

TTL CONVERTER

for Nikon #50104
for Canon #50106

Instruction Manual

Thank you and congratulations on your purchase of SEA&SEA TTL Converter, with a depth rating of 60m (200 feet). To get the best results from your new converter, please read this manual before use and retain it for future reference.

Safety Precautions

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

⚠ **WARNING!** : Situations that could result in serious injury or death.

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

⚠ WARNING!

- When transporting this product or storing it for a long period of time, remove the battery. Accidentally activating the power switch with batteries in place may cause fire.
- Be careful when opening the product. Battery overheating or other conditions inside may build interior pressure, which may cause an explosive opening and cause injuries.
- Do not open the product in the vicinity of open flames.
- Do not disassemble or structurally change this product; doing so may cause fire or electric shock.
- Do not pour water or insert foreign objects into the product; doing so may cause fire or electric shock. The product is waterproof, but if water gets inside it for any reason, immediately turn it off and stop using it. Once the product is out of the water, remove the batteries as soon as possible.
- Do not use this product in any place with flammable or explosive gases. It may cause fire or trigger an explosion.

⚠ CAUTION!

- Read this instruction manual carefully before using the product.
- Always make sure that this product is securely mounted to a compatible arm or grip to prevent it from falling off, becoming lost, or causing personal injury or equipment malfunction.
- Do not open the product in a wet or sandy environment. Protect the interior from moisture, sand, or other foreign objects.
- If flooding occurs, turn off the product. Discontinue use immediately. If flooded, beware of increased pressure inside the product. Handle with extreme care when opening.
- Use only batteries specified by SEA&SEA. Other batteries may cause heat, fire, or bursting resulting in personal injury.
- Do not step on this product or put it under heavy objects. It may deform the product or damage the equipment, causing fire, electric shock, or malfunction. It may also cause the product to leak.
- This product includes plastic parts. Do not subject this product to extreme heat, such as on a car dashboard or in direct sunlight. Plastic parts are prone to warping.
- This product has been constructed with an airtight seal. When packing this product for air travel, open the Battery Box to prevent internal pressure buildup due to change in air pressure at altitude.
- If you detect smoke and/or an acrid odor, discontinue use immediately. Remove the batteries and send the product to an authorized SEA&SEA service center.
- Always rinse this product with fresh water after use. Be sure the latch is securely closed before rinsing to prevent water from entering the interior.
- Never use petroleum solvents such as alcohol or paint thinner to clean this product; such products might mar or otherwise damage the product's finish.
- SEA&SEA Products Ltd. will not be responsible for any loss of captured images or expenses caused by loss of images, even if you're unable to shoot due to malfunction this product.
- Use this product in accordance with this instruction manual to prevent flooding, product damage, or malfunction. User mishandling will void the warranty.

Handling the O-Ring

The O-ring used in this product provides an airtight waterproof seal. Improper handling and maintenance can cause flooding. Please observe the following precautions carefully.

⚠ CAUTION!

The specially manufactured O-rings for this product contain silicone oil that gradually exudes from the O-ring over time to keep it lubricated. When it requires external lubrication, it must be lubricated with SEA&SEA pure silicone grease designed for these O-rings. The grease comes in a tube with blue lettering and a blue cap.

Never use SEA&SEA silicone grease in a tube with a BLACK lettering or other manufactures' brands of silicone grease.

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.

● Remove the O-ring for inspection.

Before using, remove the O-ring from its groove and the O-ring contact surface. Thoroughly examine the O-ring and the O-ring groove unless you first remove the O-ring.

● 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 SEA&SEA 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, the O-ring groove, or the O-ring contact surface. Such contamination will breach the seal and cause flooding.

● Lubricate with silicone grease.

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

● Do not crimp the O-ring.

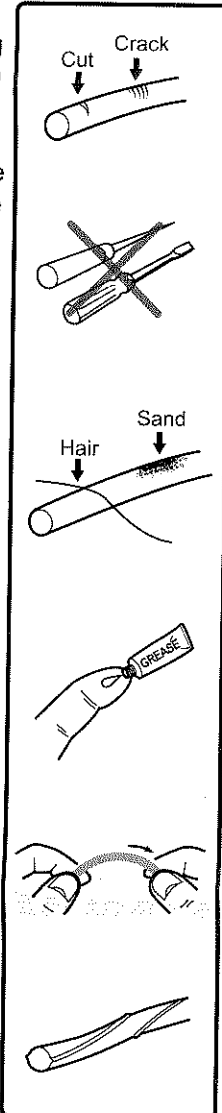
Hold the O-ring straight and do not bend or twist it when fitting it into the O-ring groove.

