

NA - GH5 / GH5SV

Instruction manual





FORWARD

Thank you for your purchase of a NAUTICAM housing.

At NAUTICAM, we pride ourselves in the ability to recognize the requirements of professional as well as amateur underwater photographers and fulfill them through the innovative designs of our products. We strive to achieve a high level of user-friendliness by allowing stress-free installation and easy operation of all important functions of the camera.

Each housing is individually inspected and water pressure tested to ensure optimum quality.

Please read this manual carefully before using the housing, this will maximize its performance as well as its lifetime.

The illustrations in this manual may differ from the actual product.

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WARRANTY

All NAUTICAM Products are warranted against any material and manufacturing defects for two years from the date of purchase for consumer use. The warranty period is defined by the invoicing or payment date by the customer. Alternatively, the warranty period would be assumed from the day that the product is shipped from our facility. This warranty only applies to products purchased from authorized NAUTICAM dealers and does not extend beyond the original retail purchaser.

To return your product for service, please contact your regional authorized service center(s). Please note that this warranty only applies when the product is purchased in the territory where the service center is located.

NAUTICAM accepts no liability for any damage to and defects in the housing caused by improper use and/or poor maintenance; it is the responsibility of the owner to carefully follow the instructions in our manuals.

NAUTICAM does not hold responsibility for damage, of any nature, to any equipment used with and/or placed within our products.

NAUTICAM accepts no liability for any loss of captured images or the inability to capture images even if it is due to the malfunctioning of our products.

Unauthorized modifications and/or repairs of our products will automatically invalidate the warranty.

PRECAUTIONS

- A water-tight test without the camera inside the housing is highly recommended when using the system for the first time and after the changing of port and O-ring(s).
- Do not use lubricants from other brands with the silicone rubber O-ring on this housing, only use the lubricant provided by NAUTICAM.
- Discontinue use immediately should you notice any leakage.
- Store the housing in a robust, shock-proof container during transportation; avoid transporting with any equipment, such as a camera, inside the housing.
- When travelling by air, do not close the housing as this may lead to a pressure difference between the atmosphere and inside the housing.
- Care must be taken when opening the housing, as pressure may build up inside the housing which increases the opening force.

- Do not open the product in a wet or sandy environment. Protect the interior from moisture and debris in order to prevent malfunction or leakage.
- Do not store the product in an environment of high humidity.
- Do not leave the housing and the monitor in direct sunlight for prolonged periods.
- Keep out of reach of children, failure to do so could result in injury.
- Defective products should be shipped to our distributors for service, unauthorized disassembling and/or modifications could result in malfunction or leakage.
- Use only recommended battery with this product, do not mix different specifications or old and new batteries.
- Do not place excessive stress on your HDMI cable connector.
- Do not bend or twist your HDMI cable.

PACKAGE CONTENTS

For NA-GH5

- NA-GH5 housing
- Spare silicone rubber O-ring [90122] for housing
- O-ring remover
- CR2450 battery
- Lubricant
- Set of Allen keys
- Manual Instruction card

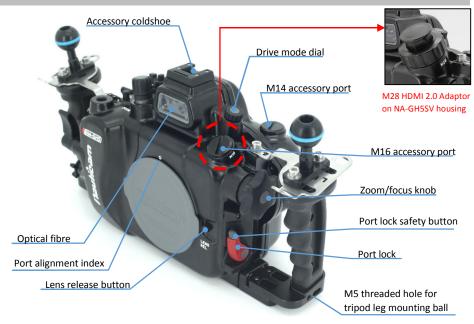
For NA-GH5SV

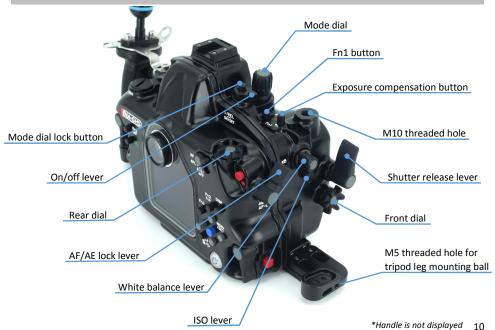
- NA-GH5SV housing
- Spare silicone rubber O-ring [90122] for housing
- M28 HDMI 2.0 Adaptor (Pre-installed)
- O-ring remover
- CR2450 battery
- Lubricant
- Set of Allen keys
- Manual Instruction card

SPECIFICATIONS

	Housing body:	Aluminum alloy	
Construction	Surface treatment:	Hard anodized	
	Display window:	Abrasion resistant polycarbonate	
	Width:	331mm	
Dimensions	Height:	184mm	
	Depth:	110mm	
Weight	Approx. 2.36kg		
Buoyancy	Slightly negative		
Depth rating	100 meters		
Port mount	N85		
Compatible cameras	Panasonic Lumix GH5 camera / GH5S camera		

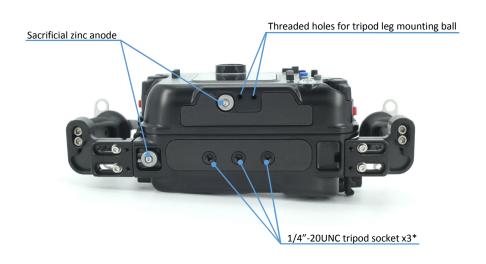
IDENTIFICATION OF PARTS







^{*}Handles are not displayed



^{*}The maximum length of screws that can be used with the tripod sockets is 4mm.

