

GoPro Gets an Update

Photography buff Mike Clark reviews GoPro's latest HERO update ...

GOPRO CAMERAS are the ideal companions for sports enthusiasts and action lovers both above and below the water. As a keen photographer and diver, I was excited to review the model refresh to the HERO 3 (3) Black Edition. There have been half a dozen improvements, the majority of which are great and will benefit most users but two of the changes will (I believe) impact directly on the deeper diver and may or may not be construed as improvements.

My experience has always been in stills underwater photography and so video with the GoPro was an alien experience. I had to learn about resolution settings, and frame rate was another thing to consider. At 1080p I had four options with the HERO 3+ when shooting for Pal format used by TVs in the UK. These frame rates were 24, 25, 48 and 50 frames per second (fps).

Then there was angle of view: narrow, medium, ultra wide and superview. This last field of view is new on the 3+ and is ideal for 'selfies' etc. I chose the ultra wide view and I found this ideal for shooting marine life and shipwrecks. There are also settings for still photography with an upper resolution of 12mp.

The camera was a little clunky when scrolling through the options for set up. That said, once you have done it and achieved the results you want, you won't need to touch it again, until you want to try something different. A new feature of the 3+ is improved Wi-Fi and it can connect to a supplied remote control or your smart phone through an app. The downside is that Wi-Fi uses up battery power very quickly.

My setup was 1080p at 48 fps in ultra wide view with the Wi-Fi off. With the camera all set up I was ready to go - well almost, three things slowed me down: 1. The weather has been extremely poor on the East Coast of Scotland and so I ended up in a freshwater quarry to test the camera before a newer model superseded the 3+. I videoed car wrecks instead of offshore wrecks.

2. I had to give thought to how I would attach the 3+ to myself. The head mount strap has been discontinued by GoPro but they are still available from third party suppliers. I thought about a helmet mount and even went as far as customising a helmet with one of the sticky mounting pads supplied with the 3+. Lastly I bought a tripod mount and attached this to the hot shoe of my underwater housing for my stills camera. 3. With older GoPro models the underwater housing supplied was always rated to 60m. With the 3+ the max depth of the supplied housing is 40m. If you do not dive below 40m this will not affect you and you will enjoy the benefits of GoPro's slimmed down smaller housing. However, if you are a deep or technical diver this change will mean that you have to shell out for the now branded dive housing at extra expense.

The 3+ is said to have improved battery performance over the 3. I did eventually get into the sea to conduct a second test. Conditions were cold and the battery died after an hour. Three other divers on board were using the Hero 3 and their batteries outlasted mine. This was very surprising as I was expecting 20-30% better performance. That said the Hero 3 users may have been using a slower frame rate which does save battery power. The 3+ I was using had only been charged up twice for my tests so perhaps the battery is still bedding in? Never the less I was expecting longer than 60 minutes from a full charge.

The lens has been upgraded and this was the big attraction for me. Let's face it image quality is what photography is all about. The 3+ really delivers and I was amazed at the results that this tiny camera achieved. Passing dive boats moored in the harbour, I could clearly read web addresses in small writing.

The 3+ also features a low light mode and the camera can automatically use this mode when it senses diminished light conditions. While my dive lights left dark shadows under the hull of a



Mike's initial attempts with the 3+ can be viewed on YouTube:

Preston Hill Quarry
[youtube.com/watch?v=N4XFSNPBJ4E](https://www.youtube.com/watch?v=N4XFSNPBJ4E)

Wreck Dive on the Glanmire
[youtube.com/watch?v=wMK8E0YrqWY](https://www.youtube.com/watch?v=wMK8E0YrqWY)

wreck, the 3+ slowed the frame rate down and showed detail in the shadows. This was accompanied by noise but for us divers often operating in dark water I found this a great feature and I left it in auto mode. A definite improvement for UK divers.

The final thing to consider with the Hero 3+ is how to mount it for underwater work. GoPro offer countless options from clips to brackets. Unlike a tripod mount found on most camera systems, GoPro have their own mounting system. As a plus, mounting options are endless but it is likely to cost you more. This needs to be factored in when purchasing the system. The Go Pro Hero 3+ is supplied with a couple of adhesive mounts and a bracket that will get you started though.