● Store the O-ring properly.

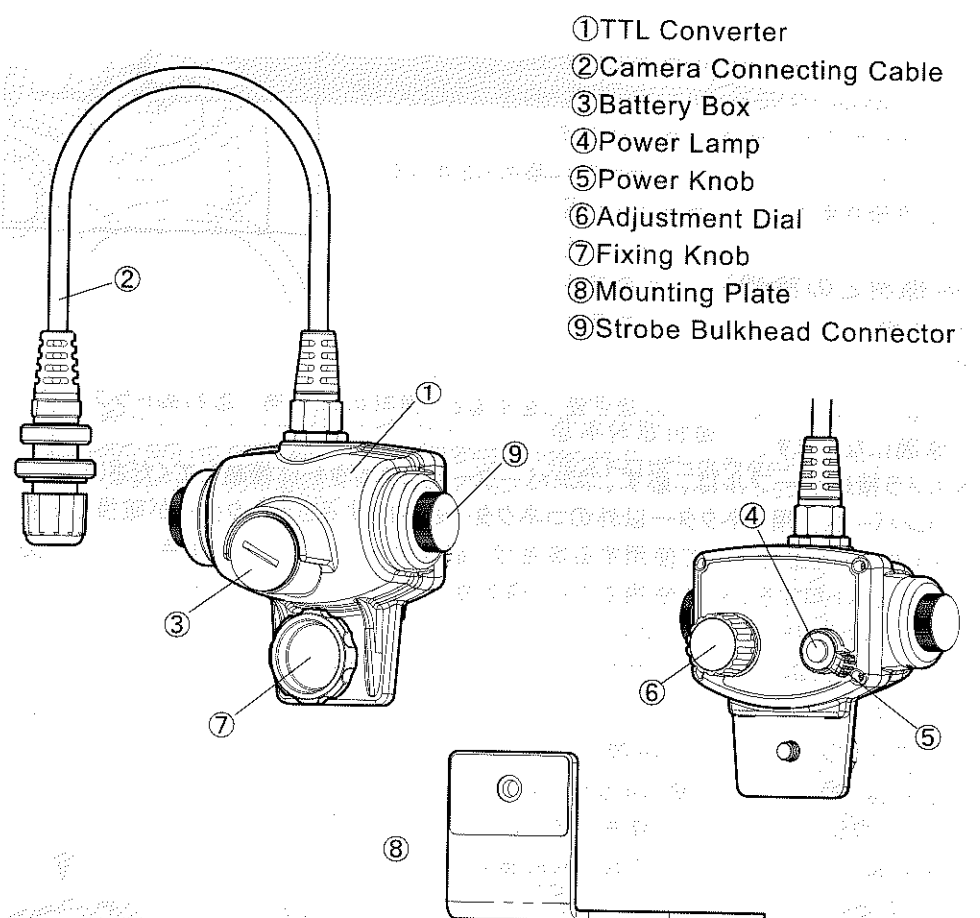
Always store your O-ring in an airtight container and in a cool environment. Keep it out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

● Replace the O-ring when it's too old.

The life of the O-ring depends on the diligence of your maintenance, the frequency of use, and storage conditions. On average, if you maintain your O-ring properly, it will retain its watertight integrity for one year. Replace the O-ring when it's older than one year.



Identification of Parts



Operating Instruction

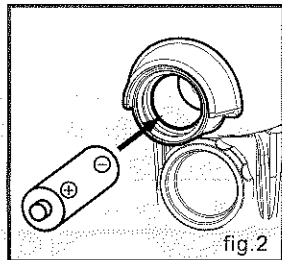
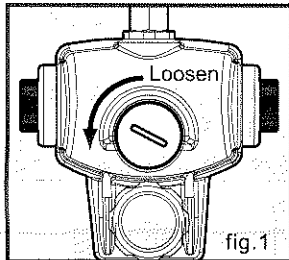
《Inserting Batteries》

⚠ CAUTION!

- Before installing or replacing batteries, wipe all moisture off the product and make sure your hands are dry.

The TTL Converter is powered by the CR-2 lithium battery.

