

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.

Safety Precautions

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.

⚠ WARNING

- Pay particular attention to removing the battery unit or opening the connector cap to avoid injury. Heat from the batteries may cause pressure buildup inside the battery unit, and could result in cap explosion with unexpected force.
- 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 use the product in the presence of flammable gas, as this could result in explosion or fire.
- Do not illuminate the light with the reflector touching a person or object to prevent heat generation.
- Touching the reflector immediately after use could result in burns.
- Do not 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 the product.
- Should you notice smoke or an unusual smell coming from the product, turn it off and remove the battery unit from the product immediately, taking care to avoid burns. Continued operation could result in injury. After removing the battery unit, 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 disassembling the product as water may spurt out or the connector cap may open explosively and cause injuries.
- Do not disassemble the product or open the connector 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 assemble/disassemble 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 electromagnetic 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 product 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 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, light, 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.
- 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 damage 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.

Safety Precautions for Use of Battery Unit

⚠ DANGER

- Never expose the battery unit to flame or fire, or to excessive heat.
- Never attempt to disassemble, alter or directly solder the battery unit. There are no user-serviceable parts. Tampering with battery unit may expose you to dangerous voltage, battery acid, or electrical shock.
- Never short-circuit the terminals of the battery unit, as it could result in battery leakage, heat generation, fire, or explosion. Avoid contact with all metal objects during transporting and storage.
- Use only the battery charger included with this product package for charging and follow the recharging instructions. Not using the aforementioned charger may cause battery leakage, overheating or explosion.
- Move leaking battery unit 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.

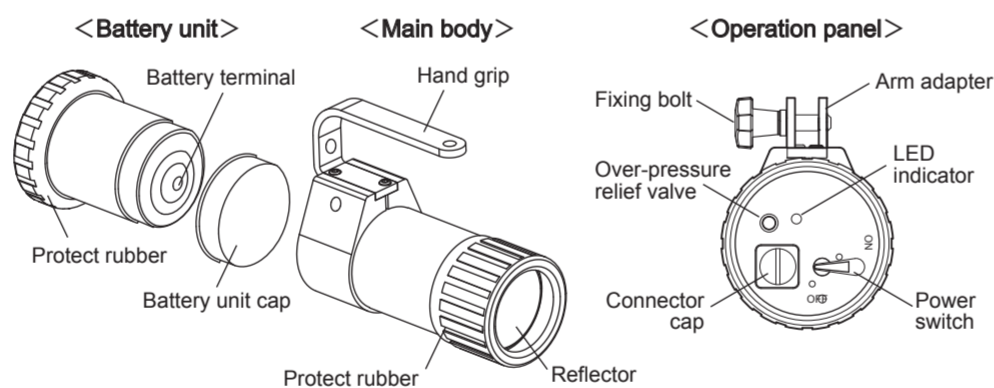
⚠ WARNING

- Keep dry. The battery unit 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 charge the battery beyond the specified charging time, it may cause battery leakage, fire hazard or explosion.
- Never use the battery unit 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.
- Do not leave or use the battery unit in an extreme hot environment. This may cause battery leakage, overheating or battery performance deterioration.

⚠ CAUTION

- Read the instruction manuals of the battery unit and battery charger for LX-24HID, and observe proper precautions before use of the products.
- When not in use, keep the battery unit and main body separated, and put the cap on.
- Generally, the battery capacity will decrease after repeated use. Be sure to recharge the battery every time before using the product.
- The battery unit is a consumable item. Replace the battery unit if the lighting time of the product becomes less than 80 minutes even after the battery is recharged.
- The lighting time of the product may become shortened after prolonged storage. Recharge the battery repeatedly when the product is stored for an extended period of time.
- Make sure to maintain the O-rings before use of the product.
- Avoid strong shocks/impacts or excess stress to the battery unit.
- Do not use or discharge the battery unit at ambient temperatures below 0°C (32°F) or above 40°C (104°F).
- During recharging, the temperature should be in the vicinity from 0°C to 30°C (32°F to 86°F).
- If you will not be using the product for an extended period of time, please recharge the battery fully.
- Do not recharge the 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 unit terminals can prevent the product from functioning. Should the battery unit terminals become dirty, wipe them with a clean, dry cloth before use.
- Turn the equipment off after use.
- Be sure to attach the battery unit cap to the battery unit when recharging the battery without assembling the product.

