

# SEA&SEA

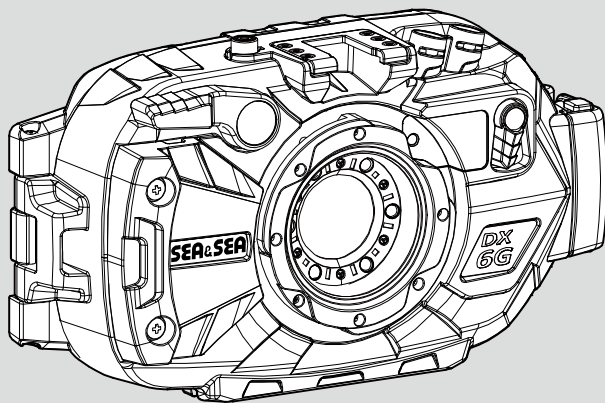
JP 06666

US 06667

EU 06668

## CAMERA/HOUSING SYSTEM

# ***DX-6G***



## 取扱説明書 Instruction Manual

日本語

English

## **Introduction**

Thank you for purchasing SEA&SEA products.

Please read this instruction manual carefully prior to using this product. Only with a thorough understanding of this manual's content will you be able to use the housing correctly. After reading the manual, please be sure to keep it in a place where you can easily come back to it at any time.

### **Note:**

**This products have passed SEA&SEA's  
criteria-based inspection for pressure resistance.**

The appearance of color evenness or weld lines on the external body of the product is normal and will not affect its performance.

## **Contents**

Safety Precautions .....	E-2
Precautions on Handling the O-ring .....	E-4
Accessories .....	E-6
Identification of Parts .....	E-7
Opening the Rear Cover .....	E-8
Installing the 6G Camera .....	E-9
Operation .....	E-11
Hand Strap .....	E-12
Macro Flashlight Diffuser.....	E-12
Connecting the Strobe .....	E-13
Attaching the Optional Accessories .....	E-14
Wide-angle Conversion Lens .....	E-14
Accessory shoe / Stays.....	E-15
LCD Monitor Hood with Lens .....	E-16
Desiccant Pack (OZO) .....	E-16
Maintenance and Storage .....	E-17
Specifications .....	E-18

# Safety Precautions

For safe handling of the product, please read the following precautions carefully before use.

Failure to heed the precautions listed below could result in serious consequences. To prevent injury or damage to yourself and/or others, please observe the precautions as they contain highly important information related to personal and product safety.



## **WARNING**

Situations that could result in severe injury or death.



## **CAUTION**

Situations that could result in property damage or personal injury.



## **WARNING**

- Keep out of reach of children to prevent accidental ingestion. If swallowed, seek medical advice immediately.



## **CAUTION**

- Carefully observe the instruction manual for the compatible camera for this product before use.
- This product has been designed and manufactured for use at a water depth within 55m / 183.3ft. Please note that diving to a depth in excess of 55m / 183.3ft may cause damage to the product or may lead to water leakage.
- Unauthorized disassembling and/or modification could result in malfunction or flooding, and void product warranty. Take the product to a SEA&SEA authorized service center for repair or inspection.
- Should you notice smoke or an unusual smell coming from the product, turn it off and remove the batteries immediately, taking care to avoid burns. Continued operation could result in injury. After removing the battery, take the product to a SEA&SEA authorized service center for inspection.
- Discontinue use and turn the product off immediately should you notice flooding or leakage.
- When the product is flooding, interior pressure may build up. Please be careful when opening the product as water may spurt out or the cap may open explosively and cause injuries.
- The product has been constructed with an airtight seal. When packing the product for airplane travel, do not seal-up the product to alleviate pressure build up due to atmospheric changes.
- Do not open the product in a wet or sandy environment. Protect the interior from moisture and debris in order to prevent malfunction or flooding.
- Avoid strong shocks/impacts or excess stress to prevent malfunction, damage or breakdown. Make sure that the product has been securely mounted to other products in order to prevent injury, fall or missing.

