

Owner's Manual

Top Dawg

Video Systems



Top Dawg
For Sony camcorders.

www.topdawgvideo.com

Welcome

Thank you for choosing Top Dawg video systems.

Please inspect the packaging of your product to verify that there was no damage during shipping.

If you are not familiar with your camcorder's features, please take time to do so before you proceed in this manual. This manual assumes you have a working knowledge of your camcorder and will only cover operational procedures relative to the underwater housing.

The term "Push" when referenced in this manual means to press and release in one motion. If a function requires a button to be continually held, the manual will state, "press and hold".

Periodically refer to the website for instruction revisions.
<http://www.topdawgvideo.com>

Caution - Caution - Caution

We hope you have a wonderful underwater experience with Top Dawg equipment. To increase your enjoyment and the life span of your new gear please take an extra minute to review common errors which will result in equipment damage or destruction.

- Check the operation of all your equipment several weeks prior to your trip. If maintenance or repair is necessary, then time is available for both shipping and repair scheduling.
- When traveling, never transport or ship the housing with the camcorder inside. This may damage your camcorder's mounting threads and base.
- Never leave your housing in the rinse bucket, it may be damaged by other equipment.
- When removing the camcorder from the housing after a dive, do so in a dry controlled environment after you have dried yourself and the housing. This prevents water from other equipment or water from another diver accidentally entering the housing or damaging your camera.
- Do not install your camera too close to the front port of the housing. The camera may scratch the port and show up in your image.

O-ring Care & Maintenance

O-rings are the critical component that keeps water out of the housing. Routinely inspect o-rings and replace at least once a year. If your o-rings are damaged, contact your dealer or the Backscatter service department for an o-ring replacement kit. Always travel with a spare kit.

Follow these steps for proper o-ring care.

- 1) The sealing system used on the rear plate incorporates two o-rings. This is the most critical area of the housing for maintenance.
- 2) Always remove, clean, and lightly grease o-rings prior to use as described below. With careful technique, you will be able to make a few dives on each cleaning.
- 3) First, remove the o-rings by squeezing and sliding your fingers. If you have trouble, use the edge of a plastic credit card to gently slip the o-ring out of the groove.

Never use a metal object to remove an o-ring. It will cause damage to the o-ring and mating surface.

- 4) Use the folded corner of a lint-free cloth to clean the o-ring grooves on the rear plate. Visually inspect the grooves for debris and damage.
- 5) Again, using the lint-free cloth, gently wipe off debris and excess grease from the o-rings. Use care not to stretch the o-rings.
- 6) Lightly grease the o-rings with the silicone grease provided in your kit. Be careful, too much grease will only attract debris. Remember, the grease doesn't seal water out, it only serves as a lubricant to allow the o-rings to slide into place. Only a thin coat of grease is necessary.
- 7) While greasing, check the o-rings for damage by sliding the o-ring through your fingers, feeling for any debris, nicks, or wear.
- 8) Visually inspect the o-ring grooves for debris prior to re-installing the greased o-rings. Re-install both o-rings in the rear plate.
- 9) Prior to installing the rear plate, again visually inspect the o-rings and the sealing surface on the housing.
- 10) After opening the housing to change tapes or batteries, again visually inspect the rear plate o-rings and the housing sealing surface prior to installing the rear plate. Debris collected while on the dive may require you to remove, clean, and grease the o-rings again. When in doubt, take the time to clean!

