

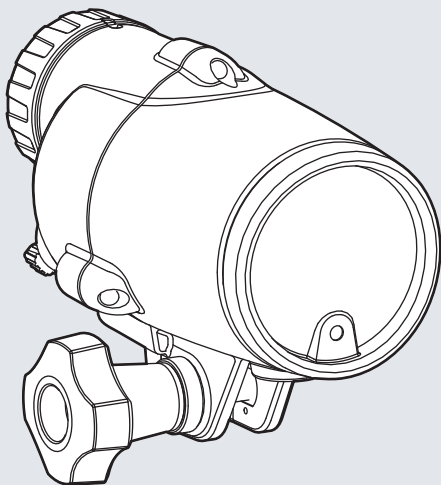
SEA & SEA

03109

UNDERWATER STROBE



YS-17



日本語

English

取扱説明書
Instruction Manual

Introduction

Thank you for purchasing SEA&SEA products.

Please read this instruction manual carefully prior to using your underwater strobe. Only with a thorough understanding of this manual's content will you be able to use the strobe correctly. After reading the manual, please be sure to keep it in a place where you can easily come back to it at any time.

Note:



Products bearing this sticker are those that have passed SEA&SEA's criteria-based inspection for pressure resistance.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, (2) this device must accept any interference received, including interference that cause undesired operation.



The product conforms to WEEE standards. This symbol indicates separate collection of waste electrical and electronic equipment in the EU countries. Please do not throw the equipment into the domestic refuse. Please contact your local authorities for recycling program information.




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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.

- | | |
|--|---|
|  DANGER | Situations that involve a high risk of severe injury or death. |
|  WARNING | Situations that could result in severe injury or death. |
|  CAUTION | Situations that could result in property damage or personal injury. |

DANGER

- Never attempt to disassemble, repair or alter the product yourself to prevent significant electrical hazard due to the high-voltage circuitry in the product. Do not heat the product or put it into a fire, this could result in explosion or fire. Unauthorized disassembling and/or modification could result in malfunction or flooding, and avoid product warranty. Take the product to a SEA&SEA authorized service center for repair or inspection.
- Never short-circuit the terminals of batteries installed in the product, as it could result in battery leakage, heat generation, fire, explosion, or product malfunction.
- Move leaking batteries away from fire or open flames immediately. The leaked fluid and its vapor are combustible.
- If the battery leakage contacts your skin or clothing, flush the affected area repeatedly with clean water. It may irritate your skin. Should it get into your eyes, immediately rinse them with plenty of water, avoid rubbing and seek medical advice.

WARNING

- Use only batteries approved for use in this product. Do not mix old and new batteries of different types.
- Remove batteries before transport or storage, or when you are not going to use the product for an extended period of time, to prevent unexpected activation.
- Pay particular attention to opening the battery cap to avoid injury. Heat from the batteries may cause pressure buildup inside the battery compartment, and could result in cap explosion with unexpected force.

Safety Precautions

- Avoid water or foreign objects inside the product. Discontinue use and turn it off immediately should you notice flooding or leakage.
Continuous use could result in complete damage to the product.
- Do not handle batteries wet hands to prevent shock hazards.
- Do not use the product in the presence of flammable gas, as this could result in explosion or fire.
- Do not fire the strobe/light with the reflector touching a person or object to prevent heat generation. Touching the reflector immediately after firing could result in burns.
- Do not fire the strobe or illuminate the light towards a driver of a vehicle to avoid causing accidents.
- Do not operate the product while driving a vehicle. Inattention could result in accidents.
- For use on land, do not operate the product at precarious foothold.
It may cause falling, injury or product damage.
- Do not leave the product on a slope or an unstable surface. It may be broken after falling or injure someone below it.
- 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 this product.
- 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.
- Do not open the 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.
- 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.
- Do not cover or wrap the product with a cloth. This could result in deformation of the product or in fire.
- Using the strobe close to your subject's eyes could cause temporary visual impairment. Particular care should be observed if photographing infants, the strobe should be no less than one meter (3 feet) from the subject.
- Be careful when touching the product immediately after firing repeatedly or lighting for a long time. The product may get hot enough to burn you.
- 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 carry the camera or housing by holding the accessories such as arm, cable, strobe, etc. Heavy components may fall and cause damage or injury.
- 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.
- Rinse the product with fresh water, after underwater use. Ensure that the product is waterproofed before rinsing. Refer to [Maintenance and Storage] for details.
- Make sure that the connectors have been secured with the connector caps before rinsing the product with fresh water, after removal from other products.
- 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.
- If you do not use the product for an extended period of time, periodic maintenance will keep internal electronic parts from deterioration. Once a month, install batteries and fire a test flash/light on. Operate all other switches as you would in normal operation. Turn the power off, then remove batteries while the ready lamp (red) is on for the strobe.

