

NA - Ninja V

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.

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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, and exceptionally HDMI and SDI cables are limited to one year. 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

- NA-Ninja V Housing
- Monitor hood
- 25625 M16 Vacuum Valve (pre-installed)
- 90137 Spare silicone rubber main O-ring
- O-ring remover
- CR2032 battery
- Lubricant
- Manual Instruction Card

SPECIFICATIONS

Construction	Housing body:	Aluminum alloy
	Surface treatment:	Hard anodized
	Display window:	Abrasion resistant polycarbonate
Dimensions	Width:	224mm
	Height:	169mm
	Depth:	113mm
Weight in air	Approx. 1.62kg	
Weight in water	-0.36kg (incl. Ninja V with AtomX SSD mini, Sony NP-F970 battery)	
Depth rating	100 m	
Compatible monitor	Atomos Ninja V 5" 4Kp60 4:2:2 10-bit Reorder/Monitor/Player (excl. HDMI 2.0 cable)	

IDENTIFICATION OF PARTS





M28 accessory port



Ball mount

Sacrificial zinc anode

OPENING AND LOCKING THE HOUSING

To open the housing:



1. Press the housing lock safety button.



2. Turn the housing lock 270°, counter clockwise, until the lock reaches the “Open” position as shown.

To lock the housing:



3. Close the housing while the housing lock is in the “Open” position.



4. Turn the housing lock 270° clockwise until the lock reaches the “lock” position as shown. Confirm that the white indicator line on the safety button is visible.

PREPARATION OF THE HOUSING

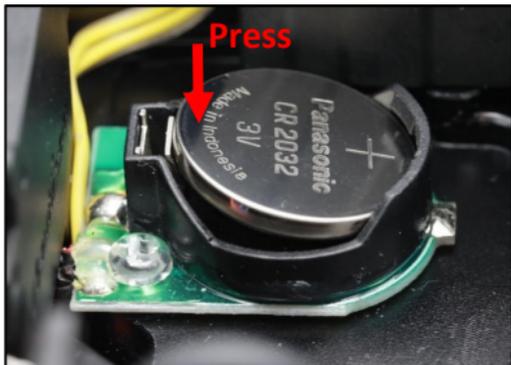
1. After verifying that the main O-ring is in good condition, lightly coat it with the lubricant provided.
2. Make sure the O-ring groove located in the front part of the housing is free from any foreign material; the groove can be cleaned with the aid of a microfiber cloth.
3. Place the main O-ring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

4. Setting up the moisture alarm:

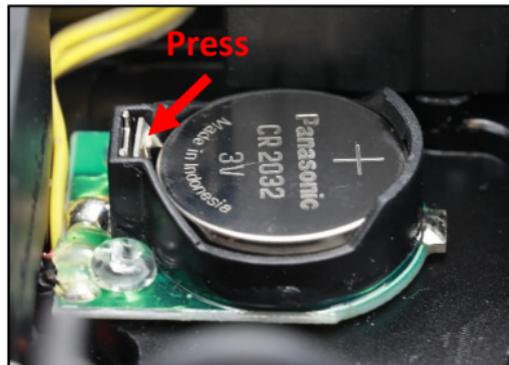


1. Ensure that remove an insulation film before install a battery. Then install the battery provided into the battery compartment on the circuit board inside the housing.

Battery Installation:



Insert the battery as shown above and then press down the battery.

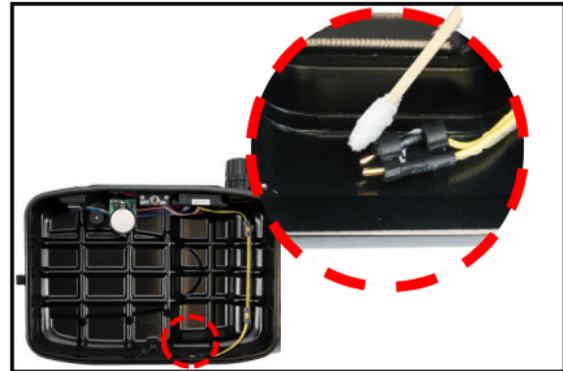


To remove the battery, press the metal plate as indicated and the battery will pop out.

**Use only recommended battery with this product*



2. 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.

Vacuum valve:

Vacuum valve is pre-install to the housing 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

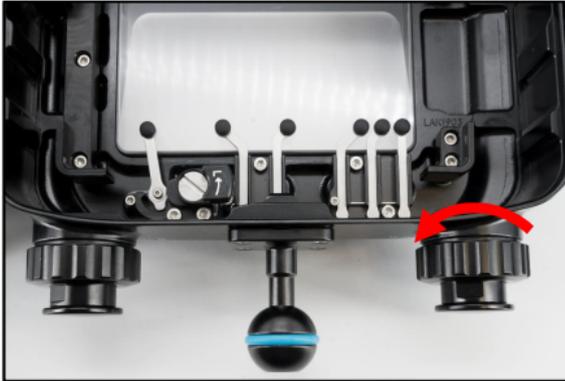
<i>LED indicator</i>	<i>Status</i>
Flash "Blue" light once	Indicates a 2nd generation PCB
Steady "Blue" light	Battery is normal, goes into flashing "Blue" light standby mode after 5 seconds.
"Blue" and "Red" lights alternating	Battery low. Replace battery as soon as possible. Goes into standby mode after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

After start up

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

CONNECTING HDMI 2.0 CABLE

To install the monitor into the housing:



1. Unscrew the cap off M28 accessory port



2. Align and plug the HDMI 2.0 cable in the M28 port opening. Gently push the cable into the M28 port opening until it cannot go in any further.



