

Marelux Apollo III 2.0 Strobes

by Henley Spiers

A Game-Changer For Continuous Shooting Underwater with Flash

Preamble: I don't get the opportunity to test underwater photography gear much. Time in the field is precious and usually spent in pursuit of a specific imagery or storytelling goal. I have to trust my gear intimately and there is no time or room for an unfamiliar addition which might not match the performance of my existing set-up. Over Christmas and downtime with family, I had a rare low-pressure moment in which I had the capacity to test out the Marelux Apollo III 2.0 strobe.

I undertook these tests with no affiliation to Marelux and no financial incentive. Marelux sent me the equipment for testing on a short-term loan basis and I was very clear in promising an honest review which did not pull punches. The only clause afforded was that Marelux could decide whether or not to make my views public.

It's useful for context to understand my history with underwater strobes as this is the base of experience I will compare with the Marelux Apollo II 2.0 strobe. Over the last 10 years I have actively used the Sea & Sea YS-D1, Sea & Sea YS-D2,



Inon Z240, Inon Z330, Retra Flash Pro X and ONEUW 160x. At present, the main strobes I use are the Retra and ONE UW models.

The strobe comes in fairly large, protective packaging cube with foam inserts. This is a nice touch and offers a reassuring way to transport the strobes...although at times luggage restrictions might mean I can't bring the strobe in the packaging cube as two of them takes up too much



Marelux Apollo III 2.0 mounted to my housing - I primarily shot them with a Nikon D850 paired with either 60mm lens or the 28-70mm lens and a Nauticam WACP-1.

space in the suitcase. Nevertheless, this is a very nice touch and one I have not seen from any other strobe manufacturer.

The layers of protection continue with special rubber covers for each of the lumilink receivers on the strobe, and a screwed on plastic cover which protects the dials at the back of the strobe. These features are also different to any other underwater strobe I have handled. The protective cover which covers the dials and battery compartment is a bit of a faff to put on and remove but you would only do so when storing or packing

it. It weights 117g and if pressed on luggage weight I might be tempted to remove them for travel.

The strobe has an industrial, high quality feel to it: metallic and sturdy. The weight and size of the Marelux strobe puts it in the bigger strobe category. It is comparable to the ONE UW 160x, roughly similar weight and only moderately smaller in length. The downsides of this are the added weight for travel and transport, and the fact that the size of the strobe would make it harder to slot into tight lighting set-ups such as in some macro or some CFWA shots. The

upside of a larger strobe usually comes in the the form of quality of light, strength of light, and increased battery power.



The front of the strobe has 3 flashlights - it does not use a circular tube method. I pressed Marelux on their decision not to use circular tubes as this does appear to be the most sought after design in the market at present. According to Marelux's testing during product development, the addition of a high quality diffuser will match the light output softness of circular tubes. Marelux preferred to use straight tubes as they believe they have a longer lifespan and are able to deliver higher light output, as well as opening up better possibilities for continuous flashing. My own side-by-side testing of strobes would yield more insight to this aspect and is continued later.

Functionality and Ergonomics

The power dial goes from 1 to 12 - the numbers are written in a small font. The power dial shifts quite easily between positions and I would prefer if it did so with a stronger click into each power setting. This would be even more useful when your tactile sensitivity is reduced through cold water and usage with gloves.

Annoyingly, the side dial functions are listed on a different area to the actual nob. This means



that when you change function you need to then angle the strobe and your point of view to see what the dial position correlates to. With familiarity, this will become second nature and I quickly learnt that dialling it all the way took me to MTL and two clicks took me to M mode.

The battery compartment has a large unlocking device which would be easy to use even with numb and cold hands. I was reassured to find a double O-ring seal to the battery compartment. I would like to know if this compartment sealed off from the rest of the strobe in a manner that would

limit damage if there was water ingress to the battery area.

The focus light is turned on by pressing the mode button down. At first this was confusing as it is different to other strobes but once you are familiar it works well. The focus light sits centrally and has a white and red light options, with two power settings for each.

The 120° dome diffusers are made of soft plastic and an integrated lanyard. I really like this feature. Operating in dynamic environments and on shoots from many different types of boats, I have a

history of losing diffusers or cracking them. The lanyard and soft nature of the dome port mean this would be far less likely (and therefore costly)! I do suspect my issues with dome diffusers are not widespread, however, as there is less chance of these failures when operating from the comfort of dive resorts and liveaboards.

Function modes on the strobe are Test, M, Auto Sync, M-HSS, MTL.

MTL is a crucial and different mode when using the Marelux strobes. In order to improve the strobes performance when it comes to continuous shooting, Marelux have designed MTL mode. In a very important difference to other strobes, you should not use M mode for continuous shooting but MTL.

