

Less is more?

by Ross McLaren

I always joke that when I started diving, from one expensive hobby spawned another in photography... but did it have to be THAT expensive? Do you really have to spend thousands of pounds to be able to capture good underwater images?

I started thinking about this when I was asked to run an underwater workshop recently and set myself a wee challenge to see if I could I put together a setup for less than £1000 that was capable of capturing images I was happy with and could “compete” with those I got with my “big rig”. I knew I would have to compromise in some areas, but would these be a deal breaker?

After a bit of research and scouring the internet, I eventually put together two options:

Option One, which is closest to my current setup:

Olympus TG-6 (second hand): £300

Olympus PT-059 Housing (second hand - Facebook): £200

AOI Q1 Strobe: £300

Total: £800

Option Two, which is likely the route many just starting out in underwater photography will go for initially:

Olympus TG-6 (second hand): £300

Olympus PT-059 Housing (second hand - Facebook): £200

Diving Flashlight 18000 Lumen IPX8 Scuba Dive Lights (Amazon): £65

Total: £565



Now, I appreciate neither One nor Two are cheap, but let's compare that to my usual setup:

Sony A7CII (second hand): £1589

Sony 28-60mm (second hand) £174

AOI UH-A7CII Housing: £1030

AOI UCL-06L Macro Wet Lens £203

AOI Q1 Strobe (x2): £600

Diving Flashlight 18000 Lumen IPX8

Scuba Dive Lights (Amazon): £65

Total: £3661

You'll notice, neither “cheap” option, nor my own setup, include pricing for trays, arms and clamps as these are needed irrespective of the actual camera, housing and lighting. So these are prices are still a bit lower than the actual value needed to build a rig from scratch. But, with a a difference of between £2861 and £3096, is that gulf in price obvious in the image quality?



Size

One of the first things that struck me about the TG-6 was the compact sizing, yes I know it is a compact camera, but I didn't realise just how good the size was. When I put together my EM-1 MKII setup I was determined to make it as compact as possible. With the EM-1 being a MicroFourThirds sensor camera, not only was the body relatively small, but the lenses were also much more compact when comparing to APS-C or Full Frame options. But looking and handling the TG-6 I was really struck by just how small it was compared to what I thought was an already compact setup.

Now, there is some down sides to this. If you're using it in colder climates with either dry or wet gloves, the buttons can be a little tricky to get used to and it wasn't the first time I accidentally hit the wrong one when I wasn't paying attention. But, within a dive or two I'd got used to the slightly smaller layout, and if you're coming to it for the first time never having used a bigger camera, I reckon there will be less "feeling out" phase.

The big positive of the TG-6 being such a compact package is it is easier to "carry" underwater and shift out of the way if needs be. A big setup with a big camera body, lens, multiple lights, arms, bulky housing and a tray, can be a real distraction and be quite



cumbersome. So having such a small rig, which is still capable of taking excellent images, is a massive plus in my book.

Flexibility

The flexibility of the TG-6 is absolutely second to none in my opinion. With it you can go from shooting medium to macro subjects with a couple of button pushes which is not something you can easily get on a larger interchangeable lens camera setup. The TG-6 has an equivalent focal length range of 25-100mm and to achieve that on a mirrorless/DSLR

system requires a relatively large lens which I'm not even sure you can get a lens port for the camera housing to fit.

To get the same flexibility and range, you would need to physically swap the lens on the camera, as well as the port on the housing, which obviously isn't possible underwater. Meaning, you are a lot more restricted in the type of shooting you can do with larger setups.

With a system like my A7CII I essentially have to decide before I get in the water on what I want to shoot and chose a lens suitable for that particular subject. Whereas, with the



TG-6 that isn't an issue. With its large zoom range and incredible macro capabilities you can shoot just about any subject aside from very wide-angle seascapes/wrecks.

Now for mirrorless/DSLR's, you can get round this by adding wet lenses to the outside of the lens port which either widen the field of view or to help improve the macro capabilities of a lens. But these are another expense to put out and another addition to an already bulky rig. With the TG-6, you literally have all these options in one very small package and for me, that's so important.