OPENING AND LOCKING THE HOUSING

Always open and close the housing with the front facing down, place the housing on a flat surface or in your lap. When closing, make sure there is nothing caught between the closing surfaces of the two halves of the housing.

The housing can be opened and closed by the two housing locks.

To open the housing:



1. Press and hold the housing lock safety button on both sides.



2. Turn the housing locks outwards as shown.

To close the housing:



1. To close, turn both housing locks towards the housing all the way.



2. Make sure they are locked in place securely.

PREPARATION OF THE HOUSING

- **1.** After verifying that the main O-ring is in good condition, lightly coat it with the lubricant provided.
- 2. Make sure the O-ring groove located in the front part of the housing is free from any foreign material; the groove can be cleaned with the aid of a microfiber cloth.
- **3.** Place the main O-ring into the groove, first at the corners, then the whole perimeter.

4. Setting up the moisture alarm:



 Locate and install the battery provided into the battery compartment on the circuit board inside the housing.



Switch the alarm on. The LED light will flash blue once and turn blue for five seconds indicating the battery is normal. Then it goes into flashing blue light standby mode.



3. Test the alarm by connecting the two wires near the bottom of the housing with a damp cotton bud; the alarm should start giving out a repeating "beep" sound along with a flashing red light. The "beep" sound and the light should keep on going for 5 seconds after the removal of the damp cotton bud.

Optional vacuum valve:

Vacuum valve can be attached to the housing via one of the accessory port for conducting a vacuum seal test. Please refer to the manual of the vacuum valve for details of the operation.

LED status identification:

On start up

LED indicator	Status
Flash "Blue" light once	Indicates a 2nd generation PCB
Steady "Blue" light	Battery is normal, goes into flashing "Blue"
Steady blue light	light standby mode after 5 seconds.
"Blue" and "Red" lights	Battery low. Replace battery as soon as
alternating	possible. Goes into standby mode after 5
	seconds.
Steady "Red" light	Battery empty, replace battery.

After start up

LED indicator	Status	
51 1: HDL H1:1:	Standby mode. The moisture alarm is active,	
Flashing "Blue" light	and the system is ready for vacuum indication	
	whenever a vacuum is detected.	
Flashing "Red" light	Moisture is detected.	
with beeping sound		
Flashing "Yellow" light	Some vacuum is detected, target vacuum level	
riasining renow light	is not reached.	
Steady "Green" light	Target vacuum level is reached.	
Rapidly flash "Yellow"	Vacuum is dropping. (Will occur only after	
light	target vacuum level is reached)	
Rapidly flashing "Red"	Vacuum is totally lost. Circuit stalled until	
	switched off. (Will occur only after target	
light	vacuum level is reached)	

It is required to reset the vacuum system when the vacuum level is dropped from target level to totally lost. i.e. when opening the housing or changing port.

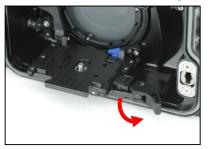
To reset when changing port/lens:



- 1. Release vacuum.
- 2. Remove the port and lens from the housing and camera.
- Press the BLUE button once to reset the system. The LED light will turn blue for five seconds then it goes into flashing blue light standby mode.

INSTALLING THE CAMERA

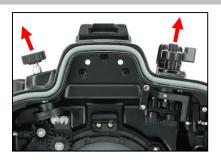
To install the camera into to the housing:



 Turn the locking lever on the tray of the housing to the "open" position as shown. Then remove the camera saddle from the housing by sliding it outwards.



2. Attach the saddle to the camera by tightening the screw to the tripod socket of the camera.



- 3. Lift the drive mode dial and on/off lever upwards.
- Then install the camera by sliding the attached saddle along the rail in the housing until it cannot go in any further.



 If installing the camera with lens and gear attached, first pull out the zoom/focus knob and sit on the shallower groove as shown.



6. Lock the camera into place by turning the locking lever to the "lock" position as shown.



- Gently push drive mode dial and on/off lever downwards, ensuring the actuator correctly engages with the ON/OFF lever of the camera.
- 8. Confirm that all the controls of the housing are correctly engaged.

MOUNTING THE PORT

Please refer to the NAUTICAM system port chart for a range of compatible ports:

- Remove the O-ring from the port, inspect for any damage and lightly coat it with the provided lubricant before placing it back into its groove.
- 2. Verify that the port opening of the housing is clean and free from foreign material.



