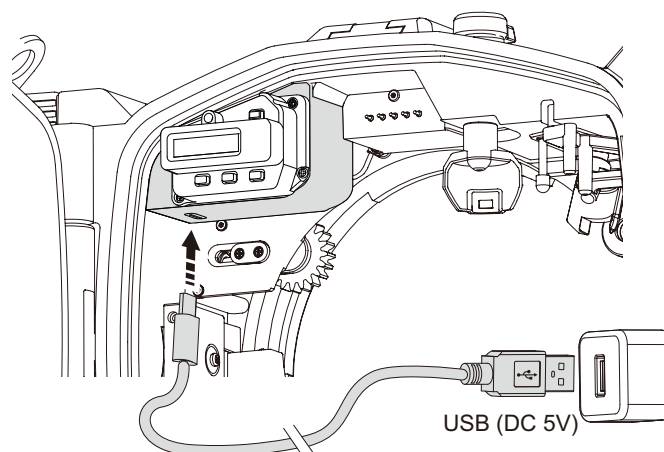
## Installing Ball Mounts



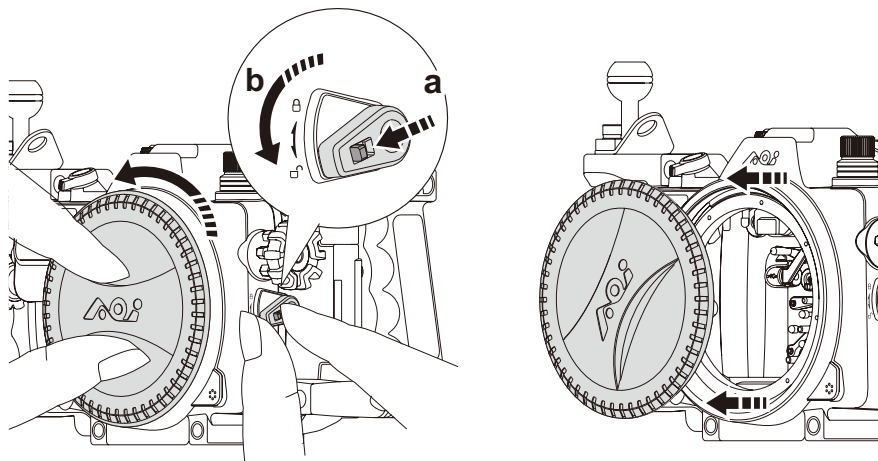
## Opening the Housing



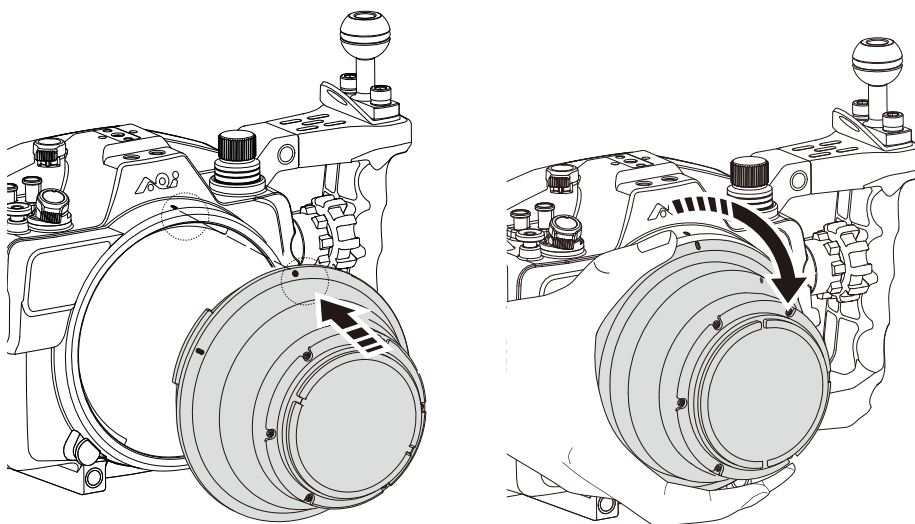
## Battery Charging



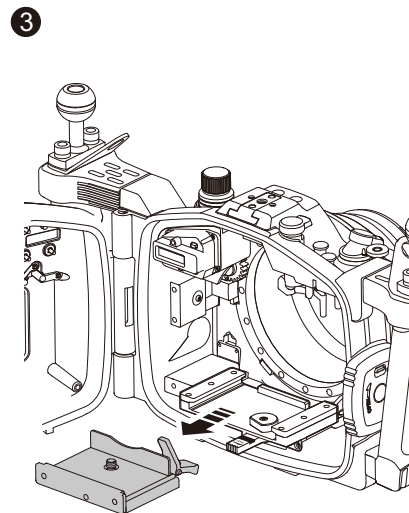
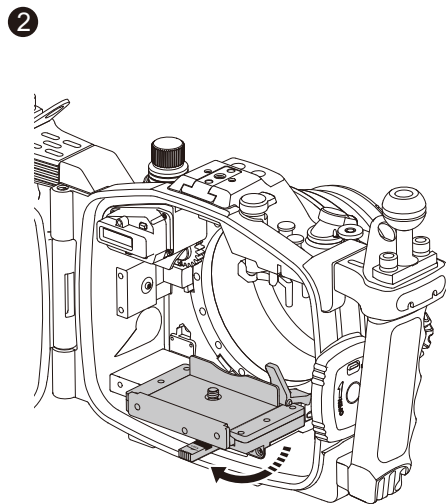
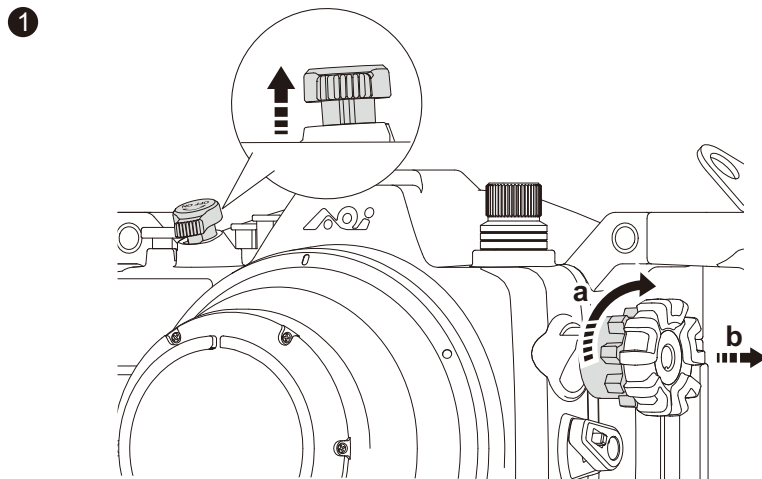
## Removing Body Cap