The GoPro 3+ is the most expensive action camera in this class. Some of its competitors such as the Intova Sport HD II are less than half the price, include a built in rear screen and come fitted with a standard tripod mount. Image quality is said not to be as good but I have not tested this for myself as yet. Ultimately though the 3+ Black Edition is the market leader and a very nice camera to use, with great functionality and the best image quality in this type of camera. It has a great range of filming options and is well supported by a range of accessories

THE PROS AND CONS

HERO3+ PROS

The GoPro Hero 3+ is a magnificent camera, which produces excellent footage from a device that is only slightly larger than a box of matches. The GoPro 3 was a vast improvement on its predecessor, the 3+ is more of a refresh than a new model. The improvements over the 3 are significant with the upgraded lens being the most important of them.

The image quality is noticeably better; there are more shooting modes with higher quality settings and faster frame speeds. The all new shooting mode Super view may be a fantastic option for divers to use and I will try it out if I have an opportunity. It is so wide angle that it may be fantastic for shipwreck photography.

The Low Light Mode works well and recovers detail from deep shadow. These are all great points and should I

experience the predicted better battery life where both dives of the day can be captured I would be very happy with the 3+ indeed.

HERO3+ CONS

The new housing is only limited to 40 metres. Divers will have to buy the dive housing which is rated to 60 metres if you wish to dive deeper with your go pro. You have to buy into the GoPro mounting system which can be expensive.

See UW in UV

UV DIVE Lights from Underwater Kinetics will allow you to see corals and critters like never before! Amaze yourself by seeing new colours not normally revealed in the beam of your old tag along dive light.

Marine scientists have noticed that certain marine animals light up with a splendid show of colour when viewed under ultra violet or blue light just like the UV posters of yore. Chemical compounds contained in the skin of these animals (mostly corals) fluoresce in brilliant reds and greens.

Different shades (wavelengths) of UV light often bring different results so, UK offer two UV dive lights models each with unique shades of UV light: SL4 eLED L1/UV-455 (available now)



The SL4 UV has a bluer colour of light. Supplied with diffuser. SRP: £91.95 Aqualite eLED UV-395 Lamp Head (available soon)

The Aqualite UV is more violet and almost invisible to your eyes. It produces the most spectacular results. Head only for fitting to Aqualite eLED light. SRP: TBC

DIY Drysuit

LEADING British drysuit manufacturer, Hammond Drysuits, has launched a new online service, which enables divers to design their own made-to-measure drysuit with bespoke



features. Thanks to the new online service users can customise their suit's technical features to create a drysuit that's perfectly tailored to their individual needs. Additionally, a wide range of colourway options adds an extra element of personalisation. Advice and guidance is offered at each stage of the design process, allowing customers to make informed decisions. Prices start from £580. hammond-drysuits.co.uk

Real Fibre Reinforced Fins

FREEDIVING KIT specialists Trygons are renowned for their distinctive designs as well as their advanced materials and innovative production techniques. Subgear is proud to be working with one of the most successful names in the freediving scene and to have the opportunity to develop the Carbon fins together.

Carbon blades provide the best performance in freediving fins and Subgear uses the highest available carbon fibre possible, similar to that used in Formula 1 cars and aircraft.

The transfer of power from the body to the blade is through a single inelastic band. This band directs the energy to where it is needed and nowhere else. The feet are comfortable in the incredibly soft rubber foot pockets and the hydrodynamic shape reduces any resistance. Each component, the foot pockets, the blade and the side rails are designed individually so that each element offers the maximum performance.

The new soft foot-pocket plays no part in the blade bending. Traditionally, the rigidity of the foot-pocket rail was used

to power the blade.

These fins were called 100% carbon, where in fact, most of their elasticity and firmness originated from the rubber foot-pocket rail. Subgear's rail piece is there for streamlining flow and nothing more. As a result, the blades are thicker and stiffer. The Fins are available at your authorised Subgear dealer.



Fashion From Divesangha



DIVESANGHA IS an exciting and bold new fashion, lifestyle and leisurewear clothing brand aimed at divers and dive enthusiasts. Created to fulfil a gap in the sports lifestyle market, it provides

comfortable, practical and fashionable surface wear for dive enthusiasts to wear between dives, on holiday, at home or wherever they want to express their love for diving.

Divesangha designers founded the company to solve the lack of leisurewear and lifestyle wear options for divers when they are out of the water. Surfers, cyclists, runners, skaters and even people who practise yoga, all have their own leisurewear brands catering to their comfort needs and allowing them to express

their lifestyle to others. We all like to tell the world around us that we belong to a special group, and what's more special than being a diver!

Divesangha products are designed and manufactured in the United Kingdom. They focus on producing limited edition, quality, unique garments that comes at a higher price, but when you wear their products you can see it's worth the little bit extra to stand out from the crowd.

The Divesangha range is available online: www.divesangha.com.