This is a vital difference, especially for my style of shooting. Typically, my camera would always be in continuous shooting mode, and I would then have the option of shooting a single frame, or, when something exciting is happening, holding the shutter down and spraying a continuous stream of shots. On all other strobes I have used, I would remain in M mode whether I was shooting singles or continuous. Marelux has changed that method and the question is do the advantages outweigh the obvious disadvantage of having to click between different modes?

In MTL, the power output is approximately half what it would be if operating in M mode. So roughly speaking, full power (12) on MTL is about half power (6) in M.

Usually, for wide angle, I am between a quarter and half power on strobes. With the Marelux strobes, this meant that I could usually get the power I needed in MTL mode. This meant that I could always be ready for continuous shooting and, underwater, I found the strobes followed the consecutive shots well in terms of power delivery. It is an inconvenience to suddenly have to think in terms of M and MTL...and with power signifying different things in each, there is some mind-bending required to think about what a power number means in either M or MTL.

People talk a lot about the maximum power of strobes but I am just as interested in how low they can go. When shooting in dark, cold water environments you have to boost your exposure settings to display the background environment (lit by natural light not strobe). This can be very difficult to balance with strobes as they are often too bright and hard to control (you often need to stop down your aperture to control for this). Although I have not tried them in coldwater yet, I am excited at the fact that MTL means the low power settings on the strobe are even lower than M...meaning they might be good strobes to use to create tasteful, delicate



light on coldwater dives.

As far as maximum power, I found the strobes had more than enough power for me when shooting wide angle scenes...in fact I never needed to use anything like full power on wide angle. I did make use of the full strobe strength, flicking over to M and maximum power, when shooting a creative, slow shutter image of a frogfish with a single strobe in the late afternoon (sky was bright but overcast). To overcome natural light, these type of creative shots can need very strong strobe power and I was pleased with the result. In this case, I could make full use of my creativity and the strobe delivered what I needed.

The strobes are powered by 3x18650 lithium batteries and use a colour indication light to tell you how much charge remains. The light is easy to see and keep track of. Blue (80-100%), green (60-80%), yellow (40-60%), purple (20-40%), red (0-20%). I didn't push the strobes crazy hard in terms of number of dives and flashes but I never went below a green light. Battery life is a strong point for these strobes and an area of great reassurance when shooting. Even if I had a very big day of shooting, I don't think I would be fretting about battery changes on the strobes.

Light Colour and Quality

I used the strobes 120° yellow diffuser designed for blue water and was pleased with the colour balance achieved in my images. It felt neither too warm or cool in terms of white balance.

Quality of light is hard to define and I would like more time with the strobes to give a final assessment. I think that strobes are a tool, not a magic wand, and for as good as a strobe may be, the role of the photographer in using that tool to shape the light is actually just as important (maybe even more important). What I can say so far is that I felt like I could achieve the look and light I wanted with these strobes... which is a good sign.

Comparison Tests

In the office, I performed side by side tests of the Marelux Apollo III 2.0 against my existing strobes: Retra Flash Pro X and ONEUW 160X. I wanted to truly understand how the continuous shooting compared and these test also gave a good perspective on light colour and diffusion.



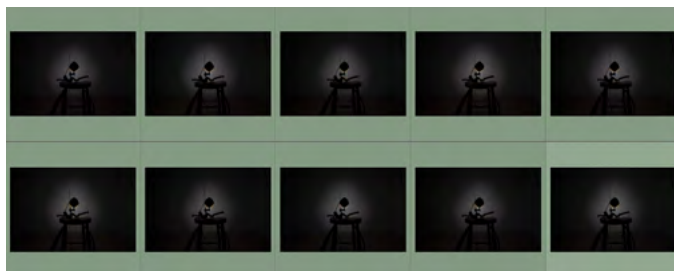
Test conditions:

- Strobes placed 1 metre from wall.
- Camera body, lens and settings remained the same throughout: Nikon D850, Nikon 16-35mm @16mm, f/11, 1/250, ISO 100.

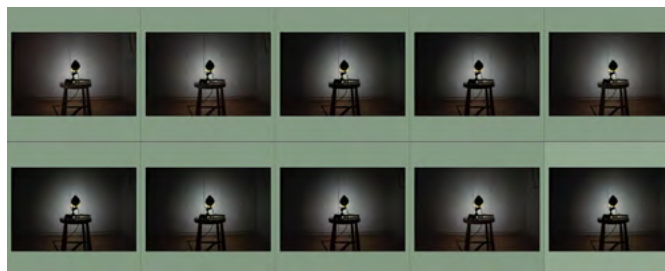
• Camera set to continuous high shooting at 7 frames per second.

