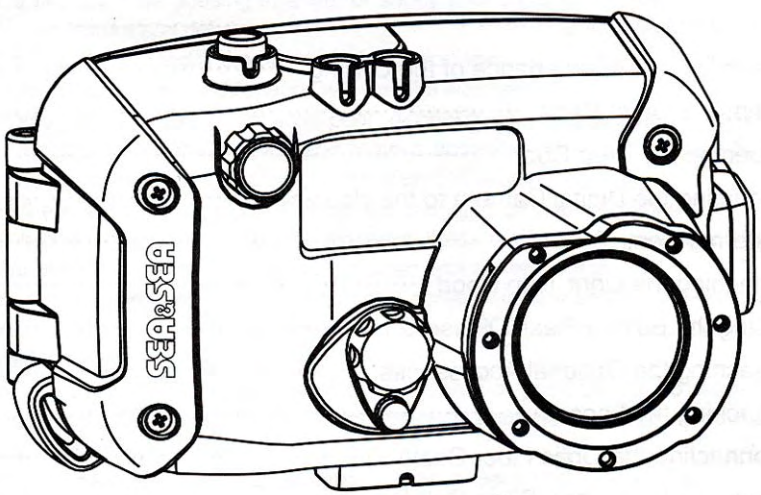
SEA&SEA

U/W DIGITAL CAMERA HOUSING

DX-8000G

Instruction Manual



DX-8000G

Thank you and congratulations on your purchase of Sea & Sea DX-8000G. Sea & Sea DX-8000G is a digital camera housing designed for use with Sea & Sea Digital camera 8000G and depth rated at 180 feet (55m). Please read this manual before use and retain for your 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 flash /AF window.
- Always dry the lens and flash /AF window 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 DX-8000G 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.**

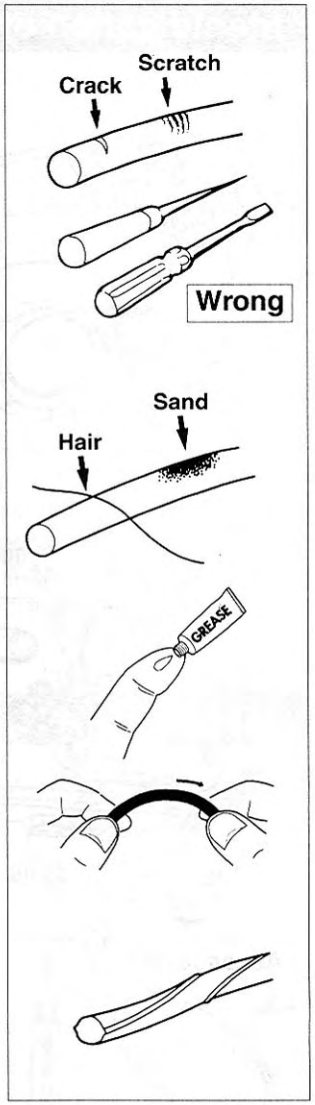
Always store your O-ring in an airtight container and in a cool environment. Keep out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

●**The O-ring's life is one year.**

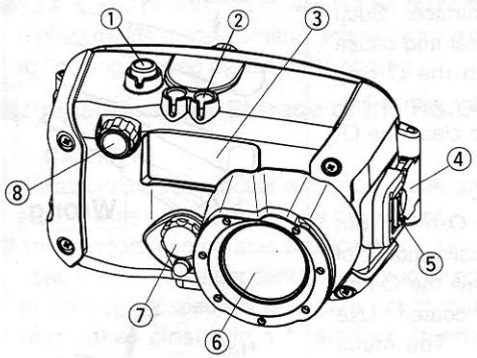
The life of the O-ring depends on the diligence of your maintenance, frequency of use, and storing conditions, but on average, if you maintain your O-ring properly, it will retain its watertight integrity for one year.

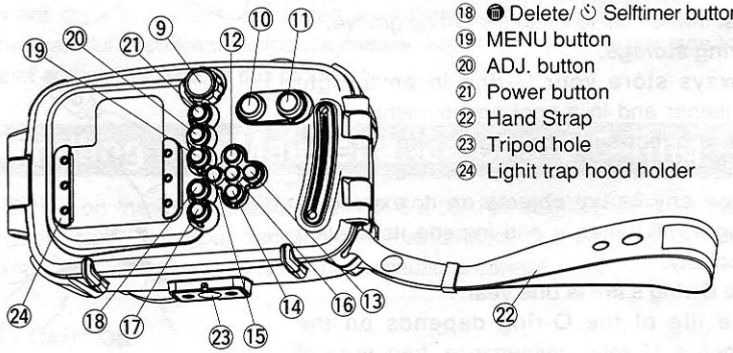
●**Remove the O-ring for inspection.**

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.



