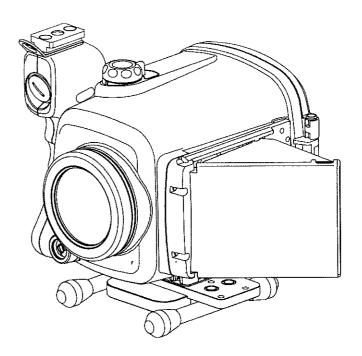
# **SEA&SEA**

## **UNDERWATER HOUSING**

07117 VX-S1 07118 VX-S2

## Instruction Manual



# SEA&SEA

### SEA&SEA Products Ltd.

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# VX-51 VX-52

Thank you for your purchase of a SEA&SEA product. For proper operation of the product and safe handling, please read the following instructions carefully before use. This manual should be retained for future reference.

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## **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.

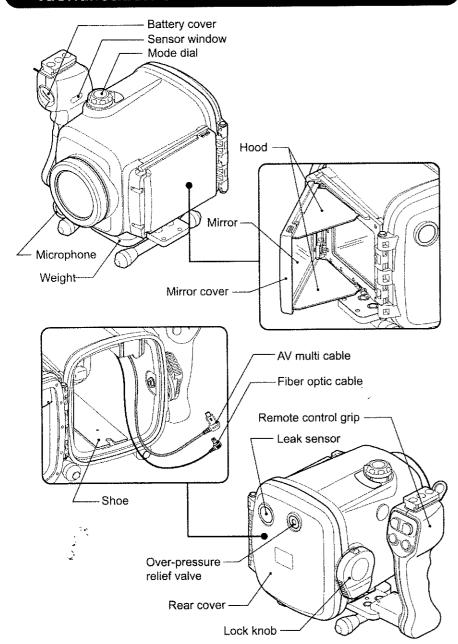
# **⚠** CAUTION

- Read the instruction manual and observe proper precautions before use of the product.
- 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.
- Keep away from strong magnetic fields. Do not use or store this product in the vicinity of equipment that generates strong electro-magnetic radiation or magnetic fields. Strong static charges or the magnetic fields could cause malfunction, or affect the product's internal circuitry.
- Before using the product in an airplane or a hospital, check if it is allowed. Electromagnetic waves emitted by the product may interfere with the measuring instruments or medical equipment.
- 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] for details.
- 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 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 will not be responsible for the replacement or compensation for cameras, lenses or those accessories damaged due to your invalid operation.
- SEA&SEA assumes no liability for errors or discrepancies in this manual.
- This product is for personal use.
- Carefully observe the O-ring maintenance manual for the handling of O-rings before use.

# Identification of Parts



# Accessories











Step-up ring



Clincher



O-ring remover



Silicone grease



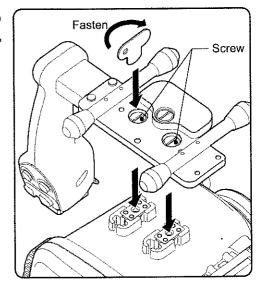
CLithium ion battery CR-2 (for Remote control grip)



Lithium ion battery CR2032 (for Leak sensor)

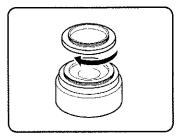
# Attaching the Remote control grip

Attach the Remote control grip to the bottom of the front case, using the clincher (included in the package) as shown.



# Mounting the video camera in the housing

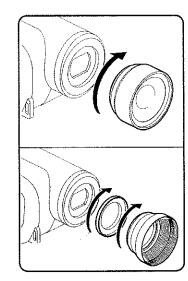
1. Fit the step-up ring to the wide conversion lens. Turn in a clockwise direction to tighten.



2. Attach the wide conversion lens to the video camera by rotating clockwise.

• If you do not use the wide conversion

lens, attach the lens hood instead.



3. Disable the built-in flash of the video

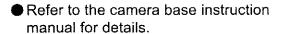
camera by selecting the camera's

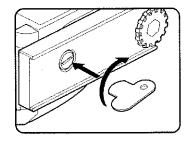
no-flash mode.

● Refer to the video camera's instruction manual for the setting of no-flash mode.

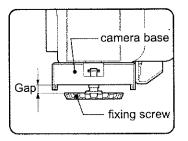


 Attach the camera base (option) to the video camera and secure with the camera fixing screw using a clincher (including in the package).

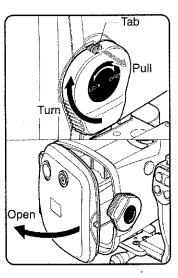




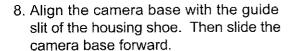
5. Insert the camera base fixing screw (included in the package of the camera base) into the hole in the camera base.

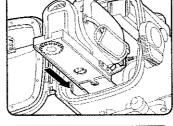


- 6. Open the rear cover with turning the lock knob while pulling the tab.
- Never turn the knob without pulling the tab, as it may result in damage to the knob.

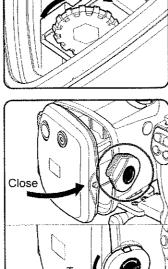


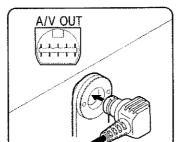
- 7. Insert the AV multi cable into the A/V OUT iack of the video camera, and connect the Fiber optic cable to the camera base.
- The position of A/V OUT jack and the fiber optic cable receptacle/socket of the camera base varies depending on the camera model. Refer to the camera base instruction manual for details.

