

Sea & Sea DX D100 camera housing

By Charles Hood

Many described the Coolpix 5000 as the birth of high quality underwater digital photography. If that is accepted then the Nikon D100 is a fully blown teenager! It's got a few spots and throws the occasional tantrum but it's got all the makings of a sophisticated grown up. Along with the FM2 and F801s the D100 is sure to go down in Nikon's history as a classic.

In UWP 11 Alex Mustard guided us through the adolescent. He gave us a low down on mega pixels, ISO settings and colour balance, but here I review the new Sea & Sea DX D100 underwater casing.

I should maybe first start with why I chose it. The simple answer is that it was the first housing anyone could get to me. Ikelite and Hugyphot were months away, Nexus was unannounced and I think I was 14th or so in the queue for a Subal. However, I had already taken the decision to trade up from the Coolpix 5000 due mainly to shutter delay. So with that system already sold and a shoot two weeks away it came down to a relatively simple choice the DX-D100 or to borrow something else. Steve Warren of Ocean Optics very kindly offered the latter, but I wanted to use the D100.

First impressions?

It's a bruiser weighing in at 5.5kg and 14 inches (360mm high).

Sea & Sea have moved away from their traditional aluminium building material and



constructed the housing from ABS resin and polycarbonate. It quite dwarfs my F100 housing but to its credit has a very similar and familiar layout. Moreover, the handles and tray are quite large and I felt I was taking a step backwards after the very compact Coolpix 5000 and Subal housing. On the other hand it does appear well manufactured and up to the rigours of professional use.

All the controls are stainless steel and line up with little problem to the camera. In fairness to Sea & Sea, the D100 is quite a bit bigger than the F100. It further has far more buttons so an inevitable increase in size is a necessity. I am not used to a 'see-through' housing so it was also reassuring to be able to see no water inside. I've always had leak detectors in the past but I've always had a nagging doubt about them not working properly or the battery being drained.

How did it handle underwater?

Very well. With the shallow dome port and two medium size strobes it feels nicely balanced and weighs about half a kilo negative in seawater. I used a 512Mb memory card that gave me well in excess of 100 high resolution jpeg images per dive. This resolution is of good enough quality to print at 300 dpi up to A4 size (i.e. a full page in a magazine).

As I have generally found with all digital cameras a good deal of tweaking is required underwater to get a nicely lit and saturated image when using the program setting so I shot the whole week in manual mode. This suits me better as I am used to using manual mode most of the time with the F100.

The staggering difference, which is not particularly new to the D100, is instant results. But what is different is that the screen gives a much better



dials. The camera slides into the housing on a quick shoe and lines up fairly easily with all them all. The only essential thing to remember is the rubber eyepiece on the rear of the camera must be removed. If you forget, or don't fully read the manual, everything works fine except the main control wheel – enough said. A big advantage to existing Sea & Sea housing owners is that the ports are identical to the F100 housing and can be easily interchanged with each other. A nice modification over the F100 housing is that the focus select knob has been extended with a stainless steel shaft. This allows the control to be reached even with the large eight-inch (21.4cm) dome attached. Further the tray allows the use of this large dome without the housing toppling over on dry land.

Disappointingly and similar to the NX100 housing the shutter release spring has not been improved, and is far too weak. The result is many unwanted frames or repeated frames. With the F100 housing it is easy to make a third turn in the spring to tighten it up, however, I had to resort in wedging a half inch (1.25cm) piece of eraser underneath it to achieve a similar result.

All other controls felt easy to use with the single exception of the camera's front wheel. I set this to control the aperture as part of the custom camera settings. This mode of working is mandatory if using G lenses. However, it does require you to make quite a few turns to change from one f stop to the next. I thus might go back to using the aperture gear on the left hand side, which has a much higher



indication as to whether the image is sharp than previous cameras I have used.

My *modus operandi* was to guesstimate the exposure and shoot. Fine adjustments were made to either the aperture or shutter speed until the perfect lighting effect was achieved. This often took three or four frames to get perfect. The other great advantage over non-SLRs digital cameras is I could shoot all the way up to f32 giving me a tremendous depth of field. The

playback feature, operated through the housing, was then used to show the client the 'perfect image' underwater. This allowed them to confirm that we had what they wanted or a different approach was necessary while still being in situ. I think they were far more impressed than I was.

What about the controls?

Just about every control you could require is accessible via a plethora of push buttons and



gear ratio. The back is fastened by no less than four over-centre catches without the necessity for any tools. These are a bit fiddly to line them all up, but certainly felt secure when closed. They further lock shut making the back virtually impossible to open by accident.