- Do not rest heavy weight on the product. It might deform the outer casing, damage internal parts, make the waterproofing fail, or result in fire or electric shock.
- Please note that some marks may be left on the camera scraping against the dials or gears of the housing.
- Handle the product carefully so as not to scratch the front port, the lens, the flash window or the finder.
- Always dry the front port, the lens, the flash window or the finder using a soft cloth to prevent stain or salt residue from marring the glass surface.
- Rinse the product with fresh water, after underwater use. Ensure that the product is waterproofed before rinsing. Refer to [Maintenance and Storage] (P.E-17) for details.
- Make sure that the connectors have been secured with the connector caps before rinsing the product with fresh water, after removal from other products.
- Never use chemicals, cosmetics, any petroleum solvents such as paint thinner, or neutral detergent on the product. They may deform and damage the product.
- Do not leave the product in places with hot temperatures such as inside of a car or in a car trunk in summer. The heat may deform plastic parts of the product, damaging internal parts and resulting in potential fire or electric shock. If the product is sealed tight in hot conditions, heated air expanding inside the product may deform the casing and ruin the waterproofing.
- Do not store the product in wet or high humidity place, to avoid mold, rust, corrosion or malfunction.
- Do not store the product with naphthalene or camphor mothballs, or in locations such as a laboratory where chemicals are used. This environment can cause mold, rust, corrosion or malfunction.
- SEA&SEA Co., Ltd. assumes no liability for compensation of loss of captured images or expenses caused by loss of images, even if you are unable to shoot due to a product defect or malfunction.
- SEA&SEA Co., Ltd. will not be responsible for the replacement or compensation for cameras, lenses or those accessories damaged due to your invalid operation.
- SEA&SEA Co., Ltd. assumes no liability for errors or discrepancies in this manual.
- Carefully observe the O-ring maintenance manual for the handling of O-rings before use.
- The silicon grease included in the product package is inedible.

## Precautions on Handling the O-ring

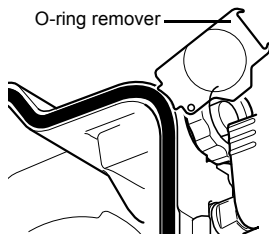
This product is kept watertight by the O-ring. To keep the O-ring functioning properly, please observe the following. Improper handling of the O-ring could cause flooding.

### CAUTION

- SEA&SEA products use blue O-rings. These O-rings are impregnated with silicone oil through a special process. The lubricating effect of the O-ring lasts as long as the silicone oil is gradually seeping out from within.
- For the maintenance of these blue O-rings, make sure to use genuine SEA&SEA silicone grease (O-ring grease for use with the blue O-rings that comes in tubes with blue lettering and blue caps). If you use silicone grease from other companies, the grease you apply will be sucked into the blue O-rings due to their special characteristics, which will result in insufficient grease. If this happens even once, the O-ring will not revert to its normal state and must be replaced.
- If the grease is insufficient, the O-ring will not slide, and it will become harder to open and close the waterproof parts. Because of this, it could become impossible to open or close the housing or it could cause flooding, so please refrain from using the housing with insufficient grease.

### Are there any scratches or cracks in the O-ring?

Check the O-ring to make sure there are no scratches or cracks. If there are, replace the O-ring with a new one immediately. When handling the O-ring, do not use pointed metal objects, which could damage the O-ring. Use of the included O-ring remover is recommended.

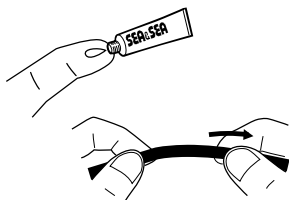


### Be careful about dust, sand, and hair

Check the O-ring to make sure that there is no dust, sand, or hair on the O-ring, in the O-ring's grooves, or on the O-ring's contact surfaces. If any of these things are attached, remove them completely. If used as is, these things could cause flooding.

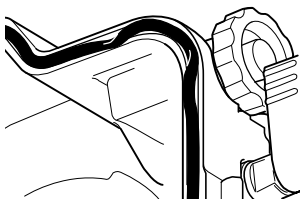
### Coat with silicone grease

Silicone grease protects the O-ring from chafing. After checking the O-ring to make sure that there are no scratches, dust, or debris, apply a light coating of silicone grease to the entire O-ring with your finger. Applying too much grease will make it easier for dust and debris to adhere to the O-ring, and could cause flooding.



### Do not twist the O-ring

When fitting the O-ring into the O-ring groove, insert it straight into the groove; do not bend or twist it.



### Remove the O-ring for inspection before each use

In principle, the O-ring should be removed before each use so that the O-ring, O-ring groove, and O-ring contact surfaces can be checked. This is because you cannot find any sand or debris that may have gotten into the O-ring groove if the O-ring is not removed. For routine maintenance prior to each use, it is advisable to make sure to remove the O-ring.

