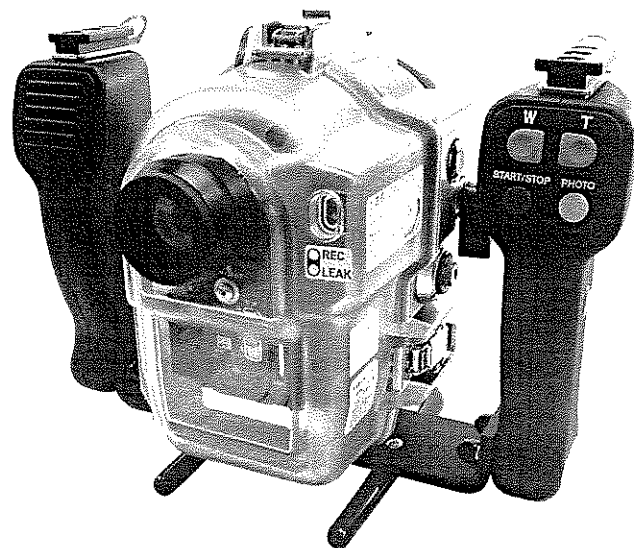


VX-PC350

SEA&SEA

Underwater Video Housing for SONY DCR-PC350



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Sea & Sea Products Ltd.

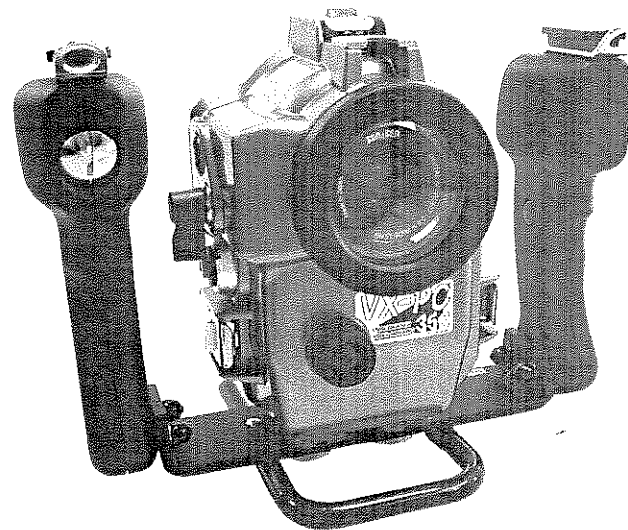
3-2-20 Saiwaicho, Kawaguchi-shi, Saitama 332-0016, Japan

TEL. 048-256-2251

<http://www.seaandsea.co.jp>

VX-PC350

Instruction Manual



VX-PC₃₅₀

Underwater Video Housing for SONY DCR-PC350

Introduction

Thank you and congratulations on your purchase of Sea & Sea's VX-PC Underwater Housing specifically designed for use with the SONY DCR-PC350 Video Camera. This product is for underwater use only and is depth rated to 200 feet. Please read this manual before use and retain for future reference.

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Safety Precautions

※ Misuses listed under the following precautions could lead to serious consequences. Please observe the precautions as they contain highly important information related to personal and product safety.

Precautions marked "CAUTION!" refer to those situations or conditions that could result in personal injury or property damage. Please read carefully.

General Precautions for the Housing

CAUTION!

- Always make sure that underwater lighting equipment and accessories are securely mounted to prevent them from falling off, getting lost, causing personal injury or equipment malfunction.
- Do not carry or swing the housing by the strap. Take care not to drop it. Violent impact can severely damage the housing.
- Do not dive into the water from a boat with housing in hand. Always have someone hand the housing to you after you are in the water.
- Do not open the housing in a wet or sandy environment. Protect the interior from moisture and debris.
- Do not alter or modify the housing. User modifications can result in flooding or malfunction. User modifications will void the warranty.
- If you detect smoke or an acrid odor, discontinue use immediately. Remove the camera from the housing and remove batteries. Bring the housing to an authorized Sea & Sea dealer for evaluation and repair.
- In the event of flooding, turn the camera and lights off and discontinue use.
- If flooded, beware of increased pressure inside the housing. When opening, handle with extreme care. Cases will open with extreme force.
- Handle this product carefully so as not to scratch the lens or viewfinder window.
- Always dry the lens and monitor windows with a soft cloth to prevent salt residue from marring the glass surfaces.
- Never use petroleum solvents, such as alcohol or paint thinner, to clean the housing; such products might mar or otherwise damage the finder window and the housing's finish.
- This product has been constructed with an airtight seal. When packing this product for airplane travel, open the housing or remove the O-ring to alleviate pressure build up due to atmospheric changes.

