

**NA - E2**  
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.

## TABLE OF CONTENTS

Warranty .....	4
Precautions .....	5
Package Contents .....	7
Specifications .....	8
Identification of Parts .....	9
Opening and Locking the Housing .....	14
Preparation of the Housing .....	16
Installing the Camera .....	21
Connecting External Monitor (HDMI 2.0 Cable).....	23
Mounting the Port .....	27
Care and Maintenance .....	30
Optional Accessories .....	31

## 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 the HDMI cable connector.
- Do not bend or twist the HDMI cable.

## PACKAGE CONTENTS

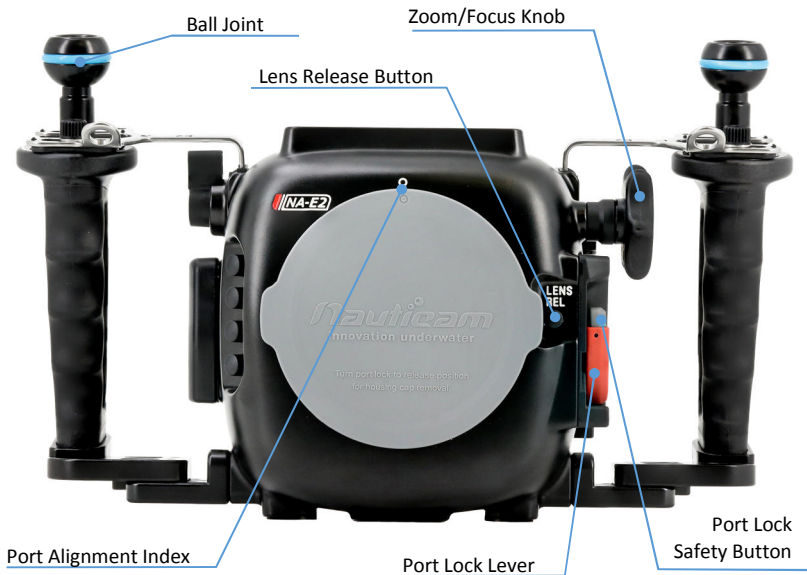
- NA-E2 Housing
- Spare 90133 Housing O-ring
- O-ring Remover
- CR2032 Battery (for vacuum system)
- 2x Adjustable Handles with Brackets
- Lubricant
- Set of Allen Keys
- Manual Instruction Card
- Padded Travel Case
- Shoulder Strap

## SPECIFICATIONS

Construction	Housing body:	Aluminum Alloy
	Surface treatment:	Hard Anodized
	Display window:	Abrasion Resistant Polycarbonate
Dimensions (Without Handles)	Width:	170mm
	Height:	145mm
	Depth:	173mm
Weight in Water	0.32kg (Incl. Camera and Sony FP-970 Battery)	
Weight in Air	Approx. 2.1kg	
Depth Rating	100 m	
Port Mount	N85	
Compatible Cameras	Z Cam E2/E2C 4K Cinema Camera	
Compatible Battery	Sony NP-F970 (excluded)	



## IDENTIFICATION OF PARTS





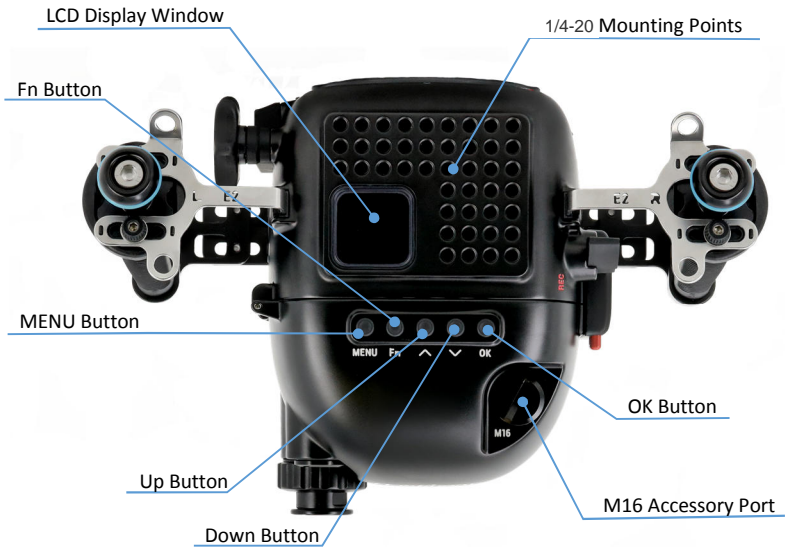
F1 Button

F2 Button

F3 Button

Power Button





1/4-20 Mounting Points



## OPENING AND LOCKING THE HOUSING

To open the housing:



