



# Vision Xs

HDMI Monitor



Hugyfot User Manual



# Hugyfot User Manual

---

## Table of Contents

History .....	2
Introduction .....	3
1. Safety precautions .....	4
2. Tips .....	5
3. Housing overview .....	6
4. Monitor sun hood .....	7
5. Opening the housing .....	7
6. Installing the monitor .....	8
7. Closing the housing .....	9
8. Installing the HDMI cable .....	10
9. Adjusting the monitor .....	11
10. Charging the battery .....	12
11. Maintenance .....	12
12. Accessory Armball installation .....	14
Maintenance Log .....	16



# 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 Zürichzee 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.

In 2004 Luc Leys, manufacturer of underwater lighting systems, takes over the company and moves it to Erembodegem in Belgium. The broad experience this company has built in the field of metal working and constructional engineering is implemented in the housings' production process.

Hugyfot introduces the HugyCheck system in 2009. This pre-dive check system enables the photographer to perform a vacuum test prior to entering the water. This test indicates whether the housing has been closed properly, and whether the housings' O-rings are in good condition. The HugyCheck system is awarded "Innovation of the year 2009" during the DuikVaker dive show in Utrecht (Netherlands).

In 2019 Hugyfot BV is founded by 2 former employees of the Hugyfot production plant. Jutha and Sven take all sales, marketing and product development activities for their account. The production unit remains at Erembodegem (Belgium).

## 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.



Jutha Heyman &  
Sven Van Langenhove  
Hugyfot Owners

1953 ...



## Thank you for purchasing the Hugyfot Vision Xs HDMI Monitor housing.

When traveling to remote areas to capture exceptional images, leave nothing to chance what concerns your equipment. Using reliable gear is particularly important when shooting underwater photos and videos. Hugyfot products are renowned for their ergonomic, functional and innovative designs. The durable housings are machined out of solid blocks of marine grade aluminum, hard anodized and coated with a durable Surlon non-stick layer for extra protection. All parts are hand fitted and assembled. Each housing is carefully inspected and pressure tested to ensure reliable and flawless operation before leaving production.

This HDMI monitor can be used in combination with every housing that has a M15 Hugyfot or M16x1 port. The 5" HDMI monitor has a bright IPS display of 1920x1080pixels and is not only extremely helpful for videographers but also for photographers; for example to check the sharpness of macro images. With its 160° viewing angle (in all directions) screen you are now able to make stunning wide-angle pictures

from otherwise unreachable positions or angles. The incorporated Feelworld F5 monitor offers professional features like Peaking Focus Assist, Histogram, Zebra exposure, Zoom, ... amongst many other. The supplied battery offers approximately 3 hours battery life while photographing and 2 hours while filming.

The Hugyfot Vision Xs HDMI Monitor is designed to work with the HugyCheck pre-dive vacuum check system but is also fully compatible with all other pre-dive systems thanks to the HugyCheck Vacuum HDMI Connection which comes standard with the monitor. This HugyCheck Vacuum HDMI Connection transfers the HDMI signal and offers a rugged air passing channel between the camera housing and the monitor housing. This way the monitor housing is put on the same vacuum level as the camera housing and is monitored by the same pre-dive check system.

The HDMI connection to the camera housing is female micro HDMI. An extra HDMI connection cable from the bulkhead to the camera needs to be ordered separately. This cable depends on the camera brand/model and position of the bulkhead to the camera HDMI output. The connection on the back side of the

monitor houses also a sacrificial Zink anode and a M6 threaded hole that can be equipped with an extra 1" armball to mount for example a focus light or video light. The M16x1 port hole can duplicate the camera housing's M16x1 port hole to install for example, a vacuum pre-dive system.

