![Nauticam - innovation underwater]

NA - 1DXIII Housing

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. 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 HDMI cable connector.
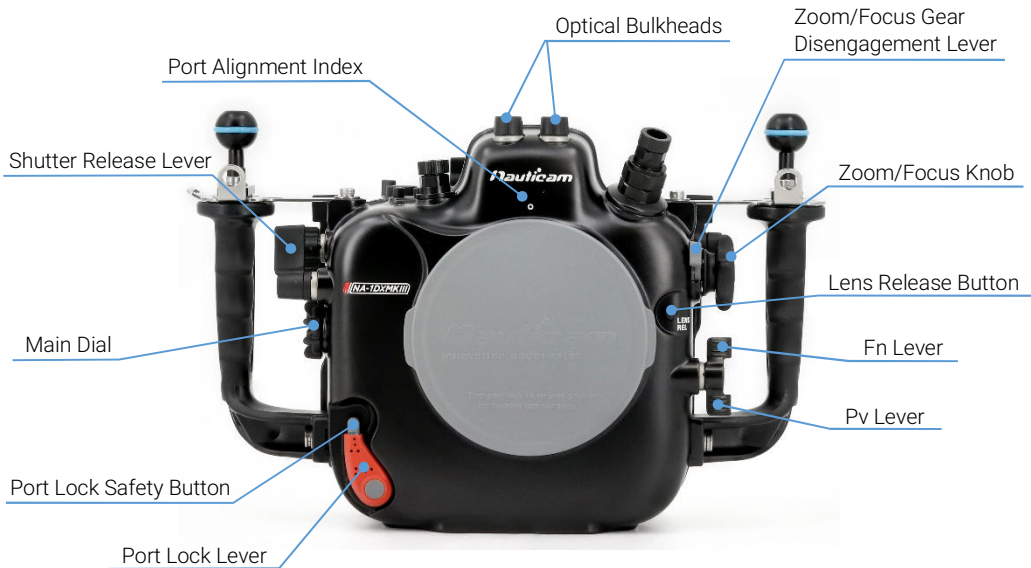
- Do not bend or twist HDMI cable.
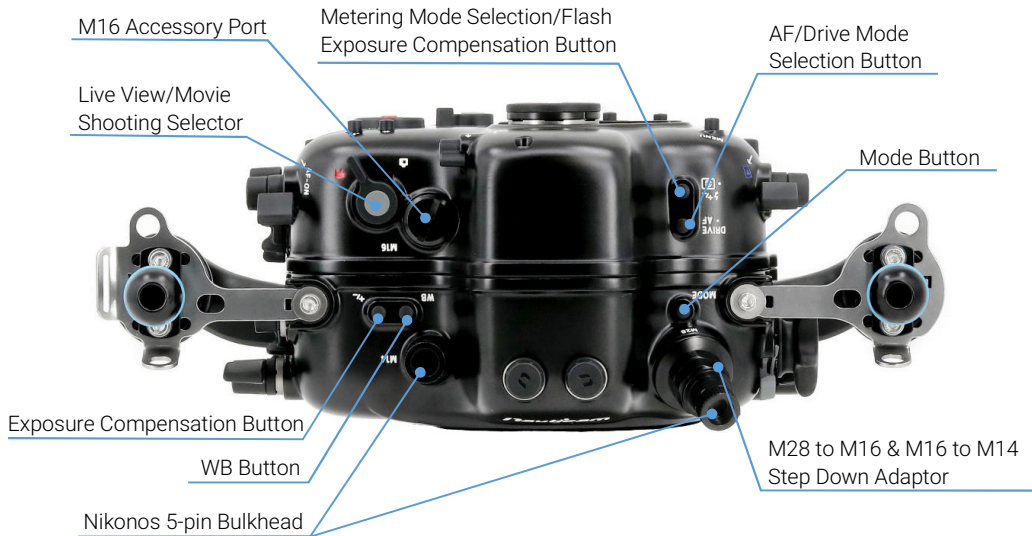
PACKAGE CONTENTS