1. Press the housing lock safety button.



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

To lock the housing:



1. Close the housing while the housing is in the "Open" position.

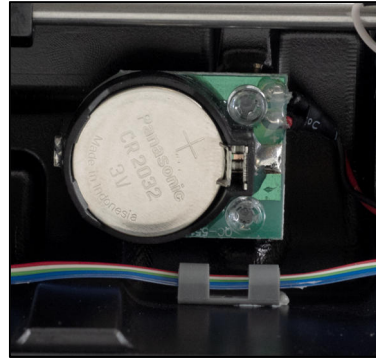


2. Turn the housing lock clockwise for 270°, until the lock reaches the "lock" position as shown. Confirm that the white indicator line on the safety button is visible.

## 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.

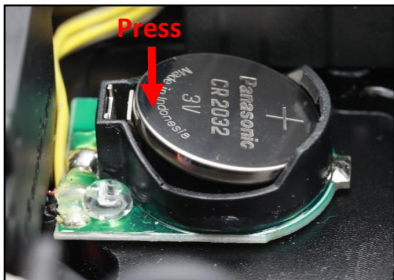
### 4. Setting up the moisture alarm:



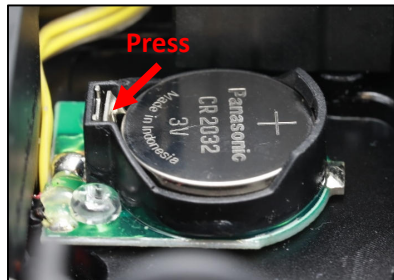
1. Ensure that remove an insulation film before install a battery. Then install the battery provided into the battery compartment on the circuit board inside the housing.



### 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.

### 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

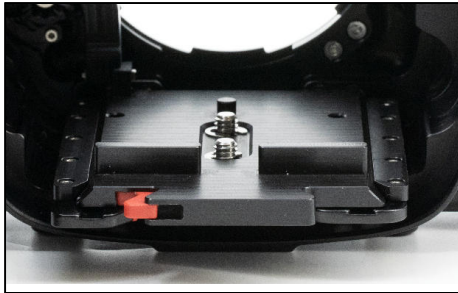
<b><i>LED indicator</i></b>	<b><i>Status</i></b>
Flash "Blue" light once	Indicates a 2nd generation PCB
Steady "Blue" light	Battery is normal, goes into flashing "Blue" light standby mode after 5 seconds.
"Blue" and "Red" lights alternating	Battery low. Replace battery as soon as possible. Goes into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

After start up

<b>LED indicator</b>	<b>Status</b>
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)

## INSTALLING THE CAMERA

To install the camera to the housing:



1. Disengage the red camera saddle lock by pressing it inwards. Remove the camera saddle from the housing by sliding it outwards.



2. Attach the saddle to the camera by tightening the screws to the tripod sockets of the camera.



3. Install the camera by sliding the attached saddle along the rail in the housing until it cannot go in any further.

Confirm that the red camera saddle locks are in the engaged position before closing the housing.

## CONNECTING WITH EXTERNAL MONITOR (HDMI 2.0 CABLE)



1. Unscrew M28 accessory port cap



2. Insert the HDMI 2.0 cable (M28A2R210-M28A1R170 HDMI 2.0 Cable) through the M28 port



3. Gently push the cable into the M28 port opening of the housing, until it cannot go in any further.
4. Then, tighten the HDMI 2.0 cable by turning the threaded working ring to clockwise direction.



