

## User Manual Housing FF- MIL

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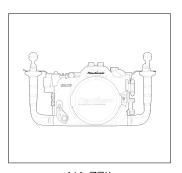
# **INTRODUCTION**

Thank you for purchasing this Nauticam product.

Before using the product, please read this manual thoroughly to familiarize yourself with full scope of functions on the product as well as ensuring that you will use the product correctly.

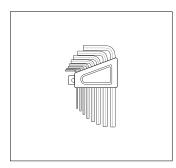
## **PACKAGE CONTENTS**

Make sure that you have all the included items listed below before using this product. If some items are missing or damaged, contact your local Nauticam dealer.





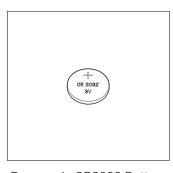
Padded Travel Case



Allen key set

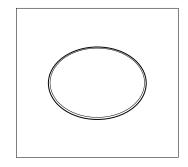


Lubricant



Panasonic CR2032 Battery

(pre-installed for Moisture Alarm)

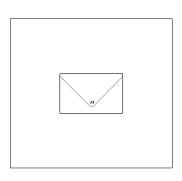


Spare Main O-ring

After purchase, we suggest that you reuse all packaging materials for future travelling.



O-ring Remover



Manual Instruction Card

## IMPORTANT INSTRUCTIONS

1

Water-tight test of the housing (without camera inside) before usage is recommended as well as any O-ring renewal and port change.

3

Only the accesories specified by Nauticam must be used. Third-party accessories may result in malfunctions or damage to the product.

5

Do not stretch any O-rings excessively. Only remove it using Nauticam O-ring remover.

7

Do not attempt to remove parts of the housing yourself. Repairs must be done at authorized service centers only.

9

Do not expose the housing in direct sunlight for a prolonged period.

11

Prevent any sand or dust or water penetration inside the housing. Be extra careful when changing lens and inserting or removing the camera.

2

Do not seal the housing when travelling by air as this may lead to a pressure difference between the atmosphere and inside the housing.

4

Use only Nauticam lubricant on silicone rubber O-ring.

Discontinue use immediately when there is a sign of leakage.

8

The housing should be positioned on the a stable and safe surface on land.

10

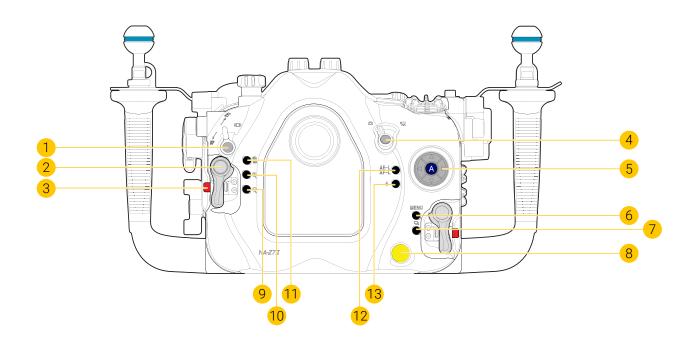
Do not open the housing in wet or sandy environment. Protect the housing from moisture and debris in order to prevent malfunction or leakage.

<u>12</u>

This product is not intened for use by children, or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised and/or given instruction by a responsible person concerning use of the product to ensure that they can use it safely.

# **PART NAMES AND FUNCTIONS**

Rear View

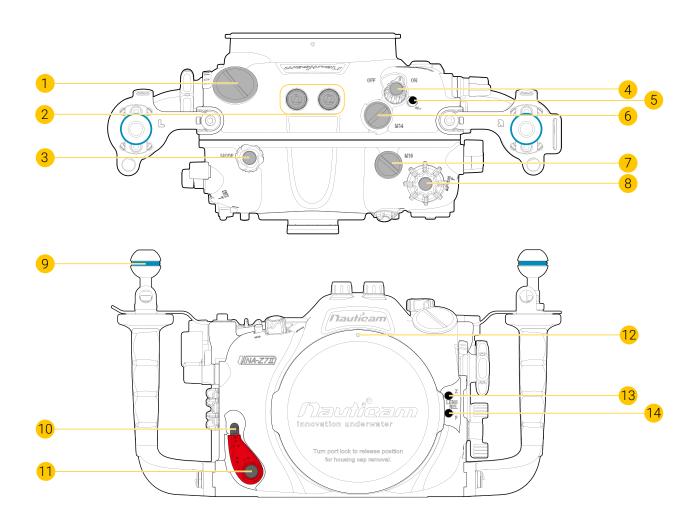


- Monitor mode lever
- 3 Housing unlock button
- 5 Multi selector
- 7 Release mode button
- 9 Zoom in button
- 11 Delete button
- i button

