

Nikon AS-S 8-15mm Fisheye

by Phil Rudin

Rarely do we see a photo product come along that is both unique and exciting in so many ways. The Nikon AS-S 8-15mm F/3.5-4.5 Fisheye zoom lens is both radical in design and exceptionally well suited for underwater photography.

This lens was announced about eight years after the Canon EF 8-15mm F/4L Fisheye version and is designed for full-frame sensor DSLR cameras. At this time none of the full frame mirrorless camera manufactures including Canon, Nikon, Panasonic or Sony offer any type of native AF fisheye lenses.

I also have not yet seen any auto focus fisheye lens offered by any of the after market lens manufacturers which leaves U/W photographers needing to adapt DSLR lenses if they want an auto focus fisheye lens. This has led some to continue using DSLR cameras when they would otherwise have made the switch to mirrorless.

I have used both the Canon and Nikon 8-15 fisheyes adapted to Canon, Nikon and Sony mirrorless cameras and all have worked as well as they do on native DSLR bodies. The Nikon 8-15mm fisheye combines both circular and full-frame fisheyes

in one lens. Unlike the popular Tokina 10-17mm for APS-C cameras that covers a range from 180-100 degrees the Nikon 8-15mm covers a full 180 circular coverage at the 8mm end and 175 degrees covering the full-frame at the 15mm end. It also works as a full-frame fisheye on APS-C at around 11mm.

Circular fisheye lenses were the first type of fisheye to be developed and they have been around since the early 1900s. Full-frame fisheye lenses started to become popular during the early 1960s. The difference between the two types of lenses is simple, the circular fisheye lens renders a perfectly round image within the center of the 3:2 format sensor while the full-frame fisheye covered the entire frame. Keep in mind that with the circular image you are losing megapixels to the black negative space while the full-frame image takes advantage of the entire sensor.

Both 8mm and 15mm fisheye lenses for DSLR Nikon full-frame cameras are offered by third-party lens manufactures like Sigma but the Nikon 8-15mm fisheye is the only lens that combines the two in one lens making it a unique and more



cost effective addition for underwater photography.

The Nikon 8-15 fisheye has the “E” moniker indicating electromagnetic diaphragm mechanism and the “ED” is for extra-low dispersion glass as well as aspherical glass. In other words pro quality glass with quality lens coatings, silent wave autofocus motors, AF/MF switch, dust and moisture sealing, removable lens shade and minimum close focus distance of 0.16meters (0.5 feet) with a maximum reproduction ratio of 1:2.9. The lens also has a rear filter mount. The 8-15 fisheye is like having two completely different lenses in one excellent package.

The Nikon AS-S 8-15mm F/3.5-4.5E ED fisheye lens retails for around in the US for \$1247.00/UK Amazon £1299.00.

Field testing the Nikon 8-15 Fisheye

For this review I used the Nikon 8-15 fisheye with Nikon FTZ lens adapter (DSLR to mirrorless mount) the Nikon Z6 24.5MP full-frame camera body, Ikelite Z6/7 housing, Ikelite zoom gear, an Ikelite 28mm port extension and an Ikelite 8 inch compact dome port with the shade removed.

The lens shade needs to be removed while using the 8mm circular end of the lens to prevent the dome shade from vignetting or showing up in the corners of the image. I also used a pair of Ikelite DS-161 flashes both in manual and TTL for this review.

One of the things I really like about mirrorless cameras is the ability to use just about any lens supported by a lens adapter. In this case the FTZ adapter you can use just about any lens

made for modern Nikon DSLR cameras. The Nikon FTZ adapter allows you to use all of the automatic functions like auto focus, aperture control, metadata and more associated with a Nikon full-frame mirrorless camera while maintaining excellent auto focus speed.

In the field most if not all images are going to be taken at either the 8mm or the (14)/15mm end of the zoom range. Focal lengths in between 8mm and 15mm will be cropped at the top and bottom as the circular image begins to expand across the edges of the full frame sensor. So you will either be filling the entire frame at 15mm or getting a completely circular image at 8mm.