- Same fibre optic cable used for all tests.
- Batteries fully charged prior to tests. Eneloop Pro AA used with Retra strobes.

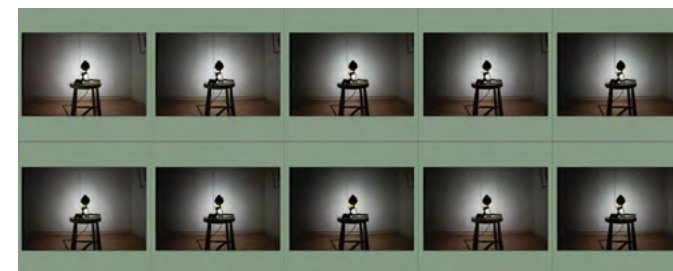
- Diffusers used on all strobes.
- Strobe Apollo III 120 Degree Diffuser (Yellow) on Marelux strobes.
- Retra wide angle diffuser on Retra X Pro.
- White diffuser on ONEUW.



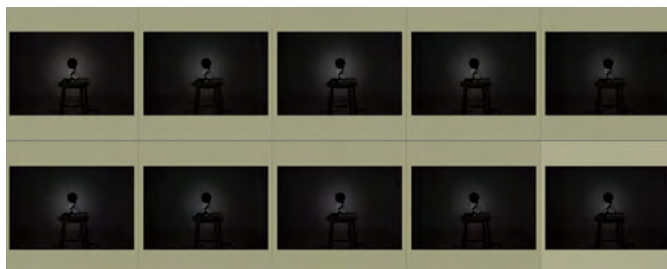
Marelux Apollo III 2.0 at MTL 6 power setting (this is roughly equivalent to 1/4 power)



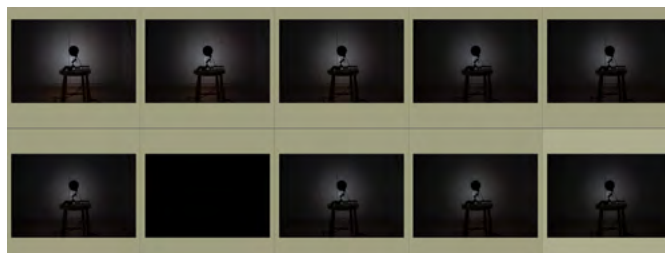
Marelux Apollo III 2.0 at MTL 9 power setting (this is roughly equivalent to 1/3 power)



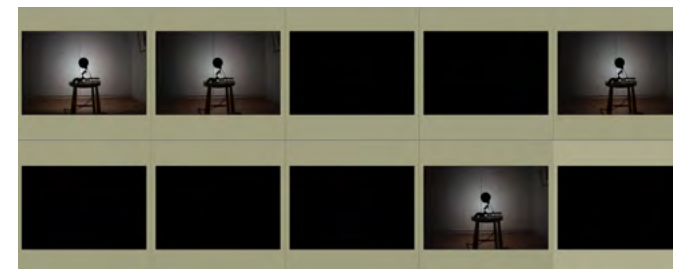
Marelux Apollo III 2.0 at MTL 12 power setting (this is roughly equivalent to 1/2 power of the strobe but the highest power setting possible in MTL mode)



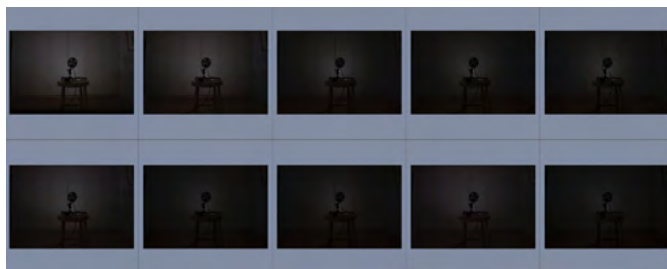
ONEUW 160x at -4 power setting (1/16th power according to manual)



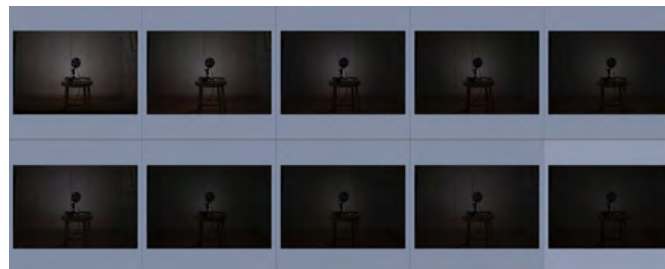
ONEUW 160x at -3 power setting (1/8th power according to manual)