## Installing Lens Port

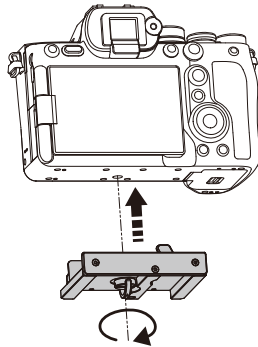


## Installing Camera in the Housing

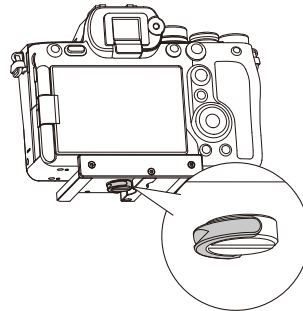


## Installing Camera in the Housing

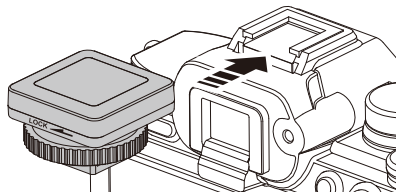
4



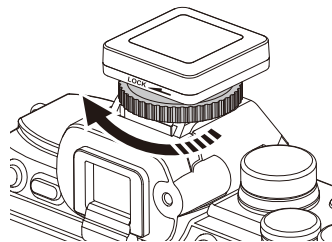
5



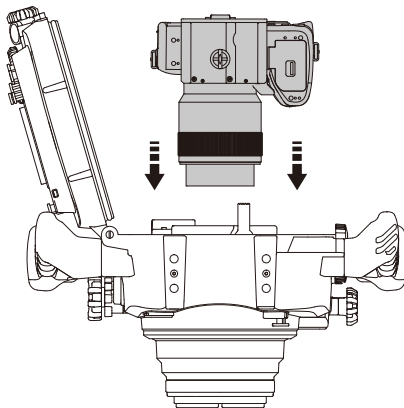
6



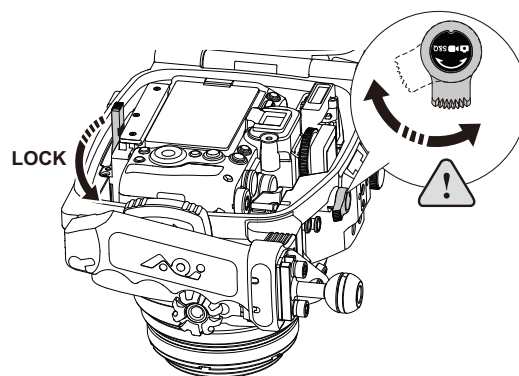
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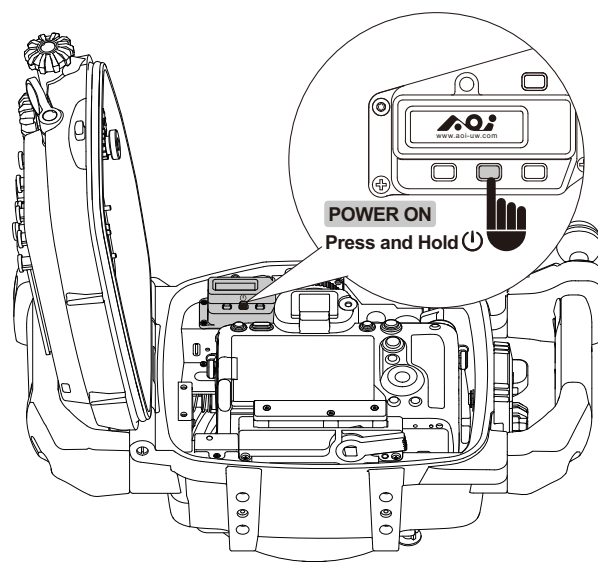
8



