

TG-6 to R7

by John Horn

Having only gotten into photography about 18 months ago, I initially did what most people would do and started with a 'budget' setup to make sure it was something I would enjoy. I only got into it initially because I wanted to be able to identify the creatures I found underwater later and I had the hardest time remembering exactly how something looked...especially small things like nudibranchs. Turns out I actually love underwater photography so the ID purposes are only a byproduct at this point. All of my diving is in Hawaii and most of it is on Kauai where we have poor visibility and lots of surge. Because of the poor visibility, I prefer to only focus on macro and fish portraits with macro being at the top of the list. After picking the brain of a good friend and fellow photography mentor Jaycee Butler, I ended up getting an Olympus TG-6 with Olympus housing and a DS-51 strobe with RC1 adapter so I could use TTL.

I'm generally a budget shopper so I scoured classifieds to find a used setup and when I finally found one, I paid for it and awaited the shipment from Canada. I didn't know a shipment from Canada could take so long, but for some reason my package went to Guam, then got lost for a couple weeks before finally making its way to me over a month after ordering it. Needless to say, the anticipation about killed me. What this extra time did for me was give me all the time in the world to research what I was getting into.

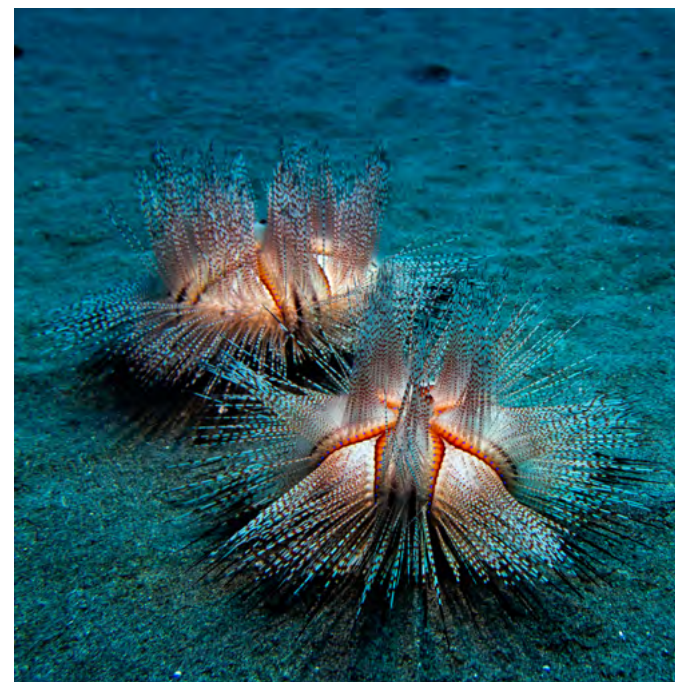
I knew nothing about underwater photography at the time, I actually didn't know anything about



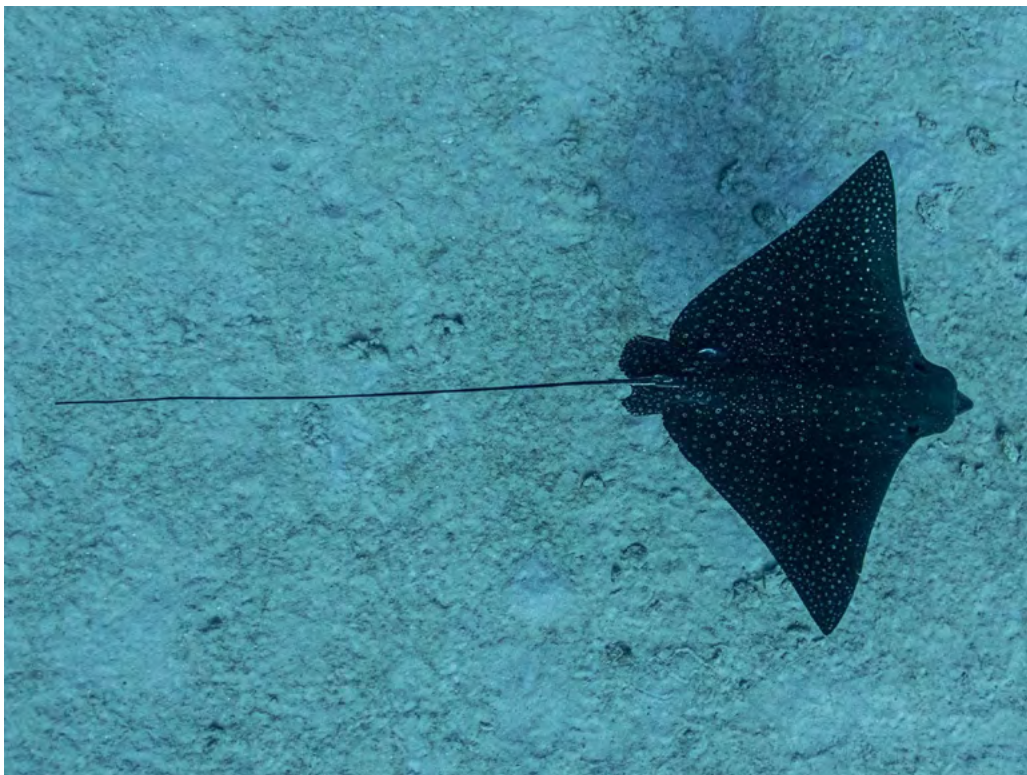
The Olympus TG-6 housing is a lot smaller and lighter than the Marelux Canon R7 housing but by the time you add lighting the volume equals out.

