

UNDERWATER LIGHT **LX-15** # 09103

Instruction Manual

Thank you and congratulations on your purchase of SEA & SEA's LX-15. This product is an underwater light with a depth rating of 60m (200feet). For efficient operation of all functions and to optimize performance, please read this manual before use. Retain for future reference.

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.

- **WARNING!** : Situations that could result in serious injury or death.
- **CAUTION!** : Situations that could result in property damage or personal injury.

WARNING!

- During transportation or when not in use for long period of time, remove the battery. Accidental activation of the power switch could cause fire.
- When opening the light, don't point the head of the light toward yourself or anyone else. If the batteries have heated up, internal pressure build-up may cause the head to pop off.
- Don't open the light in the vicinity of open flames.
- Don't disassemble or structurally change this product. It can result in fire or electric shock.
- Don't pour water or insert foreign objects into the product. Fire or electric shock may result. 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.
- Don't point the video light at car drivers. Drivers may be blinded and lose control of their cars.
- Don't use the light in any place with flammable or explosive gases. It may start a fire or trigger an explosion.

CAUTION!

- Read this instruction manual carefully before you start using the product.
 - Do not keep the light on for more than 1 minute on land.
 - Always make sure that this light is securely mounted to a compatible arm or grip to prevent it from falling off, becoming lost, causing personal injury or equipment malfunction.
 - Do not open the light in a wet or sandy environment. protect the interior from moisture and debris.
 - In the event of flooding, turn off the light. Discontinue use immediately.
 - ※ If flooded, beware of increased pressure inside the light. 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.
 - Don't step on this product or put it under heavy objects. It may deform the housing or damage the equipment, causing fire, electric shock, or malfunction. It may also cause the housing to leak.
 - This product incorporates plastic parts. Do not subject this product to extreme heat, such as on a car dashboard, or to direct sunlight. Plastic parts are prone to warping.
 - Do not store this product with the cases sealed in a heated environment. It may cause flooding or malfunction.
 - This product has been constructed with an airtight seal. When packing this product for air travel, open the cases to alleviate pressure buildup due to atmospheric changes.
 - If you detect smoke or and 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. Rinse with latch securely closed to prevent water from penetrating 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 costs incurred should malfunction of this product or accessories result in unsatisfactory.
 - Use this product in accordance with this instruction manual to prevent flooding, product damage or malfunction.
- User mishandling will void the warranty.

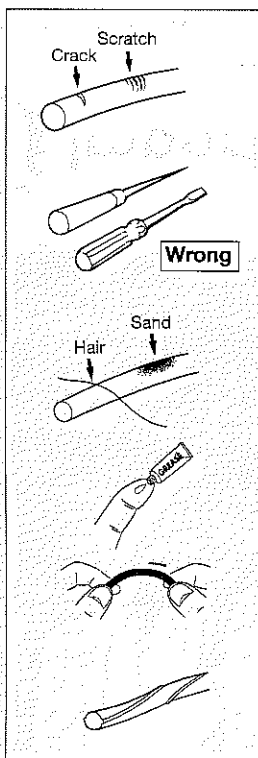
Handling the O-Ring

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

CAUTION!

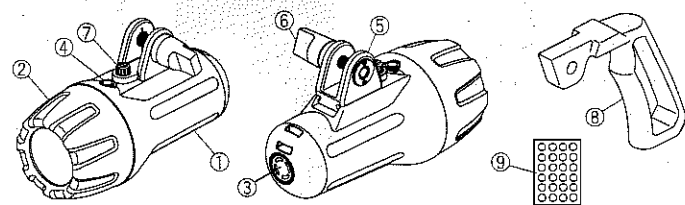
The specially manufactured O-rings for this product contain silicone oil that gradually exudes from the O-ring over time to keep it lubricated. When it requires external lubrication, it must be lubricated with Sea & Sea pure silicone grease designed for these O-rings. The grease comes in a tube with blue lettering and a blue cap. Never use Sea & Sea silicone grease in a tube with a BLACK 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 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, O-ring groove or 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. Rub 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 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 Body
- ② Head
- ③ Power switch
- ④ Pressure release valve
- ⑤ Arm socket
- ⑥ Fixing bolt
- ⑦ Arm-retaining knob
- ⑧ Grip
- ⑨ Identification stickers



Operating Instruction

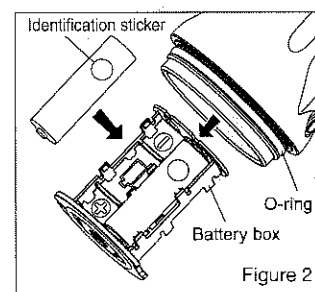
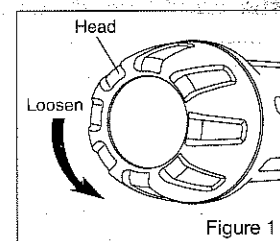
《How to install the Batteries》

CAUTION!