- NA-1DXIII housing
- 2x M14 5Pin Nikonos bulkhead (NA008-01-Connector)_Pre-installed
- 90048 Canon hotshoe plug to dual Nikonos connectors
- 25080 M28-M16 Step Down Adaptor _ Pre installed
- 25019 M16 to M14 step down adaptor for electrical bulkhead _ Pre installed
- 90134 Spare main O-ring, O-ring remover and lubricant
- 2x Optical bulkhead caps
- 2x Handles with mounting balls
- Panasonic CR-2450 Battery (for moisture alarm)
- O-ring remover
- Lubricant
- Set of Allen Keys
- Manual instruction card
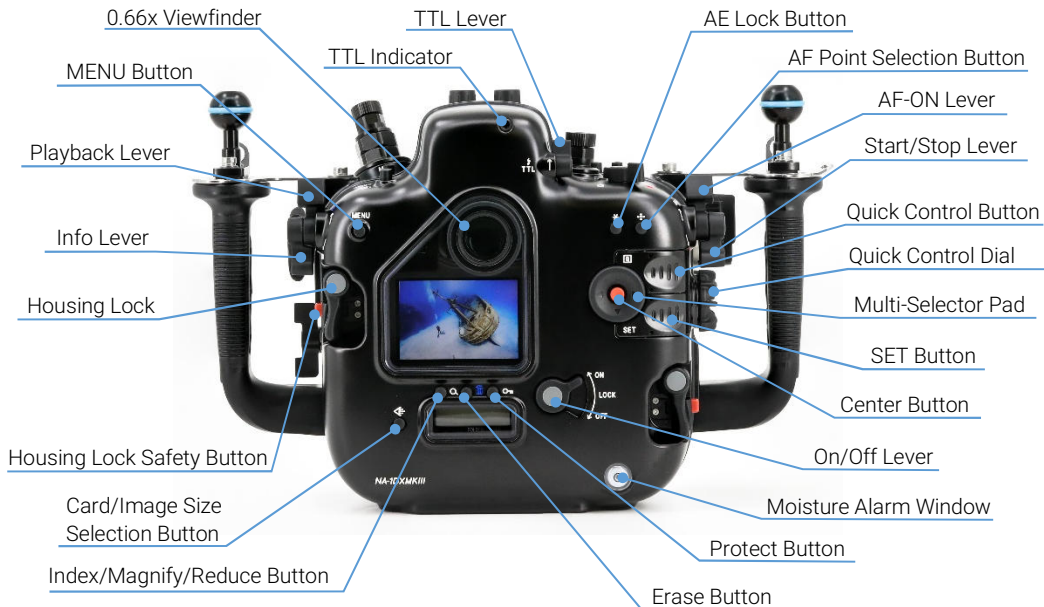- Padded travel case
- Shoulder strap

SPECIFICATIONS

Construction	Housing Body:	Aluminum Alloy	
	Surface Treatment:	Hard Anodized	
	Display Window:	Abrasion Resistant Polycarbonate	
Dimensions	Width:	360mm	
	Height:	235mm	
	Depth:	145mm	
Weight in Air	Approx. 3.59kg		
Weight in Water	-0.02kg (includes camera, battery)		
Depth Rating	100 m		
Port Mount	N120		
Compatible Cameras	Canon 1DX Mark III		
Flash Capability	Two Optical bulkheads utilizing Nauticam Flash trigger (optional)		26301 Flash trigger for Canon 26321 TTL Flash trigger for Canon
	Two Nikonos 5-pin bulkheads (Trigger and Ground connected only)		
HDMI Support	Nauticam HDMI 1.4 & 2.0 Systems		

