

Compact flash comparison

by Dan Bolt
and Dan Hopkins

The recently released 12mpix Canon G9 has created quite a stir in photographic circles with both Canon and Ikelite producing a housing for it. Allowing underwater photographers to add this fabulously-specified camera to their Christmas list this year. One of the main advantages of cameras like the G9, or 'bridge' cameras to use the popular term, is that having a hot-shoe mount for external flash-guns means that there is true TTL metering and flash control being produced by the metering system in the camera itself.

To reflect this ability of the G9 and to extend it to our chosen photographic environment, a number of strobes have been in production over the last few years to make the most of the TTL capabilities offered by bridge units like the Canon G series cameras, the Olympus SP350 & SP560 models and Nikon's P5000.

What we are going to try to do in this article is to conduct a head-to-head test of these strobes to see if they live up to their reputation and to see if you really can get TTL-like flash exposure from a non-DSLR set-up. What a great excuse to play with lots

of new kit!

TTL flash exposure has its advantages and disadvantages, indeed shooting manually on both camera and flash is perhaps the way to get ultimate control over your shots, but for many underwater photographers still shooting in-camera metered shots on compact digital cameras, a TTL strobe could be the next step in the learning process. Choosing the right strobe will also allow a degree of manual adjustment over the amount of light produced anyway, so giving ultimate flexibility underwater to cater for all lighting situation we are likely to encounter.

The equipment we chose (and Cameras Underwater kindly supplied) was the Canon G9 in both the Ikelite housing and Canon's own WP-DC21, along with the Sea & Sea YS110, Ikelite DS51 and Inon Z240 strobe heads. As a wild-card we also tried the Inon Z240 on a Canon A640 in an Ikelite housing, just because we could. We used the DS51 'hard wired' into the canon via the Ikelite bulkhead and you might suggest this is not a fair comparison to make against the other 'optically' fired strobes, but as



Olympus E330, Olympus Housing, natural light, ISO200, f/3.5, 1/6th, digitally applied colour filter, programmed auto (Dan Hopkins)

Ikelite have just stopped making their TTL controller it would not have been realistic to test kit that is no longer available. It is worth mentioning Ikelite's new strobe the Autoflash 35, this strobe was not quite on the market when we conducted our tests but it would have been an excellent choice for an entry level automatic strobe. On paper it is designed to achieve similar results to the other strobes we used, obviously with limitations on coverage and power, but it is clearly

aimed at the compact digital camera user. Hopefully we will be able to get hold of one soon and write a full review of it for UwPMag, so watch this space.

Being November it was impossible to guarantee the sea conditions around the UK so we chose the Vobster Quay inland diving centre (an old flooded quarry) to conduct our tests as they have clear (if a little cold) water, good facilities and training platforms at various depths on which



Having completed the test shots it was time to enjoy the dive and relax with the simplicity of TTL flash

we could run through our testing. Not only that, but also having constant conditions over a number of diving days would be necessary to maintain a fair test and to get the 'feel' of each set up in actual diving conditions.

To create a valid test and allow comparisons to be drawn it is important to keep as many of the conditions constant as possible. So trying to bear that in mind we designed two tests to run the kit through; one a close-up shot and the other

a wide angle composition. Because we had included the Canon housing for the G9 we obviously couldn't use any supplementary wet-lenses... but that's a debate for different article all-together.

For the test shots the cameras were set on Aperture Priority (Av), ISO100, auto white-balance, evaluative metering, and for the close-up test macro focusing mode. The zoom was not used so all shots were at the 35mm (equiv) wide end of the zoom range. Then each camera

was taken through the entire aperture range step by step which produces 10 shots per test for each camera/strobe combination. The visibility was a crisp 15m but the 10m deep platform we used was in the shade of a cliff so there was not a great deal of natural light around.