- SEA & SEA Products Ltd. will not be responsible for unobtained pictures or costs related to the shooting of such pictures due to malfunction of the housing, camera, lights or accessories.
- SEA & SEA Products Ltd. will not be responsible for any damages, repairs or replacements of the camera, lenses or accessories used with this housing due to flooding caused by user mishandling.

■Precautions for Storage of the Housing



CAUTION!

- Always rinse this product with fresh water after use. Rinse with cases closed so that water will not penetrate the interior.
- This product incorporates plastic parts. Do not subject this housing to extreme heat, such as on a car dashboard, or in direct sunlight. Plastic parts are prone to warping. Especially take care not to store this product with the front and rear cases closed in a heated environment. It may cause flooding or malfunction.
- To prevent mildew and malfunction, do not store in a damp or humid environment.
- Do not store in a chemically laden environment. Naphthalene, camphor, or other harmful chemicals can cause mildew, corrosion and other damage to the metal and rubber parts in this product.

Handling and Maintenance of the O-ring

The O-ring on the front case of your VX-PC350 Housing provides an airtight waterproof seal. Improper handling and maintenance of the O-ring can cause flooding. Please observe the following precautions carefully.



CAUTION!

A special silicone oil-impregnated blue O-ring is used in this product. For maintenance of this blue O-ring, use Sea & Sea silicone grease in a tube with BLUE cap and lettering. Never use Sea & Sea silicone grease in a tube with a BLACK cap or other manufacturers' brands. Incompatible silicone grease will cause the O-ring to lose its waterproofing ability. If you have applied incompatible grease on a blue O-ring, the O-ring must be replaced.

●Always inspect the O-ring for scratches, cracks or cuts.

If the O-ring is damaged, it must be replaced. Never remove the O-ring with a sharp tool. To avoid damaging the O-ring, use the O-Ring Remover, a tool especially made for O-ring removal.

●Inspect for debris.

Make sure that there are no foreign particles, such as dust, sand or hair on the O-ring, O-ring groove, or O-ring contact surface. Such contamination will breach the seal and cause flooding. If necessary, wash the O-ring thoroughly in fresh water and dry with a lint-free cloth. Use a cotton swab to clean the O-ring groove and contact surface.

●Lubricate with silicone grease.

Silicone grease protects the O-ring from drying and abrasion. Dab a small amount of grease onto your finger and draw the O-ring through your fingers until evenly coated. Use the silicone grease sparingly. Too much grease attracts debris.

●Do not crimp the O-ring.

Hold the O-ring straight and do not bend or twist it when fitting it into the O-ring groove.

●O-ring storage.

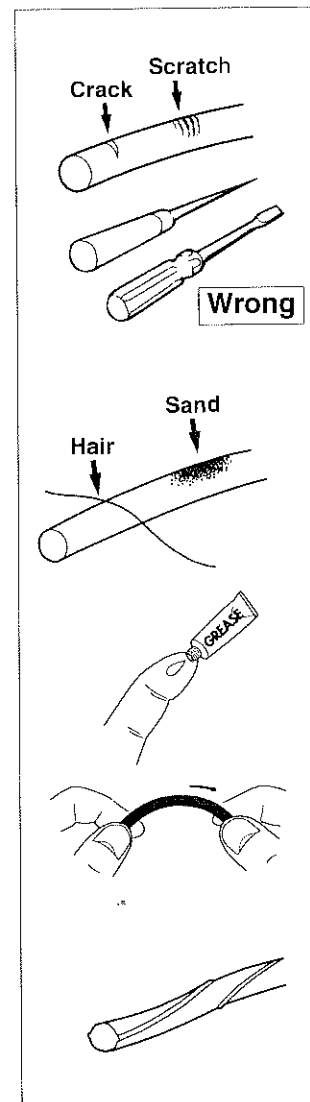
Always store your O-ring in an airtight container and in a cool environment. Keep out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

●The O-ring's life is one year.