3. Push the safety button of the port locking lever downwards.



4. Turn the port locking lever to the release position as shown.



5. Lift housing cap.



- 6. Align the Port mounting indices of the port and the housing.
- Gently push the port into the port opening of the housing, until it cannot go in any further.



8. Lock the port into place by turning the port locking lever to the inward position. To ensure that the port is securely mounted, confirm that the green line on the safety button of the port locking lever is visible.

CHANGING THE VIEWFINDER

In order that user can change to a preferred viewfinder easily, the 0.66x viewfinder which comes with the housing is designed so that it can be removed and re-installed by the following simple steps described below.

To remove the viewfinder:



 Remove the retainer O-ring of the viewfinder inside the rear half of the housing by making use of the recess on the viewfinder.



2. Gently push the viewfinder form the inside of the housing.

To re-install the viewfinder:

Lightly coat the O-rings on the outer periphery of the viewfinder body with lubricant.



1. Align the viewfinder with the sleeve in the display window.



- 2. Push the viewfinder from the outside of the housing until it cannot go in any further.
- 3. Place the retainer O-ring of the viewfinder back from inside of the housing.

CARE AND MAINTENANCE

- Soak the housing system in fresh water after each salt water use, during which all control
 buttons/knobs should be operated a few times to avoid the accumulation of salt residue;
 wipe the housing with a towel before opening.
- Carefully press the housing lock safety button for a few times to avoid the accumulation
 of salt residue.
- After each day of diving, it is advisable to have the main O-ring in the front part of the housing removed from its groove with the O-ring remover and inspected for damage. Also check that the O-ring retains its original circular shape; never stretch the O-ring excessively or remove it with a sharp object. The O-ring groove should be cleaned to ensure it is free from any salt deposit or foreign material; lightly coat the O-ring with the provided lubricant before reinstalling it in the groove. A damaged O-ring should be discarded immediately and replaced only with one that is provided by NAUTICAM.
- Replace the main O-ring annually. It is recommended that you ship the housing to our distributor for a complete overhaul every year or after every 200 dives.

OPTIONAL ACCESSORIES

Strobe Triggering

Add the optional Panasonic DMW-FL70 Mini Flash inside the housing for reliable, accurate triggering of optical TTL compatible strobes. Rapid fire manual triggering is also available with the Nauticam Mini Flash Trigger (P.N. 26309).



P.N. 26309 Mini Flash Trigger for NA-GH5 Housing

HDMI 1.4 Output

The GH5 camera features a full size "Type A" HDMI Connector on the camera body, providing a reliable user friendly connection for external monitors. A new Nauticam Internal HDMI Cable (25075) supports this format!



P.N. 25217 HDMI (D-A) Cable in 190mm Length for NA-GH5/GH5SV (for internal connection from HDMI bulkhead to camera)

Mounting Ball Set for Tripod Legs

Set of three tripod leg (or other accessory) attachment balls that attach directly to the bottom of NA-GH5/GH5SV.



P.N. 25217 Mounting Ball Set for Tripod (for NA-GH5/GH5SV)

Top Mounting Ball

The cold shoe base can be replaced with a 1" mounting ball for mounting heavier item like external monitor housing.



P.N. 25111 Strobe mounting ball for handle with screws

Other accessories



P.N. 25624 M14 Vacuum Valve II (Pushbutton Release)



P.N. 32204 Nauticam 180° straight viewfinder for MIL housings



P.N. 32205 Nauticam 45° viewfinder for MIL housings



P.N. 36059 O1250-Z Zoom Gear for Olympus 12-50mm EZ to use with GH5/EM1X (for NA-GH5/EM1X)

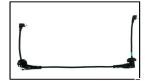


P.N. 36060 Macro Port and Zoom Gear Set for Olympus 12-50mm EZ to use with GH5/EM1X (for NA-GH5/EM1X)



P.N. 36061 P1442X-PZ Zoom Gear (compatible with NA-GH5) for Panasonic Lumix G X Vario PZ 14-42mm F3.5-5.6 ASPH. POWER O.I.S.

Additional optional accessories for NA-GH5SV



P.N. 25079 M28A2R210-M28A1R170 HDMI 2.0 Cable (for NA-GH5V to use with Ninja V



P.N. 17922 Nauticam Atomos Ninja V Housing for Atomos Ninja V 5" 4Kp60 4:2:2 10-bit Recorder/Monitor/Player



P.N. 25080 M28-M16 Step Down Adaptor



P.N. 17909N

Nauticam Atomos Flame Housing (with HDMI 2.0 input) for Atomos Ninja Flame/Shogun Flame/Shogun Inferno 7" 10-bit 4K/HD SDI / HDMI Recorder/Monitor/Player housing)

NAUTICAM International Limited

Rm2203, CCT Telecom Building, 11 Wo Shing Street, Fotan, HONG KONG

Web: www.nauticam.com E-mail: innovation@nauticam.com

Tel: +852 2690 2711

Fax: +852 2690 9778