out-of-the-water photography for that matter, but this waiting time gave me all the hours I needed to gain a basic knowledge to get started. When I get into a new hobby, I generally go all in, thinking about it 24 hours a day and researching until there is no more research to be done. I found the Backscatter setup videos extremely helpful and I currently have the TG set up using their recommended settings.

After finally receiving the package, I spent the next couple days setting up the camera and getting everything dialed in on land. I was finally ready for my first underwater foray in photography. I started with a couple dives where my photos had poor exposure due to strobe placement, but once I got that sorted out I was blown away by the pictures I was getting with my TG. It was pretty crazy that a person who knew nothing about taking pictures could watch some videos about camera settings and strobe position, then go underwater and get some pretty decent shots. Not to say they were award winning shots, but I liked some of them



*Mating Blue Spotted Urchins
Olympus TG-6, Olympus housing, Backscatter MF-1
Strobe, ISO 100, f/8, 1/125*



Eagle Ray
Olympus TG-6, Olympus housing, Ambient Light, ISO 100, f/3.2, 1/100

enough to hang on my wall.

After a short period of time I really wanted a snoot, so I upgraded to the Backscatter MF-1 and Snoot combo, parting with my DS-51. This opened another world of fun for me where I could be even more creative with my lighting. Because the MF-1 didn't have TTL, I got to learn about setting my own strobe power, but again Backscatter had some awesome videos that taught me what I needed to know to get going and it worked out perfectly.

After about a year of using the TG very regularly, I felt like I wanted more. I was loving my pictures, but I wanted more image quality, more ability to take pictures of smaller things, the ability to crop more, and more control of the overall frame and outlook of the picture. This led me to start having some serious camera conversations with my friend Jaycee again. Being as knowledgeable as he is about everything underwater photography related, I thought for sure he would be able to tell me what camera I 'needed'.



Hawaiian Lionfish Head
Olympus TG-6, Olympus housing, Backscatter MF-1 Strobe, ISO 100, f/18, 1/100

He gave me a few camera/housing/lens combinations I should look into and after some of my own research as well, I settled on the Canon R7, Canon RF 100mm f2.5 Macro IS USM Lens and Marelux housing. I would continue using my Backscatter Mini Flash and

snoot (or so I thought).

The ordering process this time was much easier and quicker than my experience with the TG. Since the camera, lens and housing I wanted were relatively new I didn't have an option to buy used so I bit the bullet



Financially both the Canon R7 and a quality housing are considerably more expensive than the Olympus TG-6 in their polycarbonate housing.

and made it happen, buying it all brand new.

Getting new camera equipment is like Christmas morning, all the excitement and nerves are firing on all cylinders! Because I had found the Backscatter videos so helpful in my initial setup with the TG, I really wanted to buy a camera they had a bunch of informational videos about, but none of the cameras on my list existed in their playlist so I had to resort to other avenues this time around. I spent a few days consulting Jaycee on best settings and again, watching some videos and reading

articles before taking her out for the first swim.

Let's just say the first dive was a wake up call. Everything that was easy with the TG was no longer easy with this new fancy setup! I had previously thought I was good at underwater photography for being such a beginner, but after my first go with a 'real' camera I was struggling! Let's look at some of the things that have been a challenge.

Size: While the R7 with the Marelux housing is small compared to what a lot of people dive with, it is huge compared to the TG. This really



*Juvenile Harlequin Shrimp
Canon EOS R7, Marelux housing, RF100mm F2.8 L MACRO IS USM, Backscatter MF-1 Strobe, ISO 100, f/22, 1/320*

isn't that big of a deal, but has taken some getting used to. Fish appear to be more scared of the big setup compared to the small setup. Because I am diving in mostly off-the-beaten-path locations, the entries and exits are challenging and this made the larger camera difficult to handle at times. I have only traveled with the R7 once, but I was surprised at how much more luggage space and weight were needed.

Focus Distance: I've always been told that in underwater photography you should get as close to the subject

as you can so you are shooting through less water. This was easy with the TG because I could get as close to the subject as I wanted and the camera could still focus. With the new setup, I can only be as close to my subject as a few inches from the end of the lens(about 10" from the camera itself). This may not seem like a big deal, but I dive in very surgey areas where keeping the camera focused on a small subject at a certain distance is very challenging! If I move as close as I can focus to my subject, but then cross the threshold, the camera goes



Tinker on a Mission.

