

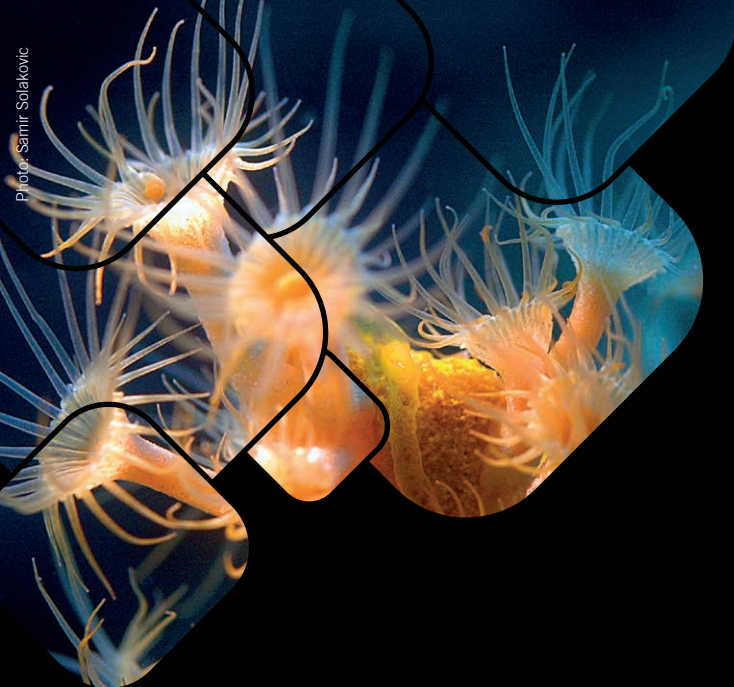


Photo: Samir Solakovic



Vision n **Xs**

Hugyfot User Manual



Hugyfot User Manual

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History

In 1953, René Hugenschmidt is introduced to recreational diving in Nervi, Italy. From that moment on, he decides to dedicate his life to Underwater Photography. The young Swiss Engineer transformed his Zürichsee workshop into a Hugyfot plant, initially fabricating underwater housings for Agfa, Edixa, Exakta, Kodak, Leitz, Voigtländer, and Zeiss cameras.

Meanwhile, the Cousteau-Gagnan regulator is released and the world's first diving magazine is published in Paris. Professor Hans Hass, Austrian Marine Biologist and Underwater film pioneer, known for his documentaries Adventures in the Red Sea (1951) and Under the Caribbean (1954), sparks people's interest in the underwater world. The diving industry is starting to take shape ...

Philosophy

At Hugyfot, our commitment to produce top quality underwater housings reigns supreme since 1953, distinguishing ourselves from the rest, thanks to our ergonomic designs, functionality, durable construction and attention to detail.

Photo: Luc Eckhaut



Luc Leys,
Managing Director



1. Introduction

Thank you for purchasing Hugyfot products.

When traveling to remote areas to capture exceptional images, leave nothing to chance, as there might never be a second chance. Using reliable equipment is particularly important when shooting underwater photos and videos. Your Hugyfot Vision Xs underwater housing protects your GoPro Hero 5/6/7, while giving you full control and access to your camera's features. Underwater photography takes place in extreme environments, which call for a compact, reliable and ergonomically designed housing, capable of withstanding harsh conditions, letting you capture images with ease and granting you access to essential onboard camera controls. Hugyfot is renowned for its ergonomic designs, functionality and experience manufacturing compact durable housings machined from solid blocks of marine grade aluminum. Traveling often involves keeping luggage to a minimum and Hugyfot housings prove to be your best choice, particularly when reliability, ease of operation and overall weight are determining factors.

Your Hugyfot Vision Xs housing is crafted using the state of the art Computer Aided Design and Computer Aided Manufacturing techniques, machined from a solid block of marine grade aluminum, anodized and finished with a durable Teflon coating. All buttons and knobs are hand fitted. Each housing is carefully inspected and pressure tested to ensure reliable and flawless operation before it leaves our plant.