- 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.
- Carefully observe the O-ring maintenance manual for the handling of O-rings before use.
- SEA&SEA SUNPAK Co., Ltd. assumes no liability for errors or discrepancies in this manual.
- Specifications and appearance are subject to change without notice.

Safety Precautions for Use of Battery

DANGER

- Never expose the battery to flame or fire, or to excessive heat.
- Never attempt to disassemble, alter or directly solder the battery. There are no user-serviceable parts. Tampering with battery may expose you to dangerous voltage, battery acid, or electrical shock.
- Never short-circuit the terminals of a battery, as it could result in battery leakage, heat generation, fire, or explosion. Avoid contact with all metal objects during transporting and storage.
- When recharging batteries such as nickel metal-hydride or lithium-ion batteries, use a charger designed specifically for them and follow the recharging instructions. Recharging in an inappropriate charger may cause battery leakage, overheating, and explosion.
- Move leaking batteries away from fire or open flames immediately. The leaked fluid and its vapor are combustible.
- If the battery leakage contacts your skin or clothing, flush the affected area repeatedly with clean water. It may irritate your skin. Should it get into your eyes, immediately rinse them with plenty of water, avoid rubbing and seek medical advice.
- Never attempt to insert the battery upside down or backward, as it could result in battery leakage or exposure. Always confirm the direction of plus and minus before installation.
- Never connect a battery directly to a plug outlet or car cigarette lighter.

WARNING

- Keep dry. The battery is not waterproof, and may malfunction if immersed in water or exposed to high levels of humidity. Rusting of the internal mechanism can cause irreparable damage.

- Do not remove and/or damage the case of a battery. It may cause battery leakage, overheating or explosion.
- Do not charge a rechargeable battery beyond the specified charging time, it may cause battery leakage, fire hazard or explosion.
- Never use batteries should you notice any changes such as leakage, discoloration or deformation. When you notice the situation as abnormal, discontinue use immediately and take the product to a SEA&SEA authorized service center for inspection.
- Keep out of reach of children to prevent accidental ingestion.
If swallowed, seek medical advice immediately.
- Do not leave or use batteries in an extreme hot environment. This may cause battery leakage, overheating or battery performance deterioration.

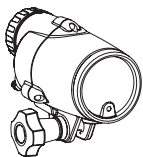
CAUTION

- Avoid strong shocks/impacts or excess stress to batteries.
- For handling and recharging of a battery, refer to the instruction manual of the battery/dedicated charger.
- Do not use or discharge the battery at ambient temperatures below 0°C (32°F) or above 50°C (122°F).
- During recharging, the temperature should be in the vicinity from 0°C to 40°C (32°F to 104°F).
- Always recharge the rechargeable battery before use after an extended time of storage.
- Do not recharge battery in a cold environment below 0°C (32°F).
Severe cold may cause battery leakage, deterioration in performance, or shortened life.
- Dirt on the battery terminals can prevent the product from functioning.
Should the battery terminals become dirty, wipe them with a clean, dry cloth before use.
- Turn the equipment off after use. Remove batteries from the equipment when not in use.
Store in dry area with temperatures ranging from -20°C to 30°C (-4°F to 86°F).
- Used rechargeable batteries are valuable resource. Please recycle used rechargeable batteries in accordance with local regulations.

