



# INON UFL-M150 ZM80

## Underwater Micro Fisheye Lens Shooting Tips for Canon PowerShot S95

Underwater Micro Fisheye Lens captures underwater landscape through small fish eyes. Let's take a lesson by a professional photographer when we use the lens for Canon S95.

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<http://www.seacam.jp>



### S95 Setting

- Zoom position at 85mm
- Use manual exposure mode with aperture F8.0 and shutter speed faster than 1/30
- ISO100 - 400
- AF Frame Size [small]



INON 28LD Mount Base DC38, M27-LD Mount Converter for UFL-M150 ZM80 and UFL-M150 ZM80 Underwater Micro Fisheye Lens attached on Canon waterproof case WP-DC38.

Point

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## Adjust Background Brightness with ISO Setting

First, set S95 zoom position at 85mm (35mm film equivalent). To get this right, use [RING FUNC. Button] and [Control Ring] with checking LCD monitor where you can visually check zoom setting on the display.

To make the most of unique feature as an underwater fisheye lens to get sharp image, depth of field has to be maximized. So aperture setting of the PowerShot S95 is set to its maximum F8.0 by necessity.

With F8.0 setting, appropriate shutter speed has to be selected depending on brightness of surroundings to expose background color naturally. However shutter speed could be significantly slow (1/8 or 1/4) in dark area and cause motion blur depending on subject. So it would ideal to use shutter speed faster than 1/30. Since fixed aperture and shutter is required, M (Manual) mode is useful.

If 1/30 shutter speed is not slow enough to reproduce water color, let's use higher ISO sensitivity. Pressing [FUNC./SET Button] to get into ISO setting menu then change ISO value by [◀▶ Button]. Ideal ISO range is between ISO100 and 400 as too high ISO will have image noise.

Once these basic setting made, let's register in shooting mode C so that

registered setting is conveniently recalled. Even you want to change shutter speed or ISO other than pre-registered value, you can still adjust them in C mode.

If you check post-view of your image on the LCD monitor, it would be recommended to choose its brightness at second darkest setting. The default brightness tends to give you brighter impression of image comparing to PC monitor.

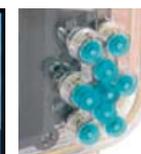
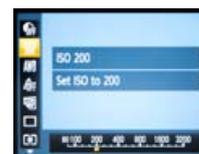
Reference in S95 user manual when making above setting  
Shoot Using Preset Focal Lengths (Step Zoom) .....P57  
Setting the Shutter Speed and Aperture Value.....P100  
Making Settings using the Control Ring.....P101  
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Setting zoom position, aperture and shutter speed by [RING FUNC. Button] and [Control Ring]



Fix focal length at 85mm (35mm film equivalent).



Press [FUNC./SET Button] to select ISO menu and choose desired ISO speed by [◀▶ Button].



DATA : Manual mode (F8.0, 1/40 sec, ISO200) with 2 x INON S-2000

## Improve Focusing by AF Setting

The UFL-M150 ZM80 is designed to enjoy so-called "insect-eye imaging" by shooting a subject at very close range to get it in entire image. Let's change AF(Auto Focus) frame mode to get a sharp focus of a subject at a few mm - cm away from the lens.

Press the MENU button to choose [AF Frame Size] then choose [Small]. The AF frame is locked to the center and makes it easy to get precised focusing on an eye of a fish etc.

Reference in S95 user manual when making above setting  
Changing the AF Frame Mode.....P88



Set AF frame [Center] and AF Frame size [Small]

DATA: Manual mode (F8.0, 1/40 sec, ISO200) with 2 x INON S-2000

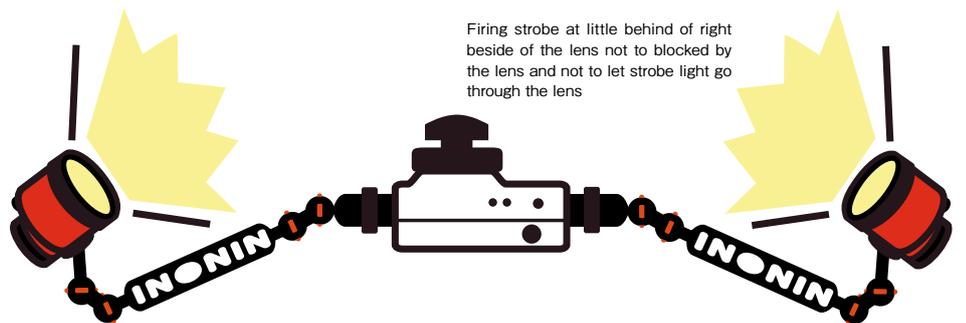


## Strobes at Little Behind of Right Beside of the Lens

Using PowerShot S95 in M (Manual) mode automatically changes the built-in flash to emit no pre-flash and S-TTL Auto mode becomes not usable. So put a magnet in the Advanced Cancel Circuit Switch to use Manual flash mode of the S-2000.

When shooting a subject just in front of the lens, strobe light may not be sufficiently reached to the subject as the space between the subject and lens is limited, which could cause blockage of the strobe light by the lens or Mount Base. In such a case, adjust strobe position nearly right beside but slightly behind of the lens to illuminate the space between the subject and lens. However be careful not let the lens front surface in the strobe beam coverage as strobe light could pass through the lens to get exposed on the other side of image. So it is necessary to adjust strobe aiming right beside the lens but not to shine the lens itself.

Also using two or more strobes are ideal to illuminate entire image naturally. It would be recommended to use dual strobe from right beside of the lens as aiming strobe from right above or diagonally upside may have unnatural shadow beneath the lens.



Firing strobe at little behind of right beside of the lens not to be blocked by the lens and not to let strobe light go through the lens

If visibility is poor due to many suspended substances, using long strobe arm to put a strobe as far as possible from the subject and illuminate area entirely but softly, is an option not to expose suspended substances on an image. Under good visibility, firing a strobe at close range would not be a big problem.

It is possible to have unique lighting as like ring flash to put a strobe behind translucent plastic plate attached around the lens.



Attaching Rubber Hood (part of the Snoot Set for S-2000) can block excess strobe light scattering around the strobe



Handmade diffuser panel attached around the lens can deliver strobe light entire image though it cuts light amount slightly

### When using 「Underwater Micro Fisheye Lens」

The UFL-M150 ZM80 is a special conversion lens to get so-called "insect-eye lens" effect capturing a tiny subject in entire image with surroundings by shooting at very close range. So it is important not to scare or harm marine lives, or damage seaweed or corals even when you concentrate on shooting with this lens. The first step of using this lens thoughtfully is to observe characteristic of a subject and its surroundings through their eyes.