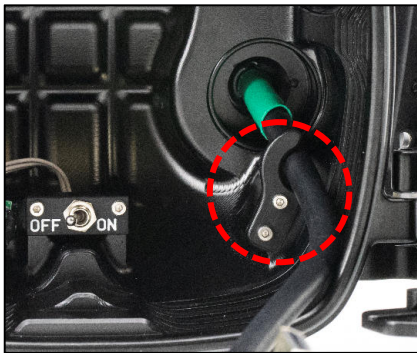


5. The HDMI cable clamp\* (optional) is to position the cable properly to avoid excessive stress on the cable. Before installing the camera on the housing, screw it on the camera as shown.

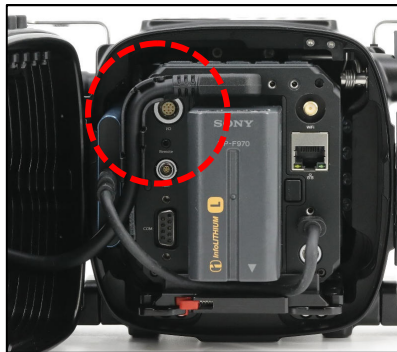
\* 25088 Cable Clamp for NA-E2 Housing with Screws



6. Install the camera with battery by sliding the attached saddle along the rail in the housing until it cannot go in any further



7. Use the positioning guide on the rear housing to hold the cable in position.



8. Connect the HDMI 2.0 cable through the camera's HDMI port.
9. To slide in an external portable SSD (ex: T5), use the USB 3.1 Gen 2 type C to C cable (P/N: 36336) to connect with the camera's USB port accordingly as shown.

## MOUNTING THE PORT

Please refer to the NAUTICAM N85 system port chart for a range of compatible ports:

1. 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.

Then lift the housing cap.



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



7. 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.

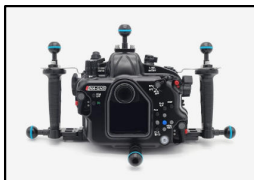
## CARE AND MAINTENANCE

- 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



P.N. 25625  
M16 Vacuum Valve II  
(Pushbutton Release)



P.N. 25217  
Mounting Ball Set for Tripod



P.N. 17959  
Housing Mounting Ball  
with 1/4" Screws housing



P.N. 36336  
USB 3.1 Gen 2 Type C to  
C Cable with Connectors  
(To use with Samsung SSD T5)



P.N. 16506  
Conversion Kit for E2C to  
Use in NA-E2 Housing



P.N. 25101/25103  
M67 Flip Diopter Holder  
for M67/M77 macro ports



P.N. 25108/25109  
M67 Double Flip Holder  
for M67/M77 Macro Ports



P.N. 83213/83215  
M67/M77 to Bayonet  
Mount Converter



P.N. 81201  
Super Macro Converter 1



P.N. 81301  
Compact Macro Converter 1  
(CMC-1, 4.5x Magnification)



P.N. 81302  
Compact Macro Converter 2  
(CMC-2, 2.8x Magnification)



P.N. 83201  
Wet Wide Lens 1 (WWL-1)  
130 deg. FOV with compatible 28mm Lenses



## Recommended Monitor Housing Setups

HDMI Type	Monitor	Bulkhead	Cable
HDMI 1.4	17920 NA-502B-H Housing for SmallHD 502 Bright Monitor	25033 Standard HDMI bulkhead with M16 thread  <i>*25033 is included in NA-058/502H/FHD5/502B-H monitor housing)</i>	16243 HDMI A-D Cable in 0.5m Length for RED DSMC2/C200/EVA1/E2 (for internal connection)
HDMI 2.0	17922 Nauticam Atomos Ninja V Housing Housing for Atomos Ninja V 5" 4Kp60 4:2:2 10-bit Reorder/Monitor/Player	25079 M28A2R210-M28A1R170 HDMI 2.0 Cable (for NA-GH5V/E2 to use with Ninja V housing) <i>*A dedicated positioning cable clamp for 25079 is required.</i>	



# **NAUTICAM International Limited**

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

Web: [www.nauticam.com](http://www.nauticam.com)  
E-mail: [innovation@nauticam.com](mailto:innovation@nauticam.com)  
Tel: +852 2690 2711  
Fax: +852 2690 9778