### This package includes

- 1 Hugyfot Vision Xs HDMI Monitor housing
- 1 HugyCheck Vacuum HDMI Connection
- 1 M15x1,5 or 1 M16x1 HDMI Bulkhead (as ordered)
- 1 HDMI Bulkhead Cap
- 1 Feelworld F5 monitor with its battery and charger
- 1 Hugyfot 5" Sunhood
- 1" Armball mount
- 1 Free M16x1 Port hole
- 1 Free M6 Accessory Mount hole
- 1 Sacrificial Zink Anode

# 1 Safety precautions

---

To prevent personal injury and/or damage to equipment, read this user manual carefully as well as the supplied monitor owner's manual.

## 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.

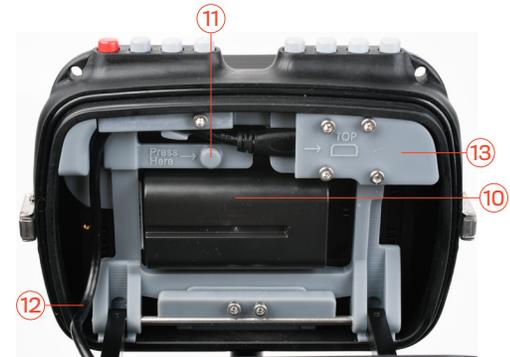
## To prevent equipment damage

- 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.

- 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.

### 3 Housing overview

1. Hugyfot Vision Xs HDMI Monitor housing
2. Monitor adjustment buttons
3. Closing latches
4. Monitor sun hood
5. 1" Armball
6. HugyCheck Vacuum HDMI Connection
7. M16x1 Port
8. M6 thread for optional 1" Armball
9. Sacrificial Zink Anode
10. Feelworld F5 4K 5" HDMI monitor with battery
11. Battery Release Button
12. HDMI Cable
13. Internal micro-HDMI to HDMI connection (link)
14. M15x1,5 or M16x1 HDMI Bulkhead (as ordered)
15. HDMI Bulkhead Cap



## 4 Monitor sun hood

Your Hugyfot Vision Xs HDMI Monitor housing comes with pre-installed monitor sun hood. This reduces glare and unwanted.

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 of the housing.

With the sun hood installed, your Hugyfot Vision Xs HDMI Monitor housing can safely be opened and closed, provided it is placed on a flat stable surface with the monitor screen faced down.



## 5 Opening the housing

For easy opening and closing your Hugyfot Vision Xs HDMI Monitor housing is equipped with 2 locking latches. You only need to open the housing to install a freshly charged battery or to remove the used, depleted battery.

### Opening the housing

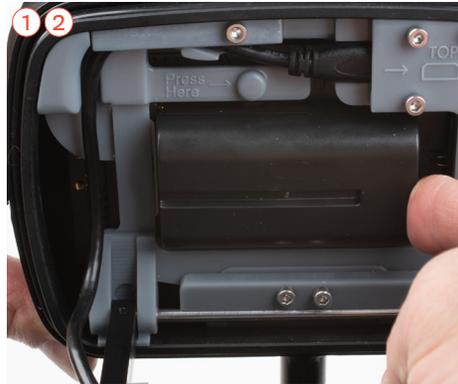
1. Release the vacuum (if applicable) from the camera and monitor system. Without releasing the vacuum, it is impossible to open the housing
2. Either place the housing on a flat stable surface with the monitor (with installed sun hood) faced down or leave it installed on your camera housing in an upright position.
3. Open both latches
4. You can pull gently the shells apart by using both hands as shown on the picture below. Place one thumb against the bulb on top of the back shell, the other thumb on the edge of the button ramp.
5. The back shell is held by a hinged mechanism to avoid any stress on the HDMI cable. This mechanism offers you the ability to install or remove the monitor battery with both hands.



## 6 Installing the monitor

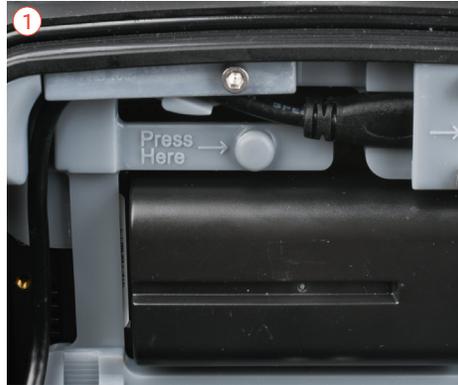
The Hugyfot Vision Xs HDMI Monitor housing is designed to work with the Feelwold F5 4K HDMI 5" Monitor. This 1920x1080 monitor offers professional features and performance. The battery lifetime is approximately 3 hours when photographing and 2 hours when filming.

