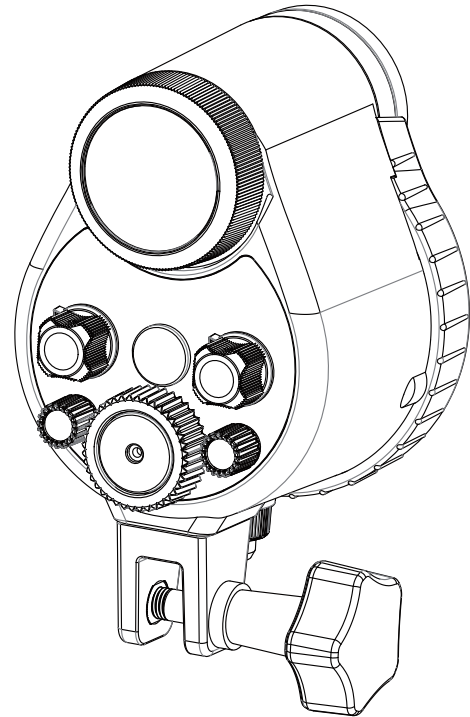
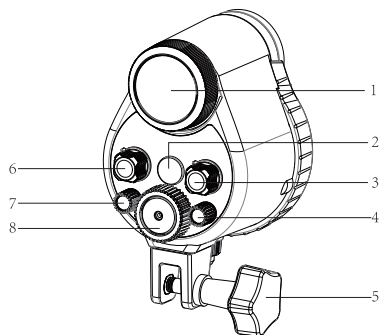
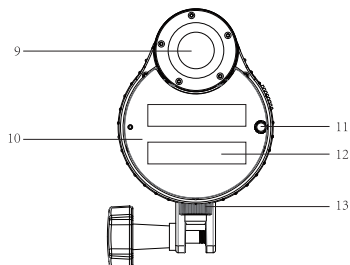


Underwater Strobe ST-100-Pro





- | | |
|---------------------------------|-----------------------------|
| 1. Battery cover | 5. Bracket button |
| 2. Energy recovery indicator | 6. Function knob |
| 3. EV regulating function | 7. LED light control button |
| 4. Lock in the current function | 8. Data seat cover |

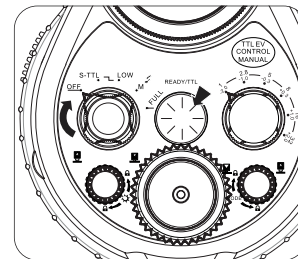


- | | |
|-----------------------------|-----------------|
| 9. LED focus flash | 12. LED flash |
| 10. Color lampshade | 13. Fiber cover |
| 11. Color cover lock button | |

■ The Mode Dial

Choose a flash control mode:

- **OFF:** Turn the flash off.



■ EV adjustment buttons

- **TTL file** (camera -AUTO gear position).

- 1) test flash and the camera flash synchronize automatically.
- 2) test level compensation tuning knob (EV) (-2.0~+2.0) a total of 6 file
- 3) test turn off focus light automatically when pressing the shutter.

- **LOW profile** (less than the TTL brightness)
(camera -AUTO gear position).

- 1) test flash output adjusted by EV knob (1~32) a total of 6 file
- 2) test turn off focus light will automatically turn off the shutter.

- **M file** (camera M file location)

- 1) test flash output adjusted by EV knob (1~32) a total of 6 file
- 2) test turn off focus light will automatically turn off the shutter.

- **FULL file** (FULL power output, adjust the EV is invalid)
(camera M file location)

- 1) test turn off focus light will automatically turn off the shutter.