The life of the O-ring depends on the diligence of your maintenance, frequency of use, and storing conditions, but on average, if you maintain your O-ring properly, it will retain its watertight integrity for one year.

●Remove the O-ring for inspection.

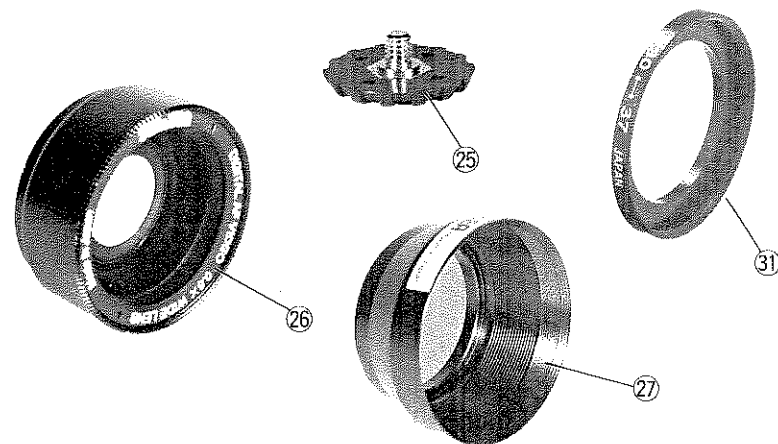
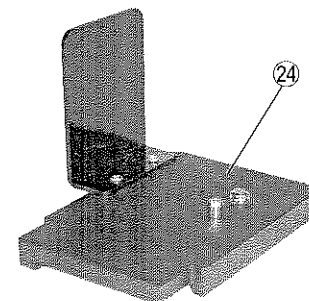
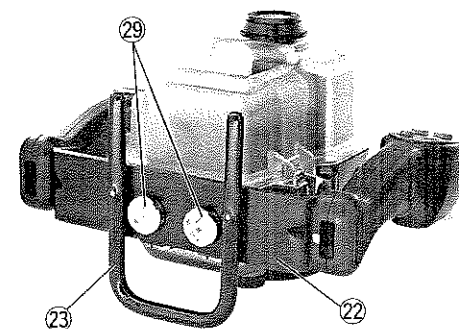
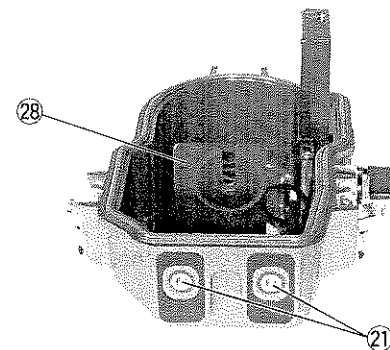
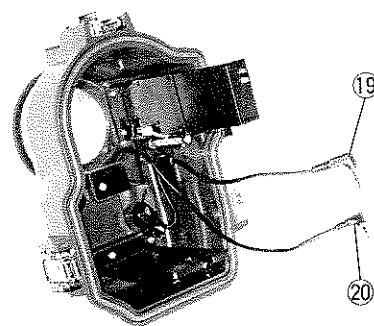
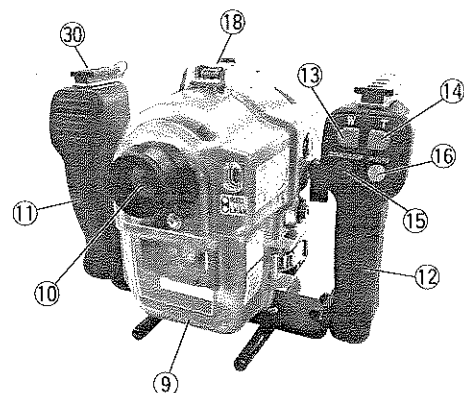
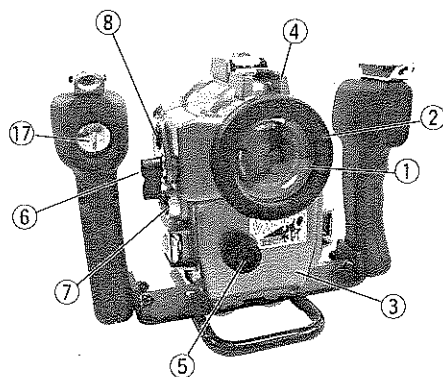
Before use, remove the O-ring from its groove and carefully check the O-ring, the O-ring groove and the O-ring contact surface. A thorough examination of the O-ring and O-ring groove is not possible unless the O-ring has been removed.