As for the strobe heads; we used the 'straight-out-of-the-box' recommended settings with no adjustments to the output - had we tried to find the best adjustment for each strobe we'd still

be down there doing the test! Each unit was set up as follows:

DS51 - TTL Sync Cord and hot-shoe connector, Mode Switch to TTL

YS110 - Optical cable, Mode Switch to TTL, Slave switch to On, Light Level Control to Full

Z240 - Optical cable, Mode Switch to S-TTS, EV Controller to B (ie: no power adjustment)

Canon G9 - Flash On, Flash Control set to Auto, 1st Curtain Synch, Slow Synchro

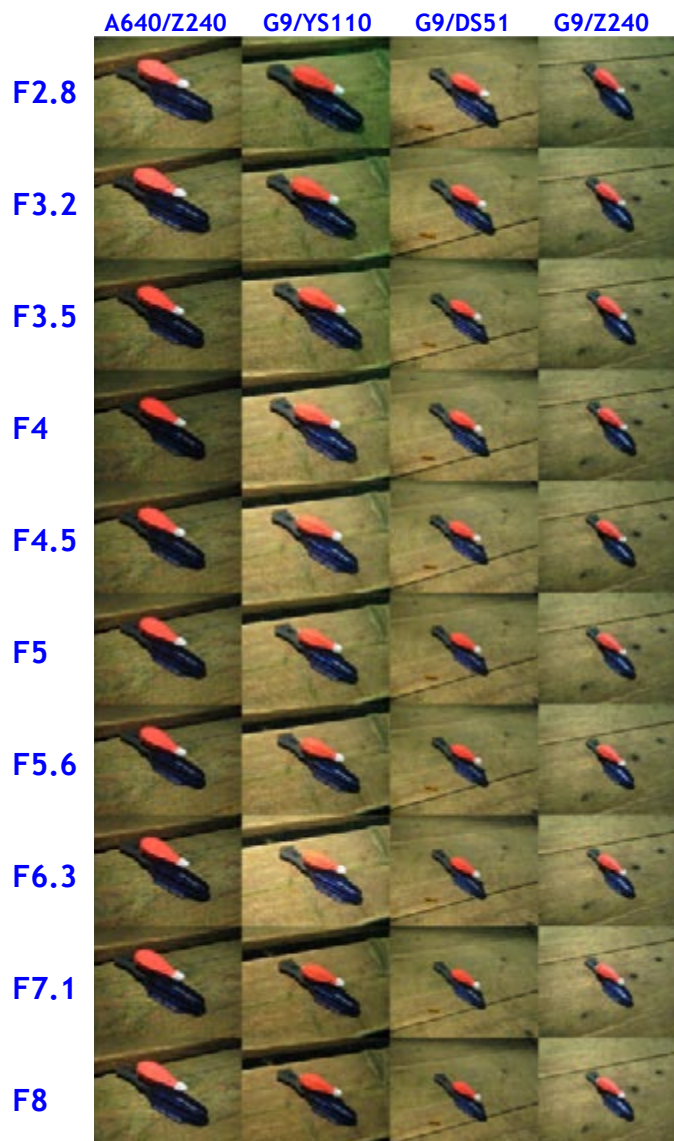
Off, no adjustment to flash output

Running through the test shots was quite a simple exercise but we did have a bit of a struggle with all the settings of the G9 to get the results we wanted, though to be honest that was more down to us not reading the manual properly than any failing of the camera! Not including the cost of trays and arms, the most expensive strobe was the Inon Z240, followed by the YS110 and then the DS51. They are all fairly pricey units and some would question if many compact digital camera users would want to shell out more for their flash than the camera/housing cost them in the first place. That said, purchasing cheaper, manual strobes could instantly turn point-and-shoot simplicity into a manual-control-nightmare. What these strobes allow for is the continued use of point-and-shoot methods while allowing the photographer to grow into the manually exposed shots we see the 'pros' taking.