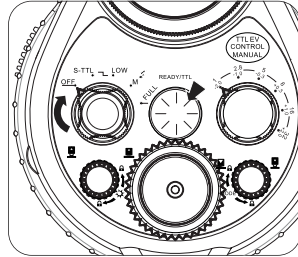
■ The indicator light (charging/finish)

- Energy recovery indicator light, the process of charging light is red
- when the charge is restored, the indicator light shows green

■ Pattern control knob/power switch

- OFF (power switch)
- TTL file /LOW file/M file/FULL file

■ LED LIGHTS



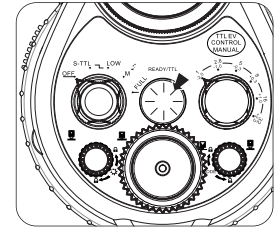
Button function :

- LED/ LIGHT button function.
(press one time, light 8 seconds automatically, the lock time light) the shutter shut automatically.
- THE MODEL/LOCK (LOCK all of the features selected).
- LIGHT (charging/finish charging)

 **Note: focus light close when charging and shutter comes**

■ The Flash-Ready Lamp

View flash status.



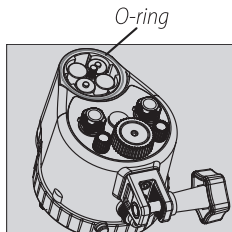
Lamp	Status
Green light	Fully charged and can use
Red light	Charging state
Red light flashing	Protection status

Readying the Unit for Use

Read the manuals for the waterproof case and camera before proceeding.

■ The O-Ring

The O-ring keeps the unit waterproof function. Before using the flash, inspect and clean the O-ring, O-ring guide and lubricate the ring as described on pages 34–36.

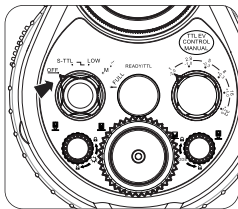


Inserting Batteries

The unit takes four AA alkaline or nickel-metal hydride (NiMH) batteries. Use new batteries only; do not combine old and new batteries or mix batteries of different brands or types.

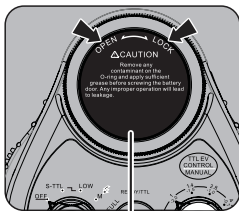
1 Turn the unit off.

Confirm that the mode dial is rotated to OFF.



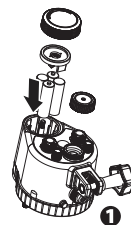
2 Unlatch the battery holder.

Keeping the latch pressed, slide it from lock to the "open" (unlatched) position.



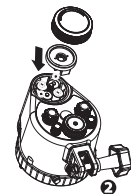
Battery holder

3 Insert the battery



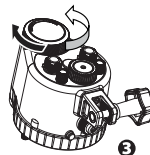
- 1 Slowly insert battery from the unit, keeping the holder straight and the unit horizontal to ensure that water does not drop into the interior.

4 Notice the positive and negative sign of battery



- 2 insert the battery by the (+) (-) mark on the drawing.

5 Re-fixed the battery compartments

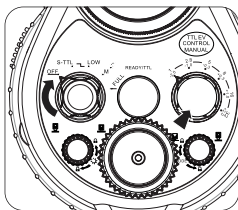


- 3 Turn it off by rotating the battery compartments to the "Lock" direction.


- 2 Adjust flash unit settings.**
Rotate the mode dial to TTL.

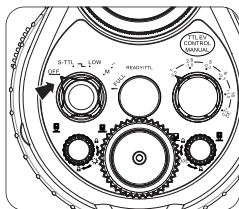
- 3 Take pictures.**
If flash output was adjusted successfully, the flash-ready lamp will light green for about two seconds after the flash has fired. If the lamp does not light, adjust the distance to the subject and try again.

Flash output can be adjusted using the flash-level dial. Rotate the dial clockwise to increase flash output, counterclockwise to decrease.



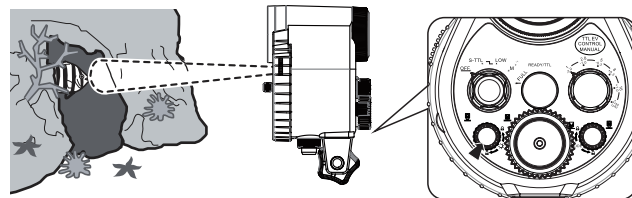
Forbidden the Flash

The flash can be forbidden by rotating the mode dial to **OFF** and setting the camera flash mode to  (off).