### Be careful about how you store O-rings

When storing spare O-rings or O-rings that you have removed from the housing, keep them in a cool place out of direct sunlight. Also, when storing O-rings, do not place heavy objects on them or twist them.

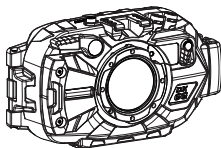
### O-rings last for one year

Although it depends on how well they are maintained, how often they are used, and how they are stored, O-rings generally last for one year. It is advisable to inspect them before use, and replace them early.

# Accessories

Before using this model, check to make sure that all accessories are present.

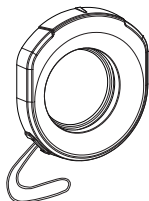
**DX-6G**



**6G**



**Macro Flashlight Diffuser with Strap**



**Hand Strap for DX-6G**



**Power Adapter**



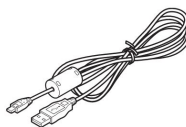
**Rechargeable  
Lithium-Ion Battery**



**Macro Stand**



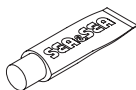
**USB Cable**



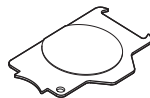
**Strap for 6G**



**Silicon Grease**



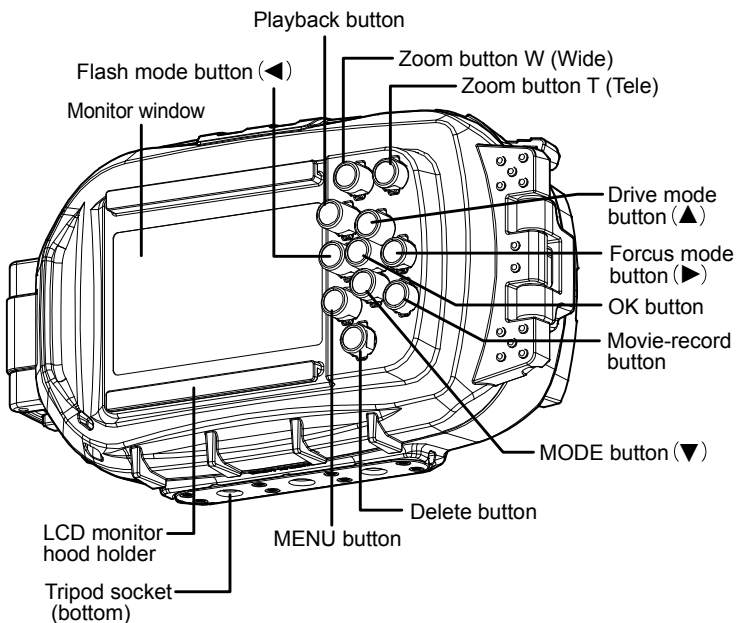
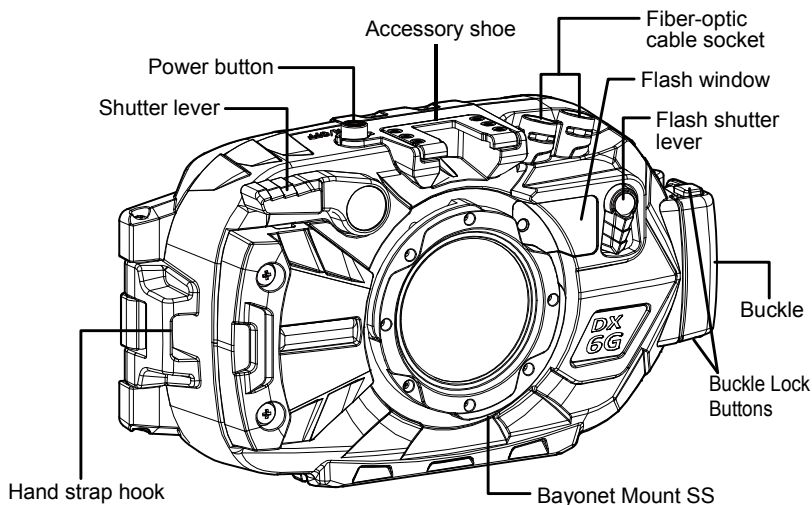
**O-ring Remover**