This User Manual provides step-by-step instructions on how to install your GoPro Hero 5/6/7 camera into your Hugyfot Vision Xs housing, helping to ensure correct functioning during dives. Read this User Manual carefully, take your time to review its content and practice these step-by-step instructions before diving.



Your Hugyfot Vision Xs housing is machined from a solid block of marine grade aluminum.

2. Safety precautions

To prevent personal injury and/or damage to equipment, read this User Manual carefully, as well as your GoPro Hero 5/6/7 owner's manual, and other accessories used in combination with your Hugyfot Vision Xs housing.

To prevent personal injury:

- Only use battery packs specified in this User Manual and follow manufacturer's instructions.
- Remove leaking battery packs immediately from your Hugyfot Vision Xs. Leaking occurrences are extremely rare. Handling a defective battery pack must be done with care, avoiding exposure to bare skin, inhaling gas emissions or contact with fluids that could leak from a defective battery pack.
- Keep battery packs away from children.
- Dive within your level of training, maintain awareness of your depth, tank pressure and decompression limits at all times.
- Your Hugyfot Vision Xs underwater housing is designed to withstand depths of up to 490 feet (150 meters), well beyond recreational dive limits, as well as most technical dive depths. Stay within safety dive limits in keeping with your level of certification and expertise. Do not use your Hugyfot Vision Xs housing at depths beyond your training level and skills.

To prevent equipment damage:

- Never leave your Hugyfot Vision Xs housing in direct sunlight as heat buildup may exceed recommended temperature ranges, causing permanent damage to electronic components, including your camera.
- Your Hugyfot Vision Xs housing is designed to operate between 32°F and 86°F (0°C and 30°C).
- Do not use paint thinners, benzene nor harsh solvents to clean your Hugyfot Vision Xs housing, as these products will damage the finish of your housing, can cause fire and are harmful to your health.

3. Tips

- Your Hugyfot Vision Xs housing is developed and machined with great precision. Treat it with care. Avoid dropping or exposing to impacts.
- The inside of your Hugyfot Vision Xs housing is not waterproof and must be kept dry at all times. Avoid water droplets from entering your housing. In the event salt water enters your housing, pad it dry immediately using an absorbent towel. Use a damp cloth to remove any salt crystals.
- Ambient humidity and temperature differentials may cause condensation inside your Hugyfot Vision Xs housing, particularly when moving it from cold to warm environments. Avoid condensation by keeping your housing in a sealed bag or an airtight case. Allow your housing to acclimate, then remove it from the bag or case. To reduce risk of condensation, do not open your housing between dives.
- If condensation forms inside your Hugyfot Vision Xs housing, do not use it. Open your housing, remove the camera, battery packs and allow condensation to completely evaporate before using it.
- Following any extended period of storage, check that your Hugyfot Vision Xs housing is operating properly before diving.
- Thoroughly rinse your Hugyfot Vision Xs housing in fresh water after each dive. Repeatedly push all buttons and levers while submerged to purge trapped water and flush internal spring mechanisms.
- Your Hugyfot Vision Xs housing has two (2) O-rings. Carefully inspect, service and lubricate each O-ring before diving.

Hugyfot recommends having your Vision Xs housing serviced every 2 years, at a minimum, by an authorized Hugyfot dealer.

4. Housing overview



1. Hugyfot Vision Xs GoPro housing
2. GoPro shutter release control
3. GoPro on/off control
4. Flat port for GoPro Hero and LCD screen
5. Easy flip red filter with flat port cover
6. Sturdy aluminium handles with 1" ball mounts
7. Closing latches
8. Monitor sun hood
9. Feelworld F5 4K 5" HDMI monitor with battery
10. Monitor adjustment buttons
11. Hugycheck Xs vacuum system
12. Dual o-ring system
13. Vision Xs cradle for GoPro Hero and its external power pack
14. External power pack for GoPro Hero and USB-C cable
15. Xs HDMI cable
16. Handle tray with center tripod hole and 2 M6 mounting holes



5. Monitor sun hood

Your Hugyfot Vision Xs GoPro housing comes with pre-installed monitor sun hood. This reduces glare, unwanted reflections and protects your monitor window when opening or closing the housing.