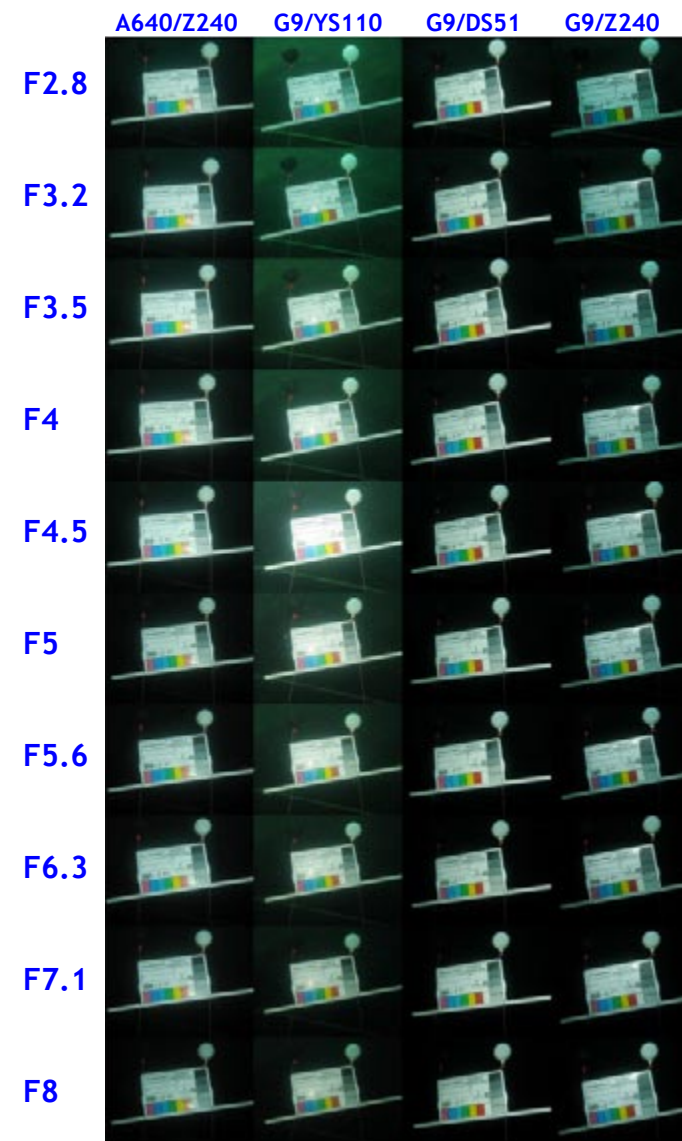
Looking at the test shots side by side (and judging on exposure alone, we're

not expecting top marks for composition here!) it is fairly easy to see which strobes gave the best results. Unsurprisingly the more expensive Inon Z240 faired very well giving even exposure throughout the aperture range. This was also evident while using the Z240 on a dive around the quarry, it's exposure was pretty spot on in all the situation photos we tried. Interestingly the Z240 faired quite well on the lesser-equipped Canon A640 too. The Ikelite DS51 was being controlled directly by the camera using a sync cable and so should have been right on the money every time. Again, looking at the test shots it faired very well too, producing the right amount of light for each shot we took. In use during the dive it seemed to not do quite as good a job as the Z240, sometimes greatly over exposing the shot. Finally we look at the YS110 chart and it's quite obvious that this doesn't cope quite as well the previous two strobes. There is an obvious light-spot around f/4.5 on the wide shot and f/6.3 on the close up. Just to be sure it wasn't a glitch each of these shots were repeated with the same result being given. Depending on the situation the YS110 tended to give out a little less light than was required when we used it around the quarry, some may say this is preferable to overexposing images which will render them useless in post-production.

Please remember that we did not adjust the strobe output to get the best results, so you need to bear that in mind when looking at the results and drawing your own conclusions with regard to price/performance. Sadly we had to give all the kit back to Cameras Underwater at the end of the day so we have no vested interest in which one is better than the others - we've tried to be totally impartial judges while doing these tests (though we each had our favourite after using them!)



One thing for sure when taking pictures of marine life, if you want that punchy shot to grab the observer by the throat you need artificial lighting. Only time will tell if people are prepared to spend more on their strobe than on their camera



(Photos by Dan Bolt)

AND housing put together. One thing is true and that is; you get what you pay for. Compacts are getting better and manufacturers are taking them more seriously producing good quality accessories including lenses as well as strobes.