Identification of Parts

- ① Front Port
- ② Front Port Protector
- ③ Front Housing Case
- ④ Accessory Shoe
- ⑤ Underwater Microphone
- ⑥ Power Switch
- ⑦ Auto Focus ON/OFF
- ⑧ Infrared Window
- ⑨ Rear Housing Case
- ⑩ Optical Viewfinder
- ⑪ Grip (Left)
- ⑫ Remote Control Grip
- ⑬ Zoom Button (W)
- ⑭ Zoom Button (T)
- ⑮ REC Button
- ⑯ PHOTO Button

- ⑰ Battery Cover
- ⑱ Locking Latch
- ⑲ Microphone Cable
- ⑳ LANC Cable
- ㉑ Grip Stay Mount
- ㉒ Grip Stay
- ㉓ Grip Stay Support
- ㉔ Camera Base
- ㉕ Camera Fixing Screw
- ㉖ Wide Conversion Lens
- ㉗ Lens Hood
- ㉘ Slide Base
- ㉙ Housing Fixing Screw
- ㉚ Bracket Shoe
- ㉛ Step-up Ring



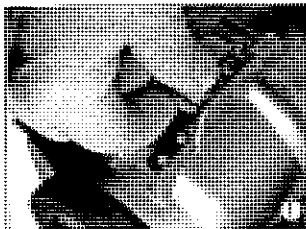
Opening and Closing the Housing

1. Opening the Housing

While holding the rear case, release the locking latches by pushing the lock forward as shown.

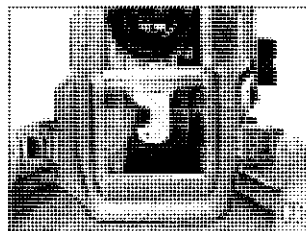
⚠ CAUTION!

- To prevent injury, lift the locking latch with the ball of your finger and not with your fingernail. (Photo ①)



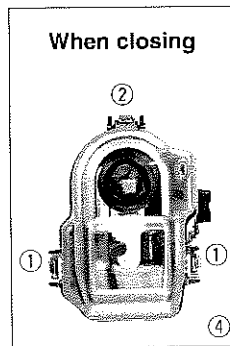
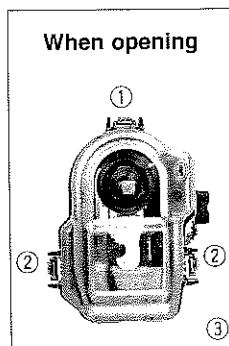
2. Closing the Housing

Examine the O-ring and O-ring channel. Make sure they are not scratched or contaminated by sand, hair, dust, etc. Carefully fit the rear case onto the front case. Take extreme care not to pinch the microphone plug or handstrap between the cases. Then close the two latches simultaneously. Do not close one at a time; that may cause uneven closure and would result in flooding. (Photo ②)



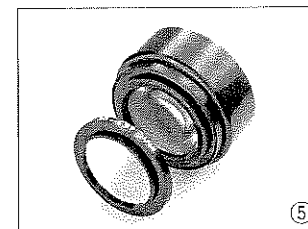
⚠ CAUTION!