The sun hood is fastened with 3 M3 screws. It is possible to remove or replace the sun hood by loosening the 3 screws. You can then slide the sun hood off the housing. With the sun hood installed, your Hugyfot Vision Xs GoPro housing can safely be opened and closed, provided it is placed on a flat stable surface with the monitor faced down.



The sun hood of your Hugyfot Vision Xs housing is secured with three M3 screws (left, top, right).

6. Opening the housing

Your Hugyfot Vision Xs GoPro housing has with 2 locking latches and can also be equipped by an optional Hugycheck Xs vacuum system.

Opening the housing:

1. Release the vacuum (if installed) by unscrewing the large vacuum valve on the back monitor shell. Without releasing the vacuum it is impossible to open the housing.
2. Place the Hugyfot Vision Xs GoPro housing on a flat stable surface with the monitor (with installed sun hood) faced down.
3. Open both latches
4. You can pull gently the shells apart by using light force to the two top M16 blanking plugs or vacuum valves (if installed)





7. Installing the monitor

The Hugyfot Vision Xs GoPro housing is designed to work with the Feelwold F5 4K HDMI 5" Monitor. This 1920x1080 monitor offers professional features and performance and can also be used outside the housing thanks to its 'plug and play' installation.

1. Plug the Xs HDMI cable into the monitor port HDMI IN
2. Snap the battery onto the monitor. The monitor accepts 2 types of batteries; for Sony type batteries insert in the middle with the battery contacts pointed to the left and slide towards left, for Canon type batteries you have to point the contacts to the right and slide to the right with the monitor faced down and buttons up
3. To release the battery from the monitor, push the unlock button and slide the battery towards the middle
4. Insert the monitor in the housing with the Xs HDMI cable side first
5. Make sure the monitor is mounted flat into the housing and that the monitor top buttons are aligned with the push button controls of the housing
6. Insert the Vision Xs cradle, the Xs HDMI cable has to be routed inside the cradle
7. Plug the USB-A to USB-C cable into the external battery pack for GoPro and mount the battery pack into the cradle with the bottom (no connections) first.
8. Carefully bend the cable into the cradle and close the Velcro strap to secure the battery pack
9. Insert the micro HDMI plug and USB-C plug into the GoPro Hero camera
10. Mount the GoPro Hero into the cradle, make sure all cabling is routed inside the cradle. Excess cable lengths can be tucked away in the space under the camera.





8. Closing the housing

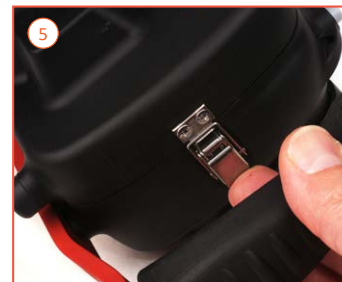
1. Place the Hugyfot Vision Xs GoPro housing on a flat stable surface with the monitor (with installed sun hood) faced down.



2. Your housing has two o rings. Carefully inspect, service and lubricate each o ring before diving.



3. Make sure that the wiring is correctly routed inside the housing so it cannot get damaged when closing the housing.
4. Open the protection cover to align and push the front shell onto the back shell.
5. Close both latches and vacuum the housing (if installed). See further how to vacuum secure your Hugyfot Vision Xs GoPro housing.



9. Hugycheck Xs vacuum system

Your Hugyfot Vision Xs GoPro housing can optionally be equipped with a Hugycheck Xs vacuum system. The Hugycheck Xs vacuum system consists of 2 parts, a valve and a body.

- the smaller part on top of the front shell contains a one-way valve and is sealed with a cap. We call this part the valve.
- the bigger part on top of the monitor shell contains 2 stacked LR44 batteries, the Hugycheck electronics, both green and red signaling LED's and the vacuum release system. We call this part the body.