Identification of Parts



Assembling the Product

Installation of the battery unit to the main body

- Remove the battery unit cap from the battery unit, then examine the O-ring**
 - Check both O-rings (red) for cuts and debris.

- Align the battery unit with the main body in a straight line ①, then screw the battery unit into the main body by rotating it clockwise until it stops ②**
 - Do not hold the bottom portion of the battery unit (protect rubber).

Remove the battery unit

- Firmly hold the middle of the battery unit, rotate it counterclockwise**
 - Do not hold the bottom portion of the battery unit (protect rubber).
 - Attach the battery unit cap to the battery unit (terminals) after removing the battery unit.

⚠ CAUTION

Never hold the ends (protect rubber parts) when assembling/disassembling the product. Doing so will loosen the fixed-mounted operation panel or reflector, and may cause flooding.

Attach the hand strap

- Pass the hand strap through the hole on the hand grip
- Let the hand grip and the other end of the strap pass between the strap
- Tightly pull the other end of the strap

⚠ CAUTION

- Make sure that the strap is firmly attached to the hand grip.
- Do not carry the product by hanging it from the hand strap. Hold the hand grip when carrying the product.

Attach the arm adapter

The product can be mounted to an arm system by replacing the hand grip with the arm adapter which is included in the product package.

<Remove the hand grip>

Loosen the cap bolt ① by turning it counter-clockwise, then remove the other two cap bolts ② by turning them counterclockwise using the supplied hex wrench

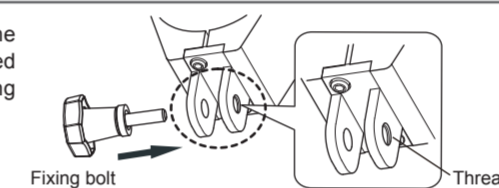
<Attach the arm adapter>

Set the arm adapter in place of the hand grip, tighten the two cap bolts ③ first, then tighten up the cap bolt ④ to fix

- Make sure the arm adapter is fixed without backlash.

⚠ CAUTION

- Be sure to insert the fixing bolt from the non-threaded hole. The product cannot be fixed to an arm if the bolt is inserted in wrong direction.



How to Use

Charging the battery

- Repeat charging and discharging the battery several times when using a brand new battery unit.
- Be sure to recharge the battery before use.
- Fully recharge the battery when storing. The battery capacity will gradually decrease due to self-discharging during storing. Recharge the battery immediately if it is stored for over 45 days, and keep the battery fully recharged.
- The battery unit is a consumable item. Replace the battery unit every year or if the running time of the product after charging becomes less than 80 minutes.

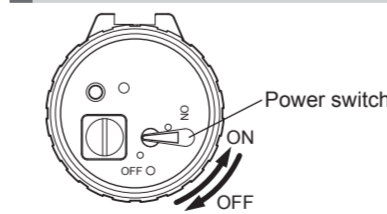
- Loosen and remove the connector cap ① by rotating it counterclockwise using a coin, and securely connect the AC adapter and the charger ②**
 - Thoroughly wipe off any water remaining in the connector.

- Connect the AC adapter to an AC power source first ③, then insert the charger's plug into the connector ④**
 - The LED lamp of the battery charger lights up green, and the color of the lamp turns red when charging.
 - Charging is complete when the LED lamp on the battery charger turns green. Unplug the battery charger from the battery unit, and close the connector with the cap after checking the two red O-rings.

⚠ CAUTION

- Use only the battery charger included in this product package for charging.
- Make sure that the product is turned OFF (power switch is set to OFF) before charging. The battery cannot be charged if the power switch is set to ON. Plugging and unplugging the battery charger to the connector without the power OFF may cause damage to the equipment.
- Do not store the product with the charger plugged into the battery unit, as it may cause damage to the equipment.
- Do not plug the charger to the battery unit before the AC adapter is connected to an AC power source, as it may cause damage to the equipment.
- Be careful when touching the battery unit and the battery charger during charging. They may get hot enough to burn you.
- Charging should be done on a flat surface free from vibration. Vibration during charging may cause malfunction.
- Hold and pull the plug when unplugging the charger from the connector. Pulling the cord may damage the wiring and result in malfunction.
- Do not cover or wrap the battery unit and the battery charger with a cloth when charging, as it may cause heat generation and result in malfunction.
- The battery unit will be very hot immediately after use. Wait until it cools down to normal temperature before recharging.