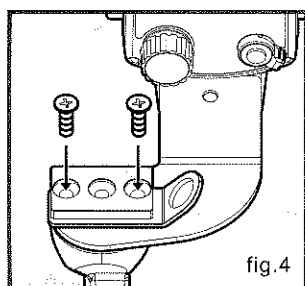
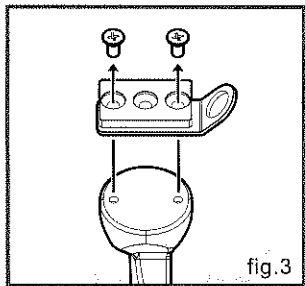
1. Release and remove the lid by turning it counterclockwise. (fig.1)
2. Put the batteries into the battery box in the correct orientation: observe the + and - signs (polarity) on the battery box and match the batteries' polarities to the signs. (fig.2)
3. Make sure that the lid surface that contacts the O-ring is undamaged and has no grit or debris on it. Make sure that the O-ring is also undamaged and free of grit or debris. Apply a small amount of silicone grease to the O-ring. ※See "Handling the O-ring"
4. Firmly turn the lid clockwise until it stops.



《How to attach to camera housing》

This product can be mounted to a SEA&SEA grip.

1. Remove two screws (short screw × 2) on the left grip of housing to disassemble each part. (fig.3)
2. Attach supplied screws (long screw × 2) as shown in the Figure. (fig.4)



《Handling the Sync Cord》

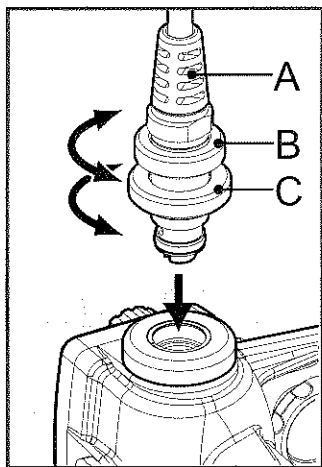
⚠ CAUTION!

- Do not touch the connector's contact pins with fingers or contaminate the pins with silicone grease. If contaminated, clean with alcohol.
- When the sync cord is detached from the strobe or converter, be sure to cover both connector ends with the sync cord connector caps.
- When rinsing the sync cord after use, if the sync cord has been detached from the strobe and/or converter, be sure both ends of the connector are protected with their plastic caps.
- When detaching the sync cord from the converter, always hold the converter with the bulkhead connector facing downward to prevent any water trapped between the sync cord connector and bulkhead connector from penetrating the bulkhead connector.

How to connect the Sync Cord

1. Remove the bulkhead connector cap. Inspect the contact pins for corrosion and debris. Clean, if necessary.
 2. Inspect the O-ring on the sync cord connector for dust and debris. Clean or replace if necessary. They lubricate the O-ring with a thin coating of silicone grease and replace to its channel.
 3. Align the index mark on the sync cord connector with the mark on bulkhead connector. Insert connector as shown. Turn part "B" until the connector is firmly fixed.
 4. Turn part "C" until the connector is locked into place.
- To remove:

Reverse the procedure. Loosen part "C", then part "B", and pull part "A" straight out.



《How to connect equipment》

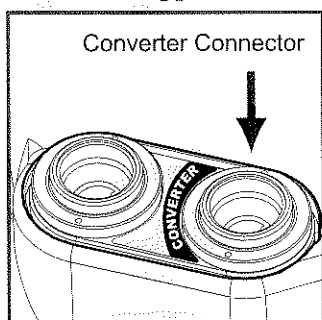
⚠ CAUTION!

- Before connecting product to other equipment, make sure to turn off all equipment. Plugging in/out the cable while equipment is ON will cause damage or trouble.
- Ensure to connect the camera connecting cable to the converter connector. Connecting the cable to other connectors will cause damage on the connector.
- Ensure to use the same type of strobes when using two strobes together. Using two of the different strobes will generate unbalanced light. ※As for YS-90 series, all strobes are the same type.
- Camera may not recognize the strobe depending on the condition. In such situation, turn off and on the power of the converter.
- Converter connector and Strobe connector on the housing cannot be used at the same time. When used together, the TTL converter will malfunction.

《How to connect the Sync Cord with Camera Housing》

Product can be connected to camera housing equipped with converter connector. Refer to the compatibility list for compatible housings.

1. Remove the connector cap of the converter connector on camera housing.
2. Plug in the camera connecting cable to the converter connector.



