Wide-Angle Lighting

— Six Simple Steps to Better Wide-Angle Strobe Positioning

To light the cuttlefish correctly, my strobes were pulled in close to my housing.

Text and photos by Kate Jonker

One of the biggest challenges to using strobes in underwater photography is positioning. In this article, Kate Jonker offers six simple steps to better strobe positioning for wide-angle underwater photography.

The aim is to get you thinking about where you are putting your strobes and where the light is falling—and to encourage you to try it for yourself. Play around and see what works for you (and your subject)! It is the only way to learn.

I am going to assume you have two strobes, with two arms mounted onto two handles on either side of your housing and that you have a DSLR or mirrorless camera with a wide-angle lens behind a dome port, or a compact camera with a wide field of view, and possibly even a wet wide-angle lens.

My go-to arm lengths are medium (21cm) attached to my handles, and then short (12cm), which attach to the other end of my medium arms and my strobe.

These are my favourite steps to better wide-angle strobe positioning:

1. Keep your strobes well back

The single most important thing to remember is to keep the front of your strobes well back. This prevents "hot spots" caused by the light of your strobes appearing in the top corners of your photo. It also helps to eliminate backscatter.

Keep the front of your strobes in line with (or slightly behind) the handles

Vertical shots are great in wide-angle underwater photography.

of your housing and point them straight forward. If there is lots of sediment in the water, turn them out ever so slightly (about 10 degrees outwards to the side).

2. Strobe power

I normally push up my strobe power quite a lot—sometimes to the maximum, especially if my subject is quite large and I must back off a bit to get it in the frame.

However, depending on your camera settings and the brightness (reflectiveness) of your subject, you might need to drop your strobe power to ensure you do not overexpose your subject. It is all about trial and error to see what strength of power works best with your subject.

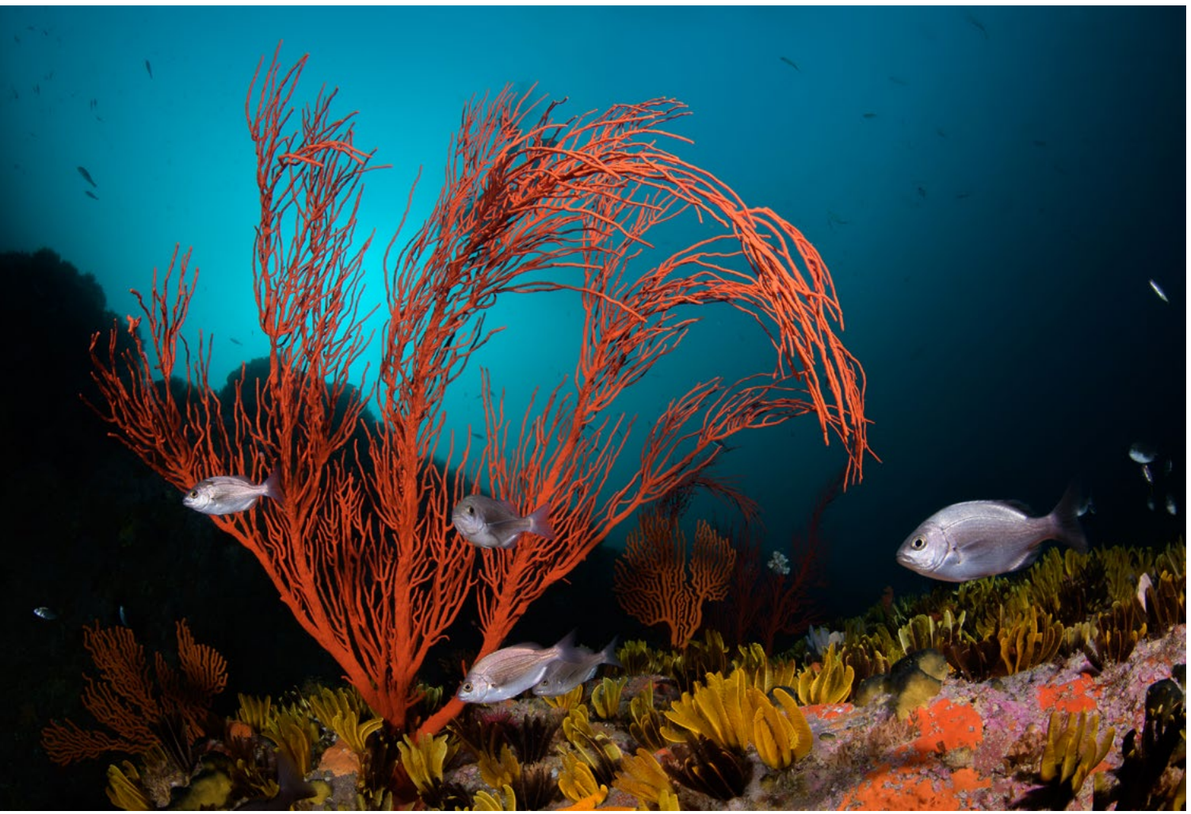
If you find that you are getting a lot of backscatter in your photos, drop the strobe power a bit.