- Before installing or replacing batteries, wipe all moisture off the light and make sure your hands are dry.
- Make sure all batteries are all of the same type. Don't mix different kinds of batteries.
- Always recharge and replace all four batteries at the same time.
- After unpacking a set of new batteries, label them with the included identification stickers to identify them as a set.

The LX-15 is powered by four AA nickel-metal hydride batteries.

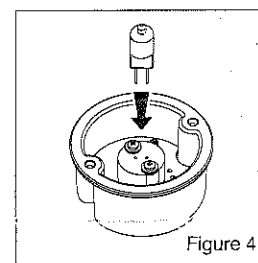
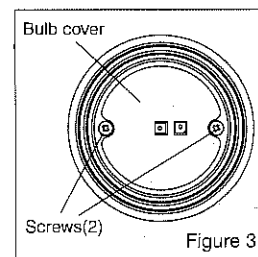
1. Release and remove the Head by turning it counterclockwise (fig.1).
2. Take the battery box out of the main body (fig.2).
3. Put the batteries into the battery box in the correct orientation: observe the + and - signs (polarity) on the battery box and match the batteries' polarities to the signs (fig.2).
4. Insert the battery box into the main body.
5. Make sure that the head 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"
6. Firmly turn the head clockwise until it stops.



《Replacing the Light Bulb》

CAUTION!

- Allow the bulb to cool for at least 30 minutes after use.
 - Don't point the head toward yourself and anyone else when opening. Bulb heat inside may cause high pressure that pops the head off.
 - Do not touch the bulb. If you have touched it, wipe with a dry soft cloth.
1. Release and remove the Head by turning it counterclockwise (fig.1).
 2. Remove the two screws using a Philip's screwdriver to remove the bulb cover (fig.3).
 3. Remove the used bulb, then insert the new bulb straight into the pinholes (fig.4).
 4. Tighten the two screws using a Philip's screwdriver to seal the bulb cover.
 5. Firmly turn the head clockwise until it stops.



《Replacing O-ring》

1. Release and remove the Head by turning it counterclockwise (fig.1).
2. Remove the O-ring from the main body using the O-ring remover.
3. Apply a small amount of silicone grease to the new O-ring.
 - ※ See "Handling the O-ring"
4. Firmly turn the head clockwise until it stops.

《Mounting to the Light to an Arm or a Grip》

This product can be mounted to a Sea & Sea arm or the grip included in the package.

1. Place the arm holder into the arm socket on the light and tighten the arm-retaining knob to hold it firmly in place.
2. Insert the arm grip into the mounting slot of the light. Align the holes.
3. Insert the fixing bolt through the holes and tighten. Loosen this bolt before changing the angle of the light mounted to an arm.

《Pressure Release Valve》

CAUTION!

- When used underwater, the battery may generate gas inside the cases. The pressure release valve is a one-way safety valve to release gas buildup. If you notice bubbles coming out through the valve during use, it may signal the presence of gas. Please proceed as follows.
1. Turn off the power switch and discontinue use.
 2. Ascend to the surface at a safe ascent. (Water will not flood into the product even if bubbles are coming out.)
 3. Contact a Sea & Sea authorized dealer for checkup.

《Auto Shut-Off Circuit》

This light is equipped with an "auto shut-off circuit" to protect the battery. This circuitry automatically shuts off power when the battery voltage becomes lower than a preset value. The light will go off before the battery voltage has been completely exhausted. Please note: This is a precaution. this is not a malfunction.

Notice



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

Maintenance and Storage

- After use, soak in fresh water and then rinse with tap water. Make certain the Head is securely closed.
 - ※ Do not allow salt water to dry. Salt will crystallize and will be difficult to remove.
- After rinsing, wipe with a soft cloth.
- **CAUTION!** : Do not use a hair dryer; the heat may cause warping or damage to the plastic parts.
- Avoid extremely high or low temperature, high humidity or direct sunlight when storing this product for an extended period.
- Lubricate the O-rings before storing. O-rings should be replaced with a new one at least once a year.

Specifications

【Power requirement】	AA nickel-metal hydride battery x 4	【Weight】	400g (14oz.) on land; Approx.-20g (-0.7oz.) under water
【Light bulb】	15-W halogen lamp	【Dimensions】	73 x 73 x 156mm (W x H x D)
【Color temperature】	3100°K	【Accessories】	arm socket, fixing bolt, hand grip hand strap, O-ring, silicone grease
【Effective lighting angle】	Approx. 70°	【Options】	LX-15 replacement bulb (#48101) LX-15 O-ring set (#62115)
【Bulb life】	Approx. 100hour*1		
【Continuous burn time】	Approx. 50minutes*2		
【Depth rating】	60m (200feet)		
【Material】	Body and holder: ABS, Head: PC, elastomer		

*1: Differs depending on use conditions. *2: When using nickel-metal hydride batteries (2500mAh)
※Specifications are subject to change without notice.

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