1. Remove O-Rings



2. Clean Grooves



3. Clean O-Rings

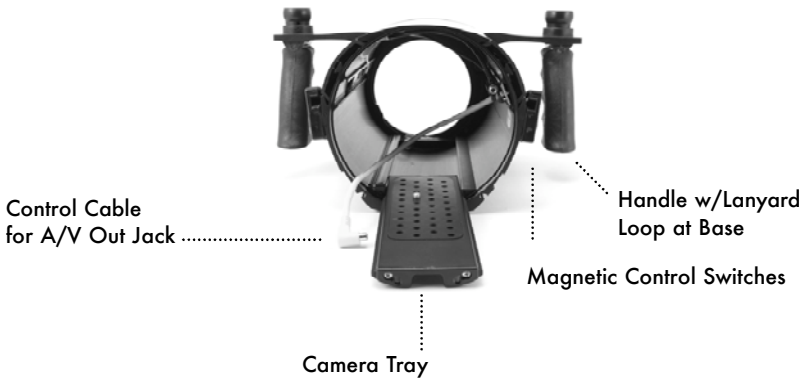
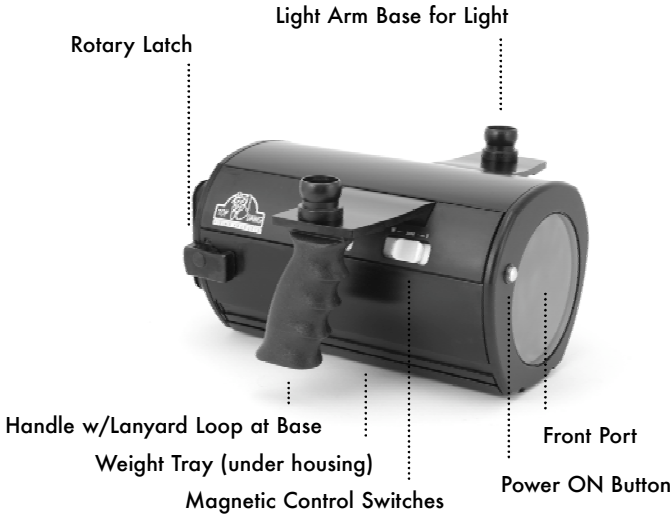


4. Lightly Grease



Getting Started

Illustrated below are the locations of the Top Dawg basic components. Please take time to familiarize yourself with the housing.



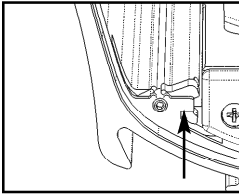
Mounting the Camera

1. Remove the Monitor Back by simultaneously rotating both latches.
2. Remove the Camera Tray.
 - A. Push forward on the Camera Tray.
 - B. Press the black Camera tray Release Button down (See Fig. 5).
The Camera Tray is spring loaded and will slide out of housing.
3. Position the Camera Tray underneath the camera. If this is your first installation, you will need to select the best tray hole to position your camera. Notice that many holes are available (See Fig. 6).

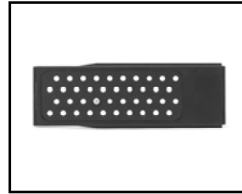
Select a mounting hole that will position your camera as forward as possible to prevent lens reflections, but not too close as to scratch the front port. You will need to select a second mounting position when using optional wide angle lenses and filters.

4. Select the best hole in the Camera Tray and secure the camcorder to the Camera Tray by tightening the Mounting Screw into the tripod mount of the camcorder. A small coin is an easy tool to use to tighten the screw.
5. Plug the Yellow control/video out cable from the Top Dawg's electronic board into the A/V Out jack on the camera. Check your instruction manual for the location of this jack on your camera (See Fig. 7).
6. Align front of Camera Tray with base of housing.
7. Slide Camera Tray forward until Release Latch engages.
8. Attach Monitor Back (See Fig. 8)
 - A. Perform an o-ring inspection. See page 3 for o-ring tips.
 - B. Align guide pins of the Monitor Back into base of Camera Tray.
 - C. Rotate both latches evenly until they lock. Ensure rear plate draws in straight and that o-rings seat properly.

If your camcorder is an older style HC or TRV series camera that does not have the 10 pin A/V connector, but uses the LANC or Remote jack for controls, please contact Backscatter or your local Top Dawg dealer for assistance.