Functions accessible include:

- * Mode Dial
- * Power Switch
- * Shutter Button
- * Exposure Correction Button
- * Sync Mode Button
- * Illuminator Button
- * Sub Command Dial
- * Function Dial
- * Focus Mode Select Dial
- * Light Level Control Correction Button
- * Format Button
- * Bracketing Button
- * Monitor Button
- * Menu Button
- * Thumbnail Button
- * Protect Button
- * Extended Function Control Connector
- * Enter Button
- * AE/AF Lock Button
- * Main Command Dial

- * Multi Selector
- * Delete Button
- * Extended Function Control Connector
- * Strobe Connector

What strobes did I use?

The flash arm shoes, which accept flash arms such as Ultralight or similar, are on each handle and not the housing. This does further increase the size but I didn't find it of any detriment underwater. The housing has two five pin Nikons style sockets mounted on the top. The sockets, however, only have two pins that are connected. There is a good reason for this. If one connects all five pins and uses any strobe other than Nikon's own SB-80DX, SB-50DX or SB-28DX they won't fire. Even the Nikon SB24/25/26 etc won't work unless you set them to Auto mode (i.e. non TTL). So only two pins will fire non- Nikon digital strobes. But if you are intending to house a Nikon digital TTL strobe you will require all five pins. Don't you just love those guys at Nikon! Thus my Sea & Sea YS50 and

YS60 strobes had to be used in manual mode. This was not really a problem. They give out heaps of light to correctly expose a digital image and indeed I used diffusers on them for most of the time. The rule of thumb was f5.6 at 2 meters, f8 at 1 meter; f11 or 16 close up (the D100 was set to the lowest ISO which is 200). Similar to negative film and unlike slides, digital has a wide degree of exposure tolerance. It was thus quite easy to get correctly exposed results using manual flash.

Value for money

I think Sea & Sea may steel a great deal of the market share with the DX-D100. It has a very reasonable suggested retail price of £1300. Furthermore already the street price is about half that of some of its aluminium competitors. If you have or are thinking about getting a D100 then this housing is definitely worth considering. Yes it's not aluminium, but in two years time it will be out of date and in semi-retirement as the D200 (?) version replaces it.

Specifications:

Compatible digital camera:
Nikon D100

Construction - Front case: ABS resin, Rear case: Polycarbonate
Depth rating: 60m/200 feet

Dimensions (housing only): 363 x 220 x 135mm (14.3 x 8.7 x 5.3 inches)

Weight: Approx. 5.5kg

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Steel Investments Are Riding High For Coolpix Owners. (But Plastic Doesn't Look Too Clever).

The UK5000 housing compliments the Nikon Coolpix 5000 beautifully. From the beginning it was designed solely for that camera. Smaller, lighter, tougher and easier to handle than the plastic "one box fits all" designs being rushed to market, the UK5000 took time to develop. And it shows.

Aluminium has long been the preferred choice of professional underwater photographers who measure value for money in terms of longevity, durability and reliability. The UK 5000 hugs the camera to keep the overall dimensions as small as possible. And because it is so compact it displaces little water (remember Archimedes?) so its already slightly negative. So you don't have to travel with a weight tray to get it underwater. Controls are laid out to make shooting as easy as possible. The inside of the housing is flock lined to absorb light and avoid internal reflections that could mar your images. The housing hull is secured by safety locked over centre catches.



The heart of any camera is its optical system. UK Germany provide a flat port for use with the 5000s built in zoom. This is the ideal range for fish photography. Macro is yours at the touch of a button. If you want to shoot really small add the inexpensive Nexus Wet Lens. Easily slipped on and off during the dive, this specially designed dioptre lets you shoot tiny animals up close and personal.

For wide angle choose Nikons EC68 wide angle adapter. It's perfect for large subjects like divers, sharks and mantas. UKs dome port lets you take it underwater.



And you are assured of the widest choice of flashguns through UKs use of the Nikonos socket. This is the industry standard. So you are not forced to buy an own label strobe from your housing manufacturer. Naturally, the UK 5000 also accepts the groundbreaking Inon T Flash, the ultra compact wide angle gun that's receiving rave reviews from the serious set.

Of course even the best housing can be rendered useless if the back ups not in place. At

Optics we pride ourselves on our aftersales. So we won't let you down for the sake of an O ring or take three months to service your housing. Which is why Ocean Optics is the first choice of so many top underwater photographers, photo journalists, authors, commercial diving companies and scientific diving teams.

As we've explained, the UK 5000 has little in common with a plastic housing. Other than price. At just £999.00 it's a steal.

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