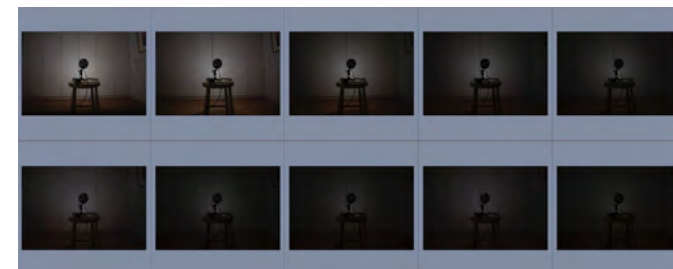
ONEUW 160x at -2 power setting (1/4th power according to manual)



Retra X Pro at 3 (power dial goes from 1 to 100)



Retra X Pro at 6 (power dial goes from 1 to 100)



Retra X Pro at 12 (power dial goes from 1 to 100)

Key observations:

Continuous firing: Marelux Apollo clearly outperforms both other strobes and is able to maintain continuous delivery of light even at higher power outputs.

Light diffusion: Marelux Apollo diffuses light less evenly than the Retra strobe. The wide and even light diffusion of the Retra strobe is impressive. Light diffusion between Marelux and ONEUW is comparable meaning that this is not purely related to the use of straight or circular tubes.

It was this testing which really opened my eyes to the potential of the Apollo strobes. Imagine yourself witnessing a moment of fast-moving hunting behaviour underwater, with the Marelux strobes you could fire continuously and stand a far greater chance of capturing the peak of the action. It could also be applicable in macro behaviour scenarios where a lot of strobe power is needed. In addition, I would find it useful for split level imagery where we naturally close up our aperture and need higher strobe power - by shooting continuously we stand a better chance of bagging the perfect frame. It is a specialist application which will be of less concern to underwater photographers focussed on more stationary subjects, but for me it is a potential game-changer.

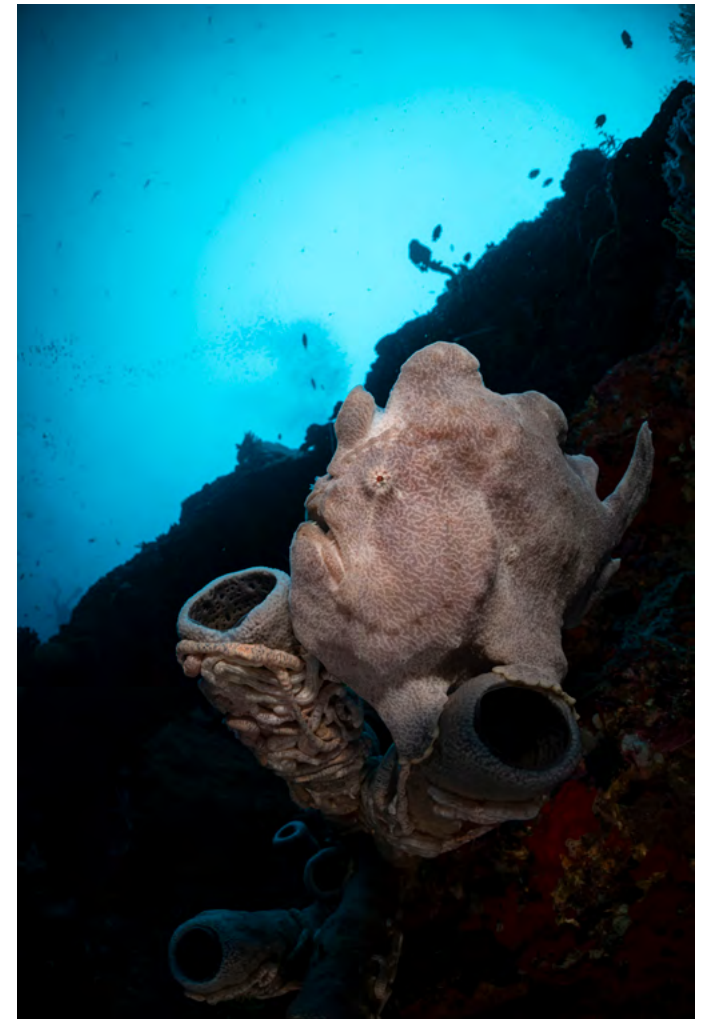
Lumilink or Wireless Flash Triggering

Marelux have brought an intriguing new innovation to their strobes with Lumilink. Two receptors are located on either side of the strobe. These offer you the opportunity of not relying on fibre optic cables to trigger the strobes. To make it work you need a Lumilink signal device which



attaches to the top of the housing where the fibre optic cable connectors go. You press and hold the power button on the transmitter for 2 seconds to turn it on. To activate the strobes for Lumilink you need to press and hold the mode knob for 2 seconds, and after hearing four “beep” sounds, the wireless trigger mode will be activated.