(Fig. 5) Tray Release



(Fig. 6) 13 Tray Positions



(Fig. 7)



(Fig. 7A)



(Fig. 8)

Display Icons on Monitor Back

Monitor Screen: In order to see the camera display information on the monitor screen, you will need to set the camera to V-OUT/PANEL on the menu screen. Go to the menu, select DISPLAY and set to V-OUT/PANEL (see Fig. 9 and 10. Refer to your Sony camcorder instruction manual). If done correctly, the external monitor back will now display all of the camcorder's viewfinder information.

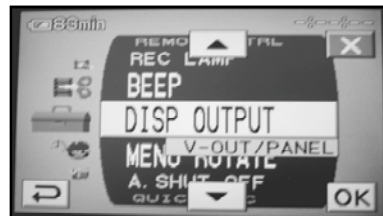
Format Monitor Aspect Ratio

If the picture on the Stingray HD monitor appears "squished", then a setting needs to be changed on the camcorder to display the video correctly.

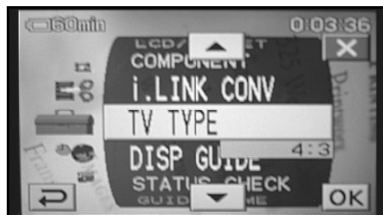
Enter the camcorder's menu; enter the STANDARD SET submenu then scroll down and select TV TYPE. Change the TV TYPE setting to 4:3. Exact steps may vary depending on your camcorder model (Refer Fig. 11).



(Fig. 9) Sony HDR-SR12



(Fig. 10) Sony HDR-HC9



(Fig. 11)

Operation

The Top Dawg housing is designed to access basic camcorder features using electromagnetic switch control sets (left and right side of housing) and mechanical interfaces (front plate).

Front Plate

ON Button - Press the ON button once to turn the camcorder on after camcorder has been turned off by the MODE/OFF switch, or if camcorder has automatically gone to sleep. Camcorder will be on and in Camera mode when properly installed into the housing.

Right Control Set

ZOOM Switch:

T - Slide forward and hold for telephoto (subjects appear closer).

W - Slide rearward and hold for wide angle (increases viewing angle).

MODE/OFF Switch:

Slide switch backward and release to toggle between Camera and Memory modes. (Memory mode shoots stills to the Memory Stick. Cameras without the Memory Stick feature will not change modes.)

Slide switch backward and hold for three seconds to turn camcorder OFF.

REC/PHOTO Switch:

In Camera mode, slide switch forward for record and once again to return to standby.

In Memory mode, slide switch forward and release to capture an image to Memory Stick.

Left Control Set

MANUAL FOCUS Switch:

N - Slide switch forward and hold to put camcorder into manual focus and move focus point closer to camcorder.

F - Slide switch backward and hold to put camcorder into manual focus and move focus point further from camcorder.

MOM. AF / AF LOCK Switch:

MOM. AF - Slide switch forward and hold to put camcorder into "momentary auto focus". Camcorder remains in auto focus as long as the switch is held forward. Once released, the camcorder switches to manual focus. This is useful in stopping the camcorder from "seeking" when filming in a low contrast environment. To return the camcorder to auto focus, slide MOM. AF / AF LOCK switch backward to the AF

LOCK position and release.

AF LOCK - Slide switch rearward to return camcorder to auto focus from manual focus.

Monitor Back Operation

Monitor Back Identification



BATTERY HOLDER - Install 4 AA batteries. Burntimes: NiMH Rechargeable (2+ Hours), Good Alkaline (2 Hours), Cheap Alkaline (1 Hour).

INTERNAL VIDEO JACK and CABLE - First connect cable to the video out jack on the Top Dawg's electronic board. Prior to installing monitor, connect cable to monitor's video in jack.

MONITOR SHADE (sold separately) - Install the shade to improve viewing during daytime shooting.

When camcorder transitions from Memory to Camera modes, there is a 2-3 second pause while the camcorder transitions. The Monitor Back may not display an image during this time.

Moisture Alarm

LCD Moisture Alarm - Audio alarm will signal if moisture is detected inside the housing. The alarm performs a three second diagnostic check when initially receiving power.