- 2 Housing Lock
- 4 Still / Movie button
- 6 Menu button
- 8 Moisture alarm window
- **10** Zoom out button
- 12 AE-L / AF-L button
- A Multi selector center

# **PART NAMES AND FUNCTIONS**

## Top + Front Views

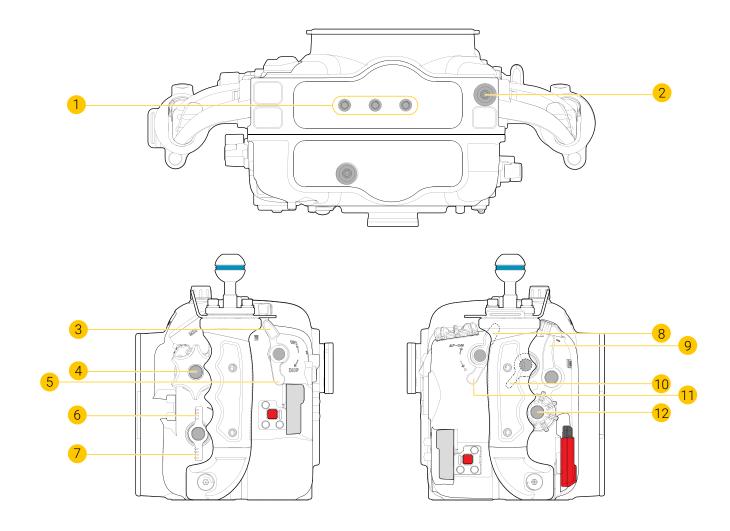


- 1 M28 Accessory port
- 3 Mode dial
- 5 Exposure compensation button
- 7 M16 Accessory port
- 9 Accessory mounting ball
- 11 Port locking lever
- 13 Z lens release button

- 2 Optical cable connector
- 4 Main Switch
- 6 M14 Accessory port
- 8 Main command dial
- 10 Port lock safety button
- 12 Port index mark
- 14 F lens release button

# **PART NAMES AND FUNCTIONS**

Back + Side Views



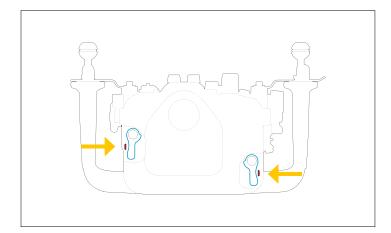
- 1 1/4" Threaded tripod holes
- 3 Playback lever
- 5 Display lever
- 7 Fn 2 lever
- 9 Shutter release lever
- 11 Movie record lever

- 2 Zinc Anodes
- 4 Zoom/Focus knob
- 6 Fn 1 lever
- 8 AF-ON lever
- 10 ISO lever
- 12 Front dial