- Instruction Manual
- O-ring Maintenance Manual
- Regarding Waterproof Design

# Identification of Parts

- For 6G camera identification of Parts, refer to the WG-50 camera's instruction manual.  
<http://www.ricoh-imaging.com/manuals/>

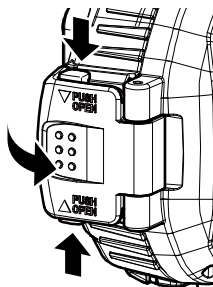




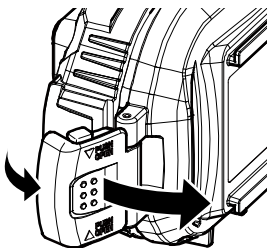
# Opening the Rear Cover

- 1 Push the red buckle lock buttons together to unlock, and pull the buckle all the way towards back to lift the rear cover from the front case

- Lift up the rear cover



- 2 Pull the rear cover to open



## CAUTION

- Before opening the rear cover, make sure that the housing is completely dry and free of salt deposits. If you find any salt deposits, rinse with fresh water and wipe off water completely with a soft cloth.
- Never use the buckle/buckle lock buttons underwater.
- When opening the rear door after use in the water, open it carefully not to let water or sand enter inside the housing.

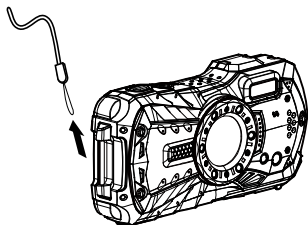
# Installing the 6G Camera

## CAUTION

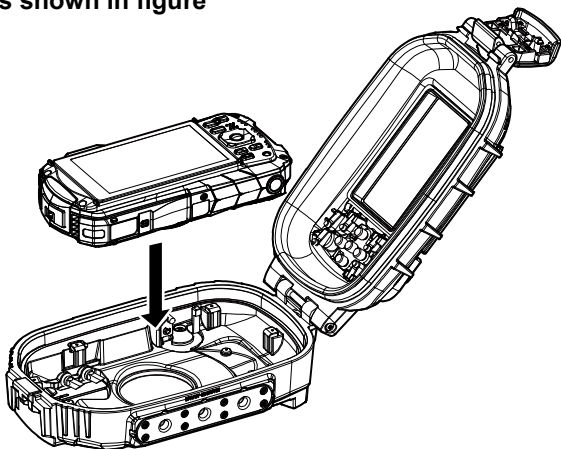
- The 6G camera is a waterproof camera. However, even if the housing is placed on a wet 6G camera that has been dried, condensation may form inside the housing and the glass may fog up, preventing pictures from being taken, due to moisture left remaining in the gaps between the housing and the camera.

If the camera has been wet, wipe it off with a dry towel or something similar and set it in a cool area out of direct sunlight for 24 hours or more before attaching the housing.

- To avoid flooding by unwanted items, remove the wrist strap from 6G camera before installation.

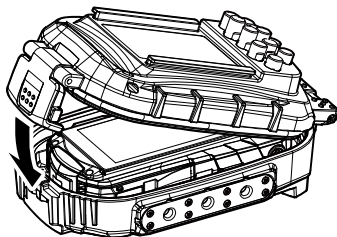


- 1 Turn off the power of the 6G camera and place it as shown in figure

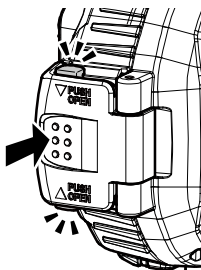


- Make sure that the 6G camera is set parallel to the housing and not excessively slanted.

- 2** Make sure that there is no dust or scratches on the O-ring / O-ring contact surface before closing the rear cover. Take the hand strap out, press the rear cover, and then put the buckle over the front case



- 3** Push the buckle down until it clicks. Make sure that the red buckle lock buttons on both sides are popped out

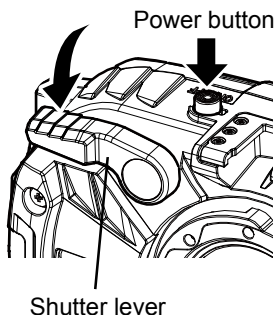


# Operation

- For 6G camera operation, refer to the WG-50 camera's instruction manual.  
<http://www.ricoh-imaging.com/manuals/>

## **Power button**

Use the power button to turn ON / OFF the 6G camera.