1. For first time use you will need to remove the transport sticker from the 2 stacked LR44 batteries in the body part. The LR44 batteries need to be installed each with the positive side first. For your convenience they are delivered shrink wrapped together.
2. Turn on the Hugycheck Xs vacuum system by screwing the body part completely till the end. **Do not apply excessive force, this will not improve the sealing.** You will see now the red LED which is slowly blinking
3. Remove the cap from the valve part and install the vacuum pump
4. Pump until the red LED changes to green and continue pumping 3 strokes more
5. Seal the valve by screwing the cap back on

Wait for at least 10 minutes and check if the green LED is still blinking. We recommend to prepare your housing and use the Hugycheck Xs vacuum system 2 hours prior to the dive

Blinking green LED indicates no pressure leak and safe to dive. Always verify if the green LED is still blinking before entering the water and before rinsing your housing

To open the housing you will have to release the vacuum first. To release the vacuum turn the body part counter-clock wards until you hear an air sucking sound. Both green and red LEDs are turned off and your Hugycheck Xs vacuum system is now turned off.

For long time storage or transport we recommend to remove the LR44 batteries (or put the transport sticker back on the batteries)

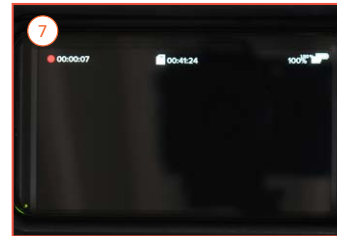
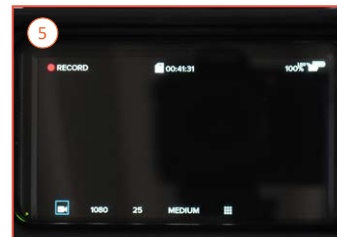


10. Using your Hugyfot Vision Xs

With the monitor and GoPro Hero installed and, if equipped, with the Hugycheck Xs vacuum system blinking green you are now ready to use the housing.

1. You should now see the monitor status light in the left bottom corner lit red
2. Power on the monitor by pushing shortly the red top button (shutter)
3. Power on the GoPro Hero by pushing shortly the side button (on/off)
4. You will get the media menu at startup, in this menu you can browse and review your clips. Move the blue marker by pushing the side button (on/off) until the GoPro Hero camera icon is highlighted blue. Press the top button (shutter) to enter the camera menu.
5. In the camera menu you get at the bottom from left to right; mode, resolution, framerate, angle and back to media menu icons. On top you see from left to right the record icon, the remaining SD card recording capacity in the selected resolution and framerate and the remaining battery capacity % of the GoPro Hero (bigger) and monitor (smaller)
6. By pushing the the side button (on/off) you can choose and change each of these setting by pushing the top button (shutter) . To start recording change until the record icon is highlighted blue. Press the top button (shutter) to start recording.
7. When recoding the elapsed time, remaining time and battery capacity of both GoPro and monitor are displayed.

For best performance we advice to set the HDMI output to "MEDIA" in the Hero's preferences menu before installing the GoPro in the vision Housing. (See your GoPro Manual)



11. Adjusting the monitor

Your Hugyfot Vision Xs is equipped with a powerful HDMI monitor that offers professional features like histogram, peaking focus assist, zoom, check field, false colors, nine grid and many other. We will only highlight some interesting features here, please consult the manual of the monitor is provided that with your housing for more details.

From left to right 8 controls are offered:



F1 (1) F2 (2) Left (3) Right (4) Menu (5) Down (6) Up (7) Power (8)

1. To access the settings press the menu button (5)
2. You can travel through the menu sections by pushing the Left (3) and



Right (4) buttons

3. We will now show you how to program the function buttons F1 (1) and F2 (2). Select the last section marked 'F' by pushing either Left (3) or Right (4) button. Press the Down (6) button to enter into the menu section and choose which key to program, press Right button (4) to enter into the choice menu and make choose the desired function with the Up (7) and Down (6) buttons. Press repeatedly the Menu (5) button to go back or exit the menu.



