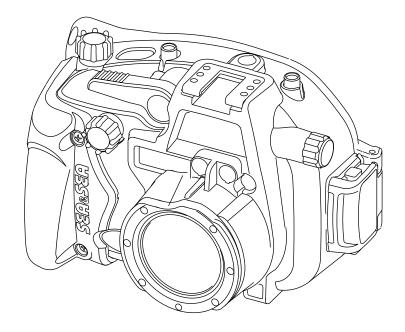
SEA&SEA

UNDERWATER DIGITAL CAMERA HOUSING



Instruction Manual





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DX-1G

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 inserious 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.

MARNING : Situations that could result in severe injury or death.

CAUTION : Situations that could result in property damage or personal injury.

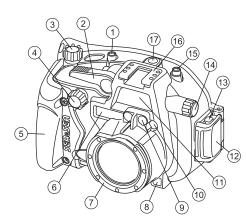
Keep out of reach of children to prevent accidental ingestion. If swallowed, seek medical advice immediately.

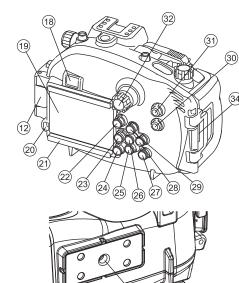
- Read the instruction manual and observe proper precautions before use of the product.
- Carefully observe the instruction manual for the compatible camera for this product before use.
- Unauthorized disassembling and/or modification could result in malfunction or flooding, and void product warranty. 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 an authorized SEA&SEA 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.
- •Do not open the chassis or battery cap in the vicinity of open flames.
- 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] 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 SUNPAK 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 SUNPAK 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 SUNPAK Co., Ltd. assumes no liability for errors or discrepancies in this manual.
- Specifications and appearance are subject to change without notice.
- Carefully observe the O-ring maintenance manual for the handling of O-rings before use.

Identification of Parts

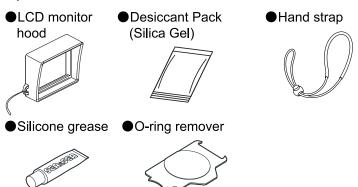




- 1 Power button
- 2 Shutter lever
- 3 Mode dial
- 4 Up-down dial
- 5 Grip6 AF window
- 7 Bayonet
- 8 Wide-angle conversion lens string eyelet
- 9 Fiber-optic cable socket (x2)
- 10 AF auxiliary light window
- 11 Flash window
- 12 Buckle
- 13 Buckle lock button
- 14 Diffuser dial
- 15 Fn. (function) button
- 16 Accessory shoe
- 17 Extension port (fiber-optic cable connection)
- 18 AF / Flash lamp window
- 19 LCD monitor window
- 20 LCD monitor hood string eyelet
- 21 LCD monitor hood holder
- 22 🖻 Playback button
- 23 💿 ┥ Quick review button
- 24 🕟 Delete / Self-timer button
- 25 🛡 / Macro button
- 26 MENU / OK button
- 27 DISP. Button
- 28 🚯 🕨 / Flash button
- 29 🞰 🛦 / MODE button
- 30 [+] W (wide-angle) / Thumbnail display button
- 31 [4] T (telephoto) / Enlarged view button
- 32 ADJ. dial
- 33 Tripod screw hole
- 34 Hand strap hook

Accessories

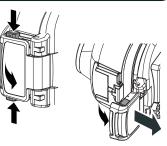
Before using this product, check to make sure that all accessories are present.



●O-ring maintenance manual

Opening the Rear Cover

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



2. Pull the rear cover to open.

- 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 cover after use in the water, open it carefully not to let water or sand enter inside the housing.

5

Installing the 1G Camera

•Before installing the 1G camera, slide the Flash OPEN switch to the outside to raise the flash cover, open the flash, and remove the lens cap from the camera. Turn off the power of the camera before installation.

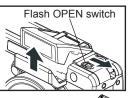


Fig.1

Fig.2

Fig.3

Click

Fig.4

- 1. Install the 1G camera to the housing as shown in Fig.1.
- 2. Make sure that there is not dust or scratches on the O-ring / O-ring mating surface before closing the rear cover. Take the hand strap out, press the rear cover, and then put the buckle over the front case (Fig.2).
- 3. Push the buckle down until it clicks. Make sure that the red buckle lock buttons on both sides are popped out (Fig.3).

- To avoid flooding by trapping, remove the wrist strap from 1G camera before installation (Fig.4).
- Never install or remove the 1G camera while the camera is ON. The ejected lens may interfere with the housing and damage the camera and lens.
- Make sure that the 1G camera is set parallel to the housing and not excessively slanted.
- The built-in flash of the 1G camera does not fire if the flash cover is not opened.

Operation

《Power button》

Use the power button to turn ON / OFF the 1G camera.

«Shutter lever»

Depress the shutter lever to press the shutter release button of the 1G camera.

《Mode dial》

Turning this dial changes the shooting mode. Mode setting status is displayed at the top center of the LCD monitor of the 1G camera.

《Up-down dial》

Turning this dial rotates the up-down dial on the 1G camera. Use this dial to work with the menu and to change aperture or setting value quickly and easily.

«ADJ. dial»

Pushing and flicking this dial to the right and left operates the ADJ. lever of the 1G camera.