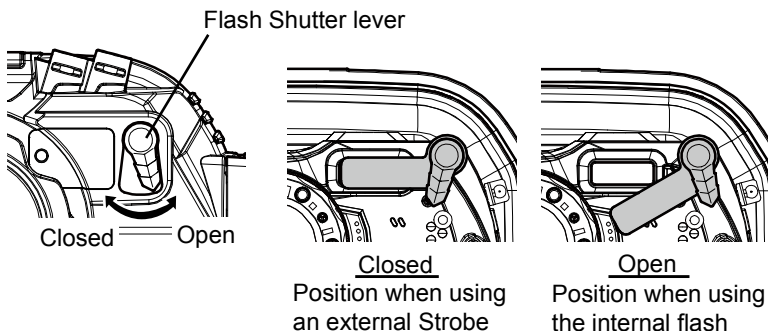


## **Shutter lever**

Depress the shutter lever to press the shutter button of the 6G camera.

## **Flash shutter lever**

When using an external strobe, close the Flash Shutter Lever to block the camera's internal flash.



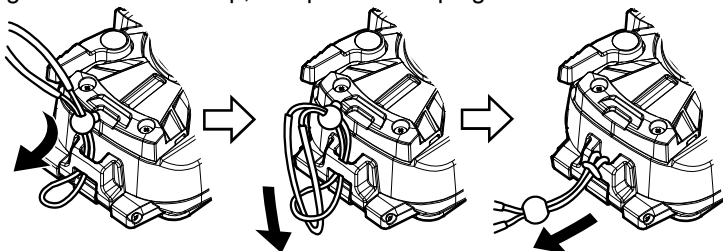
## **Other buttons**

Use buttons to control each function of the 6G camera underwater. Please refer to the instruction manual of the 6G camera for operation of the other buttons.

## Hand Strap

### Attaching the hand strap

Put the hand strap through the hook on the housing, let other end go through between the strap, and pull the strap tight as shown.



- Do not use the strap when out of water if using optional accessories (such as a wide-angle conversion lens, stay, arm, and strobe / light). The increased weight of the accessories may damage the strap and the strap hook, which may result in equipment damage / loss or personal injury.

## Macro Flashlight Diffuser

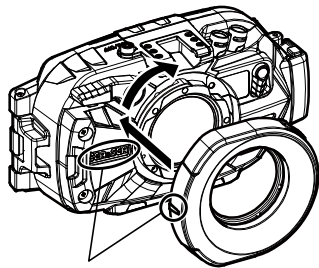
Use of the macro flashlight diffuser at close distances during macro shooting enables the light from the built-in flash to disperse and irradiate objects evenly.

### ⚠ CAUTION

- If the light from the built-in flash appears dark due to the distance between the camera and subject, shooting conditions, and settings, remove the macro flashlight diffuser before taking pictures.

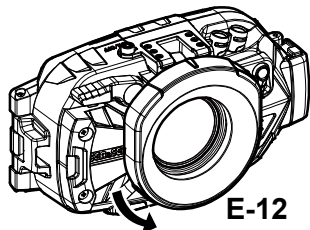
### Attaching the Macro Flashlight Diffuser

- 1 Line up the SEA&SEA logo on the main unit and the ▲ mark on the macro flashlight diffuser, and place the macro flashlight diffuser onto the lens part
- 2 Turn the macro flashlight diffuser in the clockwise direction until you feel it click into place



### Removing the Macro Flashlight Diffuser

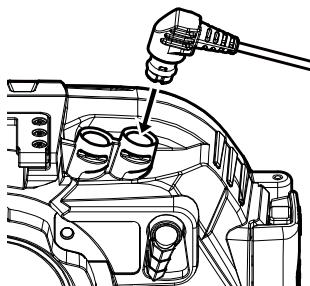
- 1 Turn the macro flashlight diffuser in the counterclockwise direction
- 2 Pull the macro flashlight diffuser forward when it has been turned to the location where the SEA&SEA logo on the main unit and the ▲ mark on the macro flashlight diffuser line up



# Connecting the Strobe

Connect the strobe with the fiber-optic cable (option) when the strobe is triggered by sensing the light from the camera's built-in flash.

- 1 **Insert the fiber-optic cable's connector into the socket until it stops**



## Shooting Tips!

- When shooting with an external flash, we recommend setting the ISO to 125.
- When the 6G camera is turned Off, the shooting function settings will return to their default settings. Use the camera's mode memory function to save the current set value.