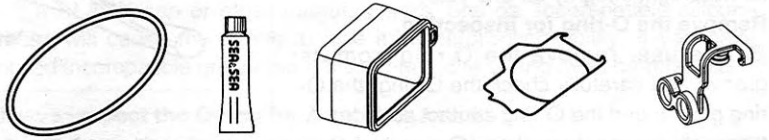
Identification of Parts





① Shutter button
② Optic fiber cable receptacle
③ Flash/AF window
④ Rear door lock lever
⑤ Rear door lever
⑥ Lens
⑦ Flashlight diffuser lever
⑧ Updown dial
⑨ Mode dial
⑩ [+] Wide angle button
⑪ [-] Telephoto button
⑫ ▲ Button
⑬ ▶ / ⚡ Flash button
⑭ ▼ / 🌷 Macro button
⑮ ◀ / 🖼 Quick Review button
⑯ OK Button
⑰ DISP. button
⑱ 🗑 Delete/ ⏲ Selftimer button
⑲ MENU button
⑳ ADJ. button
㉑ Power button
㉒ Hand Strap
㉓ Tripod hole
㉔ Lighit trap hood holder

Accessories



O-ring | Sillicon grease | Light trap hood | O-ring remover | Optic fiber cable adapter

Opening the Rear Door

1. Before opening the rear door, 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.
2. Push the rear door lock lever on the side of the housing to the direction shown in Figure 1 to release the slide lock. Then raise this lever to open the rear door.

⚠ CAUTION!

- Be sure not to pull or hook the lever accidentally in the water.
- When opening the rear door after use in the water, open it carefully not to let water or sand enter inside the housing.

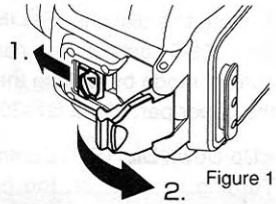


Figure 1

Closing the Rear Door

1. Before closing the rear door, make sure that there are no scratches, sand, dust or hair on the O-ring and the contact surface. (See the section titled "Handling and Maintenance of O-ring".)
2. To close the rear door, press the door to the front case with your palm and push the rear door lock lever with your finger until you feel the click. Make sure that it is locked before use.

Mounting the Digital Camera to the Housing

1. Turn off the power of the digital camera andplace it as shown in Figure 2.

⚠ CAUTION!

- To avoid possible camera damge, make sure the camera's power switch is in off position when installing and removing the camera from the (DX-8000G) housing.
- Make sure that the digital camera is set parallel to the housing case and not excessively slanted.

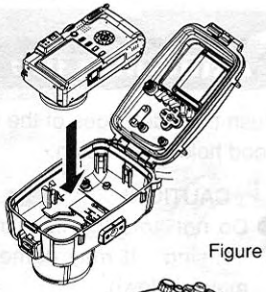


Figure 2

- It is possible to flood the housing by closing the back on the camera hand strap.
  Always remove the hand strap from camera before loading it in the housing.

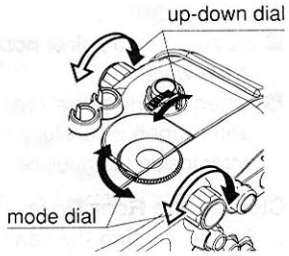
2. Close the rear door and make sure that it is locked.

※ When closing the rear door, make sure that the hand strap is removed and make sure that there is no dust, scratches or warp on the O-ring and its contact surface. Then press the rear door to the front case and lock the lever.

External Controls

<Mode Dial>
Turning this dial changes the operating mode of the 8000G camera. You can determine the current mode by looking through the window on the upper part of the DX-8000G housing.

<Up-Down Dial (Sub Command Dial)>
Turning this dial on the housing turns the up-down dial on the 8000G camera. Use this dial to work with the menu and to change aperture or shutter speed quickly and easily.



You can change aperture and shutter speed in either aperture-priority or manual-exposure mode.

* To change aperture→Turn the up-down dial.
* To change shutter speed→Turn the up-down dial as you depress the ▲button.

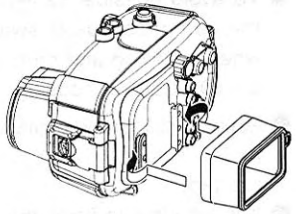
Refer to the 8000G camera instruction manual for details on using the up-down dial.

Attaching the Light Trap Hood

Push the side edges of the light trap hood into the hood holder as shown.

