

NA - GH6

For Panasonic Lumix GH6 Camera

PN 17720

User Manual
Housing
MIL

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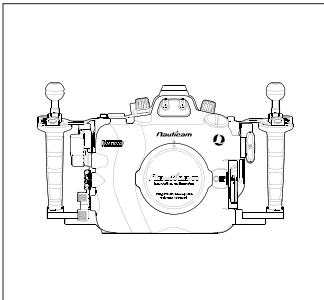
INTRODUCTION

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.

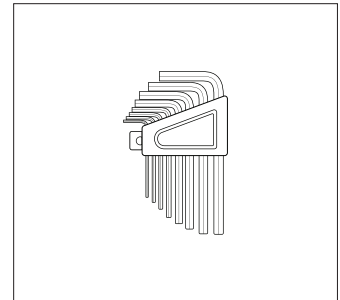


NA-GH6

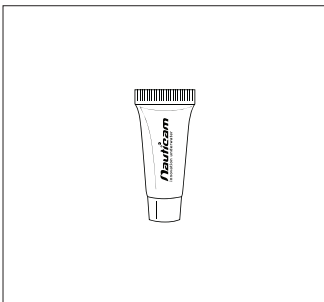
(2 x Handles with Mounting Balls, 1 x Housing Cap, 2 x Optical Fiber Mount Caps, 2 x Stainless Steel Handle Brackets)



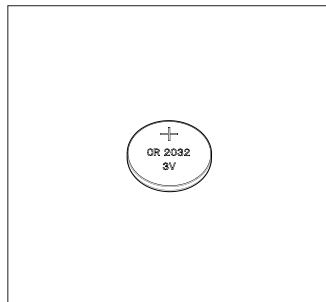
Padded Travel Case



Allen key set

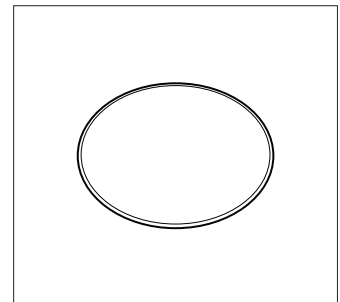


Lubricant



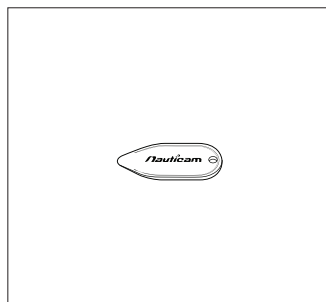
Panasonic CR2032 Battery

(pre-installed for Moisture Alarm)

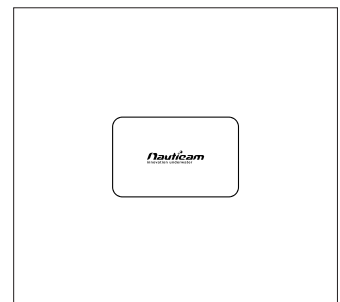


Spare Main O-ring

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.

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.

3

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

4

Use only Nauticam lubricant on silicone rubber O-ring.

5

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



6

Discontinue use immediately when there is a sign of leakage.

7

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

8

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

9

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

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.