3. Then, tighten the HDMI 2.0 cable by turning the threaded working ring.



4. Repeat the above steps for another M28 accessory port if HDMI out cable is required

INSTALLING MONITOR



1. Before mounting the camera, connect HDMI 2.0 cables (IN and OUT) to the camera's HDMI connectors accordingly.

Then place the monitor inside the housing



2. Secure the monitor by turning the two locking levers towards the monitor as shown.

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.

COMPATIBLE HOUSINGS

<i>Product Number</i>	<i>Product Name</i>
16501	NA-BMPCCII Housing for Blackmagic Pocket Cinema Camera 4k (Incl. vacuum valve and 4 x 18650 battery holder, excl. batteries)
17155	NA-XT3 Housing for Fujifilm X-T3 Camera
17718	NA-S1R Housing for Panasonic Lumix S1/S1R Camera
17713V	NA-GH5SV Housing for Panasonic Lumix GH5 Camera (to use with NA-Ninja V)
17223V	NA-Z7V Housing for Nikon Z7/Z6 Camera (to use with NA-Ninja V)

OPTIONAL ACCESSORIES



P.N. 25077

M24D1R205-M28A1R170 HDMI
2.0 Cable (for NA-T3 to use with
Ninja V housing)



P.N. 25078

M28A1R225-M28A1R170 HDMI
2.0 Cable (for NA-BMPCCII/S1R to
use with Ninja V housing)



P.N. 25079

M28A2R210-M28A1R170
HDMI 2.0 Cable (for NA-GH5V
to use with Ninja V housing)



P.N. 25082

HDMI 1.4 Cable for Ninja V housing in
0.75m length(For connection from Ninja
V housing to HDMI Bulkhead).

HDMI 2.0 Input & Output

<Supporting monitor housing>

- 17922 NA-Ninja V

★How to read cable code

Connector type Cable length NA-Ninja V cable

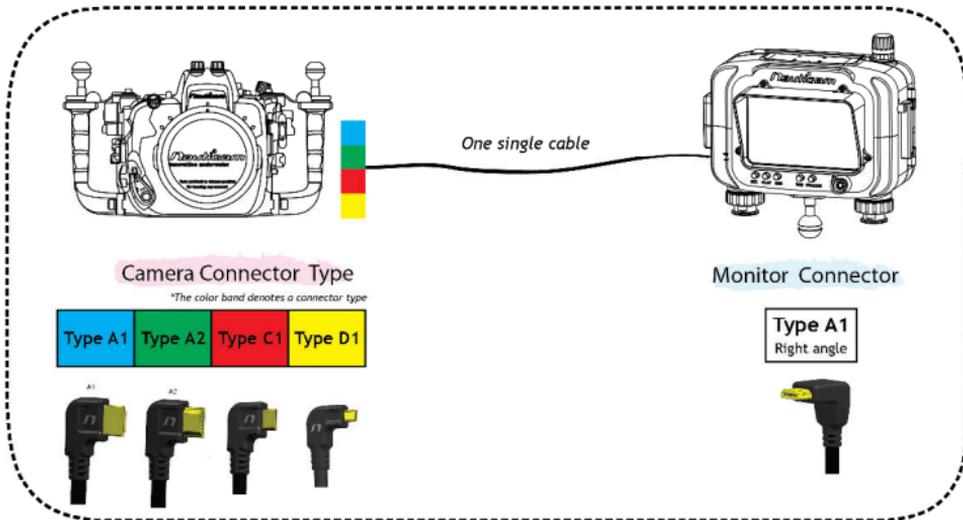
M28A1U225-M28A1R170

Thread size Orientation - R:Right angle

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HDMI 2.0 Cable Details			Compatible Housings	
P/N	Cable Description	P/N	Product Name	
25077	M24D1R205-M28A1R170	17155	NA-XT3	
25078	M28A1R225-M28A1R170	16501 17718	NA-BMPCCII NA-S1R	
25079	M28A2R210-M28A1R170	17713V	NA-GH5SV	
TBD	M28C1RTBD-M28A1R170	17223V	NA-Z7V	

Nauticam Ninja V housing doesn't include HDMI 2.0 cable since it is housing model specific. Please order the cable separately according to the above compatible table for your housing.



HDMI 2.0 increases the maximum bandwidth to 18.0 Gbit/s, HDMI 2.0 uses 8b/10b encoding for video transmission like previous versions, giving it a maximum video bandwidth of 14.4 Gbit/s. This enables HDMI 2.0 to carry 4K video at 60 Hz with 24 bit/px color depth.



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