## CAUTION

- Before inserting the fiber-optic cable, check to make sure that there are no scratches or dirt on the connector surface. Scratches or dirt may cause the strobe to malfunction.
- To protect the surface from scratches or dirt, do not remove the caps from the fiber-optic cable sockets when the cable is not inserted.
- There is no possibility of water leaking from the fiber-optic cable socket even if the fiber-optic cable/cable socket cap is removed underwater.
- After the strobe is connected to the housing, make sure to check that the connected strobe functions correctly before underwater use.

## Attaching the Optional Accessories

This product accepts SEA&SEA optional accessories. By using this product in combination with those accessories, you will be able to try various shooting techniques.

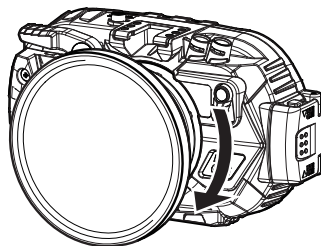
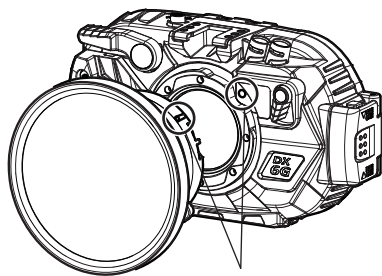
- Lenses, strobes and other accessories have different depth rating. Check the depth rating for each before use.
- Read the instruction manual for each accessory before use.

### Wide-angle Conversion Lens (Option)

An optional SS Bayonet Wide-angle Conversion Lens / WCL06 (#52152) can be attached to this product .

#### Attaching the Wide-Angle Conversion Lens

- 1 The ○ mark on the Flash Window and Align the salient on the upper surface of the lens bayonet, then fix the Wide-angle Conversion lens to the housing
- 2 Turn the the Wide-angle Conversion lens clockwise until it clicks



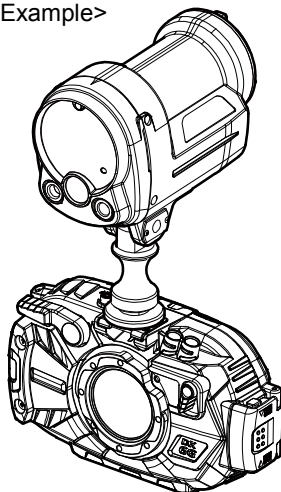
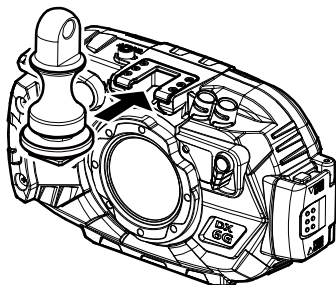
#### ⚠ CAUTION

- When using the lens, loosen or lightly shake the lens while underwater to remove any air trapped between the lens and the housing.
- When the wide-angle conversion lens is used on land, there may be cases where it is difficult to focus the camera due to effects from the distance between the camera and subject, shooting conditions, and the like.

## Accessory shoe

SEA&SEA strobes / lights can be mounted to the accessory shoe by using optional SA8 Ball Base for Accessory Shoe II (#22139) or Hot Shoe Arm (#29501).

<Example>



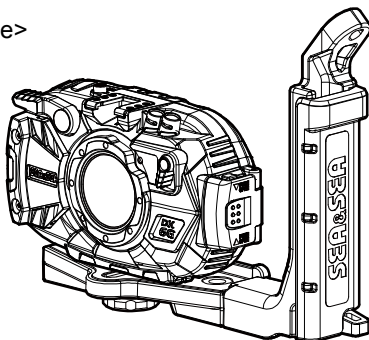
### CAUTION

- The max. weight of an accessory that can be mounted to the accessory shoe is approx. 750g / 26.3oz.
- Remove the accessories from the accessory shoe when carrying the housing out of water.

## Stays

SEA&SEA stays can be mounted to the housing's tripod socket.

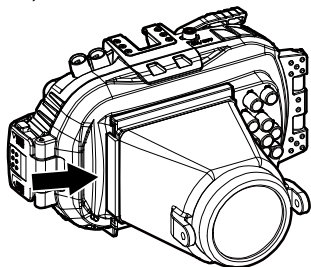
<Example>





## LCD Monitor Hood with Lens

The LCD monitor hood holder on this product accepts the LCD monitor hood with lens (#52121).