# **OPENING THE HOUSING**

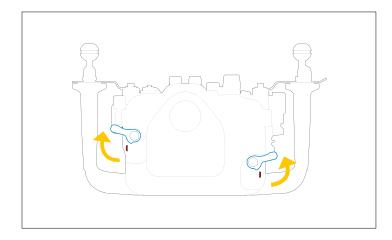
\* drawings as illustrations only

1



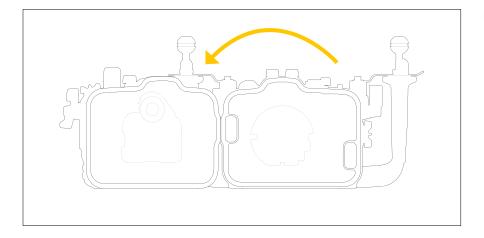
depress housing unlock button

2



turn housing lock outward

3



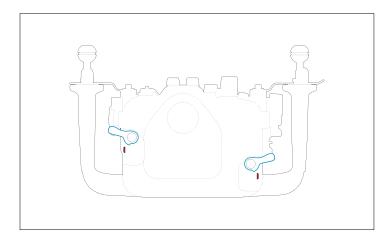
lift up the back housing

# **CLOSING THE HOUSING**

\* drawings as illustrations only

Housing Lock - Lock

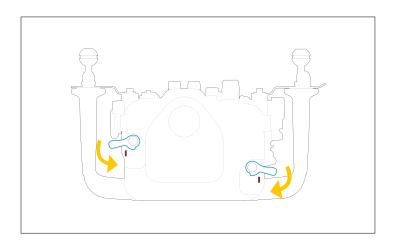
1



before closing the housing, clean and lubricate the main O-ring

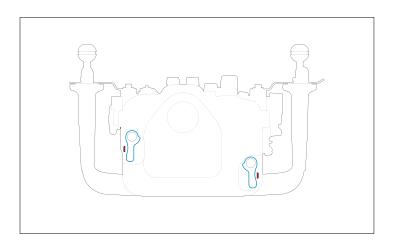
make sure nothing is caught between front and back housing and that they are fully aligned before locking

2



turn housing lock inward until you hear and feel it click into place

3

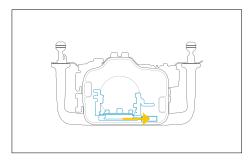


housing locked in place securely

\* drawings as illustrations only

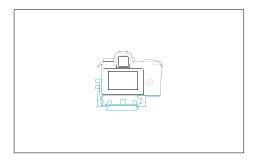
Installing the Camera - housing tray attachment & Z-mount / F-mount lens installment

1



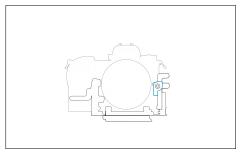
unlock camera tray lever and remove the tray from the housing

2



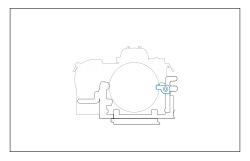
attach the camera tray by tightening the tray screw into the tripod socket of the camera

## 3 Z-mount / F-mount lens installent



Z-mount lens

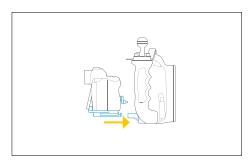
make sure the small lever is in vertical position before Z mount lens installment



F-mount lens (w/ FTZ adaptor)

make sure the small lever is in horizontal position before F mount lens installment