Accessories

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

YS-17



Diffuser



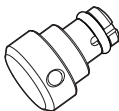
Diffuser String



Silicon Grease

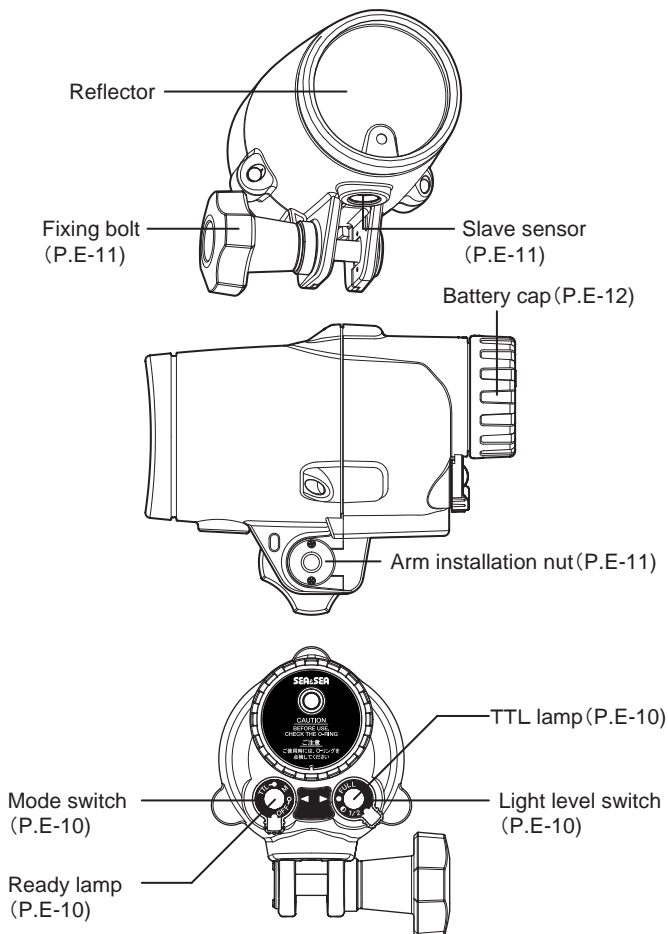


Slave Sensor Cap



- O-ring Maintenance Manual
- YS-17 Instruction Manual (this manual)

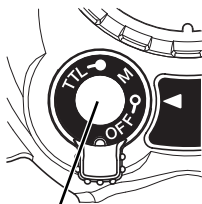
Identification of Parts



Operation

Mode Switch

- OFF** Turns the power off. Set the mode switch to [OFF] when you are not using the strobe.
- M** Set the mode switch to this position when you shoot with manual flash.
- TTL** Set the mode switch to this position when you shoot with TTL flash.
- Ready lamp** Illuminates in red when the strobe is ready to fire.

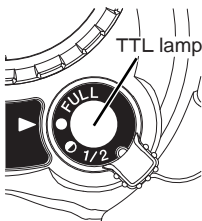


Ready lamp

Light Level Switch

Light amount can be adjusted in 2 increments (FULL or 1/2) when the mode switch is set to [M].

- TTL lamp** Illuminates in green for approx. 3 seconds after firing with TTL flash output.

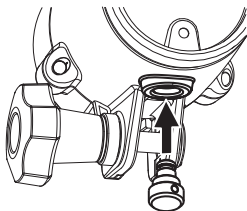


Slave Sensor Cap

This model may fire when you turn the power on without attaching the slave sensor cap or connecting a fiber-optic cable (optional) to the slave sensor. To avoid unexpected emissions, block the slave sensor with the cap when a fiber-optic cable is not connected.

CAUTION

The slave sensor cap has a string eyelet in it. Pass a string through the eyelet to prevent losing the cap.

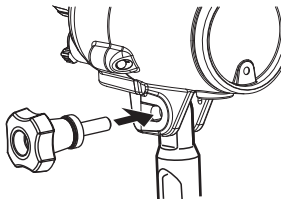


Fixing Bolt

To mount the strobe to an arm, insert the fixing bolt in the direction of the arrow.

CAUTION

Take care not to insert the fixing bolt from the wrong side, as this can result in damage to the arm installation nut.



Installing the Batteries

This model can be powered by the following batteries.
Use two of each type.

AA alkaline battery, AA Ni-MH battery, AA oxyride battery

1 Make sure that the mode switch is in the OFF position

2 Turn the battery cap counterclockwise and remove (Fig.1)

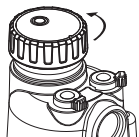


Fig.1

3 Insert two batteries aligned to the + and - marks (Fig.2)

- Take care to insert the batteries in the correct direction.

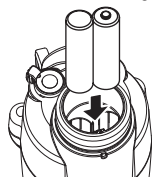


Fig.2

4 Apply silicon grease to the O-ring

- Check the O-ring to make sure there are no scratches or debris, and apply a light coating of the included silicon grease.



Fig.3

5 Align the ▲ mark inside the battery cap with the ▼ mark (salient) on the battery compartment (Fig.3), and turn the cap clockwise to close

6 After closing the battery cap completely, turn back the cap to align the concave marks (Fig.4)

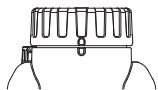


Fig.4

⚠ CAUTION

- When installing or removing batteries, thoroughly wipe water off the strobe and dry your hands. Pay particular attention not to allow water from your hair or wetsuit to drip into the battery compartment. This is in order to prevent an electrical hazard, mold, malfunction or flooding.
- Never mix old and new batteries or batteries of different types.
- Always replace all batteries with new batteries at the same time.