### ⚠ CAUTION

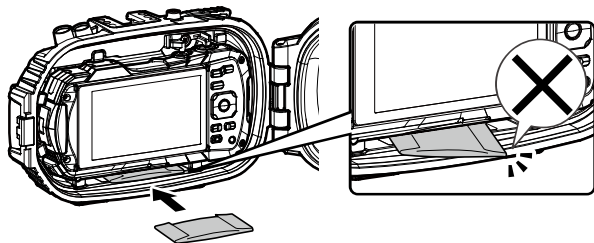
- When attaching LCD monitor hood to the LCD monitor hood holder, always make sure to refer to and follow the instructions in the accompanying instruction manual.

## Desiccant Pack (OZO)

A substantial difference between the external (water) and the internal (camera and air) temperatures sometimes result in dewfall on the inside surface of the housing lens. This phenomenon typically happens when the camera becomes hot due to long and consecutive use. To mitigate the effect of the dew, use the desiccant pack (Option) as follows;

### Using the desiccant pack (OZO)

- 1 Install the 6G camera to the housing
- 2 Place a desiccant pack (OZO) at the location as shown, then close the rear cover

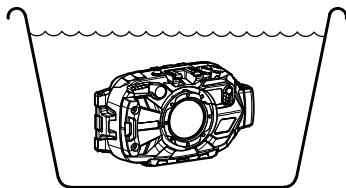


- Make sure that the edge of the desiccant pack is not covering the O-ring contact surface.
- Make sure that the desiccant pack is not trapped when closing the rear cover.

# Maintenance and Storage

## CAUTION

- Never use chemicals, cosmetics, any petroleum solvents such as paint thinner, or neutral detergent on the product. They may deform and damage the product.
- After each use in salt water, make sure it's watertight, then soak it sufficiently in fresh water.
- Insufficient soaking causes damage by salt to the product. Salty residue may be left on the product where it will crystallize as it evaporates. Crystallized salt is hard to dissolve and difficult to be removed once formed, and it will result in water leakage.
- After rinsing, dry the product well with a soft dry cloth, then let the product dry in the shade, out of direct sunlight.
- Do not dry the product by heating (using a hair dryer, for example). Heating can deform and damage the product.
- If you will not use the product for an extended period of time, store it away from high temperatures, high humidity, direct sunlight, or extreme cold.
- Do not store the product with naphthalene or camphor mothballs, or in locations such as a laboratory where chemicals are used. This environment can cause mold, rust, corrosion or malfunction.
- Always remove the camera from the housing after use. Thoroughly wipe off water before opening the housing and avoid any water drops inside the housing.
- After using the product, maintain the O-rings before storing. Examine the O-rings before and after each dive. We recommend early exchange of the O-rings, at least once a year.
- Every two years we recommend a complete overhaul of O-rings regardless of the frequency in use, for the best performance of the product.



# Specifications

- For 6G camera specifications, refer to the WG-50 camera's instruction manual.  
<http://www.ricoh-imaging.com/manuals/>

<b>Controls</b>	Control dial, Shutter lever, Zoom lever, Power button, Mode dial, Movie-record button, MENU button, Selection button, Control wheel, Delete button, Playback button, Fn button
<b>Construction</b>	Body: Polycarbonate Grip: ABS resin
<b>Depth rating</b>	55 m (180 ft)
<b>Dimensions (W×H×D)</b>	Approx. 165×93×61 mm
<b>Weight</b>	Approx. 412 g (14.5 oz) ※housing only Approx. 605 g (21.3 oz) ※incl. camera, battery, SD card
<b>Weight underwater</b>	Approx. 30 g (1.0 oz) ※incl. camera, battery, SD card
<b>Accessories</b>	<ul style="list-style-type: none"><li>•Macro Flashlight Diffuser</li><li>•Strap for Macro Flashlight Diffuser</li><li>•Hand Strap for DX-6G</li><li>•Power Adapter</li><li>•Rechargeable Lithium-Ion Battery</li><li>•Macro Stand</li><li>•USB Cable</li><li>•Strap for 6G</li><li>•Silicone grease</li><li>•O-ring remover</li><li>•Instruction manual (this manual)</li><li>•O-ring maintenance manual</li><li>•Regarding Waterproof Design</li></ul>

\* The specifications and appearance are subject to change without notice.

# SEA&SEA

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