《How to connect the Sync Cord with Strobe》

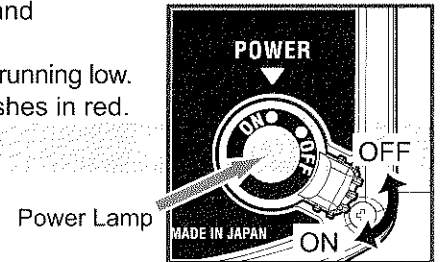
Product is equipped with two Strobe Bulkhead Connectors. Product can be used with either one or two strobes. Refer to the compatibility list for compatible strobes.

1. Remove the Strobe Bulkhead Connector cap on product.
2. Connect the strobe Sync Cord to Strobe Bulkhead Connector on product.

《Operation of Each Area》

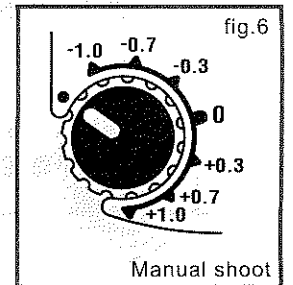
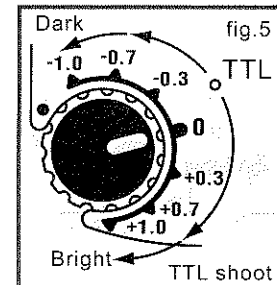
[Power Knob]

Turn the switch clockwise to turn on power, counterclockwise to turn off power. Green light will flash when tuning on power, and converter will activate. Power lamp will flash in red when the battery is running low. Change the battery when the power lamp flashes in red. Leave the power off when not in use.



[Adjustment Dial]

Switch over TTL shoot and manual shoot. Adjust the light during TTL shoot.



《Taking photographs》

Refer to the strobe instruction manual for proper usage of strobes.

[TTL Converter for TTL shoot]

Turn on the converter and turn the adjustment dial to TTL. (fig.5)

※For normal use, keep it at 0.

Set the switch for strobe for TTL shoot.

[TTL Converter for Manual shoot]

Turn on the converter and position the adjustment dial to manual. (fig.6)

Set the switch for strobe to manual shoot.

Maintenance and Storage

- After use, soak in fresh water and then rinse with tap water. Make sure the product is securely closed before immersing in water. ※ Do not allow salt water to dry on the product. Salt will crystallize and become difficult to remove.
- After rinsing, wipe with a soft cloth.
- ⚠ CAUTION! : Do not use a hair dryer. The heat may cause warping or other damage to the plastic parts.
- When storing this product for an extended period, avoid extremely high or low temperature, high humidity, or direct sunlight.
- Lubricate the O-rings before storing. O-rings should be replaced with new O-rings at least once a year.
- When storing this product for a long period of time, remove the battery.

Notice



This "Pressure Test Passed" sticker confirms that this product has met SEA&SEA pressure test standards.

Specifications

【Power】	Lithium battery CR-2
【Battery life】*1	Over approx. 2000 times
【Depth rating】	60 m (200 ft.)
【Construction】	Case: Polycarbonate, Fixing Knob: ABS resin Mounting Plate: Corrosion-resistant aluminium alloy
【Weight】*2	Above water: approximately 420 g (14.8 oz.) Underwater: positively buoyant by approximately 200 g (7.1 oz.)
【Dimensions】	(W × H × D) 95 × 85 × 75 mm (3.8 × 3.4 × 3.0 in.)
【Accessories included】	Mounting Plate, Screw × 2, Lithium Battery CR-2, O-ring, silicone grease, O-ring Remover
【Accessories sold separately】	O-ring set for TTL Converter (#62126)

*1: Number of flashes of connecting strobe. (Differs depending on use conditions.)

*2: Including Battery and Mounting Plate. ※Specifications are subject to change without notice.

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TTLコンバーター対応機種一覧表
TTL Converter Compatibility List

TTL Converter	Camera	Housing	Strobe							
			YS-350	YS-300	YS-120	YS-110	YS-90AUTO	YS-90DX	YS-90Duo	YS-60/N
for Nikon	D200	DX-D200			○	○	○	○	○	
	D50	DX-D50 ※1			○	○	○	○	○	
	D70/D70S	DX-D70 ※1	○	○	○	○	○	○	○	○
for Canon	5D	DX-5D			○	○	○	○	○	○
	350D	DX-350D ※1			○	○	○	○	○	○
	300D	DX-300D ※1			○	○	○	○	○	○
	10D	DX-10D ※1			○	○	○	○	○	○
	10D	DX-D30/D60 ※1			○	○	○	○	○	○

※1. コネクタの改造が必要です。

With customized connector.

仕様は改良のため予告なく変更することがありますのでご了承ください。

Specifications are subject to change without notice.