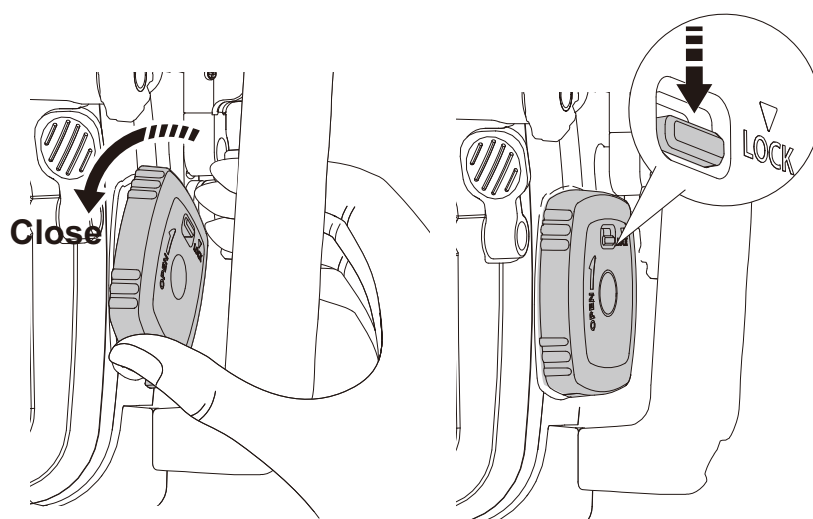
9



## Powering on Multi-control Device



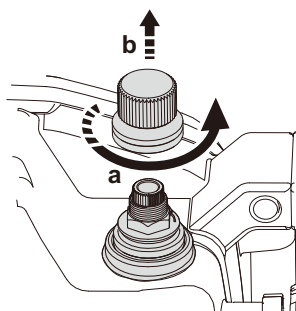
## Closing the Housing



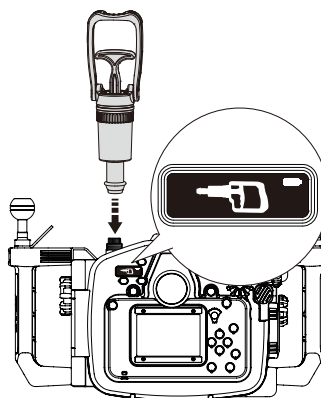


## Perform Vacuum Analyzation

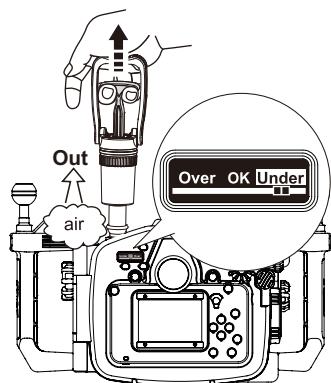
①



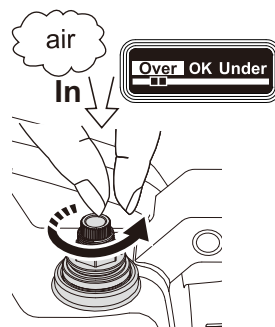
②



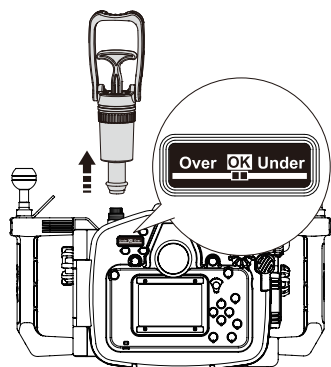
③



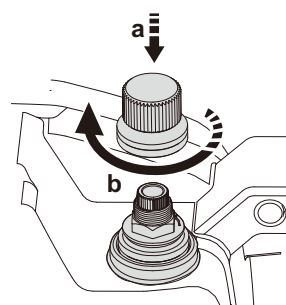
④



⑤

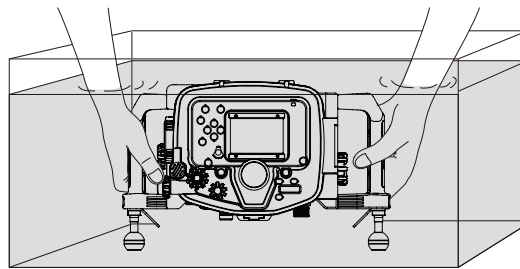


⑥



## **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. Multi-control Device will display "LEAKING", Water Leak Alarm will make "BEEP-BEEP-BEEP" sound.



## **Reset Button Use Notice**

In case of Multi-control Device system freeze, press Reset Button to force a shutdown. Then restart Multi-control Device.

## **Care and Maintenance**

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- a. 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.
- b. 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.
- c. 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.
- d. Clean the Main Seal O-ring and its 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.
- e. To lubricate O-rings, apply a small amount of silicone grease (*AOI S/GR-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.
- f. Do not leave the camera and housing in direct sunlight for prolonged periods. Heat may damage the camera and housing.
- g. Dry well and remove the camera prior to travel and storage.
- h. Store the housing in a cool and dry place.

### **IMPORTANT:**

- a. 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!
- b. If you don't use the housing, please remember to fully charge the battery in the Multi-control Device for every half year.

## Specifications

|                         |                          |   |
|-------------------------|--------------------------|---|
| MODEL NUMBER            |                          | AOI UH-A7RV   |
