

Marelux 140mm Optical Glass Fisheye Port with Removable Shade

by Phil Rudin

Marelux Precision Inc. is headquartered in California, USA selling U/W photography products manufactured in China. It is owned by several hard core professional underwater photographers and engineers. They assessed the market trends in the 2020's and chose to avoid the dying DSLR market and launch a line of full frame mirrorless camera housings for Canon, Nikon and Sony. Marelux also has two high end video camera housings in the pipeline for Sony FX3 and Alexa Mini LF and Mini with housings for monitors and recorders in the pipeline.

All the Marelux housings are depth rated to 100 meters, offer optional manual flash triggers, vacuum systems, use the same series 5 dome ports and extension systems so you can move between camera brands without needing to change dome systems. Macro ports will vary depending on the length of the lens.

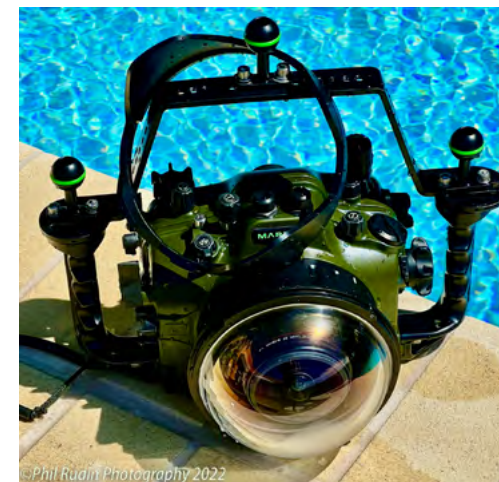
Currently Marelux has housings for the Canon R5 and R6 cameras, Nikon Z6 II and Z7 II cameras and Sony A7R III, A7R IV, A7s III the new A7 IV and the Sony A1. They

have six signature housing colors, Basic Black, Burgundy, Mocha, Oliver Green, Silver Gray, Yale Blue and all of the current housings are available in these six colors.

Full-frame fisheye and fisheye zoom lenses are the overwhelming choice for many underwater photographers doing wide angle, CFWA and WAM photography. With all fisheye lenses the name of the game is getting close to your subject, for me anything beyond about 45cm (18 inches) is reserved for large animals like Whale Sharks and split shoots with large (230mm) ports.

The fisheye zoom lenses have a close focusing distance around 15cm (5.91 inches) and a maximum reproduction ratio of around 1:3. Many of my images have been taken within a few centimeters of the subject with the Canon 8-15mm F/4L which will focus all the way to the 140mm port glass. My takeaway is that the 8-15mm fisheye zoom lens which provides a unique perspective from which to view the underwater world much like an extreme macro lens.

For over six years I have used



8-15mm fisheye zooms with dome ports from 100mm to 230mm and they all have one thing in common. At the 8mm circular fisheye end of the lens they will all vignette if the sun shade is not removed. This means that, when choosing a port for the 8-15 zoom, consideration must first be given to whether the sun shade can be removed at all. Second can the shade be removed while underwater or will it need to be removed before entering the water and lastly what will protect



the port glass if you enter the water without the shade.

Marelux has addressed these issues with the release of their new Marelux 140mm optical glass fisheye



Sony A-1, Marelux MX-A1 housing, 140mm fisheye dome, Canon 8-15mm F/4L fisheye at 8mm with the sun shade in place, bad vignetting

dome port with removable sun shade. The 140mm fisheye port is the most popular port for full frame fisheye lenses because of its small size and travel weight.

The Marelux port has the advantage of using a bayonet mounted sun shade that can easily be removed and reattached underwater. This means you can leave the shade and port cover on when entering the water. While shooting at the 15mm end of the lens the shade can remain on and the shade can then be removed by simply depressing the lock and rotating the shade 90 degrees when using the 8mm end of the lens. I carry the shade over my arm when removed but it could easily be hooked off on a BCD or other secure point.

The Marelux 140mm fisheye port ships in a hard carrying case with a velcro strap to hold the port securely in place. The neoprene port cover can be secured to a D-ring or other attachment while in the water. The port is depth rated to 80 meters and ships with a cleaning cloth and spare O-ring.



Sony A-1, Marelux MX-A1 housing, 140mm fisheye dome, Canon 8-15mm F/4L fisheye at 8mm with the sun shade removed

This port has the Series 5 (5") port mount used for all Marelux housings. The port glass diameter is 140mm, the port material is BK7 crystal glass with a broadband multilayered anti-reflective coating and the body construction is from hard-anodized aluminum alloy.

The port with the shade attached weighs 0.75kg (26.5 oz) The removable shade has a small locking device that when depressed allows the shade to turn 90 degrees and then lift off. To reattach, reverse the process until the shade locks back into place. The shade has white markings that lineup with the dome markings for proper alignment.

The Polycarbonate shade has a recessed lock so that it won't accidentally unlock. I found the shade a bit easier to remove and reinstall underwater than on land perhaps because it was wet.

In the field the Marelux 140mm fisheye port performed as well as any high quality glass port I have used. My tests did not include use with a fixed



MX-A1 housing with the Marelux 140mm fisheye dome, Canon 8-15mm F/4L at 14mm, full frame no crop with the shade in place

15/16mm full frame fisheye. The Marelux 140mm port retails for \$1090.00US. Check the marelux.co web page for the nearest authorized dealer in your part of the world.

Fisheye Zoom Lenses

The Canon EF 8-15mm F/4L USM and Nikon AF-S 8-15mm F/3.5- 4.5E ED Fisheye zoom lenses are both radical in design and exceptionally well suited for underwater photography. These lenses are not new and were designed for DSLR full-frame sensor cameras. Many Mirrorless full frame camera owners have been using these lenses with great success for years with one of the growing number lens adapters now available. These lenses combine both circular (360 degree) and full-frame fisheyes into one lens. Unlike the popular Tokina 10-17mm for APS-C cameras that covers a non-circular range from 180-100 degrees the 8-15mm fisheyes cover a range from 180-175 degrees on full-frame for both

Don't settle for 2nd best



The popular Tokina 10-17mm for APS-C cameras that covers a non-circular range from 180-100 degrees

Nikon 8-15mm F/3.5 to 4.5 Canon 8-15mm F/4L

round (8mm) and full sensor (15mm) coverage. Using these lenses a degree or two beyond the extreme ends of the lens and the image will spill over the edges of the frame. So best results are at the 8mm and 15mm settings.

Circular fisheye lenses 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 covers 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. 8mm and 15mm full-frame fisheye lenses are offered by other manufacturers like Sigma but the Canon and Nikon 8-15mm fisheyes

are the only lenses that combine the two in one making it a unique and more cost effective addition for underwater photography.

Both fisheye zooms offer excellent glass with quality lens coatings, a zoom locking mechanism, AF/MF switch, dust and moisture sealing, removable lens shade and more. Both can be used on sub-full frame sensor cameras and both have a maximum reproduction ratio of around 1:3 on full frame. It is like having two completely different lenses in one. Some find the circular images to be more of a gimmick while others find the round images very appealing.

The Canon 8-15mm F/4L retails in the US for \$1249.00/UK Amazon £1269.00. The Nikon 8-15mm F/3.5 to 4.5 retails for \$1247.00/UK Amazon £1449.00.

Phil Rudin
Instagram



Film - No Filter,
No White Balance



Digital - No Filter,
Manual White Balance



Digital - Magic Filter,
Manual White Balance

Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards.

These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter, using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

Simple and inexpensive, yet so effective.

www.magic-filters.com