3. Strobe distance

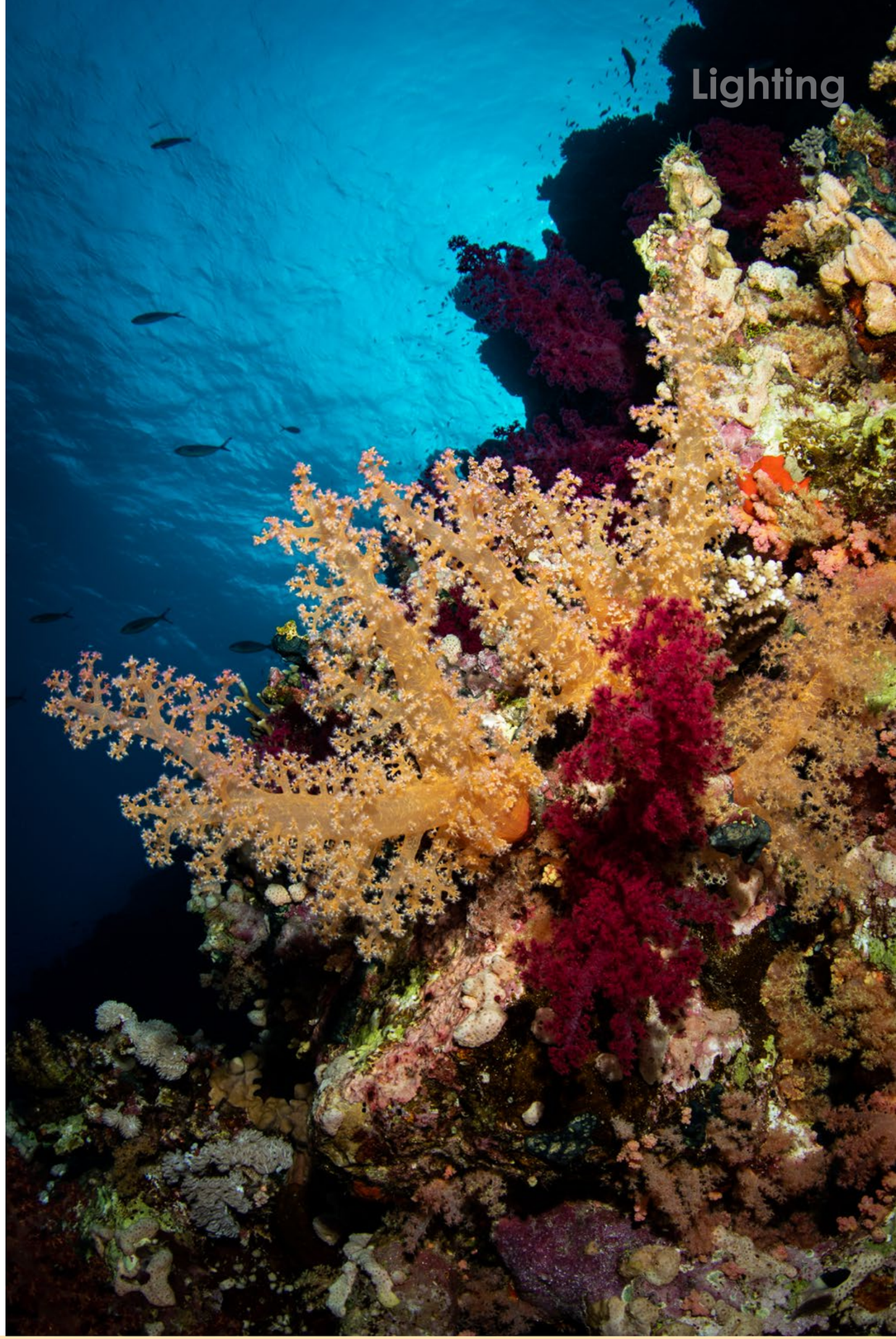
Think about the beam of light that is coming out of your strobes. Where is it going to fall? It is cone-shaped and starts off narrow and gets wider, the farther away it travels from your strobes.