12. Charging the battery packs

Charge the camera power pack with the provided micro USB cable. Plug into a standard 5V USB outlet (not provided). Depending on the USB outlet charging will take 2 to 6 hours.

The status LED on the power pack will blink during charging;

- 1 blink = battery depleted
- 2 blinks = 25% charged
- 3 blinks = 50% charged
- 4 blinks = 75% charged
- Steady light = battery charged



This indication is the same when discharging the battery where 4 blinks indicate full battery

Charge the monitor battery with the supplied cradle charger. You can use the mains outlet or charge with the supplied cigarette lighter outlet. When the charger is powered the left **(Status)** LED is red and the right **(Charge)** LED is slowly blinking green. When connecting the battery the Charge LED will lit continuous red until the battery is charged.



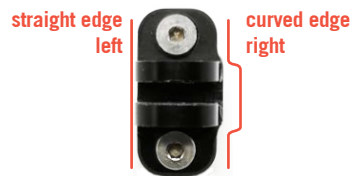
13. Macro lens

Capture small subjects in sharp focus, with plenty of detail to fill your screen with a Macro lens. Your Hugyfot Vision Xs can be upgraded with an easy flip macro lens (sold separately).

Install an easy flip lens holder to your Hugyfot Vision Xs housing by following these steps:



Mount the hinge of the easy flip lens holder to the right of housing flat port using two M3 Allen hex screws (provided with easy flip lens holder). Keep hinge straight edge to the left and curved edge to the right.



Mount the easy flip lens holder onto the hinge and fasten it with the provided Allen hex screw, threading it from the bottom.

Once mounted to your housing, a macro lens can be flipped in front of your GoPro Hero 5/6/7 **(A)**, or flip aside when not in use **(B)**. When recording video or taking photos with your GoPro Hero 5/6/7, avoid image vignetting by not choosing wide angle camera's field setting.

The easy flip lens holder can be used in combination with a variety of M67 threaded lenses. Hugyfot offers a kit that includes an easy flip lens holder and an M67 (+10) diopter macro lens.



M67 (+10) diopter macro lens



Easy flip lens holder

14. Red/magenta filters

Your Hugyfot Vision Xs housing comes standard with an easy flip red filter with flat port cover. An optional magenta filter is available (sold separately).

Protect the flat port of your Hugyfot Vision Xs housing by keeping the flat port cover closed when not in use.

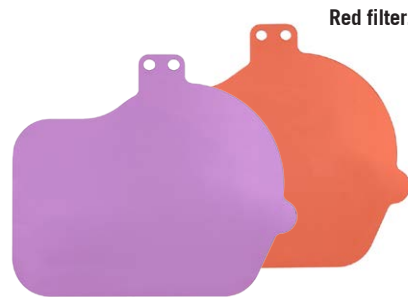
Use an easy flip red filter for blue water or an easy flip magenta filter for green water.

On land, natural light contains all the colors of the spectrum. Reds rapidly deplete the deeper you go, and as light travels through the water column. A red filter attenuates overabundance of blue spectrum light, keeping available reds, restoring natural colors and improving contrast. Use a red filter for depths at or beyond 10 feet (3 meters). Filter performance is contingent upon available ambient light and visibility.

Red and magenta filters reduce the amount of pass through light reaching your camera lens. When diving in poor visibility or insufficient ambient light, filter effectiveness is reduced. In situations like this, Hugyfot recommends recording video or taking photos using video lights.



Easy flip red filter with flat port cover.



Magenta filter.

Red filter.

15. Video lighting system

Your Hugyfot Vision Xs housing can be upgraded with LED video lights.

When filters can't get the job done, a video lighting system is the perfect solution, enhancing performance of your Hugyfot Vision Xs housing.

Hugyfot recommends using the Arius 1500 video lighting system (sold separately).

Use video lights when:

- Diving in conditions with low ambient light.
- During night dives.
- Deep dives.
- Macro videography or photography.
- Capturing natural vivid colors.