When the camcorder transitions from Memory to Camera modes there is a 2-3 seconds pause while the camcorder keys the tape. The Monitor Back will black out during this time and LED alarm will sound when Monitor Back is re-powered.

Pre-Dive Checklist

- 1) Install appropriate media for your camcorder if necessary.
- 2) Install a completely charged battery in the camcorder.
- 3) Clean lens if necessary.
- 4) Verify operation of all housing controls.
- 5) Check that the rear plate o-rings are seated correctly and that the rear latches are in the closed and locked position.

First Time Use

All Top Dawg housings are pressure tested prior to shipping. However, there could be unseen damage due to shipping. A test dive without the camcorder in the housing is recommended.

After the initial dive with just the housing, make the following checks.

1. Dry off housing exterior.
2. Remove the Rear Plate and visually inspect for moisture.
3. Reach inside the housing and trace a finger around all view ports and mating surfaces.
4. If any water is detected, contact the Backscatter service department.

After Diving Care

1. Immediately submerge the housing in fresh water. While in fresh water, work all the switches and press all the buttons, to work any remaining salt water out of the housing buttons.
2. Remove housing from rinse tank and then simply towel dry.

Housing Storage

Store housing and Travel Case in a dry location the first 24 hours after a dive. Leave Travel Case Lid about two inches open. Allow any residual water to evaporate from the Travel Case prior to storing the housing.

Travelling With Your System

To avoid stressing the camera's plastic tripod mount, never travel with your camera attached to the Camera Tray. Remove the o-rings from the rear plate if your travel plans include changes in elevation from origin to destination.

Underwater Shooting Tips

1) Slow and steady movements.

Video is fantastic for capturing motion. However, too much motion will only make your viewers sick. When panning across a scene, move slowly and steadily from one subject to another. Allow the viewer time to see the detail.

2) Zoom with your fins, Not with your lens.

Water acts as a giant blue filter and quickly absorbs color and reduces sharpness. To minimize this effect, always get as close to your subject as possible (two - three feet). Only use telephoto zoom when shooting close-up and macro subjects

3) Sun at your back.

Video has a hard time with high contrast scenes. Maximize detail and insure a brilliant blue background by always shooting with the sun at your back.

4) Get close, then get closer.

For maximum impact, fill the frame with your subject. Get up close and personal. Most beginners try to shoot all of their subjects at three feet or further. Always try to get within two feet of your subject... and then get closer.

5) Know when to use lights OR a color correction filter.

Lights will always produce the best color, but are limited to close subjects. By getting close to your subject, you will increase the effect of your lights. Use a color correction filter on your camera lenses when you will be shooting subjects too distant to light. Never use lights and a filter at the same time.

6) Don't shoot too much.

Unlike shooting still photos, video is very simple and automatic. In fact it is so simple that most people shoot too much of it on a dive. Remember, your viewers will not share your enthusiasm if you bore them to death with an hour of swimming. Take time to reveal your subjects to your viewers and shoot steady shots from multiple angles. Keep things exciting by limiting each shot to a 10-20 second clip.

7) Make a 5 minute edited video.

A short, fast paced video will keep your viewers attention and have them begging for more. Keep it to 5 or 10 minutes and only show the best footage.

8) Take a class.

Many diving destinations have staff video pros that teach courses in underwater videography. Backscatter offers technique and editing classes throughout the year in Monterey, the Channel Islands, and abroad. Please inquire with your dealer or check out www.backscatter.com for a schedule.

Returning Products for Care

We highly recommend a factory annual service to maintain proper operation of your Top Dawg equipment.

- 1) Before returning your Top Dawg product for care, please contact Backscatter for a RMA# then download and complete a service request form from www.topdawgvideo.com/service.html
- 2) Ship your product pre-paid freight with the shipping label provided on the service request form. When packaging your housing, protect the front port to avoid scratches. It is recommended that you keep your shipper's tracking number until the product is returned to you.

Warning: Do not ship your camera inside the housing to avoid costly damage to the camera's mounting threads and base. If we request your camera, please package it separately.

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