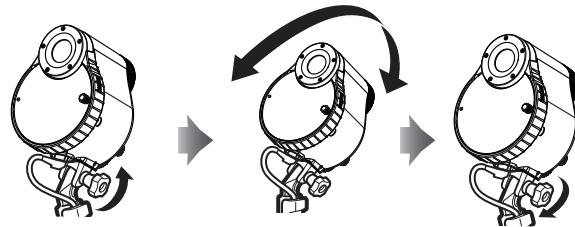


Using the Targeting Lamp

To use the targeting lamp, press the targeting lamp button.



The targeting lamp shows where the flash is pointing and can be used to assist the focus operation when the subject is in shadow. The direction of the flash can be adjusted as shown below.



Loosen mounting bolt

Position flash unit

Tighten mounting bolt

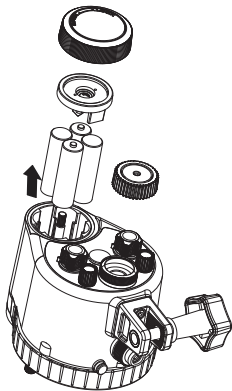
5 Let the unit dry in the shade.

Leave the unit dry in a shady, well-ventilated area.



6 Clean the battery holder.

After confirming that the holder is dry, remove it from the unit and wipe it with a soft, dry cloth to remove any foreign objects.



Maintenance

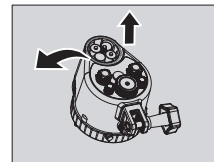
This section describes how to maintain the O-ring and flash unit.

Caring for the O-Ring

The flash unit uses an O-ring to form a waterproof seal. Improper handling of the O-ring can cause leak. Check the condition of the O-ring as below after the unit has been used under water.

1 Remove the O-ring.

Lightly stretch the O-ring by sliding your fingers along either side and remove it from the unit. Do not apply excessive force or use your fingernails, metal objects, or edged or pointed tools.

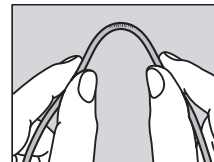


2 Wash the O-ring.

Wash the O-ring in clean water and dry it thoroughly. Do not use benzene, thinner, alcohol, soap, neutral detergents, or other cleaning products, as these could damage or weaken the O-ring.

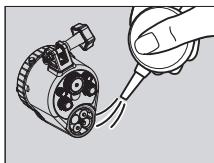
3 Inspect the O-ring.

Remove any foreign matter with a soft, dry cloth, taking care not to leave tissue or threads on the O-ring. Gently bend the O-ring to check for cracking or other damage.



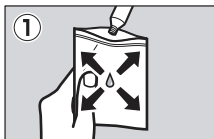
4 Inspect the O-ring guide.

Use a blower or cotton swab to remove any foreign objects from the O-ring guide. Be sure to remove any threads left behind by the swab.



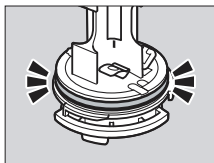
5 Grease the O-ring.

Squeeze about 5mm of silicon grease into a plastic bag and use your fingers to spread the grease throughout the bag (①). Next, insert the O-ring and massage the bag to coat the ring (②).



6 Re-insert the O-ring.

After making sure that O-ring and guide are free of foreign objects, place the O-ring horizontally round the O-ring guide, without undue stretching and without protruding from the guide.



✔ O-Rings

The O-ring require periodic replacement. Replace the O-ring immediately if it is damaged, cracked, warped, or has lost its elasticity. O-rings should be replaced at least once a year even if the unit has not been used; only use O-rings designed for use in this unit. O-rings must be greased before use and whenever the surface appears dry; failure to observe this precaution could result in the O-ring cracking and water entering the unit.

✔ Silicon Grease

Coating the O-ring with the supplied silicon grease prevents wear and ensures that the holder rotates smoothly. Use only the supplied silicon grease or optional WP-G1000 silicon grease; failure to observe this precaution could result in O-ring becoming stretched or otherwise deformed. Replacement O-rings and silicon grease are available for separate purchase. Do not use grease in excessive amounts or apply using paper or cloth, as this may cause dust or fibers to adhere to the O-ring, making the unit vulnerable to leak.