IDENTIFICATION OF PARTS

Optical Bulkheads

Zoom/Focus Gear Disengagement Lever

Port Alignment Index

Shutter Release Lever

Zoom/Focus Knob

Lens Release Button

Main Dial

Fn Lever

Pv Lever

Port Lock Safety Button

Port Lock Lever

M16 Accessory Port

Metering Mode Selection/Flash Exposure Compensation Button

AF/Drive Mode Selection Button

Live View/Movie Shooting Selector

Mode Button

Exposure Compensation Button

WB Button

Nikonos 5-pin Bulkhead

M28 to M16 & M16 to M14 Step Down Adaptor

0.66x Viewfinder

TTL Lever

AE Lock Button

MENU Button

TTL Indicator

AF Point Selection Button

AF-ON Lever

Playback Lever

Start/Stop Lever

Info Lever

Quick Control Button

Quick Control Dial

Housing Lock

Multi-Selector Pad

SET Button

Center Button

Housing Lock Safety Button

On/Off Lever

Card/Image Size Selection Button

Moisture Alarm Window

Index/Magnify/Reduce Button

Protect Button

Erase Button

Sacrificial Zinc Anode

I/4"-20UNC Tripod Socket x3*

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

OPENING AND LOCKING THE HOUSING

To open the housing:

Always open and close the housing with the front facing down, place the housing on a flat surface or in your lap.

The housing can be opened and closed by operating the two housing locks; when opening, press the safety buttons, then turn the locks outwards.

To lock the housing:

When closing, make sure there is nothing caught between the closing surfaces of the two halves of the housing.

To close, turn the locks towards the housing, and then make sure they are locked in place securely.
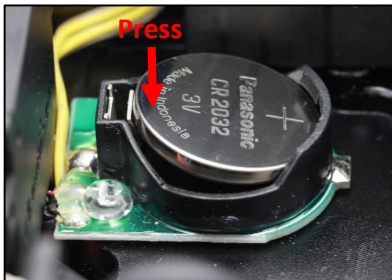
PREPARATION OF THE HOUSING

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.
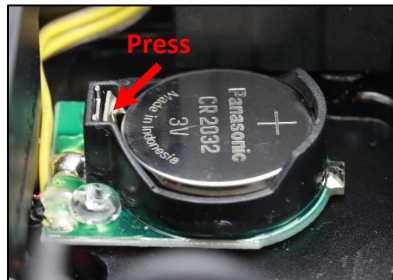
4. Setting up the moisture alarm:

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:

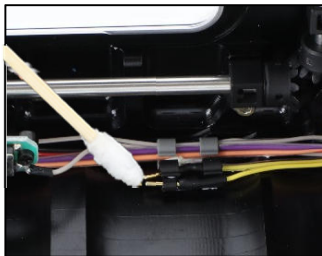Insert the battery as shown above and then press down the battery.

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

LED indicator	Status
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

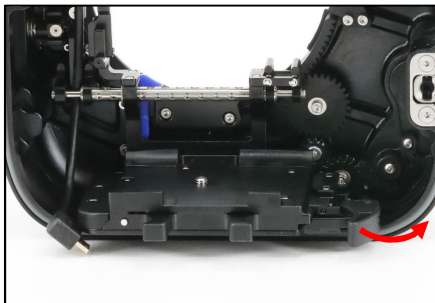| LED indicator	Status
Flashing "Blue" light	Standby mode. The moisture alarm is active, and the system is ready for vacuum indication whenever a vacuum is detected.
Flashing "Red" light with beeping sound	Moisture is detected.
Flashing "Yellow" light	Some vacuum is detected, target vacuum level is not 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)

INSTALLING THE CAMERA

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.

3. 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.

To install the camera to the housing:

1. 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. Pull down the Zoom/ focus gear disengagement lever before mounting lens (with gears installed) to the camera. Engage the gears by pulling up the lever to the original position. Confirm that the zoom/focus knob operates correctly.

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

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

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.

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.

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

    Then, lift a housing cap.