To light up your subject, you want to be sure that those beams meet in the middle, and only very slightly before where they hit your subject. If they do not meet, you will have a dark area in the centre of you photo. If they overlap too far forward of your subject, you will light the particles in the water between your subject and your camera and the result will be backscatter.

The general rule here is the farther you are from your subject, the farther sideways (away from the handles) you need to move the strobes. In fact, the distance from your port to your subject should be equal to the distance your strobe



If you are unable to light the entire reef, focus on a subject and use the rest of the reef to add contrast and depth to the image.



I used long strobe arms to light this huge sea fan.

is from the centre point of your lens. When lighting huge reef scenes, I use longer arms (31cm) together with my medium arms (21cm) so that I can really push out my strobes.

4. Get close

The reason we use a wide-angle or fisheye lens is to get as close to our subject as possible to light it well. The closer you are to your subject, the better your lighting will be. If you are too far away, your beam will not reach your subject, no matter how much power you blast at it. If you are shooting a big reef or wreck, choose the most photogenic part and light that. You can always use the part that is unlit as a silhouette to add depth to your image.

5. Standard positioning

The standard positioning for wide-angle lighting is to have your strobes on either side of your housing in the 9 o'clock and 3 o'clock position. This is useful for most scenarios, smaller subjects, and divers. If you find you are lighting too much of the reef or sea floor below your subject, lift your strobes higher to a 10 o'clock and 2 o'clock position.

6. Angle to your subject

For the best lighting, you need to hit your subject with enough light for it to be lit evenly throughout. The easiest way to do this is to choose a subject that is completely parallel to your camera. If you are taking the photo with your camera horizontal (landscape), you will easily light up the entire subject without having to adjust the power of either of your strobes.

Sadly, not many reefs are as thoughtful as this, and you may find you will need to push down the power of your strobe closer to the reef or push up the power of your strobe that

Typical 9 o'clock and 3 o'clock strobe positioning

is farther from the reef (do not push your strobe forward!).

Similarly, if you are taking a photo holding your camera vertically (portrait), keep the strobes at the 9 o'clock and 3 o'clock positioning but drop the power of your strobe now at the bottom so that it does not give an unnatural-looking upwards lighting effect.

Bonus Tip

Remember to keep reviewing your photos in your viewfinder. Zoom in to check either side of the screen for backscatter and reposition your strobes to help prevent this or adjust the strength of your strobes to get the right amount of light on your subject.