Full-frame fisheye lenses are the overwhelming choice for many underwater photographers doing wide angle, CFWA and WAM photography. Some find the circular images to be more of a gimmick rather than a serious choice while others find the round images very appealing. My takeaway is that the 8-15mm circular fisheye zoom lens provides an additional unique prospective from which to view the underwater world much like an extreme macro lens.

With all fisheye lenses the name of the game is getting very close to your subject, for me anything beyond about 45cm (18 inches) is reserved for large animals like Whale Sharks. Because of the close focusing distance and the maximum 1:2.9 reproduction ratio many of my images are taken within a few centimeters of my subject.

I like to keep my flashes pulled back and away from the dome with the front of the flashes at least parallel with the grips on my housing. I also like the flashes to be pulled in close to the housing rather than way out on either side. This makes shooting vertically much easier and allows you to push the



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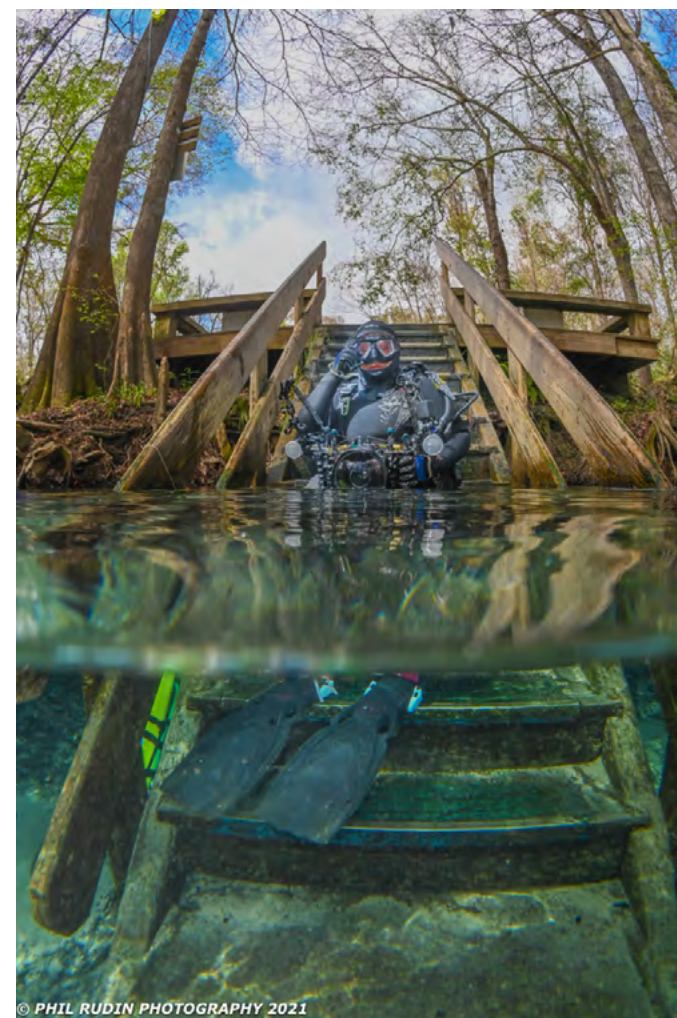
Florida Red-Bellied Turtle, Nikon Z6, Nikon 8-15mm fisheye at 8mm, Ikelite housing with compact 8 inch port, two Ikelite DS-161 flashes, ISO-320, F/13, 1/125th sec

Split level. Nikon Z6, Nikon 8-15mm fisheye at 8mm, Ikelite housing with compact 8 inch port, two Ikelite DS-161 flashes, ISO-320, F/13, 1/200th sec

housing away from your body if you are using the LCD to frame the photo. You can also lower the flash power to help avoid overexposing a light sand bottom in the image.

I try to stick with an aperture values of around F/11 or a bit greater for acceptable corner sharpness on full-frame and adjust ISO and strobe power to achieve proper exposure.

Remember that fisheye lenses have a very wide field of view allowing things like your fins, loose



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flash cords and parts of other divers to appear within the frame. Flash also tends to bleed over into the frame causing blowout highlights. You can remove some of these issues by cropping them out of the image but with the circular images this is a not easy. While composing an image I look into the edges of the frame for unwanted appendages and other distractions.

When exhibiting circular fisheye images there seems to be two schools of thought on how they