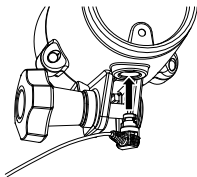
Connecting the Strobe

When you use this strobe with a compact digital camera, connect the strobe to the camera (housing) with a fiber-optic cable (optional). Using a built-in slave sensor, this strobe is triggered by sensing the light from a digital camera's built-in flash. If the fiber-optic cable is not used, depending on the shooting conditions the strobe may either not fire, or not obtain TTL flash exposure compensation.

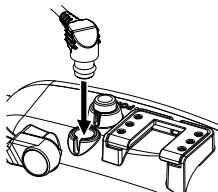
⚠ CAUTION

Some housings are not compatible with fiber-optic cable.

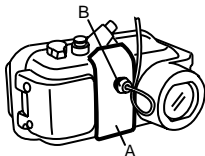
- 1 Insert the fiber-optic cable's connector into the slave sensor socket of the strobe until it stops



- 2 Connect the other end of the fiber-optic cable's connector to the socket in the housing



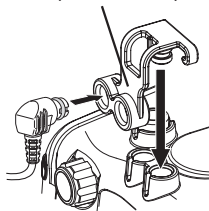
- When the housing is not equipped with the socket, attach the strobe mask (A: optional) to the flash window of the housing, and then connect the fiber-optic cable (B: optional).



⚠ CAUTION

- When you shoot with a compact digital camera, set the built-in flash of the camera to the forced-flash mode. The strobe will not fire unless the built-in flash of the camera fires. Refer to the digital camera instruction manual for setting the forced-flash mode.
- Refer to the fiber optic-cable instruction manual before use.
- When using this model together with the SEA&SEA DX-8000G/DX-1G set, please attach the fiber-optic cable adapter (included in the DX-8000G/DX-1G) to the housing, and then use a fiber-optic cable.
- Refer to the housing instruction manual before use.

Fiber-optic cable adapter



Taking Photographs

When you shoot with a compact digital camera, set the built-in flash of the camera to the forced-flash mode. The strobe will not fire unless the built-in flash of the camera fires.

TTL Photography

- 1 Set the mode switch to [TTL]**
- 2 Take a photograph**

TTL Photography

Photography based on the camera's photometric data of the subject's brightness, which is used to regulate the light amount of the strobe so that the correct exposure is achieved.

Even if the distance from the subject has changed, the light amount will be controlled automatically and you can easily obtain the correct exposure. After shooting with TTL automatic light control, the TTL lamp on the light level switch will illuminate in green for approximately 3 seconds. When automatic light control was not used, the TTL lamp will not illuminate.

Manual photography

Light amount of the strobe can be adjusted with the light level switch.

1 Set the mode switch to [M]

2 Adjust with the light level switch (Set to [FULL] or [1/2])

CAUTION

- FULL:** ● For a compact digital camera that does not pre-flash, or a camera that has a pre-flash cancel function.
Refer to the digital camera instruction manual for details.
- If your camera pre-flashes, set the light level switch to [1/2].
- 1/2 :** ● The light amount (Guide Number) of the main flash of this strobe will differ depending on the number of pre-flashes.

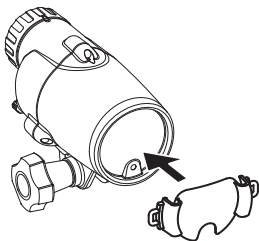
3 Take a photograph

Pre-flash

With some types of digital cameras, the light amount is adjusted with the first flash and the image is taken with the second flash (main flash). The first flash for adjusting the light amount is called a pre-flash. When the mode switch is set to [M] and the light level switch is set to [FULL], the strobe will fire in synchronization with the pre-flash. As a result, it will recharge during the second flash (main flash) and be unable to fire.

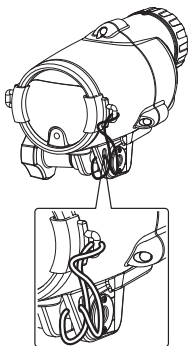
Using the Diffuser

Use of Diffuser is highly recommended for shooting short camera-to-subject distances. Fit and press the diffuser to the front of the strobe.



CAUTION

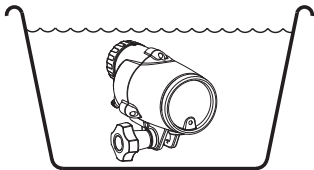
- Always make sure that the diffuser is properly attached before use. If not properly attached, it may fall off, get lost or become damaged.
- Both the diffuser and the strobe have string eyelets in them. Attach the included diffuser string to each of these eyelets.