Maintenance and Storage

Observe the following precautions when cleaning and storing the unit after underwater use.

- Before inserting or removing the battery holder, find a shaded location free from spray, wind, dust, and sand, and be sure your hands are dry. Before removing the holder, wipe the unit with a soft, dry cloth to remove any water. Water dropping from the battery holder into the unit could result in condensation or other damage.
- Benzene, thinner, alcohol, soap, neutral detergents, and other cleaning products may deform the unit, making it easy to leak.
- After washing the unit in dean water, remove any visible water with a soft, dry cloth and leave the unit in a shady, well-ventilated area to dry. Do not leave it in direct sunlight or dry it with hair dryers or other powered devices. Failure to observe this precaution could damage the unit, resulting in leaks.
- If the unit will not be used for a long time remove the batteries and store it in a cool, well-ventilated area. To protect the unit from mold, mildew, rust, or corrosion, avoid locations that are exposed to direct sunlight, extreme temperatures, or high humidity and do not store the unit with naphtha or camphor mothballs or in laboratories or other locations where volatile chemicals are used.
- Inspect the O-ring before and after use and before placing the unit in storage. Meikon recommends that the O-ring be replaced before it shows signs of wear.
- Although the need for servicing will vary with storage conditions and how often the unit is used, it is recommended that it be serviced about once every two years by Meikon-authorized service, starting from the date of purchase. fee is charged for this service.
- Take the unit from storage about once a month, insert the batteries, fire it, and test the control. Before returning the unit to storage, confirm that the flash-ready lamp lights red, and then turn the flash off and remove the batteries.

Troubleshooting

If the flash unit fail to work as expected, check the list of common problems as below before consulting your retailer or Meikon representative.

The flash does not charge (the flash-ready lamp does not light red):

- Confirm that the batteries are not exhausted and are inserted in the correct orientation and that the battery holder is fully inserted.
- The unit will shut down temporarily to protect the internal circuits after it has fired several times in quick succession or when the ambient temperature is high. Turn the unit off and let it cool for a few minutes; if the ambient temperature is high, move it to a cool location. Note that if the flash has been fired at full power more than 20 times in succession, it will automatically shut down for at least 20 seconds to protect flash and the flash-ready lamp will turn off; in this case, leave the flash off for at least 10 minutes before resuming use.

The flash does not fire:

- Confirm that the fiber-optic cable is securely connected.
- Confirm that the camera's built-in flash is set to fire with every shot.
- Check the camera shooting and flash mode settings.

The subject is over- or under-exposed in pictures taken in TTL flash control mode:

- Confirm that the fiber-optic cable is securely connected.
- Depending on camera setting and shooting condition, adjustments to flash level using the flash-level dial may not have the desired effect.

The subject is underexposed in pictures taken in manual flash control mode: The flash control mode selected with the flash mode dial does not match that selected in the camera shooting menu.

Specifications

Flashing index	GN: 32 (overland ISO100)
Digital support	Optic cable (Compatible with all camera)
Digital support	USB (Compatible with all Nikon camera TTL)
Flash point	100°X 100°
Battery	1.5V alkaline/AA battery /1.2V nickel metal hydride/AA battery
Lightning time	AA alkaline battery : 500 / AA nickel metal hydride battery : 600
Reflect speed	5S(alkaline) / 4S (nickel metal hydride)
Flash support	Support 5pin socket and optic cable connection
Reflect instructions	LED light (red)
Color temperature	5600K
Focusing light	3W LED , manual/auto(auto 8S close), auto close when exposure
Pressure depth	100m (328ft)
Exposure control	optical cable/ USB synchronize with TTL , adjust the luminosity(flash index), M grade by turnable button
Index grades	6 grade (GN 1/2. 8/5/8/16/32)
TTL compensation	6 stage (EV -0. 3/-1. 0/-2. 0) (+0. 3/+1. 0/+2. 0)
Dimensions /Weight	105x163x98mm/596.5g