

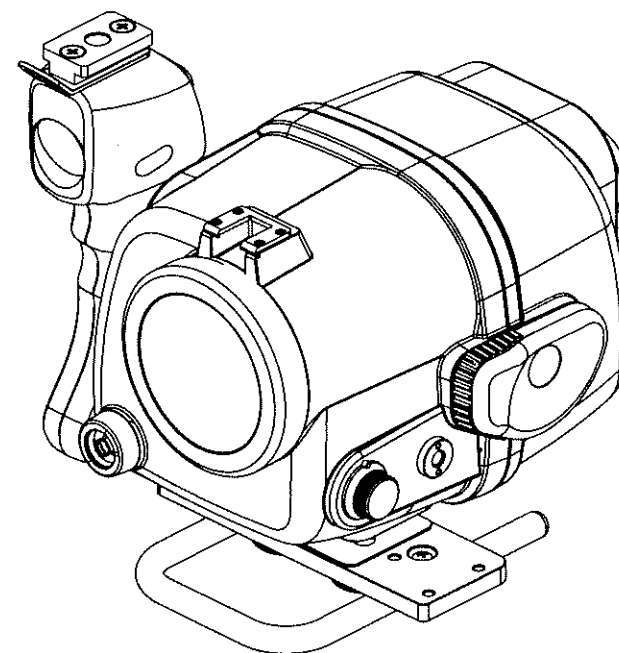
VX-G1

SEA&SEA

**UNDERWATER HOUSING FOR
SONY DCR-HC90/DVD203/DVD403**

VX-G1

Instruction Manual



SEA&SEA

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VX-G1

UNDERWATER HOUSING FOR SONY DCR-HC90/DVD203/DVD403

Introduction

Thank you and congratulations on your purchase of Sea & Sea's VX-G1 video camera. This product is for underwater housing specifically designed for use with the SONY DCR-HC90 / DVD203 / DVD403 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 may open with extrême force.
- Handle this product carefully so as you don't 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 Housing Storage

⚠ 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 Maintaining O-ring

The O-ring on the front case of your VX-G1 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.

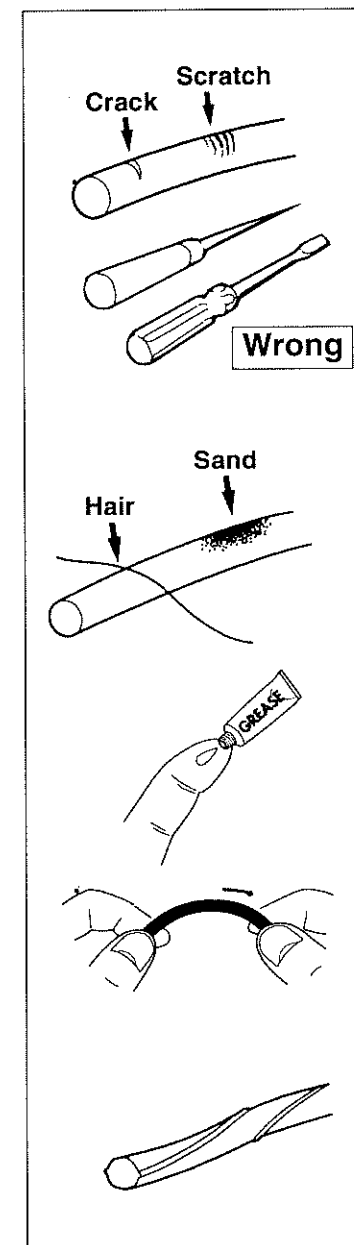
Always store your O-ring in an airtight container and in a cool environment. Keep out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

● The O-ring's life is one year.