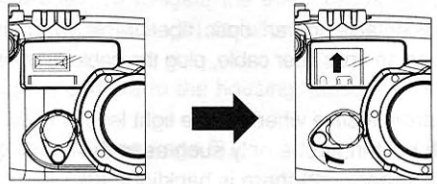
⚠ CAUTION!

- Do not hold the light trap hood to carry the housing. It may come off and the housing may fall down.



Using the Built-In Flash Diffuser

The built-in flash diffuser disperses and softens light from the built-in flash. It helps prevent backscatter-that is, it reduces light reflection from particles in the water.



Flash Light Diffuser (Open) Flash Light Diffuser (Closed)

Attaching the Optional Accessories

DX-8000G accepts Sea & Sea accessories that are sold separately. By using DX-8000G in combination with optional accessories, you will be able to try various shooting techniques.

⚠ CAUTION!

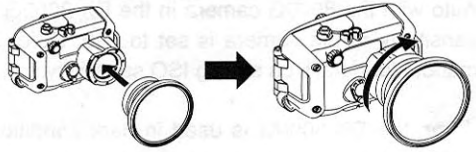
- Lenses, strobes and other accessories have different depth rating. Check the depth rating before you use the accessories.
- Read the instruction manuals of the accessories before using them.

Attaching the Lens

DX-8000G accepts Sea & Sea lenses that are sold separately.

<Attaching the Lens>

Fit the lens to the front of the housing so that the markings on the lens and the housing meet. Then turn the lens until you feel a click.



⚠ CAUTION!

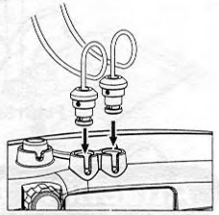
- The depth of field indicated on the lens is not applicable to digital cameras.
- When you start using a new lens, remove it in the water and shake it to eliminate bubbles between the housing and the lens.

- When the Wide-Angle Conversion Lens for the DX-5000G is mounted, vignetting (dimmed-out image corners) may occur depending upon the aperture setting and the shooting conditions.

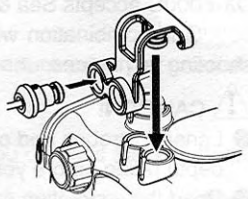
Connecting the Optic Fiber Cable

DX-8000G has a receptacle for an optic fiber cable to connect a Sea & Sea external strobe. To use an optic fiber cable, plug the cable fully into the receptacle as shown.

※External strobes are effective when (1) the light level is insufficient with built-in strobe only such as in the case of wide photography, (2) there is backlight, (3) it is desirable to light from sideways in order to avoid direct reflections from floating objects, or (4) in macro photography, to eliminate the shadow of the lens that is created by the built-in strobe



- When external strobe does not synchronize, use the accessory Fiber Optic Cable Adapter. Attach the adapter to the housing as shown below.



⚠ CAUTION!

- Since the optic fiber cable conveys the light of the built-in strobe to the external strobe, the system may not work properly if the cable receptacle is dirty. Before using the optic fiber cable, make sure that the receptacle and the cable plug is free from salt residue or sand.

When you use a Sea & Sea auto strobe such as the YS-90 Auto or the YS-25 Auto with the 8000G camera in the DX-8000G housing, make sure that the ISO sensitivity of the camera is set to 100. Refer to the 8000G camera instruction manual for details on setting ISO sensitivity.

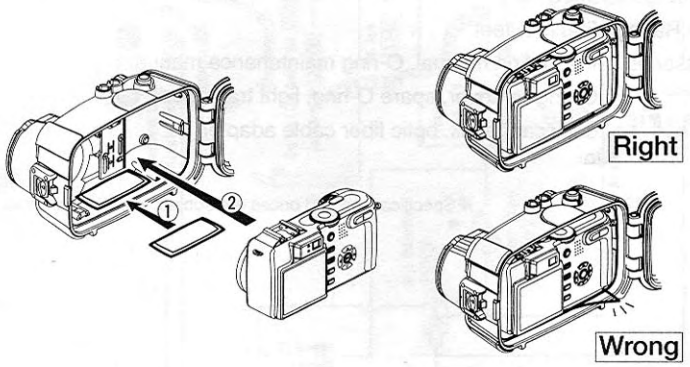
When the DX-8000G is used in dark conditions such as night diving or cave diving, an external strobe might not synchronize because the built-in strobe may pre-flash in these conditions. To avoid this, set your strobe to pre-flash mode using the following settings for these strobe models:

- YS-25 Auto: 2
- YS-90-DX: PRE
- YS-90 Auto: Auto 2

Using the Desiccant (Silica Gel) Pack

A substantial difference between the external (water) and 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:

(1) Before mounting the camera to the housing, place the desiccant pack at the location shown below.
(2) Then mount the camera (see Page 6).