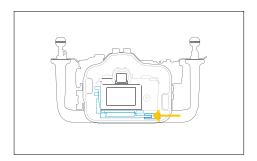
4



\* please refer to page 10 for lens installment before sliding in the camera

slide the camera tray back into the housing along the tray rail

5



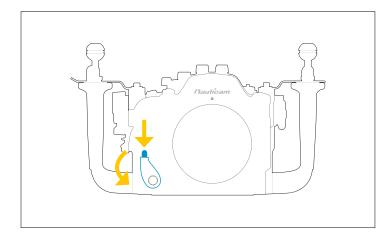
lock camera tray

\* place the zoom/focus knob in place and make sure it is engaged with lens gear

\* drawings as illustrations only

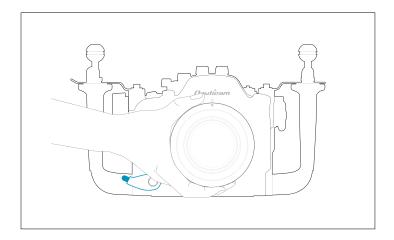
Port Mounting

1



depress safety button and rotate anti-clockwise

2

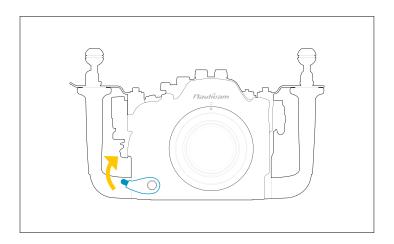


lubricant the port O-ring before mounting

align index mark

push port assembly straight in

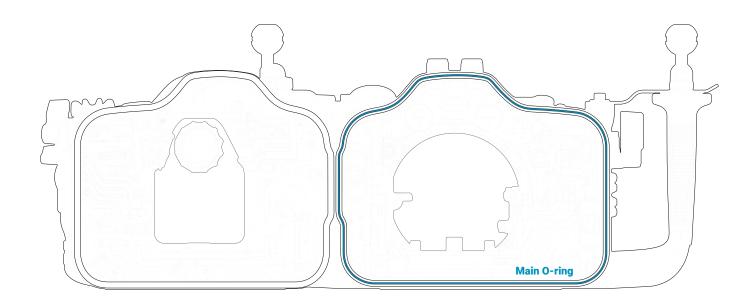
3



rotate locking lever clockwise to lock

\* drawings as illustrations only

Coating housing O-ring



1 remove the main O-ring using an O-ring remover

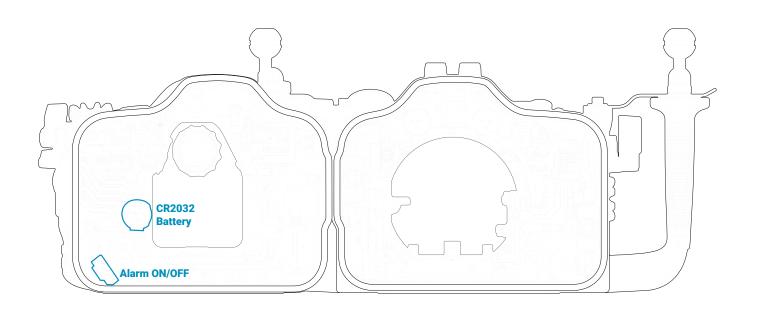
2 clean the O-ring groove with a cloth and ensure that it is free from salt or other foreign materials

3 lightly coat it with provided lubricant

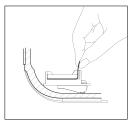
4 return the main O-ring by slowly pressing from one corner to the whole perimeter

\* drawings as illustrations only

Setting up moisture alarm

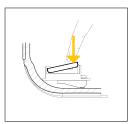


1



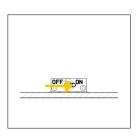
remove battery insulation film

2



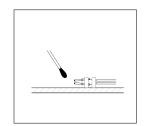
press the battery down until it click into place

3



switch on the alarm
- the moisture alarm
window will flash in
BLUE when it is working
correctly

4



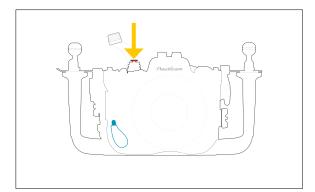
test the alarm

- connect the wires with a dampened cotton bud; the alarm will give a repeating 'beep' and the mositure alarm window will flash RED

\* drawings as illustrations only

Changing lens/port without opening the housing

1

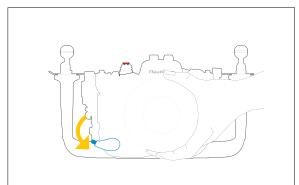


If using with vacuum valve:

remove the cap from the vacuum valve and press the red button to release pressure before unlocking port lock

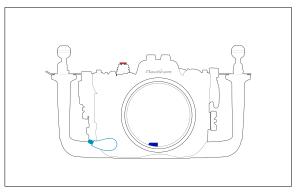
If using without vacuum valve, please follow from step 2

2



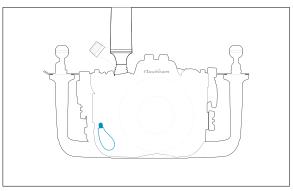
unlock port lock and remove port assembly

3



press the blue button to reset vacuum alarm before replacing port

4



reset vacuum valve system using hand pump then close the cap

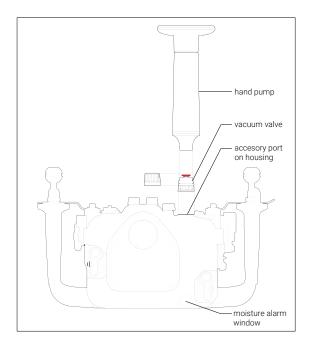
<sup>\*</sup> please refer to page 15 on complete vacuum system guidance

## **RECOMMENDED ACCESSORY**

\* drawings as illustrations only

Vacuum valve system

1



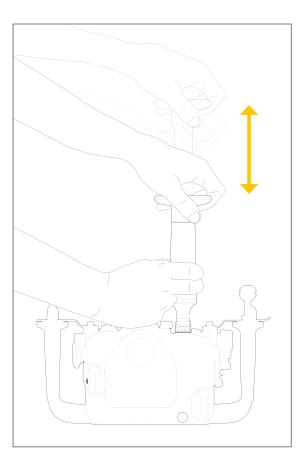
remove the plug of M16 accessory port from the housing

remove the cap from the vacuum valve

slightly lubricate the o-ring and make sure the o-ring is in place

then tighten the vacuum valve to the housing with the tool provided

2



connect hand pump to the valve and pump several times until it reaches the target vacuum level

close vacuum valve cap

Moisture alarm window colour indication :