| DESCRIPTION             |                          | Underwater Housing for SONY ILCE-7RM5 Camera  |
| HOUSING COLOR           |                          | Black   |
| COMPATIBLE CAMERA MODEL |                          | SONY ILCE-7RM5 Camera   |
| MAIN MATERIAL           |                          | PC + GF   |
| DEPTH RATING            |                          | 60 Meters   |
| LENS PORT SYSTEM        |                          | AX Port System  |
| MULTI-CONTROL DEVICE    | FLASH CONTROL            | a) SONY TTL, b) M-HSS, c) Manual Flash (without Pre-flash)  |
|                         | WATER LEAKAGE PROTECTION | Built-in Vacuum Analyzation and Wet Detection System (VWS)  |
|                         | WATER DEPTH MONITOR      | Max. Monitoring Depth up to 60 Meters with Preset Depth Alarm Function  |
|                         | INFORMATION DISPLAY      | a) VWS Monitor, b) Water Depth Monitor,<br>c) Depth Alarm, d) Wet Detection Alarm,<br>e) TTL Flash, M-HSS Flash or Manual Flash Selection                         |
|                         | POWER SOURCE             | Built-in Rechargeable Lithium Polymer Battery (3.7V 700mAH)   |
|                         | BATTERY CHARGING         | By USB Charger DC5V, 0.5A (not included)<br>Approx. 1.5 Hours for a full charge   |
|                         | BATTERY OPERATION TIME   | 18 Hours (continuous operation)   |
| DIMENSIONS              |                          | 321.5mm(L) X 130.4mm(W) X 203.5mm(H)  |
| WEIGHT                  |                          | On Land : Approx. 2981.0 g<br>(Only included the Housing Body and Body Cap)   |
|                         |                          | Underwater : Approx. -190.0 g<br>(With SONY ILCE-7RM5 Camera, Camera Batt., FE 28-60mm F4-5.6 Lens,<br>AOI FLP-103 Lens Port and Hot Shoe Connector (AOI HSC-03)) |

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