

Taking Care of Your Video Equipment So That It Takes Care of You

By Steve Douglas

Nothing can feel worse than spending a fortune for airfare and an exotic live aboard or resort dive trip only to find that your camcorder or housing is not functioning properly. Then there are the times when things may go sour in the middle of the trip. That sick feeling in the gut is never pleasant. 'Why me' and 'why now' are the milder thoughts that come to mind. Sometimes these problems may be fixed 'in the field' but if not, you have to just hope that there is a good rental facility on the premises.

Perhaps these problems could have been avoided in the first place with just a little knowledge and preparation prior, during, and after your dive expedition.

Lets take a look at what you can do to ensure everything works as it is supposed to before you ever step outside and head to the airport.

To start things off I recommend creating a complete and full checklist of all your gear. When I first started diving in 1983, I was instructed to do this to avoid getting on my buddy's boat and discovering that my weight belt was still sitting at home. Thus, it became a mantra that was memorized, 'mask, snorkel, fins, booties, weight belt, B.C., wetsuit, hood, gloves, dive knife, spear (yep, I hunted a bit back in the day), tanks, and lunch. Whoa to me if I had forgotten lunch!

Lets apply this mantra to our camcorders and housing equipment. Most of these suggestions should be done long before you need to pack and go. If there is a problem before the trip you will have time to set things right, make that unexpected purchase, or have something repaired.

Camcorders

1. Camcorder Batteries...make sure they are fully charged and tested before they are ever packed for the trip. If the batteries have lost their ability to hold a charge then it is time for a new one.
2. Charger....make sure it is working properly.
3. Cables for the charger....boy, would you be stuck without these.
4. Camcorder.... test it out and record something, play it back, make sure everything is working as it should.
5. Tapes.... do you have enough for the trip? Better to have too many than too few.
6. Head cleaning tape.... you shouldn't need this but it is a great thing to have should the heads get dirty and ruin your clips in the middle of the trip. They are the size of a regular mini-DV tape and inexpensive.

7. Outlet strip.... I never, ever go on a dive trip without one. On a dive boat there are frequently too few outlets for everyone to plug in their chargers. Having one of these along provides you with the outlets you will need.
8. Outlet adaptors and voltage converter.... different countries use different currents so it is best to be prepared on this count.
9. UV and Protection filters...there is a great chance that you will be shooting some topside footage as well. Having these in your camera bag will provide the ability to protect your camcorder lens and reduce the effects of atmospheric haze by absorbing ultraviolet rays when outdoors.
10. Dusting brush.... often with a squeeze attachment that can gently blow dust or lint off the lens and eyepiece. It is much better to use one of these than to blow on them yourself. Lens cleaning papers are also recommended.
11. Zip lock plastic Baggies...Should you bring your camcorder into an air conditioned cabin and then back out into a hot and muggy climate, condensation will frequently occur and the camcorder's condensation sensor will prevent you from filming for up to an hour or more. Placing the camcorder in a zip lock baggie and putting it outside on the camera table will acclimate the camcorder in ten minutes or so. This is a great little trick taught to me by professional videographer, Bruce Robison, and it really works. Obviously, make sure the Baggies you buy are large enough for your model of camcorder.
12. Mark all batteries, chargers, and parts with your initials or name, as there may be some on board with the same equipment. Having them marked will prevent confusion and possible loss.

Housing

1. Long before you depart place the camcorder in the housing and test all the controls. Make sure everything is working as expected.
2. As with the camcorder, make sure your light batteries are fully charged. I will place the lights in water and let them discharge. After a full burn I then recharge them again. You are conditioning the battery by doing this, especially needed if they haven't been used in some time.
3. For electronic housings make sure you have some extra handle batteries just in case the ones you have installed have aged a bit too much.
4. O-rings.... clean and re-grease all o-rings before you start on your trip, but be careful not to leave too much grease on them as this can attract dust and hair which may cause a problem. Be sure to pack your Light and Motion O-ring grease.
5. Lint free cloth.... a 'blood cloth' is made for surgical use and does not leave any residue. These serve well to clean and wipe lens and other housing and camcorder parts. I find that micro-fiber cloth or new, cloth diapers are also an excellent alternative. I usually pack about three.

6. A Light & Motion maintenance contract is a great idea and can save you time and expense in the future.
7. Remember that camcorder and Baggie trick? It works to prevent condensation in housings as well. I never really have to use this trick for the housing because I always leave it securely on the housing table.

Okay, you have marked off each item on your checklist and now are ready to pack, but there is yet more the prepared videographer should be aware of.