«Other buttons»

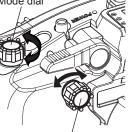
Use buttons to control each function of the 1G camera underwater.



Please refer to the instruction manual of the 1G camera for operation of the other buttons.

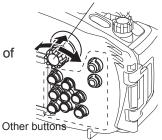
Shutter lever

Power button





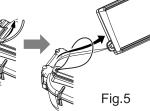
ADJ. dial



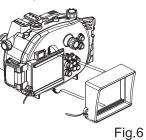
LCD Monitor Hood

1. Put the LCD monitor hood string through the rear cover eyelet as shown (Fig.5).

2. Mount the LCD monitor hood to the holder (Fig.6).



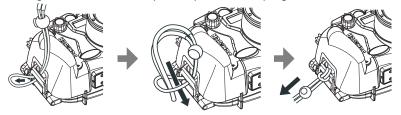
- Please be careful not to get the strap of the LCD monitor hood caught in the rear cover when closing.
- Do not hold the LCD monitor hood to carry the housing. It may come off and the housing may fall down.



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 hand 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.

Built-in Flashlight Diffuser

Turning the dial forward sets the built-in flashlight diffuser inside the flash window. The diffuser disperses and softens light from the built-in flash of the 1G camera. It helps prevent backscatter --- that is, it reduces light reflection from particles in the water.

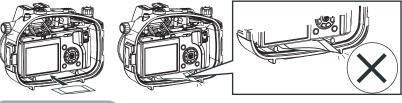


Desiccant Pack (Silica Gel)

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 (included in the product package) as follows;

《Using the desiccant pack (Silica Gel)》

- 1. Install the 1G camera to the housing.
- 2. Place a desiccant pack (Silica Gel) 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 mating surface.
- Make sure that the desiccant pack is not trapped when closing the rear cover.

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.

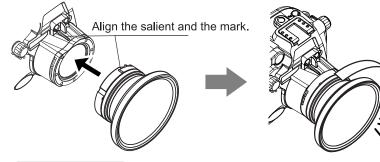
- Lenses, strobes and other accessories have different depth rating. Check the depth rating for each before use.
- •Read the instruction manual for each accessory before use.

Wide-angle Conversion Lens (Option)

Using the optional Wide-angle Conversion Lens for DX-1G (#52115) will expand the angle of view to approx. 16mm (0.65x, on land).

«Attaching the wide-angle conversion lens»

- 1. Align the salient on the upper surface of the housing lens and the mark on the lens bayonet, then impose the close-up lens to the housing.
- 2. Turn the close-up lens clockwise until it clicks.

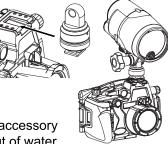


- After entering the water, loosen or lightly shake the wide-angle conversion lens to remove of any bubbles trapped between the lens and the housing, as those bubbles may affect your images.
- •When using the wide-angle conversion lens, vignetting (dimmed-out image corners) may occur depending on the aperture setting/shooting conditions.

Accessory Shoe

SEA&SEA strobes / lights can be mounted to the accessory shoe by using optional Mini Shoe Arm (#29511) or Hot Shoe Arm (#29501).

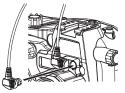
 The max. weight of an accessory that can be mounted to the accessory shoe is approx. 750g / 26.3oz (equivalent to the weight of SEA&SEA YS-90AUTO strobe).



Remove the accessories from the accessory shoe when carrying the housing out of water.

Fiber-optic Cable Connection

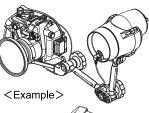
This product has two fiber-optic cable sockets for the external strobe connection. Plug the fiber-optic cable connector fully into the socket as shown.



External strobe works effectively for various shooting styles such as wideangle photography (camera's built-in flash is insufficient), back-lighting condition, backscatter elimination, and macro photography (to acquire grater brilliance).

《Extension port》

For connecting optional accessories with a fiber-optic cable (under development).





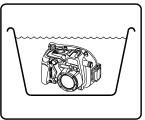
About the PASSED Label

The pressure test PASSED label on a product indicates that the product has passed the SEA&SEA pressure test and is waterproof at depth.



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 is watertight, soak sufficiently in fresh water and rinse with running water.

Operate all the buttons, dials or levers underwater, but do not operate the buckle/buckle lock buttons.

- 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.

Specifications

[Controls]	Power button, Shutter lever, Mode dial,
	Up-down dial, Diffuser dial, Fn. (Function) button,
	■ Playback button, ◄ / Quick review button,
	Solution Self-timer button, The self self self self self self self sel
	[₊] W (wide) / Thumbnail button,
	대 T (telephoto) / Enlarge display button, ADJ. dial
[Construction]	Polycarbonate
[Dimensions]	158x109x109mm / 6.3x4.4x4.4inch (WxHxD)
【Weight】	Approx. 510g / 17.9oz (incl. Hand strap)
	(Underwater weight: Approx110g / -3.9oz)
[Depth rating]	55m / 180ft
[Accessories]	LCD monitor hood, Desiccant pack (Silica Gel),
	Hand strap, Silicone grease, O-ring remover,
	O-ring maintenance manual, Instruction manual

* Specifications and appearance are subject to change without notice.