- Snap down the latches until you hear a clicking sound. Check that the housing is securely closed.
- To avoid accidentally dropping the front case, always place the housing on a table when opening or closing.
- Follow the order shown in the photographs below: (Photo ③, ④)

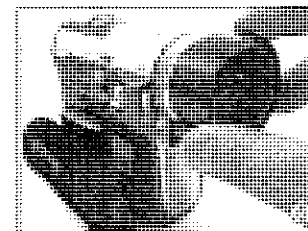


Mounting the Video Camera to the Housing

- Fit the step-up ring to the wide conversion lens. Turn in a clockwise direction to tighten, as shown. (Photo ⑤)

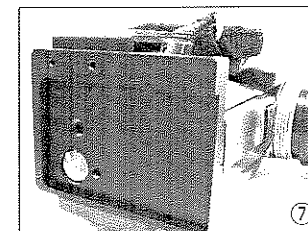


- Attach the wide conversion lens to the video camera and rotate clockwise as shown. (Photo ⑥)



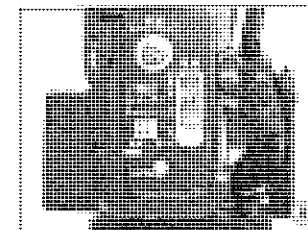
⚠ CAUTION!

- When the wide conversion lens is not used, attach the lens hood instead.
- ※ Use the lens hood included in the VX-PC package.
- Attach the camera base to the camera and secure with the camera fixing screw. Use a coin to tighten. (Photo ⑦)

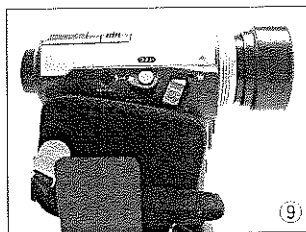


⚠ CAUTION!

- The camera base must fit flush against the camera. (Photo ⑧)

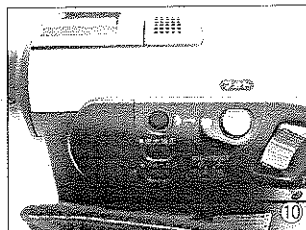


- Fold the strap into the strap holder as shown. (Photo ⑨)

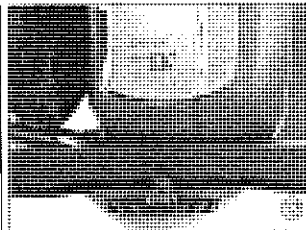
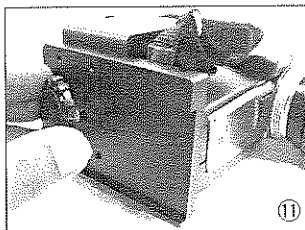


- From the REMOTE CONTROL menu of the video camera, select ON.

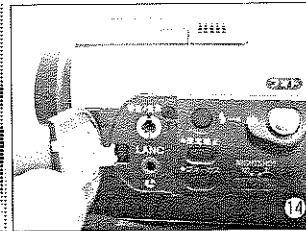
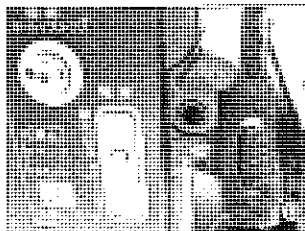
- Press the flash button of the video camera to disable the flash. (Photo ⑩)



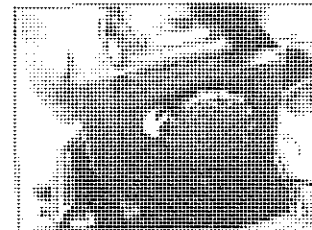
- Insert the camera fixing screw into the hole in the camera base. (Photo ⑪)
Do not tighten at this time. (Photo ⑫)



