

# **INON Condenser Lens LF-N**

Thank you for purchasing INON product.

INON Condenser Lens LF-N is an attachment lens for compatible INON LED flashlight product to condense light beam. This lens is designed for underwater use only and <u>not</u> usable on land.

#### **Main Features**

- The Condenser Lens LF-N can condense light beam to have closer usable range and stronger beam at its center benefitting you with totally new possibility of underwater imaging.
- The lens has screw mount on its front end to stuck another Condenser Lens LF-N to have even closer working range and narrower beam.
- Rear end of the lens barrel can hold packaged "Red Filter LF-N" not to scare shy subject or "Blue Filter LF-N" to calibrate color as imaging light for different applications.

Package includes :

Condenser Lens LF-N ① x 1

Red Filter LF-N

② x1

Blue Filter LF-NThis User Manual



Compatible product,:

INON [LF800-N]

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(as of December 2014)

(\*1)

This product has fixed usable range and will have center spot out of the range.

(\*2

This lens offers compatible LED flashlight;

- Closer usable range
- · Smaller(and brighter) lit area

as per below table.

「LF800-N」 Working Range (underwater)

Number of	Working distance [Min.]	Working distance [Max.] (*3)	Diameter of lit area [Min.]
Condenser Lens LF-N	-		
Nil	approx. 30cm/11.8"	∞	approx. 7.0cm/2.76"
1	approx. 15cm/5.91"	∞ (*4)	approx. 3.5cm/1.38"
2	approx. 11cm/4.33"	approx. 32cm/12.6"	approx. 2.0cm/0.79"

<sup>\*</sup> Theoretical working distance to illuminate a subject without significant center spot and not same as the maximum distance this product can deliver light.

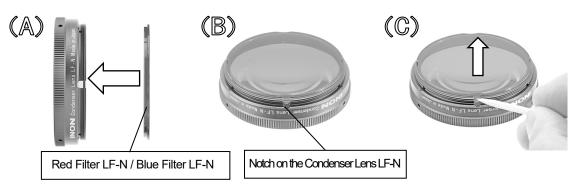
### **Installation Method:**

- Apply a little amount of grease (supplied with compatible LED flashlight) on the threaded part of the screw
  mount to prevent anchoring by salt build-up or electrical erosion between the lens and combined LED
  flashlight.
- Screw on the front of the compatible LED flashlight. It is recommended to attach underwater or partially
  unscrew and retighten underwater to escape bubbles trapped between the lens and LED flashlight surface.

<sup>\*\*</sup> When illuminating a subject at approx.55cm/21.6" away or greater, using 「Condenser Lens LF-N」 will have bigger lit area.

Installing/removing : Red Filter LF-N or Blue Filter LF-N

- It is easy to install <code>[Red Filter LF-N]</code> or <code>[Blue Filter LF-N]</code> on <code>[Condenser Lens LF-N]</code>. Just snap on either filter on inside of the male screw on the back of the <code>[Condenser Lens LF-N]</code> as shown below (A). Check and confirm that the filter is completely and firmly seated in the position.
- To remove [Red Filter LF-N] or Blue Filter LF-N] from [Condenser Lens LF-N], stick the edge of a toothpick or similar at the notch of the male screw (B) not to damage the filter to lift it up(C).



#### Precautions:

- After using, never allow any water (salt or fresh) remaining on the lens surfaces. Doing so may degrade the glass coatings or the glass itself, or cause spotting or discoloration. Heavy surface degradation would necessitate replacing the damaged lens element(s) which is NOT covered by warranty. Take extra care when using lens in high temperature as the lens surface could have heavy spotting/discoloration right after surfacing.
- Do not disassemble. Disassembling lens could cause damage and subsequent flooding, and will void warranty.
- Do not subject lens to large shocks or vibrations, which can lead to damage and possible flooding.
- Do not leave lens exposed to strong sunlight, especially on such surfaces as a boat deck, car dashboard etc. as the lens will collect and concentrate the sunlight, creating a fire hazard. Never attempt to see the sun or strong light source through the lens or camera to avoid irreparable injury to the eyes.
- Do not leave lens exposed to strong sunlight, especially on such surfaces as a boat deck, car dashboard etc. to prevent damage and subsequent flooding.

#### Maintenance

- After using, <u>always remove the lens from combined LED flashlight</u>. Soak the lens in fresh water (below 30°C / 86°F) for several hours to dissolve any remaining salt, then <u>blow off water on the both lens surface</u> by compressed air etc. Leave the lens at <u>shaded</u> and well-ventilated area to dry <u>with no water drops on the both lens surface</u> (it may take several days to completely dry).
- After completely dry, store out of direct sunlight and well-ventilated area. DO NOT store the lens in area with chemical fumes, high humidity or extreme temperature fluctuations. Storage in such area may lead to damage, water leakage, lens surface degradation or mold.
- Do not leave any water on lens surfaces when not in use, as water spots or discoloration may result.

## **Optional Accessory:**

- Red Filter LF-N
  - ② in the product image.
- Blue Filter LF-N
  - ③ in the product image.

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