Underwater photography, and especially lighting, takes a lot of practice. It does get easier once you understand where and how the light falls, and the amount of strobe power you need to use. Persevere, and your hard work will be rewarded! ■

Kate Jonker is an underwater photographer and dive writer, underwater photography instructor, dive guide and dive boat skipper based in South Africa who leads dive trips across the globe. For more information regarding diving and underwater photography in Cape Town, divers are welcome to find her at: ***katejonker.com****.*

Strobes can really make the colours pop in underwater photography.

photo news

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Ikelite housing for the OM System OM-1

Ikelite has released its housing for the OM System OM-1 Micro Four Thirds mirrorless camera. The housing is built around the company's Dry Lock Micro (DLM) port system and features an ABS-PC body in transparent back, an ergonomically designed shutter release (which can be optionally extended), and the option to add a TTL converter for automatic exposure when using compatible DS-series strobes. The OM-1 housing is depth-rated to 60m. It weighs 2.9 lbs (1,322g) with the dimensions of 7.5 x 5.75 x 5.875in (190 x 146 x 149mm). **Ikelite.com**

Megadap ETZ21 Sony E-Mount to Nikon Z-Mount lens adapter

The newly released Megadap ETZ21 is an updated version of the ETZ11. Like its predecessor, the adapter supports both APS-C and full-frame Nikon Z mirrorless models, including the Z fc, Z50, Z5, Z6, Z7, Z6 II, Z7 II, and Z9. The adapter supports in-body image stabilisation, in-lens vibration reduction, aperture rings, real-time and focus tracking, face, eye and animal detection AF in all focus modes. The bayonet mount is now made of stainless steel (instead of aluminum). Like the ETZ11, the ETZ21 ships with a special clip-on cable for firmware updates via USB. **Megadap.net**

Panasonic GH6 firmware update

The update allows users to record ProRes RAW in DCI 4K at 120p as well as 5.7K at 60p via the Atomos Ninja V+. Underwater videographers who are shooting with anamorphic lenses get ProRes RAW 4:3 in 4.4K at up 60p and 5.8K at up to 30p with the Ninja V+. The new firmware also adds support for internal ProRes 422 and ProRes 422 HQ recording in DCI 4K and Full HD at up to 60p, in addition to the current 5.7K options. The new firmware version 2.0 for the Lumix GH6 is available for free download at the Lumix Global website. **Panasonic.com**

Canon 15-30mm RF-mount ultra-wide lens

Canon has announced a new RF-mount ultra-wide zoom lens—the RF 15-30mm f/4.5-6.3 IS STM. The lens, being priced in the lower segment, complements the existing RF 14-35mm f/4L IS USM and RF 15-35mm f/2.8L IS USM, which are both pro-level lenses. The new lens weighs only 0.9lbs (390g). The 15-30mm lens uses a seven-blade aperture diaphragm and is constructed using 13 elements in 11 groups, including two ultra-low dispersion elements and an aspherical element. It has a minimum focusing distance of 11in (28cm) throughout the focal range when using AF; when using the manual focus at 15mm, it can focus as close as 5.1in (13cm). The lens features optical image stabilisation and has a 67mm front filter thread. The RF 15-30mm f/4.5-6.3 IS STM will be available in late August 2022. **Canon.com**

Nikon Z 30 mirrorless camera

Nikon has released its APS-C size/DX-format Nikon Z 30 mirrorless camera. The Z 30 features the smallest (128 x 74 x 60mm) and lightest (405g) body among the Nikon Z series models, as well as a vari-angle LCD monitor, a REC lamp for instant alert of recording, and up to 125 minutes of recording time. The Z 30 comes with the same EXPEED 6 image-processing engine used in the Nikon Z7. In addition, the Z 30 is designed for beginner-friendly video recording, featuring various presets, 4K UHD/30p video, and slow-motion video. It is equipped with a 20.9 MP APS-C sized sensor and the EXPEED 7 image-processing engine. It offers 4K at 30p without crop and full HD at 120p. All DX-format and FX-format NIKKOR Z lenses are available with the Z 30. **Nikon.com**