Steady Blue	device is turned on
Flashing Blue -	standby mode, ready for pumpng
Steady Green	target vacuum level is reached
Flashing Yellow -	vacuum level is dropping
Flashing Red -	vacuum is totally lost, circuit stalled untill device is switched off
Alternating Blue and Red	vacuum is totally lost, circuit stalled untill device is switched off
Steady Red	out of battery
Flashing Yellow Flashing Red Alternating Blue and Red	vacuum level is dropping  vacuum is totally lost circuit stalled untill device is switched off  vacuum is totally lost circuit stalled untill device is switched off

\* It is recommended to leave the housing for at least 20mins to ensure it is sealed. If the LED light changes from steady green light to rapidly flashing yellow light, that means there is a leakage. Please check every 0-ring and then conduct the vacuum test again.

# **CARE/STORAGE**

1

Soak the housing system in fresh water after salt water usage

3

We recommand cleaning and inspecting the main 0-ring each time after diving for any damage and every time the housing is opened.

5

We recommand to ship the housing to our servic centers for a complete overhual after 200 dives/every 2 years.

2

Operate all controls and buttons at least 3 times while immersed in fresh water

4

Protect the housing with robust and shock-proof travel case during transportation. Do not travel with camera inside housing.

## WARRANTY

All NAUTICAM Housing Products and Viewfinders are warranted against any material and manufacturing defects for two years from the date of purchase for consumer use. NAUTICAM Optical Accessories are warranted against material and manufacturing defects for a period of one year, and HDMI cables carry a year warranty.

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.

# **SPECIFICATIONS**

#### Construction

Abrasion Resistant Polycarbonate

# Width 360 mm Height 200 mm Depth 160 mm

## Weight

In air	3.10 kg
In water	-0.07 kg (w/ camera & battery)

### Depth

Rating	100 m

## Port specifications

Port mount	N 120 Port System
Port accessories	1 x M28, 1 x M16, 1 x M14

## HDMI connectivity required accessories (2.0)

25085 M28C1R200-M28A1R170 HDMI 2.0 Cable

25089 M28 Adaptor for HDMI 2.0 Cable

## Monitor options (2.0)

17922 Nauticam Atomos Ninja V Housing for Atomos Ninja V 5" (excl. HDMI 2.0 cable)

#### HDMI connectivity required accessories (1.4)

25033 Standard HDMI Bulkhead with M16 Thread

25080 M28-M16 Step Down Adaptor

25036 HDMI (D-C) cable in 190mm length

## Monitor options (1.4)

17923 NA-Shinobi-H Housing for Atomos Shinobi 5.2" 4K HDMI Monitor

17906 NA-502H Housing for SmallHD 502 5" HD Monitor

17920 NA-502B-H Housing for SmallHD 502 Bright Monitor

#### **Recommended accessories**

25625 M16 Vacuum Valve II (pushbutton release)

32201 180º Straight Viewfinder

32203 45° Viewfinder

26308 TTL Flash Trigger for Nikon

26216 Universal Optical Fiber Cable

## **Wet Lens Compatibility**

Macro	81201	Super Macro Convertor 1 (SMC-1, 2.3x magnification)
	81202	Super Macro Convertor 2 (SMC-2, 4.0x magnification)
Macro to Wideangle	86201	Macro to Wide Angle Lens 1 (MWL-1)
	87301	EMWL Set#1 (incl. focusing unit #1, 150mm relay lens & 3 objective lenses
Wideangle	85201	0.36x Wide Angle Conversion Port with Aluminium Float Collar (incl. N120 to N100 port adaptor)
85	85204	0.57x Wide Angle Conversion Port 2 with Aluminium Float Collar (compatible with 14mm lenses)

#### Recommended wet lens accessories

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
87501 Flip Holder for EMWL
87512 Shade for 130° Objective Lens
87518 Strobe Mounting Brackets for EMWL Relay Lens
87517 EMWL Bayonet Holder for Ø90 Float Arm

 $<sup>\,{}^{\</sup>star}\,25033\,\&\,25036$  are included in monitor housing packaging

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