Maintenance and Storage

CAUTION

- 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 the battery and connector caps are attached, then in a watertight condition 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.
- Always remove batteries from the product after use.
- 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.
- If you do not use the product for an extended period of time, periodic maintenance will keep internal electronic parts from deterioration. Once a month, install batteries and fire a test flash. While the ready lamp is red (strobe is ready to fire), set the mode switch to [OFF], then remove the batteries. In addition, operate all other switches as you would in normal operation.

Specification

Controls and functions	Mode switch (OFF / M / TTL) Light level switch (FULL / 1/2)
Indicator	Ready lamp (Illuminates in red when the strobe is ready to fire.) TTL lamp (Illuminate in green for approx. 3 sec. after firing with TTL flash output.)
Guide number	14 (at full flash) / 7-5.8 (at 1/2 flash) * Depending on the camera models. * Land, ISO100/m
Beam angle	70° × 53°
Color temperature	5600° K (land, at full flash) 5100° K (with Diffuser)
Battery life	Alkaline: Approx. 200 flashes Ni-MH (2700mAh): Approx. 400 flashes Oxyride: Approx. 230 flashes
Recycle time	Alkaline: Approx. 3 sec. Ni-MH (2700mAh): Approx. 3 sec. Oxyride: Approx. 3 sec.
Battery requirements	2 × AA Alkaline, 2 × AA Ni-MH (2700mAh), 2 × AA Oxyride
Operating temperature	0°C-40°C / 32°F-104°F
Construction	Acrylic resin, Polycarbonate resin
Depth rating	60m (200ft)
Dimensions (WxHxD)	90 × 110 × 140mm / 3.6 × 4.4 × 5.6inch
Weight	425g / 14.9oz (excl. batteries)
Weight underwater	-10g / -0.35oz (incl. batteries)

* The specifications and appearance are subject to change without notice.

* The performance values above may change depending on variables such as frequency of use, battery consumption, recharge level, and so on.

* The above specifications are based on normal roomtemperature (25°C / 77°F)

Safety Precautions for Use

When used in Mode Switch "M" (manual) position

This product is not equipped with pre-flash cancellation mode.

Therefore, when this product is used with a camera which pre-flashes, the light level control's position "Full" cannot be used. In this case switch to the "1/2" position. It may be that, even in the "1/2" position, the flash may not operate depending on the camera model used. Please refer to SEA & SEA web site to obtain information regarding compatible cameras.

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

- * With reference to camera's function, please refer to the camera's instruction manual.

Fiber Optic Cable

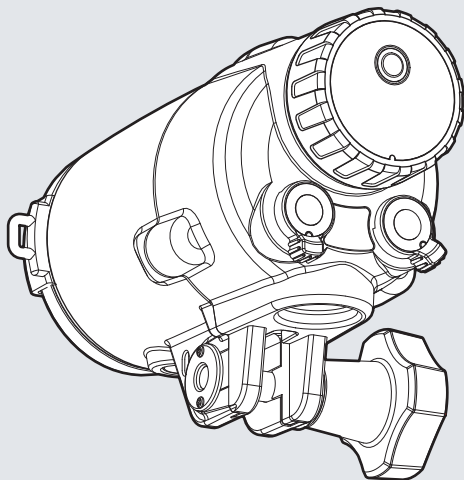
To prevent a misfire please ensure that the Fiber Optic Cable is used.

When used with the DX-1G

When you use this product with the DX-1G, please attach the strobe to the housing using the Fiber Optic Cable Adaptor which comes with the DX-1G housing.

- * The Fiber Optic Cable Adaptor may not have been supplied with early DX-1G housings. In this case, please contact the official SEA & SEA distributor in your country and ask for the Fiber Optic Cable Adaptor.

The serial number of your DX-1G will be required to be supplied with the Fiber Optic Cable Adaptor.



SEA&SEA

シーアンドシー・サンパック株式会社

〒332-0016 埼玉県川口市幸町3-2-20
TEL.048-256-2251

カスタマーサービスセンター

TEL.048-255-8512
<http://www.seaandsea.co.jp>

SEA&SEA SUNPAK Co., Ltd.

3-2-20, Saiwai-cho, Kawaguchi-shi,
Saitama, Japan 332-0016
TEL. +81-48-256-2251

World Customer Service Center

TEL. +81-48-255-8512
<http://www.seaandsea.jp>