

Laowa Venus 24mm F/14 Macro Probe Lens

by Jim Decker

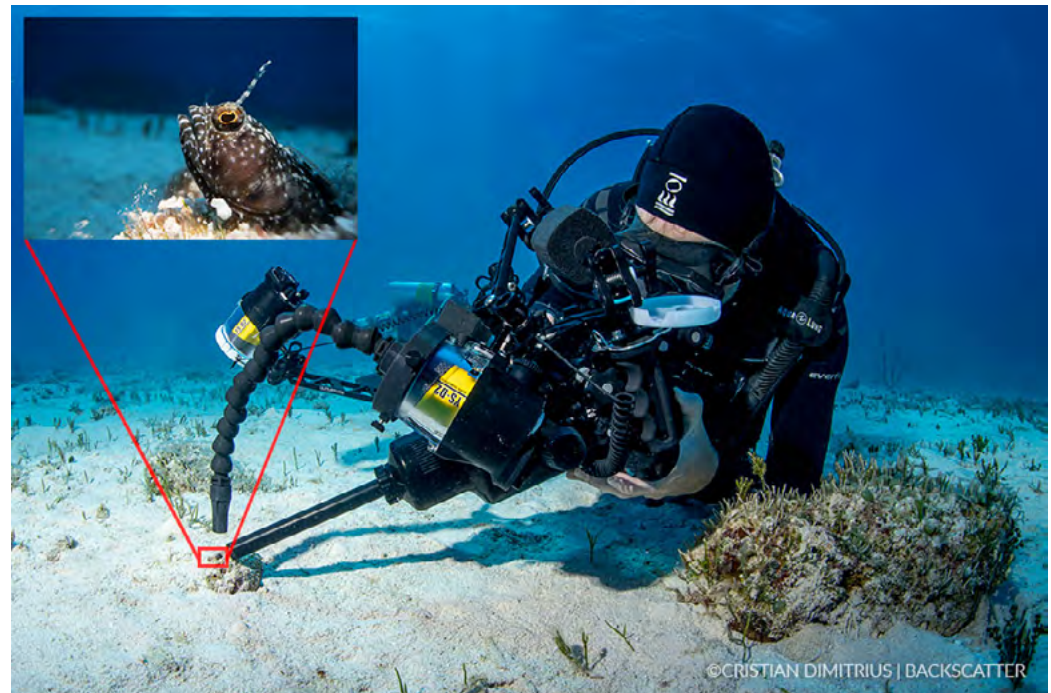
“Whoa! What is that thing?!?” is the most common question I get when people see the Laowa Venus 24mm f14 Macro Probe Lens on my underwater camera rig. The best way to describe it is a super macro lens with a wide field of view. It has a minimum working distance of less than an inch with a 24mm lens field of view. At minimum focus, the reproduction ratio is twice life-size at 2:1, which is equivalent to using an SLR macro lens with a +10 to +12 diopter. This lens is about serious macro capability, but with a much wider field of view. Referred to as a “bug-eye” effect, it can lead to some very interesting shots.

The lens has an LED ring light surrounding the lens element that requires a battery pack to operate. While the battery pack fits inside the housing I used, there is no way to control the light output — I would have had to turn on the light before sealing up the housing with no option to turn it off underwater. Due to this lack of control, I decided not to use the light for the limited amount of time I had to shoot this lens.

Big and small subjects in the same shot

Backgrounds are what this lens is all about. With a traditional macro lens, there is a severe limit on the background that can be shot. We really like using the Laowa Probe Lens for capturing both small and large subjects in the same shot, which is basically impossible to do with traditional macro lenses. The wide angle field of view that the lens produces allows us to utilize the perspective distortion that comes along with wide angle photography. By getting close to an object it can appear much larger in the frame relative to any background elements. The closer it gets, the larger it can appear.

Because the Laowa Probe Lens can focus super close, combined with the 2:1 reproduction ratio and the wide angle perspective, creates an image that focuses attention on the foreground macro subject while also leaving room for something larger in the background. It can create a very unique perspective where 2 very different subjects that would not be



With a normal macro lens and a +10 diopter, this blenny would take up the whole frame. Being able to capture tiny macro subjects while still showing their surroundings makes for a whole new perspective with the Laowa Probe Lens.



The perspective distortion of a wide angle lens makes objects that are closer to the lens appear larger than objects further away. This effect becomes extremely exaggerated at super close distances, allowing for an interesting composition that makes the head of the snake eel appear larger than the diver.

possible to have in the same frame can now both be captured. I wish the lens had a larger field of view, as a 24mm lens underwater isn't exceptionally wide. When I was shooting with a diver in the background, it was hard to get the diver completely in the shot.

How I shot it

The Laowa Probe Lens only has manual focus and manual aperture controls that are operated directly on the lens. This requires a special underwater lens port with gearing to

allow for controlling both the focus and aperture manually. Since this is operated directly on the lens and it's impossible to see this when it is in the housing, there is no way to know for sure what aperture the lens is set to unless it is set to wide open at $f14$ or fully closed at $f40$. For some shots, I preset it to around $f22$ and left it for the whole dive.

The Laowa Probe Lens has a bit more depth of field than a regular macro lens and doesn't have the super fuzzy out of focus bokeh of a macro



Tracking a subject on the move with manual focus, lighting with a snoot, and with a secondary subject in the background made for a very challenging shot with this cuttlefish. Over 90 shots later, the effort was worth the end result.

lens. This makes it hard to see critical focus looking through a viewfinder of an SLR when compared to a regular macro lens. Also with the manual aperture, it makes looking through an SLR viewfinder very dark. For this reason, I decided to use it with two mirrorless cameras, the Canon EOS R, and the Sony a7R III because of the availability of focus peaking to make the manual focusing task easier. Don't take that to mean it's easy! Focus on this lens, especially when trying to track moving subjects while turning

a manual focus knob, is a skill that needs practice and patience.

For lighting, I only wanted to light the foreground subject and nothing else so I could draw attention to it. If I lit any more than that, the subject would get lost in the big cone of the strobe light. I decided to use a snoot for the foreground subject so I could isolate just that subject and not light anything else. For the particular subject, I was getting set up on, I set the snoot for the distance I wanted to shoot the subject, which also allowed



The Laowa Probe Lens allows for a macro critter that would normally take up the whole frame to be shown in its surrounding environment.

me to set the focus for the distance to the subject. When that was all lined up I could move the camera in and out until the subject was in focus, which then also was the same distance at which the snoot was set for. Setting up for one distance to the subject for both focus and snoot position like this made it much easier than constantly trying to chase my tail shooting different distances.

The Laowa Probe Lens is one of the most unique lenses that can be shot underwater. With a 2:1 macro

reproduction with a 24mm lens field of view, it can produce a very distinct look that combines both macro and wide angle into a single shot.

The manual focus and manual aperture definitely doesn't make it an easy lens to shoot. It takes practice and patience when working with this lens, but if you dedicate yourself a couple of days to it, the rewards are worth it. A little bit more field of view would make framing some larger objects in the background easier.

I'll definitely be taking this lens



When used close up on super macro subjects, the Laowa Probe Lens can almost look like a regular macro lens. Backing up a little bit and/or finding a slightly larger subject can reveal more background, which is what this lens is all about.

on every macro trip I do. Once you start shooting with this lens, it's very addictive!

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