Canon EOS R7, Marelux housing, RF100mm F2.8 L MACRO IS USM, Backscatter MF-1 Strobe, ISO 5000, f/11, 1/250

out of focus. I have since been trying out a diopter which allows me to get close to the subject, but at the same time this really tightens my depth of field, which adds another challenge in surge. These are things I knew before getting into the R7, but didn't realize how big of a difference they would make on my ability to

take macro photos. When taking fish portraits this focus distance is actually a benefit because I can still get great pictures of fish and be far enough away to keep them happy.

Auto Focus: While overall the autofocus on the R7 works wonderfully, especially for fish portraits, it

can be challenging for macro. Because of the surge, things like sand, hydroids, plants, etc will move into my frame at a moment's notice and confuse the autofocus. I've set up backbutton focus to help with this, but I think it will always be hard to take a picture of something the size of a grain of rice and not have



Leaf Scorpionfish

Olympus TG-6, Olympus housing, Backscatter MF-1 Strobe and snoot, ISO 100, f/18, 1/100

the camera be confused as to what it should focus on. While the overall focusing of the TG worked well, I wasn't always happy with the final shot because I would think I had one thing in focus, but it ended up being something else. It's hard to tell for sure underwater using the TG screen. Because of this, I

always took multiple shots to have a better chance of having the right thing in focus. With the R7, because I am using the EVF I generally know when I got 'the shot'. This makes my post processing faster because I have fewer pictures to go through. Yay!

Snoot: This is another aspect I didn't really consider



White Bump Nudibranch

Canon EOS R7, Marelux housing, RF100mm F2.8 L MACRO IS USM, Backscatter MF-1 Strobe, ISO 200, f/22, 1/250

when making the switch. Using the snoot with the TG was no problem and quite easy most of the time. I was able to rest my hand on the Olympus camera housing while pointing the snoot where I wanted it to go while looking at the screen to get the exact shot I wanted. It may sound complicated, but it is actually pretty easy because I could get my subject very close to the camera. Because the minimum focus distance is so much further on the R7, I cannot rest my hand and snoot on the housing to keep it stable. I have yet to find a

good solution for using the snoot with the new camera. I have seen people mount the snoot in the center of the camera, and point it right where their focus distance is, but I really like to be able to get creative and not just shoot overhead shots with the snoot. Once I get this sorted out, I will report back.

Setting up the Shot: The TG is simple, you approach your subject, get as close as you would like, frame how you prefer, possibly adjust your strobe depending on where you had it last and then take your picture. Easy. It takes me at least three times as long,



Fireworm on Fried Egg Nudibranch

Olympus TG-6, Olympus housing, Backscatter MF-1 Strobe, ISO 100, f/18, 1/100

if not longer to get setup with the R7. Dealing with the bigger size of the setup, finding the subject, framing it, making sure strobes are where I want them, bringing my eye to the EVF and focusing (if I have not already lost the subject before I get it to my eye), then taking the shot. Sometimes I have to bring the camera to my eye multiple times to reset and find my subject again. All of these challenges are due to diving in surge. If you have nice conditions, I imagine it is much easier!

Overall Thoughts: While the new camera is more challenging, I am enjoying it and getting some great shots with each dive. I was getting more “keeper” shots with the TG each time I went out, but I know this will continue to change as I get more accustomed to the new camera. I’m loving the overall quality of the shots I do get with the R7 and I love the ability to use the diopter to take pictures of things even smaller! I don’t mind a challenge and I know after a



Schooling Hellers

Olympus TG-6, Olympus housing, Ambient Light, ISO 100, f/2.8, 1/160

few months pass, using the R7 will feel like second nature.

Would I recommend upgrading from a TG for all people who are thinking about it? The answer is no.

If you only get to dive on occasion, dive in surgey conditions or just want to go out and take pictures and have it be easy, then the TG is a great camera that is simple

and carefree to use.

If you are wanting to focus on fish portraits, the R7 blows the TG out of the water as far as ease and quality of shots.

If you only shoot macro, you really could go either way and be very happy. Just know that it will be easier with the TG, but you can get better image quality and the ability



*Schooling
Canon EOS R7,
Marelux housing,
RF100mm F2.8 L
MACRO IS USM,
Ambient Light, ISO
500, f/10, 1/250*

to shoot smaller subjects with the R7.

If you want to set up the camera settings initially and forget about them and just go take pictures, the TG is definitely for you.

I have since passed the TG along to my lady friend and she is having a blast with it. She is getting killer shots and happy to be shooting underwater. Occasionally she will show me a picture underwater and ask how I can help with strobe placement and it's fun to be able to help. I'll even borrow the camera from her on occasion if I need

to shoot something quick that I wouldn't be able to setup on the R7.

I love taking underwater pictures and whether I am using the TG or the R7, I'm having a blast! If you are having fun taking pictures with the setup you have, then I would say you are doing the right thing. Keep it up!

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