

From Stills to Video

by Rob Duncan

I have always had an interest in shooting video, but as a still shooter, the whole process has always intimidated me. The shooting and post processing that go into making a great video seemed daunting. But with video becoming more of a relevant feature of still cameras, I thought that it might be a great time to take that leap.

I had an opportunity to travel to South Florida along with fellow Backscatter West teammates, Sean Boone and Becca Boring, to shoot under the direction of Nauticam USA's Chris Parsons. We arranged a couple days of boat diving with Pura Vida Divers, as well as three evenings of diving the Blue Heron Bridge. This meant that I would have a chance to try some wide-angle video drift diving off the boat, and be able to get some great macro video while diving at the Blue Heron Bridge.

I opted to use the new Panasonic GH4 Micro Four-thirds camera along with the Nauticam NA-GH4 housing. Lens choice was fairly easy, the Panasonic Lumix G Micro 4:3 FISHEYE 8mm for wide angle, and the Olympus 60mm macro for the close-up shooting. Here's a list of a few essentials you'll need to consider

when making the transition from stills to shooting video.

Setting Exposure

You are going to want to set your exposure before you start shooting. There is a lot of discussion on frame rate and shutter speeds. Frame rate refers to how many actual frames are being exposed per second (30p = 30 frames per second and so on). Shutter speed is how long each one of those frames is exposed (1/60th means that each frame is exposed for 1/60th of a second). For the best results, you typically want to double the shutter speed over your frame rate. So if you have your camera set to 30p frame rate, you should have your shutter speed at 1/60th of a second. Just remember like still images, if you drop your shutter speed too low you will start to get motion blur in the shot. But play around with this, you might find a combination that fits your creative eye.

As with shooting stills, setting aperture adjusts your depth of field (DOF). For shooting macro video you need as much DOF as you can so I was running at f/18 and even f/22 to maximize my DOF. With lights, this is very easy to do. For shooting wide



video where lights have less of an impact on the scene, I was shooting at f/8 or f/11 most of the time.

Once you have set your aperture for DOF, you have only two adjustments to consider, ISO and light power. Depending on the camera you

are using you may not want to run your ISO up too high, so having lights that have some adjustment in output is great. You can even adjust the exposure by moving the lights closer or further from the subject. If your lights are not powerful enough to get

a good exposure, you will have to sacrifice DOF in order to get the exposure correct.

Stability is Key

Shaky video is never good. With macro video even the slightest movement is very noticeable. This is why a tripod is not only recommended, but required in order to capture steady video. I used the XIT404 Tripod Bracket along with their Twist Clamp Tripod Legs. The bracket is a great platform for mounting pretty much any sort of housing to. The twist clamp legs are very easy to use, and can be adjusted very quickly so that you can make adjustments on the fly and get that perfect composition. To help stabilize the rig while shooting wide-angle video, I removed the tripod legs and mounted a very long strobe arm on the left side ball mount of the tripod bracket. I angled it back so that I held onto it with my left hand, and with my right hand held onto the housings handle and operated the controls. To get my rig more neutral in the water, I used the Nauticam Carbon Fiber Double Ball Float Arms.

Nail the White Balance in Camera

Unlike shooting stills, you do not have RAW files with video. Therefore you have very little leeway in making color correction adjustments in post processing. Because of this, you really have to get your white balance as close to perfect in camera. If you are very close to your subjects where the ambient light is not going to be a factor you can get away with an auto white balance. But anytime where the ambient light will be a part of your scene you must execute a manual white balance, even if you are using lights. Doing this will insure that your background color will be spot on. This means

that being familiar with the manual white balance process on your camera is necessary. If this is not something you are familiar with, refer to your camera's instructions, or give us a call and we can walk you through the process. In a location like the Blue Heron Bridge where you have a light colored bottom, this process is fairly easy by white balancing off the sand. You can, of course, also use the palm of your hand, and I know some people even carry a slate, or use white dive fins.

Get Creative With Your Lighting

With LED technology advancing very rapidly, there is a huge selection in video lighting that has become relatively inexpensive and easy to use. Let's face it, unless you see a behavior that nobody else has seen, it is very difficult to capture a compelling video. If you get a little creative, you can get some amazing results and set your videos apart from all the rest. Lighting is an easy way to do this. Experiment with different lighting positions so that the shadows help separate your subject from the background. I even mounted a new Fisheye FIX Neo 2000 DX SWR light on a separate tripod so that I could position it into pretty much any location around the scene. I positioned the light directly above the subject giving a spotlight effect. I even put the light down low and off to the side creating interesting shadows. This new light features a spot beam as well as a wide beam. The spot beam was great, but was not narrow enough for what I wanted to do so I improvised a snoot that I attached to the light giving me a very narrow beam of light that would allow me to light just the subject and keep the surrounding scene dark. When shooting wide angle, I used the new Keldan Luna 4X video lights. These are similar to the original Luna 4s but are



now 6000 lumens, and feature a dome port giving you a much wider even beam making them the perfect choice when shooting with the fisheye lens.

Focus Is Crucial

Just like stills, you cannot bring an out of focus video into focus in post. Make sure that your focus is “tack” sharp before you even start recording. With in-camera tools like focus peeking, even if you have bad eyesight you can tell if the subject is in focus. I personally used the manual focus feature a lot on the GH4 to really nail it. The great thing about the GH4 and the Nauticam housing is that it is very easy to switch between autofocus and manual focus with just the flick of your thumb. I would sometimes switch into autofocus so that I could get in the ballpark, but would then switch into manual focus to fine-tune it. For macro video, you really want the focus to be on the subject's eye, so make sure the eye is as sharp as possible.

Shoot More Than You Think You Need

Shooting a still image captures a brief moment

of time. With video, you are capturing a sequence of events, and a lot of the time you are capturing a behavior. So it is always a great idea to capture as much footage as possible. Let the camera run for a while. There is no way to avoid camera shake when starting and stopping the video, so having some lead-in time, and lead-out time on the clip is a great idea. Letting the camera run for a minute or two might be enough, but if possible let it run longer. You can always cut the clip down, but there is nothing more frustrating than stopping the camera just as something cool happens. Memory cards are relatively cheap, so fill them up.

Learn Behavior

Watch how the critters move around, and react to your presence. Anticipate what they are going to do next. If you are trying to shoot a shy subject, act accordingly. Approach with care, and don't blast them with light right away. It's a good practice to set the shot up, nail your focus before you turn the lights on. This is a good way for the critter to get a little more comfortable to you being there, and might not get as spooked when you do power up the lights. Also be respectful to the critters. They are much more sensitive to light than we are, and sitting there with all those lumens of light blasting them in the eyes could

make them uncomfortable. Get your shot, and move on.

A Different Way of Looking at Your Subjects

I was a little nervous taking this leap into video. I felt that there was so much to learn, and so much to remember. But once you have these basics down, it is actually very easy, and quite fun. Video gives you an entirely different way of looking at subjects, and opens your eyes to a whole new way of expressing yourself. I am eagerly waiting for my next opportunity to get in the water and shoot some video!

Rob Duncan
www.backscatter.com



WETPIXEL

THE SOURCE
www.wetpixel.com