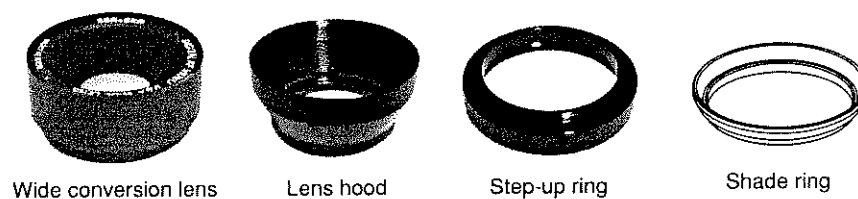
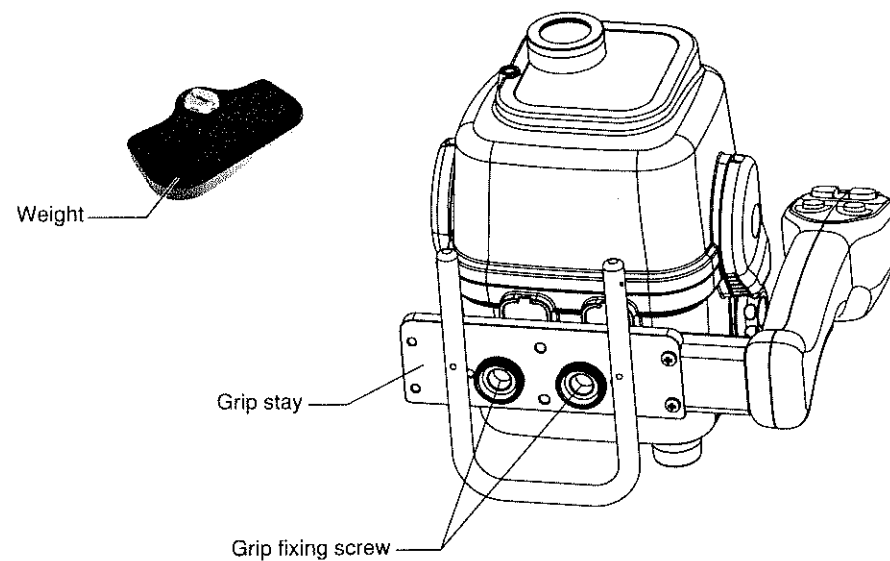
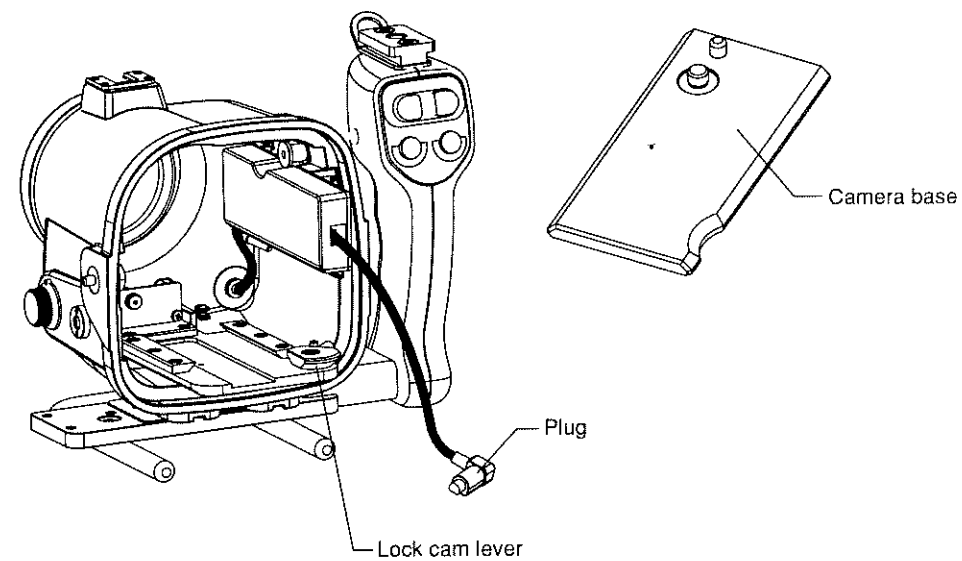
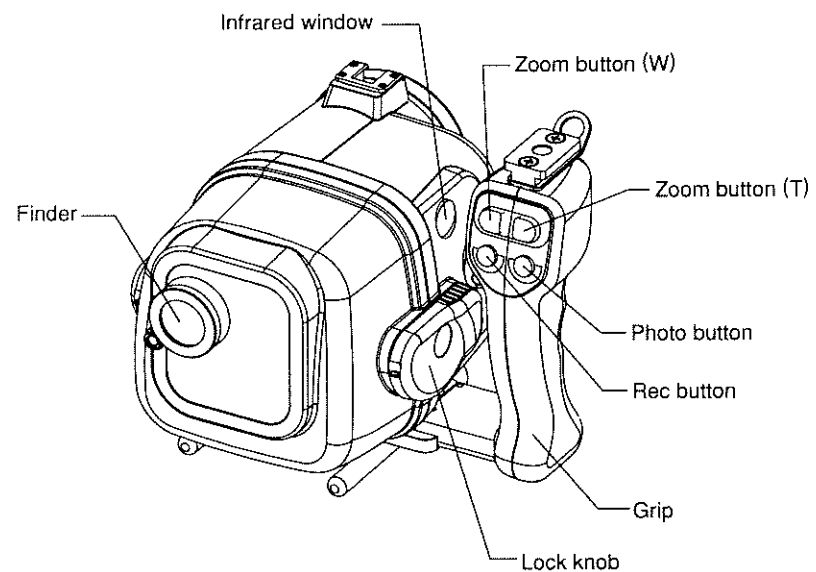
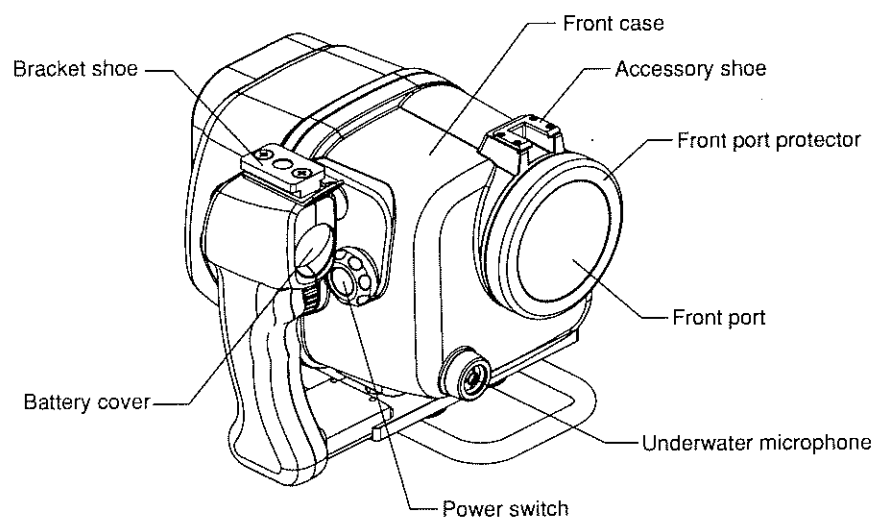
The life of the O-ring depends on the diligence of your maintenance, frequency of use, and storing conditions, but on average, if you maintain your O-ring properly, it will retain its watertight integrity for one year.