1. Open the housing as described in chapter 6.
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 buttons up
3. To release the battery from the monitor, push the unlock button and slide the battery towards the middle



## 7 Closing the housing

1. Your housing has a double o ring sealing. Carefully inspect each o ring before diving for damages, fibers or sand. Service and lubricate the o rings if needed - learn how to do this in section 12. Maintenance
2. When closing the lid, pay particular attention to the routing of the HDMI cable. It needs to bend inside the housing, make sure it is not caught between the shells. This can result in unrepairable damage to the cable.
3. There is a notch in the hinged mechanism to guide the cable, make sure the cable sits into this notch before closing the housing.
4. Push both shells firmly together and close both latches



## 8 Installing the HDMI cable

Hugyfot has developed a unique HDMI cable allowing you to use the depressurization leak detection system that is already installed on your camera housing. While depressurizing your camera housing the Vision HDMI cable allows simultaneously depressurization of the monitor housing so your whole system is under guard of one leak detection system.

The HDMI cable is passed through a ruggedized tube connecting both housings electrically and offering a pathway of air. HDMI cables are very fragile cables with 19 wires, always handle the cable and its connectors with high care when connecting or disconnecting.

1. Install the M15 (Hugyfot standard) or M16x1 bulkhead into a free slot of the camera housing. Test the installation by sealing the bulkhead with the supplied cap and check the housing for correct sealing with (if equipped) a vacuum pre-dive check system. Follow the pre-dive check system's guidelines to perform a correct sealing check. If you don't have a pre-dive check system you should perform a dive with the housing without camera and monitor installed. The sealing of the monitor housing and HDMI connection cable have been factory pressure tested before shipping. Please do not install and dive the monitor housing without checking the sealing of the
2. HDMI bulkhead installation first.
3. Install the HDMI cable from your camera to the bulkhead so that it can move freely through the bulkhead. The male micro HDMI connector from this cable should be able to extend at least 2-3cm from the bulkhead so it can be easily inserted into the HugyCheck Vacuum HDMI Connection Cable.
4. Connect the male and female HDMI connections and gently push the connection inside the bulkhead.
5. Secure by connection by tightening the nut by hand. Do not use any tools to tighten the connection, the sealing is done by the 2 o rings inside the connector, not by the force that tightens the nut.

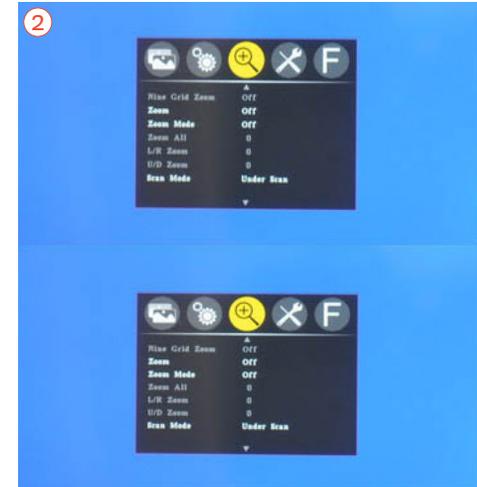
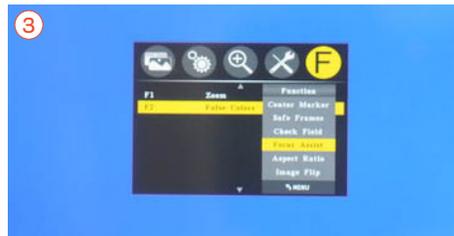
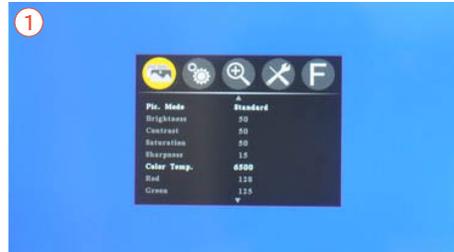