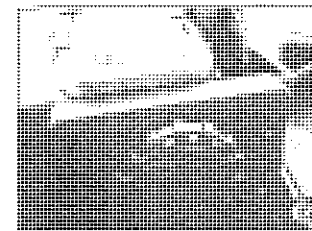
- Remove the microphone jack cover. (Photo ⑬, ⑭)



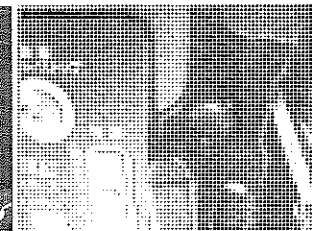
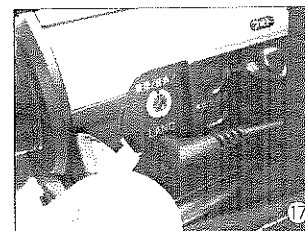
- Align the camera fixing screw with the guide slit of the housing shoe. Then slide the base forward. (Photo ⑮)



- Make sure that the camera/camera base assembly is all the way into the front case. Secure onto position by tightening the camera fixing screw. (Photo ⑯)



- Insert the LANC and microphone plugs into LANC and microphone jacks provided on the camera body. (Photo ⑰, ⑱)



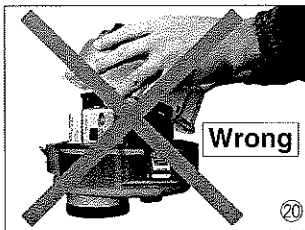
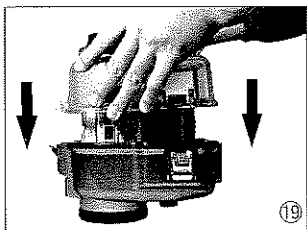
Closing the Housing

Make sure that there are no foreign particles, such as dust, sand or hair on the O-ring, O-ring groove, or O-ring contact surface. Make sure that the O-ring is properly lubricated.

⚠ CAUTION!

- When closing the housing, make sure that the microphone and LANC cables and the camera strap are not protruding or pinched between the cases.
- ※ Make sure that the strap is properly folded and tucked inside.

- Carefully place the rear case down over the camera so as not to hit the viewfinder. (Photo 19, 20)



⚠ CAUTION!

- Check that each switch moves smoothly and easily. If any of the switches does not move after the housing is closed, repeat the opening/closing procedure from the beginning. Do not force the switches, since that may cause malfunction.

External Controls

For information regarding the controls of the DCR-PC350 video camera, please refer to the instruction manual packaged with the camera.

<RECORDING>

Power Switch

Use this control to turn the camera power ON or OFF. (Photo 21)

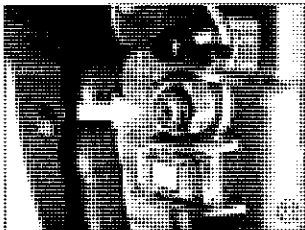


Auto Focus ON/OFF Button

This button is used to toggle between Auto Focus "On" and Auto Focus "Off."

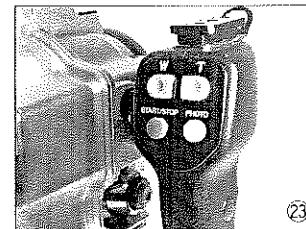
※To prevent autofocus searching on subjects with low contrast, select Auto Focus "Off."

To switch to Auto Focus "Off" press the autofocus button once. You can select autofocus mode again by pressing the button once more. (Photo 22)



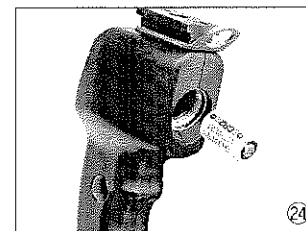
Remote Control Grip

W and T buttons are provided for electric zoom control. Use PHOTO button for still picture capture. Press the START/STOP button once to start recording and once more to stop recording. (Photo 23)



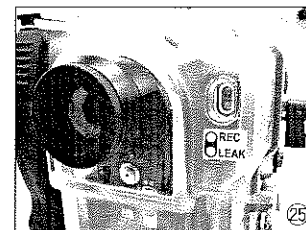
<Replacing the Battery>

To replace the Remote Control Grip battery, remove the battery cap on the grip. Using a coin, rotate it counterclockwise. Install the CR-2 battery included in the product package. Close the cap completely. (Photo 24) To prevent flooding, make sure that the O-ring is clean and lubricated.