● 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.



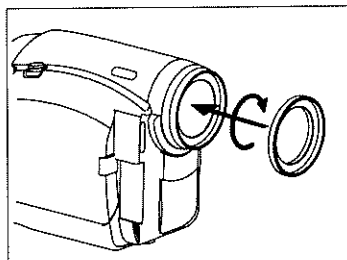
Identification of Parts



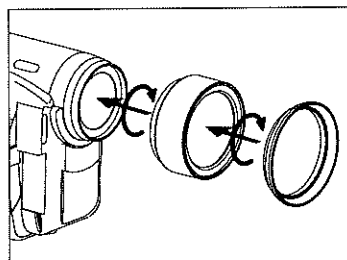
Mounting the Video Camera in the Housing

- Set the functions, such as focusing and lightning, to AUTO.

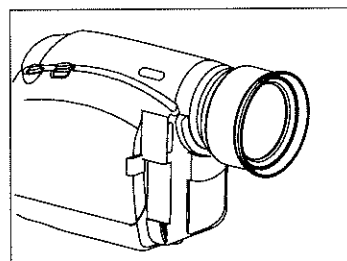
- Attach the step up ring onto the video camera.



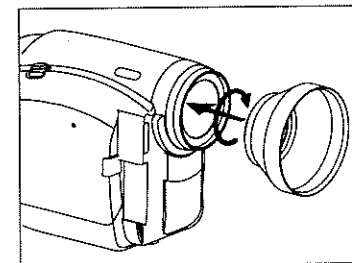
- Attach the wide conversion lens on the step up ring.



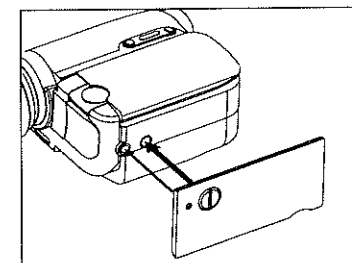
- Attach the Shade ring on the wide conversion lens.



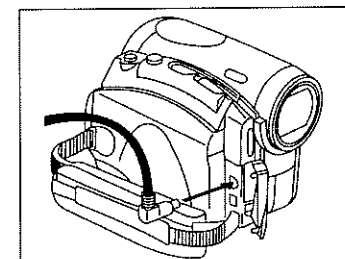
- If you don't use the wide conversion lens, attach the lens hood instead.



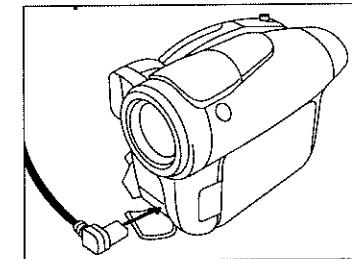
- Attach the camera base to the camera and secure with the camera fixing screw. Use a coin to tighten.



- Insert the plug into video camera remote terminal.

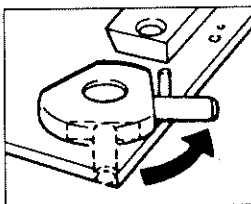


※DCR-HC90

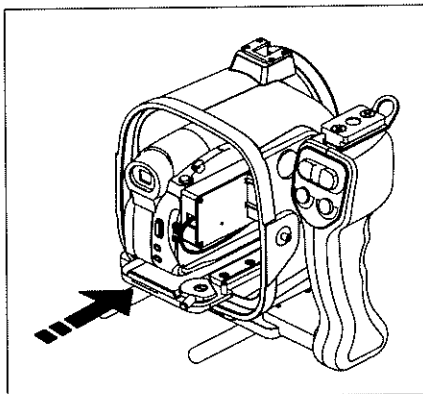


※DCR-DVD203/DVD403

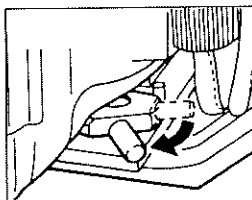
- Push the lock cam lever, located on the bottom right side of the housing, all the way forward.



- Slide video camera along camera base horizontally until it stops.



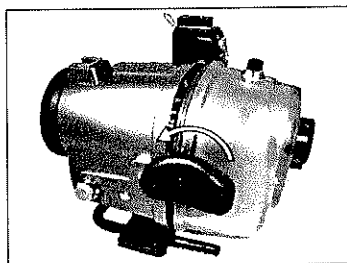
- When the camera has properly positioned, secure the camera by turning the lock cam lever on the bottom of the housing.



Closing the Housing

To close the rear case, set the lock dial to the position shown in photo and press to lock the dial. At this time, make sure that the grip belt video cable is not sticking out or being pinched.

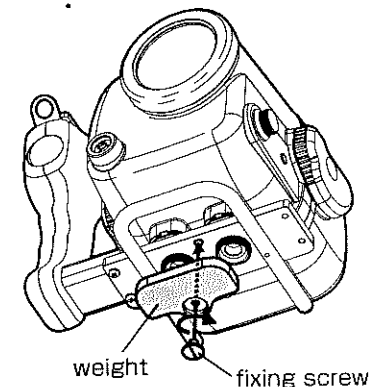
- Make sure that there are no foreign particles, such as dust, sand or hair on the O-ring, O-ring groove or O-ring contact surface. Also make sure that the proper amount of grease is applied to the surface to prevent flooding.