Macro/Super Macro Capabilities

This kind of ties in with the flexibility of the setup. To shoot macro and super macro on an interchangeable lens setup, you either need to use a dedicate fixed focal length prime lens (on their own can be very expensive), which can limit what you can shoot if something unexpected swims by. Or, you need to add macro wet lens(es), which although will allow you to shoot small critters with a “normal” lens, which although offers flexibility, just isn’t quite as good as a dedicated macro lens.

But, the TG6 has two dedicated settings, “Super Macro Mode” and “Microscope Mode” and these are game changing! These put it above pretty much most cameras for shooting small to extra small marine life. With a focus distance of just 1cm in these modes (and zoomed in by at least 1.2x) the results you can achieve are absolutely out of this world. Now that doesn’t come without drawbacks. Getting so close to marine life requires excellent buoyancy,



really good spatial awareness (so you’re not touching or disturbing other life around you) and a steady hand. But nail those and the rewards are worth it.

And the best bit? If something medium to large does decide to grace you with its presence, with a flick of a dial you can go back to “normal” shooting mode and get a few snaps without the frustration of having the wrong lens on.

Full Control of Camera Settings

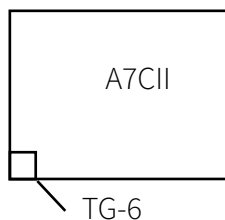
There is one major downside I thought I’d found with the TG-6 and was sure would be a deal breaker for me, and that was the lack of full manual camera controls. When I mean full manual control, I mean choosing the aperture, shutter speed and ISO settings on the camera. To casual photographers and beginners, this might not be a big deal.



Many people like to keep it simple and either have the camera on full auto (which I’ve been known to use in the past and I suggest people start off with until they get comfortable diving with their camera underwater) or aperture priority mode (where the only thing they need to worry about is how much the subject and background is in focus). But for someone who is used to being in complete control, it was something I

was wary of.

With the TG-6, the closest you can get to full manual is to shoot in aperture priority mode, set the ISO to a maximum value (usually this is between 100 and 400) and then to control shutter speed (to ensure the subject isn’t blurry if it is moving) using the exposure dial. It felt like a bit of a faff to start with. But in the end, I was pleasantly surprised with how much I didn’t miss manual mode,



Sensor size comparison to scale:
36x24mm v 6.17 x 4.55mm



Image Quality

Image quality is obviously a huge consideration when it comes down to it at the end of the day. Let's be totally honest, you're not going to get the same quality from a TG-6 as you would from a bigger camera but just how different is it and does it justify such a big price difference?

Without getting too technical, the actual 12mp sensor in the TG-6 is roughly 30x smaller than the 30mp one in my A7CII. Which, when you read it on paper sounds like a massive difference. But is there a 30x bigger difference in image quality?

Well, in reality, most images are viewed on a small screen, and if you're only looking to upload to social media, honestly, I wouldn't say

there was a £2861 to £3096 worth of a difference.

Yes, if you are pixel peeping and heavily cropping, of course you can see there is less image quality. With less megapixels and a smaller sensor that's got to be the case. But the trick here is to simply get it right when taking the shot, and with the macro abilities of the TG-6 there's no reason you can't. So, just get in close and avoid cropping in afterwards.

If you do find yourself having to bump up the ISO in the TG-6, above about 400, yes, there is a bit of noise in the final image. But again, there's a work around. Make sure you are shooting in RAW and put the files through an editing software (there's plenty of free options to choose from)

to help reduce the grain and it'll easily fix this issue.

If you're producing large prints, then there will be a big difference in quality, but as I say, with most images being viewed on screens, unless you look really closely, there isn't a huge difference. Certainly not a nearly £3000 one anyway in my opinion.

Will I get rid of my "big rig" now and downsize to the compact camera "full time?"

I think there's definitely a physiological factor at play for sure in choosing the Sony A7CII over the far cheaper Olympus TG-6.

It's got one of the best auto focus systems, full manual controls that I find easier to use, a full frame sensor that's more versatile and offers more editing flexibility and knowing I won't "outgrow" the system as well are just a few reasons.

But, are they good enough reasons to justify spending £3000 more? That's the question.

But, what I think is clear, you don't need to break the bank to get excellent underwater images!

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