5. Align the Port mounting indicates of the port and the housing.

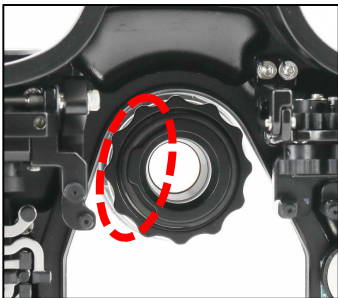6. Gently push the port into the port opening of the housing, until it cannot go in any further.

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.

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:

1. 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 from 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

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

P.N. 32201
Nauticam 180˚ straight
viewfinder

P.N. 32203
Nauticam 45˚
viewfinder

P.N. 26301
Flash trigger for Canon

P.N. 26321
TTL Flash Trigger for
Canon

P.N. 26216
Universal Optical Fiber
Cable

25080 M28-M16 Step Down Adaptor
28130 Hand Strap for 28113
25056 M14 Nikonos 5-pin bulkhead with universal hotshoe connection
90109 Nikonos 5-pin bulkhead cap
25019 M16 to M14 step down adaptor for electrical bulkhead
90134 Housing O-ring (I.D.=230mm,C.S.=4.0mm) For NA-Rossa/D4/1DX/1DXII/1DXII/BMCC

Optional Accessories for using with Wet Lenses:

25101 M67 flip diopter holder for M67 macro ports
25108 M67 Double Flip Holder for M67 Macro Ports
83213 M67 to Bayonet Mount Converter II
83214 Bayonet Mount Adaptor for SMC/CMC
83215 M77 to Bayonet Mount Converter
83251 M77 to Bayonet Mount Converter II

Buoyancy Recommendation for Housing Setups: (depending on port and lens choices)

72216 Ø70x200mm Carbon Fibre Aluminium Float Arm (Buoyancy 370g)
72217 Ø70x250mm Carbon Fibre Aluminium Float Arm(Buoyancy 520g)
72218 Ø70x300mm Carbon Fibre Aluminium Float Arm (Buoyancy 670g)
72219 Ø90x170mm Carbon Fibre Aluminium Float Arm (Buoyancy 450g)
72220 Ø90x220mmCarbon Fibre Aluminium Float Arm (Buoyancy 720g)
72233 Single Bayonet Holder II for Ø70 Float Arm
72234 Double Bayonet Holder II for Ø70 Float Arm
72243 Single Bayonet Holder II for Ø90 Float Arm
72244 Double Bayonet Holder II for Ø90 Float Arm
83252 Bayonet Holder for Arms
83253 Double Bayonet Holder for Arms
83254 Bayonet Lens Holder for Inon Float Arms

For Wet Optic Lenses

P.N. 81201
Super Macro Convertor 1
(2.3x Magnification)

P.N. 81202
Super Macro Convertor 2
(4x Magnification)

P.N. 85201
Wide Angle Conversion Port
(WACP-1)

P.N. 85204
Wide Angle Conversion Port
(WACP-2)

P.N. 87302
EMWL Set #2 (incl. focusing
unit #2, 150mm relay lens
and 3 objective lenses)

HDMI Output with V 1.4 Cable System

P.N. 17906/17907
NA-502H housing
for Small HD 502 5-inch HD monitor
with HDMI 1.4 input support

P.N. 17920/17921
NA-502B-H Housing
for SmallHD 502 Bright Monitor with
HDMI 1.4 input support

P.N. 25033*
Standard HDMI bulkhead with
M16 thread

P.N. 25080
M28-M16 Step Down Adaptor
(pre-installed on housing for
Nikonos 5pin bulkhead)

P.N. 25042
HDMI (D-C) cable in 240mm length
(for connection from HDMI bulkhead to
camera)

*25033 Standard HDMI bulkhead are included in the monitor housing.

HDMI Output with V 2.0 Cable System

P.N. 17922
Nauticam Atomos Ninja V housing
(HDMI 2.0) for Atomos Ninja V 5" 4Kp60
4:4:2 10-bit Recorder/Monitor/Player

P.N. 25089
M28 HDMI 2.0 Adapter

P.N. 25091
M28C1R200-M28A1R170
HDMI 2.0 Cable

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