Turning on the functionality works well. As far as triggering, the Lumilink works perfectly as long as the Lumilink has a clear line of view to the receptors on the side of the strobes. This is very sensitive, you need to imagine a straight line going from one to the other. I had instances where I adjusted the strobe position slightly, and the signal was then blocked by the strobe arm, meaning it did not fire. Lumilink solves one problem but creates a new one. Fibre optic cables fire the strobes 100% of the time with only the mild inconvenience of having a wire connection. Lumilink would fire the strobes maybe 90 to 99% of the time but suddenly I had to worry about whether the connection was intact. When shooting underwater, I need to be able to quickly adjust my strobe position and my hand position without worrying if the strobes will fire or



not. For this reason, at this moment, I prefer to have 100% certainty and a cable, rather than no cable and a new worry about visibility of Lumilink to the receptors.

What about if you remove the strobes from the camera housing and arms? This for me was one of the most intriguing potential uses of wireless triggering. In a pool, in the very late afternoon, in relatively low light, I tested the connection and found that the furthest distance I could successfully

fire the strobe from was 2 metres. This was a little disappointing. I had hoped to be able to take a much bigger step back from the strobe and still fire it. Marelux argue that the distance possible for a Lumilink connection will increase in darker environments but I did not have the opportunity to test this for myself.

Use of off-camera lights and flashes, especially in wide angle photography, usually works best when you hide the light behind a person or feature. The Lumilink relies on direct line of sight with the strobe receptor, meaning that this type of use is also compromised (you can't hide the strobe and trigger it).

What would be interesting to see developed is a cable with receptor which could be attached to the strobe. This would then function more like other off-camera strobe trigger whereby the strobe attached to a receptor is discreetly placed within communication distance with the triggering strobe or, in this case, Lumilink transmitter.

I could see Lumilink having more value in macro photography, especially with a snoot, whereby the strobe could be detached and fired with creative lighting effects but within close proximity to the camera (and being careful to keep Lumilink and strobe 'seeing' each other.

In the past, Jade and I have also swam together with one of us shooting whilst the other did lighting with a detached strobe in snoot - we used this for fast-moving animals like juvenile boxfish. The Lumilink might be used for this kind of work too (although you would have to be very vigilant about the connection for triggering).

I wish the fibre optic cables Marelux supplies came with a coiled design so that they can be stretched and shortened depending on how wide or

tight you want to have your stride arms. The straight cable means you have to commit to a set size ahead of a shoot, and you then usually have lots of slack in the cable which needs to be managed somehow (I wrapped it around the arms).

Headline summary:

Marelux have built a strobe which aims to introduce two innovations to the market: wireless flash triggering and much improved continuous shooting performance.

The continuous flash triggering is jaw-droppingly good, completely outperforming my existing strobes.

To benefit from this you must make use of their MTL mode and use this as your default configuration.

The wireless flash triggering is good but not 100% reliable - I would still rather rely on fibre optic cables.

The overall performance of the strobe in terms of power and light quality feels good. Longer term testing in more situations and places will reveal more on this.

The light diffusion could be improved - my Retra strobes cast light in a far more even and soft way.

The battery reserve is excellent.

The ergonomics could be improved and be more intuitive.

For photography which involves fast-moving behaviour (e.g. baitballs or diving gannets or macro animal behaviour) the continuous shooting of the Marelux Apollo III 2.0 may help you capture shots you might otherwise miss. It could also be especially

useful for continuous shooting in split-level imagery which requires a closed aperture and higher flash power.

For much of underwater photography I do, the Marelux Apollo III 2.0 would be a very useful addition.

Henley Spiers

Henley Spiers is a renowned underwater photographer, writer, and expedition leader who has fast become one of the most highly decorated wildlife image-makers in the world. An avid waterman, Henley is passionate about all aquatic realms, from storytelling marine protection in the frigid waters of Scotland, to venturing 500 metres deep on a scientific mission in the Indian Ocean. Whether it be swimming alongside hunting orcas or witnessing the feeding behavior of tiny blue sea dragons, Henley has a proven ability to deliver the images which do justice to the wonder and threats faced by the natural world. Henley was honored to be the first ever Storyteller in Residence for Oceanographic Magazine.

www.HenleySpiers.com

