Gates housing for Canon HF-S11 with GP32 wide angle port.



Pushing Fin purchased the Gates Underwater Video housing for the Canon HF-S11 from Scuba Symphony, Kuala Lumpar in March 2010.

The sales service we received from Sim and Tan at Scuba Symphony was flawless. All pre-sales questions were answered quickly and in full detail.

During the ordering process they kept us up to date with the shipping and arrival dates. Friendly and helpful, these guys are highly recommended.

As for the housing itself it's still early days but these are our initial impressions.

Sample video footage from this camera and housing set-up can be seen <u>here</u>

The aesthetic

The first impressions, out-of-the-box...everyone that has seen this Gates housing has commented on how good it looks. Not only is it aesthetically 'cool'; the engineer types all appreciate the quality of the finish. Regardless of the fact that it's an underwater video housing or an overnight bag it looks 'cool'....

Set-up & camera installation

Despite our initial fumblings in the shop we are now finding it a straightforward procedure to install the camera.

Initially it did take some experimenting to work out where the on/off control arm was supposed to be positioned for installation and operation and that the camera is installed in the housing with the flip-out screen closed, then you open it, but now we know it's easy...

The biggest issue we have with the housing is the mounting screw in camera mount (CDM). The CDM is a plate that screws into the tripod mount of the camera, once in place the CDM is inserted into guides inside the housing so the camera is always located in the correct place for the controls.

The mounting screw on the CDM needs to be retained somehow in the mounting plate as we are always dropping it as we remove the plate from the housing to mount the camera initially.

We can see that because the base of the plate has been counter sunk for the screw head it leaves no easy option to retain this screw but it would help.

The CDM is a tight fit into the housing and I did find it 'stuck' when trying to remove the camera after the dives. I'll add a film of silicone and see if that helps, I expect frequent use will also free it up a bit.

Other than that mounting the camera securely was very easy and the housing controls all operated the camera controls without issue.

Controls & Operation



The 'feel' of the controls is good, matching the look and finish of the housing.

The record on/off requires some pressure but is a distinct and 'positive' feel

The zoom control is great as the long lever gives a good degree of control. However we did find that zoom-in would stick. After pressure is released from the lever the camera was still zooming-in so we had to touch the lever back. Zoom-out however would stop zooming as soon as we released pressure from the lever.

All the other controls worked as we expected.

The remote control operation is straightforward. We are happy we have had a few hours of use of the camera on land previously or the menu options may have been difficult to remember and navigate while underwater.

Accessing and using the pop-up menu is a little bit easier via the remote control than it is using the camera's joystick directly – so that's a bonus.



Screen / monitor visibility

During the 2 dives the screen visibility was good. We didn't try anything fancy or get in 'tight places' but you'll see in the movie we were able to shoot a flounder at almost ground level and a couple low of shots angled-up.

The GP32 wide angle port

The wide angle port is wider than the Amphibico Wide Angle port we are used to using; significantly wider, so we actually got my fin tips in a shot that we were not expecting.

Despite it being wider there's no noticeable fish-eye like 'bending' of the picture or any distortion at the edges.

At the other end of the scale the close ups cannot match the set-up we have with the Sony HVR-A1P.

We had discussed the optics with Pam at Gates before purchase and her information was accurate, zoom through holds focus to between two-thirds and three-quarters of the camera's zoom range.

In the movie see the shots of the small grouper (white tip), the flounder's eyes, the scorpion fish, the feather star and the anemone fish. You will also see with the scorpion fish sequence and the black and white (Clarks) anemone fish the use of the camera's 1.7x magnify feature.

Here we used the zoom to the maximum the port would allow then used the camera's 1.7x feature; these pictures are close up enough for a day movie.

Feedback from Gates is that this camera has used a different optical set-up to any other camera on the market. This GP32 port is modified but essentially 'off the shelf'. It is likely other wide ports will be introduced that allow more zoom through capability.

For those who need macro, a flat port is already available and this allows for diopters to be mounted too.

The dome of the wide angle port is from optical acrylic. The information that comes with the housing recommends using air to clean it as this material can scratch easily. Though Gates also assure us it has been coated to makes scratches from normal cleaning unlikely.



Housing ergonomics

Holding the housing steady underwater is something we still need to get used to. Our other housing is narrower and we use the viewfinder so the position gives a third point of contact with the viewfinder up against the mask and elbows tucked in.

This housing doesn't allow that position, being much wider and there's no viewfinder to use in that way. So initially we was finding it hard to hold the housing steady laterally. It felt it was tilting left and right, up and down, like steering a car down a bumpy road.

You will see stability problems in the scorpion fish sequence as this

was filmed in surge on the reef top too.

Having said that it's more a case of getting used to the camera's balance and my position. The final shot of the bubbles and water surface was filmed one-handed.

Overall for the housing we are very happy; it looks good and works well.

The HF-S11 camera underwater



Now the camera's performance.

For such a small camera we are impressed, it's performance is very good.

While using the camera on land we have been surprised by the sharpness and detail in the picture; underwater we are still impressed.

Focus

We have a lot of experience with using the Sony HVR-A1P, also a small lens camera and not renowned for good low light.

You will see in the footage that the first dive was not well lit. It was overcast with light cloud and the dive site was in shade. If shooting with the A1 we would lock focus otherwise we would see occasional 'focus-hunting'.

Since we were testing the HF-S11 we went without focus-lock most of the time and it did not focus hunt at all, even with fast movements and low light.

White balance



The camera required the red filter at a shallower depth than the Sony but once in place it had no problem finding a white balance.

The red filter is built-in to the housing and is moved into place or removed using a lever on the front of the housing.

Actually 'white-balancing' the camera appears 'odd' but good. We were using manual white balance and found that it made little

difference if I had the white card in front of the camera or not!

After pressing the MWB button via the remote control the camera found a white balance whether it could 'see' the white slate or not.

We will experiment more with this but initially it seems very easy and 'clever' and gives good results.

Custom control

We set the camera's custom button and control to manual focus, this will take some getting used to or it may be useless. The camera does not display the focus distance until you reach it's limits of infinity or minimum focus distance and the control is not sensitive so it takes a lot of twirling the control to see the focus move. This is a problem on land as well as in the housing.

Being able to lock focus is very useful to avoid focus hunting and for ensuring the subject is in focus and not the background but this can also be done via the camera's pop-up function menu.

We will practice more with the custom control and also try it set for exposure and see which will be more useful day to day.

Photos



During the dive we experimented with the camera dual-shot mode which allows you to capture high resolution photos while recording video at the same time.

The feature works well and may allow us to offer additional products on the day trips however dual-shot mode sets all functions to auto including white balance so we end up with clips with different colours as some were with manual white

balance and some with auto. Correction 'in post' is possible but not ideal.

Nonetheless the photos turn out with good quality.

Summary

We are happy with this package seeing the future of recording to digital media.

We edit with the Edius video editing package and their latest version makes native AVCHD editing possible even on an old dual-core PC.

For shooting and making 'dailies' time is always an issue, a huge benefit is the time saved in quicker than real time footage acquisition. It also frees-up the camera and gives more available time to capture 'more of the action'.

So no more DV tape but a lot more hard disk storage.

For the price of the camera we are impressed with it's performance and picture quality and combined with the housing and the ingenious use of the full-function remote control it's a great solution for us.

Thanks to Sim and Tan at Scuba Symphony for your time, advice and service.

Simon Deane

Pushing Fin Video Service – Underwater Specialists