## 9 Adjusting the monitor

Your Hugyfot Vision Xs HDMI Monitor housing 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 F2 Left Right Menu  
Down Up Power

1. To access the settings, press the menu button
2. You can travel through the menu sections by pushing the Left and Right buttons
3. We will now show you how to program the function buttons F1 and F2. Select the last section marked 'F' by pushing either Left or Right button. Press the Down button to enter into the menu section and choose which key to program, press Right button to enter into the choice menu and make choose the desired function with the Up and Down buttons. Press repeatedly the Menu button to go back or exit the menu.



## 10 Charging the monitor battery

Charge the monitor battery with the supplied cradle charger. The cradle charger needs a 5V USB input with at least 1A output current (like the supplied USB EU outlet power source). When charging the LED will lit continuous red until the battery is charged. Then the LED will turn to continuous green. (8)



## 11 Maintenance

### O-rings

- Inspect, service and lubricate the O-rings of your Hugyfot Vision Xs housing before diving.
- Carefully remove them by using the supplied plectrum tool. Be careful not to scratch the o ring seating. Gently insert the tool between the o ring and its seating and push the o ring out. Never use a screwdriver, knife, pliers, tweezers or any sharp metal.
- 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, tho-roughly 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 un-wanted 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](http://www.hugyfot.com) for a list of authorized Hugyfot dealers near you.

### **Monitor and HDMI Cable disassembly instructions**

If needed, it is possible to disassemble the HDMI cable and monitor from the housing. Because of the fragility of the HDMI cable we do not recommend performing these actions on a regular base. Disassembly should only be performed in case of malfunctioning or periodic maintenance. Following instructions should only be performed by persons with experience in fine mechanics. Damaged HDMI connections are never subject of manufacturer's warranty and are expensive to replace. Please send your monitor housing and HDMI cable for service to an accredited Hugyfot service center if needed.

1. Remove the 5 screws that secure the HDMI cable guide and the internal HDMI link cover
2. Remove the internal HDMI link cover and carefully unplug the HDMI cable
3. Detach the HDMI cable from its routing and from the notch in the hinge
4. You can now loosen the nut from the monitor housing HDMI bulkhead
5. Gently pull the connector out of the bulkhead, the HDMI cable should freely come out of the bulkhead now
6. Be careful not to damage the micro-HDMI male connector when passing it alongside the hinge and trough the HDMI bulkhead.
7. Unscrew and remove the 2 screws that hold the hinged mechanism retainer
8. Lift the retainer from the hinged mechanism
9. You are now able to remove the hinged mechanism and separate both shells. Pay particular attention not to damage the HDMI link.
10. Lift the monitor out of the housing by use of the battery. The left side (no HDMI connection) should be lifted first.
11. Remove the HDMI link from the monitor HDMI Input
12. Reassemble in reverse order. The monitor with installed link cable needs to be inserted right side (HDMI connector) first.



## 12 Accessory Armball installation



An accessory 1" Armball can be installed, for example to hold a focus light, in the M6 mount hole on the backside of the monitor housing.



Hugyfot M6 Armballs are provided with 2 straight edges that prevent the Armball from turning so no glue or excessive tightening force on the bolt is needed. Excessive force can damage the Aluminum M6 thread and is not covered by manufacturer's warranty.



# Vision XS HDMI Monitor Maintenance Log

	Housing serial number	Factory Quality control & pressure test (date)	Stamp
Housing full service / Quality control & pressure test	Date	Hugyfot Service Center	Stamp
	Date	Hugyfot Service Center	Stamp
	Date	Hugyfot Service Center	Stamp
	Date	Hugyfot Service Center	Stamp



Rietstraat 63 – 9320 Erembodegem – Belgium  
www.hugyfot.com – info@hugyfot.com

Hugyfot BV.