Hugyfot Arius 1500 video lights are equipped with 4 'true color' LEDs, producing 1,500 lumen at 5,700 Kelvin color temperature, sporting a wide 120° of top shelf quality beam, free of hotspots and powered by a rechargeable Li-Ion battery that provides 1 hour of continuous light at full power.

When paired with the Hugyfot Arius 1500 video lighting system, your Hugyfot Vision Xs housing is a formidable piece of equipment designed to maintain 100% neutral buoyancy.



16. Maintenance

Hugyfot Arius 1500 lights:

- When using Hugyfot Arius 1500 lights, Hugyfloat arms and clamps, consider breaking down and dismounting lights, arms and clamps during the rinse. This will reduce saltwater crystals for appearing along joints, around buttons and levers, reducing chances of damage from corrosion and prevent fusion in place.

O-rings:

- Inspect, service and lubricate the O-rings of your Hugyfot Vision Xs housing before diving.
- Your Hugyfot Vision Xs housing has two (2) O-rings. Carefully remove them using a thin plastic card, or a plastic O-ring picker. Never use a screw driver, knife, pliers, tweezers or any sharp metal as this will damage your O-rings and permanently deform the grooves of your housing.
- Shore diving in sandy areas or where fine particles are in suspension from currents or surf, increase the chance of unwanted particles, grains of sand or debris from adhering to the O-rings of your Hugyfot Vision Xs housing. We recommend you inspect, service and lubricate your O-rings immediately after opening your housing.
- When cleaning O-rings, find a well-lit place free of dust, hair, sand or debris. Take your time and gently run your fingers along the O-ring. Don't pull or stretch it. Your fingers are the best way to determine the presence of unwanted particles.
- If available, run your O-rings under the faucet. Use room temperature tap water, carefully removing unwanted particles by rubbing one O-ring at a time between your fingers. If needed, feel free to apply a dab of dish soap, thoroughly rinse under the faucet, then let your O-rings air dry.
- Discard and replace any damaged O-ring. Attempting to use a damaged O-ring can compromise a watertight seal.
- Service the grooves of your Hugyfot Vision Xs housing by running a foam makeup applicator or a lint-free cloth. Cotton swabs have fibers; therefore, we do not recommend their use. Remove unwanted particles, grains of

sand, hair, fibers or any debris from the grooves where your O-rings sit.

- Once your O-rings have air dried, proceed to lubricate them with a small amount of Hugyfot silicone grease. Do not over lubricate the O-rings. Ideally, a uniformly applied thin coat or sheen is what you end up with. To accomplish this, place a very small dab of Hugyfot silicone grease between our thumb and index finger, gently running one O-ring at a time, to uniformly coat its surface. Over lubricating is a common mistake, which carries unwanted consequences, attracting hair, unwanted particles and debris that could potentially compromise a watertight seal. Do not over lubricate your O-rings.
- Once the grooves of your Hugyfot Vision Xs housing are clean and your O-rings are lubricated, proceed to sit them one at a time. Inspect to ensure both O-rings are in place, in their grooves. Confirm that, sand, hair, fibers nor any unwanted particles are present. Proceed to close your housing.
- When traveling by air, remove both O-rings before your trip, place them in a zip top bag and keep them inside your Hugyfot Vision Xs housing. This will reduce risk of dislodged O-rings from pressure differentials or an unwanted vacuum seal from occurring. Inspect, service and lubricate both O-rings once you reach your destination and before diving it.
- When storing your Hugyfot Vision Xs housing for a prolonged period of time, follow the suggested travel by air tip above. This will keep your O-rings relaxed, prolonging useful life.
- Have your Hugyfot Vision Xs housing serviced every 2 years, at a minimum, by an authorized Hugyfot dealer.
- Visit our website at: www.hugyfot.com for a list of authorized Hugyfot dealers near you.

Your Vision Xs Maintenance Log

Housing serial number: Factory Quality control & pressure test (date): 	stamp
Housing full service / Quality control & pressure test Date: Hugyfot Service Center 	stamp
Housing full service / Quality control & pressure test Date: Hugyfot Service Center 	stamp
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Hugyfot Underwater Housings
Fits your camera like a glove



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