REC Lamp

The red REC lamp turns on and remains on during recording. This lamp also blinks as a warning of insufficient battery power. Replace batteries when the red lamp blinks. (Photo 25)



Leak Detector

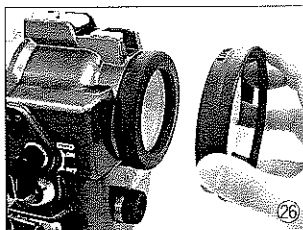
The yellow leak detector light blinks when the leak sensor detects moisture. (Photo 25)

If the leak sensor blinks, make a safe ascent to the surface. Remove the camera from the housing.

Attaching the Accessories

Attaching the Filter

Fit the filter to the front protector and press in. (Photo 26) Make sure that the filter is inserted all the way in.



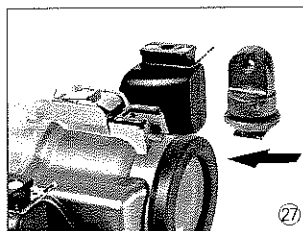
CAUTION!

- When you enter the water with the color filter attached to the housing, the air trapped between the port and the filter will adversely affect the picture. Be sure to vent trapped air by removing the filter in the water and attaching it again.

Attaching the Mini Shoe Arm and Hot Shoe Arm

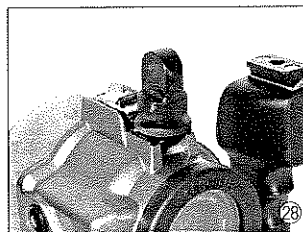
Slide the mini/hot shoe arm into the accessory shoe as shown. Secure with the fixing screw. (Photo 27, 28)

※Mini shoe arm shown



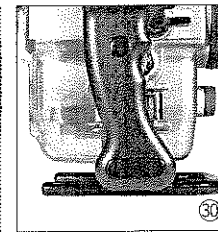
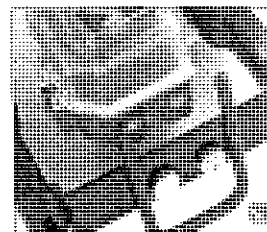
CAUTION!

- The accessory shoe accepts LX-25 and CL-20DH video lights only. Do not attempt to mount any other video light to the accessory shoe. When you use a large and heavy video light, attach it to the bracket shoe of the grip.
- Any accessory light weighing more than 1kg/2.2 lbs should be attached to the grip.



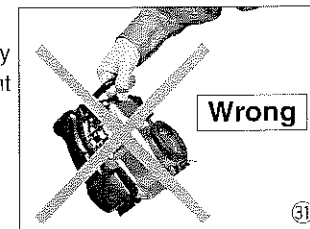
Attaching the Grip and Stay

Make sure that they are attached in the correct orientation as shown. Use a coin to tighten the stay. (Photo 29, 30)



CAUTION!

- Do not carry the housing by the grip stay support; it is not designed to support the weight of the system. (Photo 31)



- Using the BLX-55W light set with the VX-PC for Sony PC120 requires the BLX-55W adapter (#35430) for the VX-PC and adapter fixing screws (#90960). Sold separately."

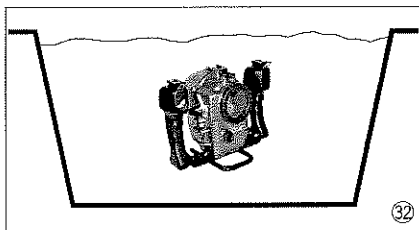
The Basics of Underwater Imaging

Underwater photography and videography are different from land photography, because of the effects produced by water opacity, depth, light conditions and particles suspended in the water. For best results with your video camera, it is important to understand the basics of underwater imaging.