⚠ CAUTION!

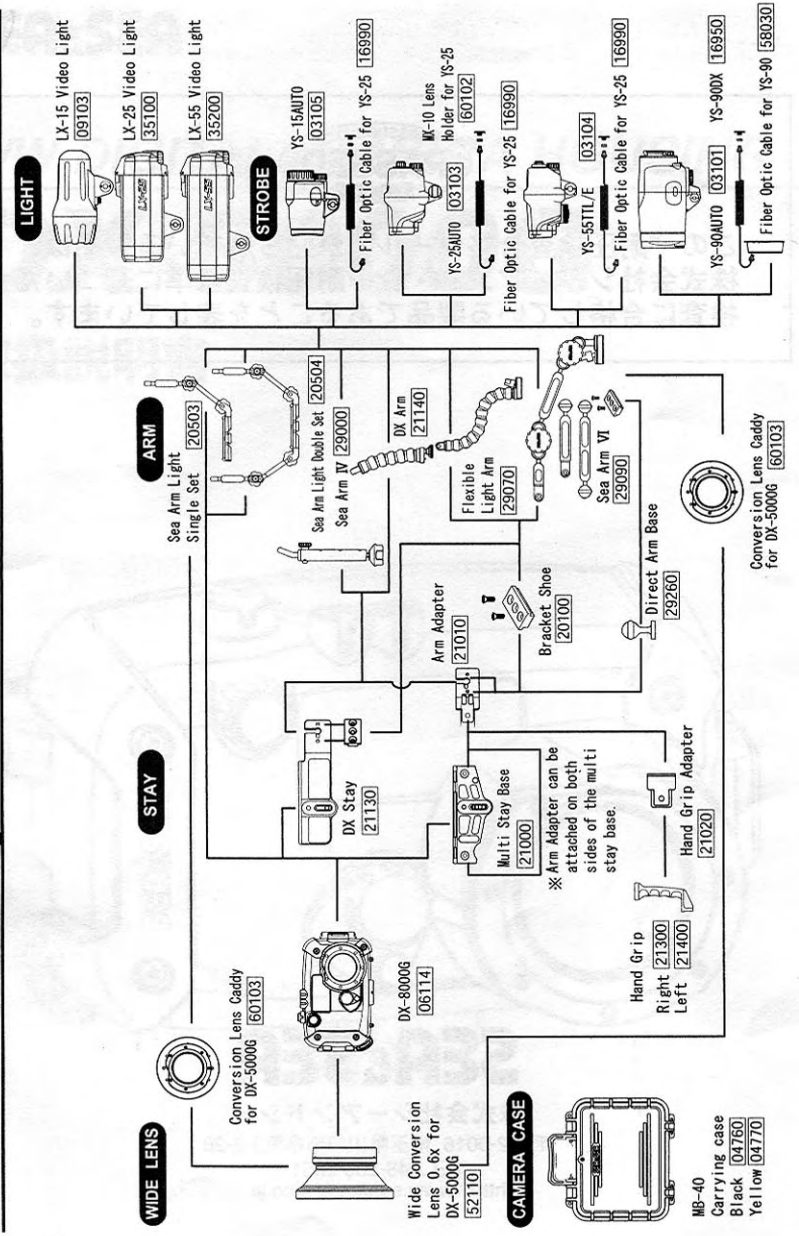
- Make sure that the edge of desiccant pack is not covering the O-ring contact surface.
- When closing the rear door, make sure that the desiccant pack is not pinched between the rear door and the front case.

Specifications

Controls:	Power button, Shutter button, Flashlight diffuser lever, Updown dial, Mode dial, [◐] Wide angle button, [◑] Telephoto button, ▲Button, ▶／ϟ Flash button, ▼／❀ Macro button, ◀／▣ Quick Review button, OK Button, DISP. button, ▣ Delete/ ⏲ Selftimer button, MENU button, ADJ. button
Construction:	Polycarbonate resin
Dimensions:	150 x 95 x 103 mm (W x H x D)
Weight:	465g
Depth Rating:	55m/180feet
Accessories:	Instruction manual, O-ring maintenance manual, O-ring remover, spare O-ring, light trap hood, desiccant pack, optic fiber cable adapter

※Specifications and prices are subject to change without notice.

SEA&SEA Underwater Digital Camera Accessories System Chart for DX-8000G



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SEA&SEA
株式会社シーアンドシー
〒332-0016 埼玉県川口市幸町3-2-20
TEL.048-256-2251
http://www.seaandsea.co.jp

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