8. When packing your housing do not attach your large wide-angle lens onto the housing itself. Rough treatment by the airlines may cause a problem to the front plate of the housing. Much better to leave the lens unattached and separate.
9. When traveling by air, be sure that your housing is not completely closed as the change in air pressure may create a partial vacuum within the housing making it difficult to open.
10. When using your Pelican case, remember to adjust the depressurization knob so that the case will also be easily opened.
11. If you are using another form of case, a larger cooler for example, make sure the housing, lights, and everything else is well protected. In the past, when using a cooler, I lined it with thick bubble wrap and then used more bubble wrap individually around the housing and every thing that was enclosed. Clothing and laundry provide additional padding and protection.
12. With the heightened security at most airports, using a regular padlock, or even tie wraps, is asking for trouble as these will be frequently cut off leaving your gear vulnerable to breakage if there is a spill, as well as theft. I strongly recommend the use of TSA approved locks for additional and necessary protection.

On The Boat or At the Resort

Proper maintenance of your equipment while on the boat or at the resort is equally important as your pre-trip preparations. It is not as time consuming as it may sound and is simply the wise and prudent thing to do to ensure that you have a trouble free vacation.

1. Before ever entering the water review with the boat tenders and dive crew exactly how you want your housing to be handed down to you once you are in the water and specifically what they should grab once you are ready to pass your equipment back up to them. Do not assume that they are familiar with the model of your housing or that they know not to grab hold of the lights or monitor. Good communication with a friendly but instructive manner will go a long way.

2. Always rinse or soak your housing in fresh water after each dive. Most dive boats have specially set rinse tanks to be used just for housings and cameras. No booties, masks or dive gear should ever be rinsed in this tank.

3. Be VERY AWARE of RINSE TANK DEMOLITION DERBY. Too often dive crews will hand cameras and housings up to crewmembers who then place them in the rinse tank. You just might find that there are other housings now placed on top of yours, strobes and lights against your unprotected lens, light arms or controls now damaged. While a good long soak to rinse off salt particles is the best thing; it just might not always be possible. It will serve you well to rinse your housing and then set it safely on the camera table out of harms way.

4. While your housing is on the camera table, make sure to replace the lens cover. This will protect your lens from errant light arms and other scratch inducing projections.

5. If it hasn't been announced, be sure that everyone on board is aware that no cups of coffee, food or water bottles are to be placed on the camera table.

6. Female connections for the light pods – I use a syringe to wash them with fresh water at the end of a day's diving, and then before packing for the return trip home.

7. Some people clean and re-grease the o-rings after every dive. That is an accident getting ready to happen. I may re-grease the o-rings part way thru the trip depending on how many dives I do.

8. Make sure the male connections to the pods are dry before putting the lights away as there can be some air oxidation of the pins.

9. Try not to twist the cables from the pods to the lights as over time it might cause a break in the cable.

10. Mark the covers to the pods so that you can put the same cover back on the same pod. They have been factory checked at pressure as a matched set.

11. When the housing is sitting on the camera table keep the back plate on the housing as other people may not be as careful as you are and splash water into your housing.

12 Do not use compressed air to clean water off of the lens or housing as you may force water inside

13 When opening your housing (or camcorder) remember that your hair may be wet and may also drip water where it is not wanted.

14 Double check that you have properly connected the monitor cable to the monitor.

15 Do not wait until the last minute to get your video gear ready. Prepare and check everything before the dive briefing, not when everyone is rushing to suit up.

16 When all is done, double check that all is sealed and ready to go. The one time I ever had a flood it was because I was rushing, didn't check as I should have and became the proud owner of a \$3,000.00 doorstop. It was entirely my own fault. Don't make it yours.

After You Have Returned Home

You had a great trip, all your video gear worked just perfectly on each dive. You've patted yourself on the back for doing a great job taking care of your camcorder and housing before and during the trip and you came home with some fantastic video clips waiting for the editing bay. WAIT! There is still a little more to be done. Now is the time to run the sink or tub and, making sure your housing is properly closed, soak it, the monitor, battery pods and lights in a nice warm bath. Let those salt crystals just melt and wash away will be just the thing your Light and Motion housing will appreciate after having served you so well. It need not be all night; an hour should do just fine. Then once your housing has been well rinsed and dried, carefully remove the o-rings. (I use half an old credit card, never a dental pick) and clean and re-grease them before storing the housing away. Recharge your light batteries and place them out of the way of too much heat or cold.

Preparing your equipment is as important as preparing yourself. What may seem like a lot of 'to do's really is not that much once you get into the good habit of proper maintenance. These good habits will become your mantra as you mentally review and check your housing and camcorder. Because you have taken proper care and precautions before, during and after each dive trip, you can be assured that your video equipment will continue to serve you well for many dive trips to come.

Happy Filming!
Steve