- The best time for underwater imaging is between 10:00 a.m. and 2:00 p.m. When the sun is high, the water surface has the least light reflection and the best lighting conditions are achieved. For shooting during other times of the day, the use of an underwater video light (sold separately) is recommended. The same light is recommended for shooting at depth or in caverns, under overhangs, and other dark sites even during the optimal time mentioned above.
- Underwater, subjects will look one-third bigger and 25% closer than they actually are due to refraction. Refraction affects the camera lens in the same way as it does the human eye. Since angle of view recorded will be narrower than on land, it is recommended that you use a wide conversion lens (included in the product package) to obtain a wider angle.

Care and Maintenance After Use

1. Always rinse this product with fresh water after use. To prevent water from penetrating the interior, keep the housing securely closed with both locking latches while rinsing.
2. After use, first soak the housing well in fresh water as shown and then rinse with running water.
(Photo ③②)



⚠ CAUTION!

Salt residue may be left if the housing is only dipped in fresh water or just rinsed. The salt residue will crystallize when it dries. Crystallized salt will be hard to wash away and it may cause flooding. So always soak the housing well in fresh water and rinse after use.

3. After rinsing, dry completely with soft cloth and keep in a shaded and dry place.

⚠ CAUTION!

Do not dry the housing with heat, since heat may warp or damage housing parts.

4. Always remove the video camera from the housing after use. Carefully wipe off water before opening the cases and make sure water does not drip onto the camera or into the housing. If water gets inside the housing, dry immediately and completely.
5. Lubricate the O-ring with silicone grease after use. The O-ring must be replaced with a new one once a year.
6. When not in use for a long period, do not store in a damp or humid environment, under direct sunlight, or in an extremely cold environment.
7. Never use petroleum solvents, such as alcohol or paint thinner, to clean the housing; such products might mar or otherwise damage the housing's finish.
8. Send the housing to an Authorized Sea & Sea service center for a checkup and necessary overhaul no later than two years after purchase.

Troubleshooting

If the video camera mounted to the VX-PC350 housing does not function properly, check the camera according to the following procedure:

1. Check if the camera base is firmly fixed to the front case. Make sure that the LANC cable is properly plugged into the LANC connector.

If the video camera still does not function properly,

2. Remove the camera from the housing and replace the battery with a new one. Then test the camera.

The video camera functions properly

VX-PC350 may be defective. Contact a Sea & Sea authorized dealer.

The video camera still does not function properly

SONY DCR-PC350 video camera may be defective. Please contact SONY's service department.

Specifications

Product type: Housing for SONY DCR-PC350 digital video camera

Controls: Power switch, recording start/stop button, 120x digital zoom, underwater microphone (condenser type, monaural), focus lock, photo mode

Battery: SONY NP-FF71/NP-FF71S/NP-FF51/NP-FF51S

Construction: Front case: ABS resin (paint finish)
Rear case: Polycarbonate

Dimensions: 158×195×186 mm/6.2×7.7×7.3 inches (W×H×D)
Weight 1140g/2.5 lbs (without camera)

Depth Rating: 60m/200 feet

Accessories: Remote control grip (right), standard grip (left), grip stay, camera fixing screw, wide conversion lens (internal, 0.6x), lens hood, step-up ring, pickup finder protection cap, housing guard, pedestal, O-ring, silicone grease, lithium battery CR-2, instruction manual

Options: Video color filter for VX-PC, housing lanyard, BLX-55W basic set*, BLX-55W double light set*, light control grip, sea arm VI set, flexible light arm, hot shoe arm, mini shoe arm.

Notes: Use of the options marked* requires BLX-55W VX-PC adapter.

LX-25 and CL-20DH are the only video lights compatible hot shoe arm and mini shoe arm.

*Specifications and price are subject to change without notice.

Notice



Products that display this decal have passed pressure-test in accordance with Sea & Sea's standards.