The two Dans - Hopkins left and Bolt right.

So with the maturing compact market and TTL strobe technology we could be seeing the start of rival exposure systems to that of DSLRs. At the end of the day that's a personal judgement we should make for ourselves, but it is interesting and worth keeping an eye on.

As well as all the test kit we had to play with, we were lucky enough to have even more cameras, housings and strobes to use in-between the test dives. This threw up some interesting photographic results and we learned a great deal about different lens/housing combinations in addition to the lighting effectiveness of the test strobes. You can see more images from our adventures on <http://www.underwaterpics.co.uk/2gallery/vobster>

where we have additional images from an Olympus E330, Canon A640, Fuji E900, and an old YS60 with HeinrichsWeikamp converter - enjoy!

Big thanks have to go to Cameras Underwater for providing kit, manpower and expertise; Tim at Vobster Quay for accommodating us so well, Ian for letting us borrow his Canon G9 housing/YS110 rig, and Peter at UWPmag for giving the backing to the article in the first place!

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www.underwaterpics.co.uk

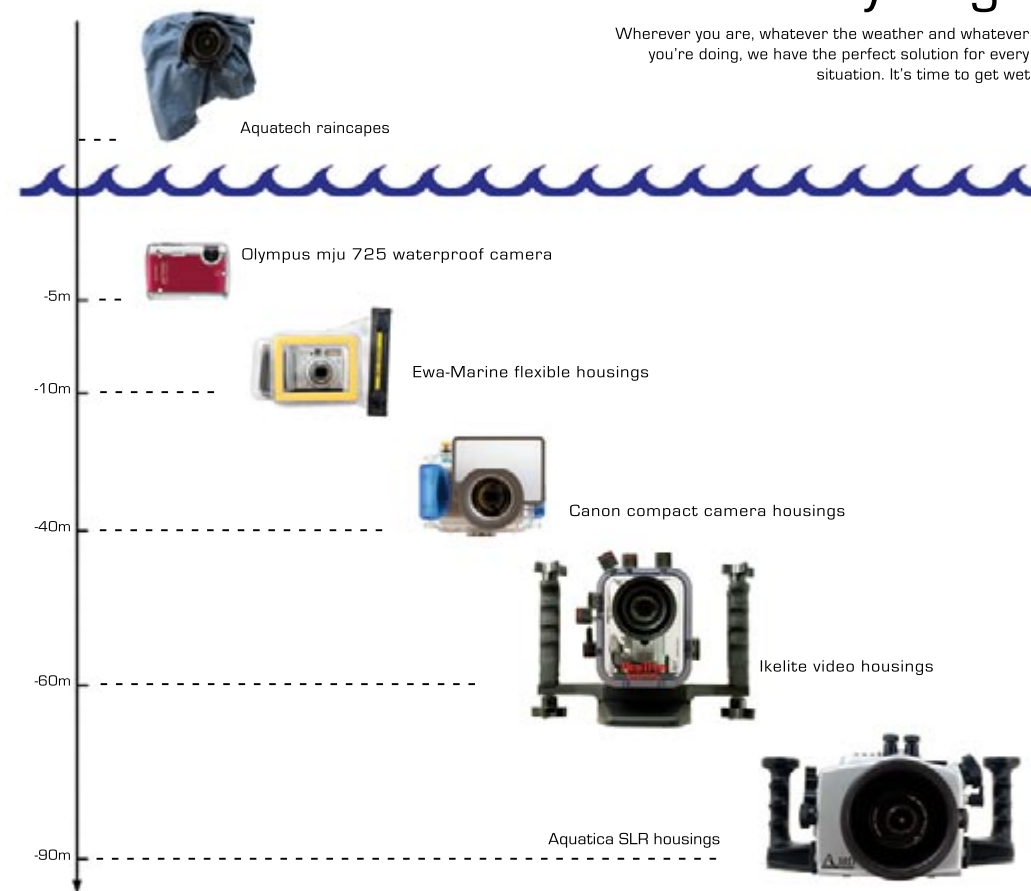
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