Power switch



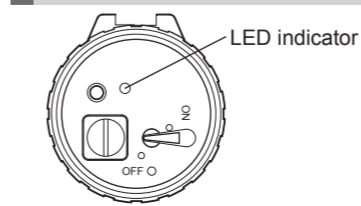
Set the power switch to ON to illuminate the light.

Set the power switch to OFF to turn the light off.

⚠ CAUTION

- Make sure to check whether the product works properly by operating the power switch before underwater use.

LED indicator



Displays the remaining battery level in three colors: Green, Amber and Red.

⚠ CAUTION

- The LED indicator turns Red when the battery level becomes low during use. Be sure that the POWER TURNS OFF AFTER approx. 10 MINUTES.

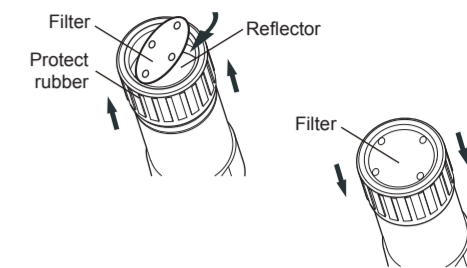
Filter set

Three different filters are included in the product package. Choose the best one depending on the situation.

[White]	Diffusion: Widens beam angle, changes from spot to flood
[Yellow]	Provides better visibility when foggy
[Amber]	Reduces Kelvin to approx. 5600K

<Attach the filter>

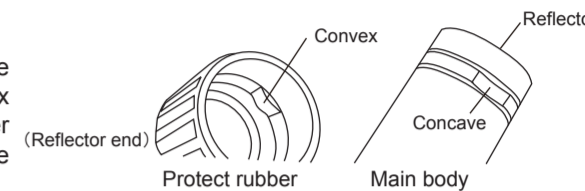
- Pull up the protect rubber on the reflector partially, and put the filter on the reflector**
- Press the protect rubber down completely**
 - Make the filter even.



Protect rubber

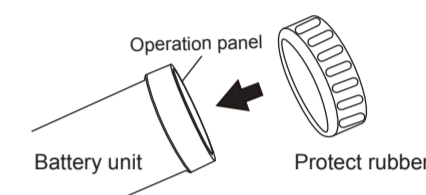
<Reflector side>

Place the protect rubber over the reflector aligning the convex portion inside the protect rubber with the concave portion on the main body



<Operation panel side>

Place the protect rubber over the operation panel as shown



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's watertight, then 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.
- 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.



This device complies with Part15 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.

Specifications

[Power source]	Rechargeable Li-ion Battery 11.1V 5200mAh
[Bulb]	24W HID bulb
[Color temperature]	Approx. 6500K
[Beam angle]	Approx. 36° (with Diffuser : Approx. 90°)
[Output]	1750 lm
[Bulb life]	Approx. 1400 hours
[Max. running time]	Approx. 120 minutes
[Charging time]	Approx. 7 hours (at full discharge)
[Depth rating]	120 m / 400 ft
[Operating temperature]	Charging : 10°C~30°C / 50~86°F Using : 0°C~40°C / 32~104°F
[Construction]	Main body / Battery unit body : Corrosion-resistant aluminum alloy Operation panel : ABS resin
[Weight]	Approx. 1550g / 54.2oz (Underwater : Approx. 700g / 24.5oz)
[Dimensions]	φ 75 × 2500 mm / 3 × 100 inch (DIA × D)
[Accessories]	Main body, Battery unit, Battery unit cap (attached to the battery unit), Battery charger, Protect rubber (attached to the product), Hand grip (attached to the main body), Hand strap, Arm adapter, Fixing bolt, Filter set (three filters), Spare O-rings (two large O-rings for the battery unit, two small O-rings for the connector cap), Silicon grease, Storage bag, Hex wrench, Instruction Manual (this manual)

Specifications and appearance are subject to change without notice.