

Sigma 17 mm F/4 DG DN

for Leica-L and Sony FE Mount Cameras

by Phil Rudin

Sigma is a Japanese company founded in 1961 which exclusively provides quality photography and video-related products world wide. All products are manufactured in Aizu in the Tohoku region of Japan.

The contemporary lens line which is the subject of this review features the very latest in technology and optical performance combined in a very small package. I own the Sigma 17mm F/4 being reviewed and the very compacted 90mm F/2.8 DG DN.

The Sigma 17mm has an F/4 to F/22 aperture range and a rectilinear angle of view of 103.7 degrees or around 70 degrees if you switch to APS-C mode. The lens has all metal construction including the lens hood and weights in at 220g (7.8oz). The lens is also quite small at 64mm and 50.8mm long or (2.5" X 2").

The front filter size is a small 55mm, It has seven rounded blades with nine elements in eight groups.

The Sigma 17mm F/4 is quite basic on the outside with manual and "A" settings for aperture control and an AF/MF switch. The lens has a rather narrow manual focus ring which is

buttery smooth when engaged in the MF setting.

Image stabilization with the Sigma 17mm is handled in camera.

The Sigma 17mm in Leica-L or Sony mount retail's for \$599.00 US and includes a soft carry case, rear cap and two lens caps a pinch type and a magnetic version which I have been using a lot above water. These are at retail prices and they may very due to the age of the lens and sale pricing.

During my film days 17 and 18 mm rectilinear primes and the nearly equivalent Nikonos 15 mm at 94 degrees diagonally were the gold standard for underwater photographers. Most modern lens manufactures have now opted for zooms to cover this focal length and 17 mm full frame fixed autofocus primes are now as scarce as Hens teeth.

What sets the Sigma 17mm apart from the Zeiss and Tamron lenses listed above as well as the less expensive Rokinon/Samyang 18mm F/2.8 also reviewed in UWP #119 is the excellent close focusing capability of the lens. Minimum focus distance for



the Sigma 17 is 12 cm (4.7") giving it a reproduction ratio of just 0.28X or 1:3.6 which is excellent for a lens this wide.

By comparison the Rokinon and Zeiss minimum focus is 25 cm (9.84") and the Tamron at 17mm is 19 cm (7.5") and 26 cm (10.2") at the 28mm end of the lens. The very short 12 cm focus distance for the Sigma 17mm allows me to shoot all the way to the port glass using a 140mm optical glass dome port.

This is the best wide rectilinear

for close focus wide angle I have used. I have attached a photo using a 140mm port touching the glass on the light in my swimming pool which is 15 cm (6") across.

High quality rectilinear lenses will not preform any better than a "kit" lens underwater if they are not mated with a quality dome port and proper extension if needed. I am asked all the time if a particular lens will work with a port not really designed for that lens. I can't stress this point enough, if you



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Sony A7R V with Marelux MX-A7RV housing, Marelux 180mm optical glass dome port, Sigma 17mm F/4, two Backscatter MF-2 flashes, 1/125th, F/11, ISO-640

are going to invest in a high quality camera and lenses you need to seek out the very best port combinations to complement your lens choices.

Full frame cameras with high megapixel numbers like the Sony A7R V with 61MP tend to expose flaws more easily than say M43 cameras with lower (20's MP). Full frame lenses of lower quality and lenses used at lower aperture values in the F/4 to F/8 or so range also suffer. I try to shoot full frame in the F/13 or higher range when corners are going to be an issue. Many times corners are not the prime issue and lower F/numbers can be

used without noticeable issues unless you pixel peep at high magnification.

We would of course like all areas of a photo to be in crisp focus but everything in photography is a tradeoff. We want smaller and lighter equipment for travel and ease of use, to avoid having to bump the ISO, faster shutter speeds, how photos will be used I.E internet or massive prints and the list goes on. Each of use has a limit for what they will tolerate as far as image quality is concerned and many equipment choices will be made based on cost and personal tolerances.



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Marelux 140mm dome port touching the pool light glass, F/11, 1/250th, ISO-400

Field Testing The Sigma 17MM

Not all port combinations work the same when shooting with the Sigma 17mm. For this review I was shooting the Sigma 17mm F/4 with a Sony A7R V (61MP) in a Marelux MX-A7RV housing and my port choices were the Marelux 180mm optical glass port with a 20mm extension and the Marelux 140mm optical glass port with a 15mm extension. Like many of the lenses I test Marelux has not yet listed the Sigma 17mm F/4 on the Sony port charts nor has anyone else that I am aware of so I was left to test lens the

and dome port combinations myself.

Above water I manually move the aperture ring on the lens to change settings. Underwater you need to set the lens to the "A" setting on the aperture ring and use the camera controls to change aperture settings. I have shifted the aperture ring off the "A" setting without noticing several times. It "clicks" when you shift to "A" but no lock is provided to hold the ring in place. When I am shooting with "A" inside the housing I just use a bit of tape on the ring to make sure that it remains in place.

For this review I used the

180mm dome and 20mm extension with the Marelux housing in the field and both the 140 and 180 domes in the pool during testing of extension lengths. The extension lengths will of course vary depending on what housing system you are using.

Along with this lens I used two Backscatter MF-2 flashes with eight inch and five inch arm combinations and two 800ml Flexibuys, as described in the last issue of UWP. I attached the Flexibuys to my flash arms for adjustable flotation control.

I also have the very useful UWTechnics TTL flash trigger installed in the housing to allow me to enable HSS on the MF-2 flashes. I find HSS up to around 1/500th to 1/640th very useful in the clear shallow water and for macro, especially for blackwater.

In the water I found the two MF-2 flashes without diffusers easily covered the entire AOV of the 17mm lens. The Sony AF worked flawlessly including eye-AF on several occasions when photographing divers.

Having a 104 degree wide rectilinear lens which will snap into focus all the way to the port glass in a 180mm or 140mm port is an excellent advantage over many zooms that require 230mm ports for acceptable image quality. At F/4 shooting shallow depth of field the background blur, AKA bokeh was smooth and creamy - quite exceptional for an under \$600.00 lens.

If you own a Leica-L or Sony FF underwater system and looking for a rectilinear lens option, the Sigma 17mm F/4 provides excellent image quality at an affordable price with minimal port and extension sizes. This is a lens I will consider traveling with when space and weight are an issue.



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Sony A7R V with Marelux MX-A7RV housing, Marelux 180mm optical glass dome port, Sigma 17mm F/4, two Backscatter MF-2 flashes, 1/320th in HSS, F/14, ISO-640

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Sony A7R V with Marelux MX-A7RV housing, Marelux 180mm optical glass dome port, Sigma 17mm F/4, two Backscatter MF-2 flashes, 1/250th, F/14, ISO-320