Attachment of Supplemental Weight to Housing

- We recommend attaching supplemental weight to housing when using housing only. Remove supplemental weight to adjust total weight of housing in water when using accessories such as underwater lights.

1. Set supplemental weight underneath grip stay.
2. Attach supplemental weight to grip stay firmly with the fixing screw.



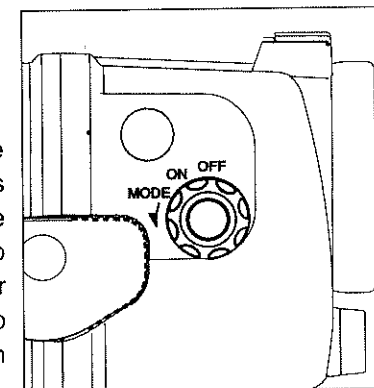
External Controls

■ Power / mode switch

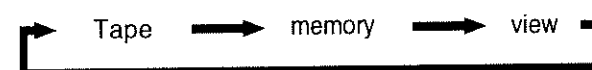
Turn the power switch to "ON."

⚠ CAUTION!

- The power automatically shuts off when the camera is in film standby for 5 minutes. This is to prevent battery draining. Setting the "Automatic Power-off" to "no" on video camera can set to this function off. For detailed information, please refer to the video camera user's manual. To return to film standby, return the power switch to "ON."



The camera mode can be changed in the following sequence by sliding the power / mode switch to "MODE."



※ Confirm the mode change on the LCD screen.

If using a DCR-HC90

To record a moving image, select the "tape" mode or "memory" mode.

To record a still image, select the "tape" mode or "memory" mode.

To view a recorded image, select the "view" mode.

If using a DCR-DVD 203 / DVD 403

To record a moving image, select the "tape" mode.

To record a still image, select the "memory" mode.

To view a recorded image, select the "view" mode.

! CAUTION!

- If using a DCR-DVD 203 / DVD 403, still images cannot be recorded in the "tape" mode.
- If using a DCR-DVD 203 / DVD 403, moving images cannot be recorded in the "memory" mode.

■ Remote control grip

W and **T** Zooms out or in

PHOTO Captures still images.

START/STOP Starts recording when the button is pressed once. Stops recording when the button is pressed again.



■ 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. To prevent flooding, make sure that the O-ring is clean and lubricated.

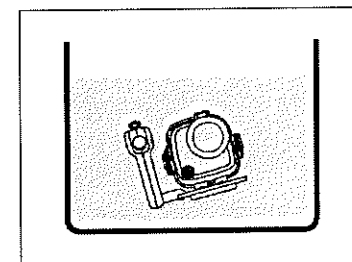


■ Leak Detector

The red leak detector light blinks when the leak sensor detects moisture. If the leak sensor blinks, immediately turn off the power switch then make a safe ascent to the surface. Remove the camera from the housing.

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.



! 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.

Notice



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

Specifications

Controls

Power / mode switch

Remote control from remote control grip (Zoom/REC/Photo)

Construction

Front case : ABS resin (paint finish)

Rear case : Polycarbonate

grip : Non-corrosive aluminum alloy

Dimensions

238 x 193 x 224 mm (W x H x D)

9.4 x 7.6 x 8.8 inches (W x H x D)

Weight

2800g/6.2 lbs

Depth rating

60m/200 feet

Accessories

Weight, Wide conversion lens (internal, 0.6x), Step up ring, Shade ring, O-ring, Silicone grease, O-ring remover, Instruction Manual, O-ring maintenance manual, Lithium battery (CR-2), Lithium battery (CR2032), Lens hood

Options

VMC-75, Grip L, VX-G1 Macro lens, Video color filter for VX-G1, O-ring set for VX-G1

* Specifications and price are subject to change without notice.