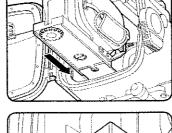


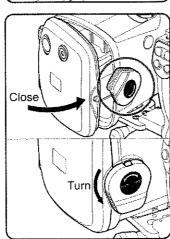


- 9. Make sure that the camera/camera base assembly is all the way into the front case. Secure onto position by tightening the camera base fixing screw.
- 10. Close the rear cover with turning the lock knob to backward; you will hear it click into place.
- Please be careful not to get the cables caught in the rear cover.
- Make sure that there are no foreign particles, such as dust, sand or hair on the O-ring, O-ring groove or O-ring mating surface.
- Make sure that the proper amount of silicone grease is applied to the surface of the O-ring to prevent flooding.







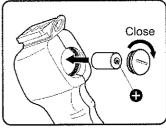


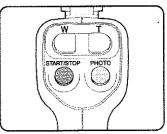
## Operation

## 《Remote control grip》

To replace the remote control grip battery, remove the battery cover on the grip. Using a clincher (including in the package), rotate it counterclockwise. Install the CR-2 battery included in the product package. Close the battery cover completely. To prevent flooding, make sure that the O-ring is clean and lubricated.

Zoom (W/T) buttons..... Zoom out or in. PHOTO button......Captures still images. START/STOP button..... Starts recording when the button is pressed once. Stops recording when the button is pressed again.



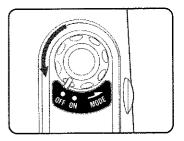


- The PHOTO button is lower than the START/STOP button in order to avoid errors in operation.
- The PHOTO button can be pressed while recording. If you press the PHOTO button while recording, the still image captured is saved on a designated memory card.

## 《Mode dial》

You can operate the video camera's POWER switch by the mode dial.

Set the pointer of the mode dial to the ON or OFF position, so that you can switch the power of the video camera to ON or OFF.

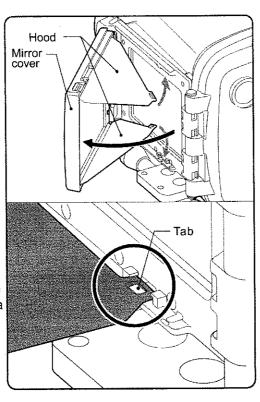


- Turn the mode dial repeatedly in the direction of the arrow to switch the recording mode of the video camera (movie → still image → play/edit → movie).
- \* Some cameras can not be switched to play/edit mode when the camera does not contain recording media.
- \* Refer to the video camera's instruction manual for details of the POWER switch of the camera.

#### 《Mirror》

You can reflect the LCD screen of the video camera to the mirror while recording. Pull the mirror cover and get out the hood to be secured into the tabs of the housing side. Please close the mirror cover folding the hood after recording.

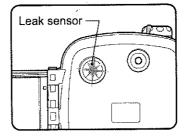
- Please avoid strong shock/ impacts or excess stress to the mirror cover and the hood to prevent damage or breakdown.
- Close the mirror cover when the LCD screen of the video camera is OFF in order to prevent damage to the mirror.



## 《Leak sensor》

# **A** CAUTION

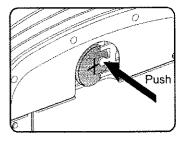
The red leak detector light blinks when the leak sensor detects moisture. If the leak sensor blinks, immediately turn off the power switch with turning the pointer of the mode dial to OFF position, then make a



safe ascent to the surface. Remove the video camera from the housing. When the product is flooding, interior pressure may build up. Please be careful when opening the rear cover to remove the camera from the housing, as water may spurt out or the rear cover may open explosively and cause injuries.

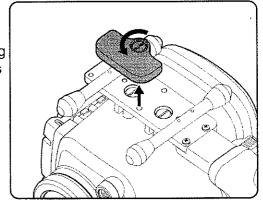
# Removing / Installing the LEAK Detector Battery

■ The battery included in the rear cover is the battery for the leak sensor. To replace the battery, use CR 2032. In order to take out the battery, push the circular part in the center firmly and will come off.



#### 《Weight》

Remove supplemental weight to adjust total weight of housing in water when using accessories such as underwater lights.

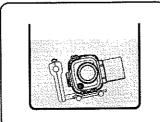


## Maintenance and Storage

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.

Remove batteries from the product before storing.

 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.

## **Specification**

■ Controls

Mode dial

Remote control grip: Zoom (W/T) buttons START/STOP button PHOTO button

■Indicator

Leak sensor

■ Construction

Body: Polycarbonate

Remote control grip: Corrosion-resistant aluminium alloy

■ Dimensions (WxHxD)

VX-S1

236x187x225mm / 9.4x7.5x9inch

(the mirror open: 320x187x225mm / 12.8x7.5x9inch)

VX-S2

236x187x235mm / 9.4x7.5x9.4inch

(the mirror open: 320x187x235mm / 12.8x7.5x9.4inch)

■Weight

VX-S1: 3,300g / 116oz VX-S2: 3.380g / 119oz

■Depth rating 60m/200ft

Accessories

Wide conversion lens / Lens hood / Step-up ring / Clincher / O-ring remover / Silicone grease / Lithium ion battery CR-2 / Lithium ion battery CR2032

\*Specifications and appearance are subject to change without notice.

\*This product is for personal use, not for commercial use.