11

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

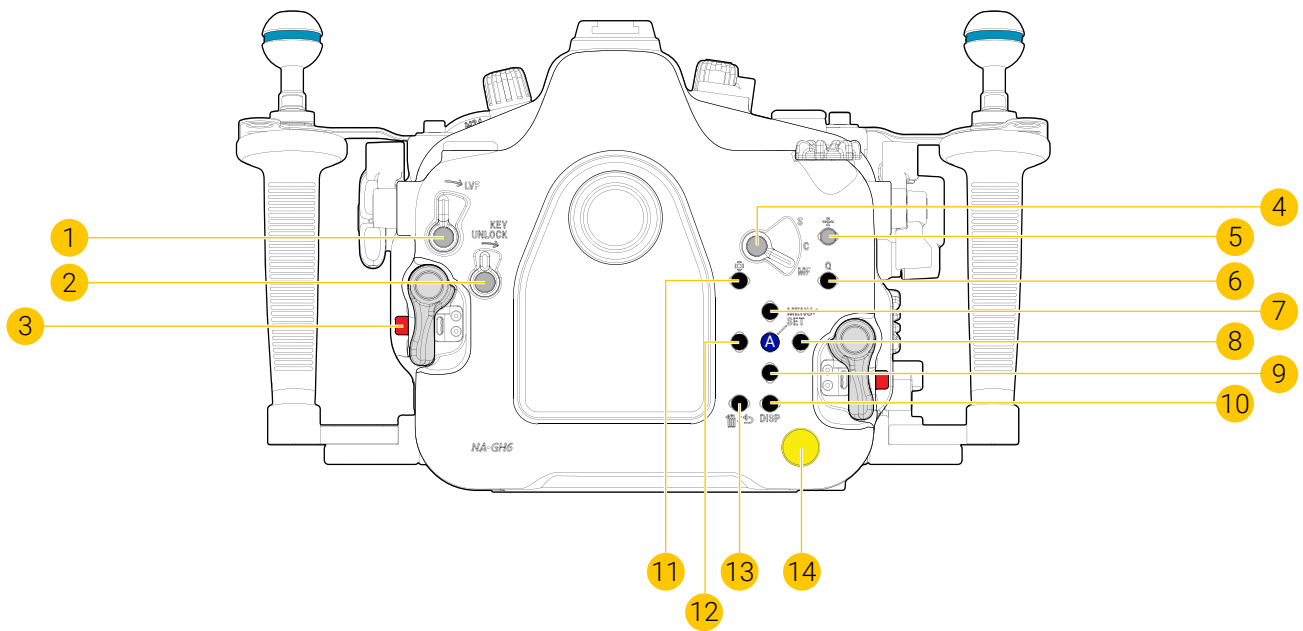


12

This product is not intended 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

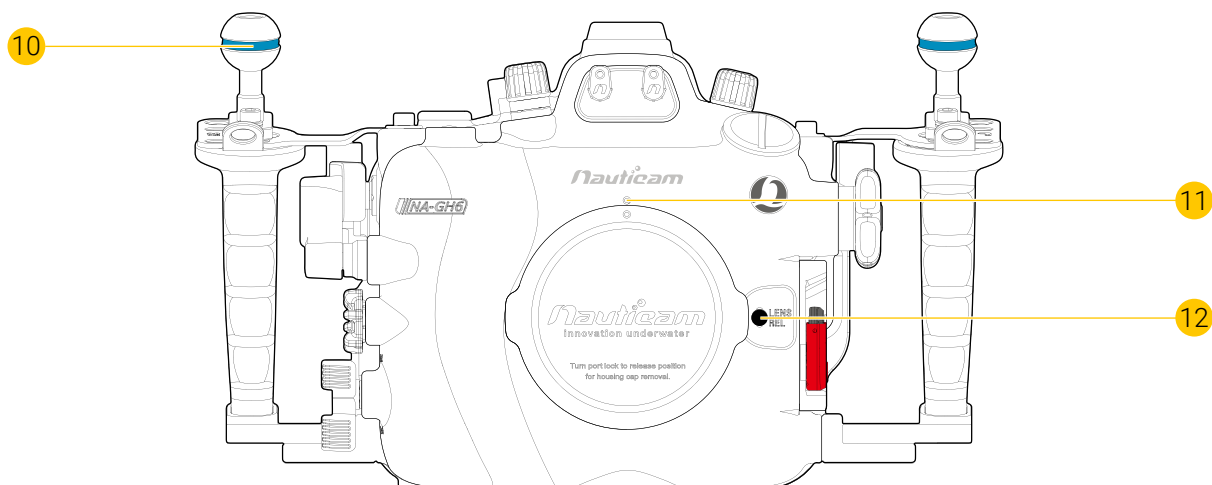
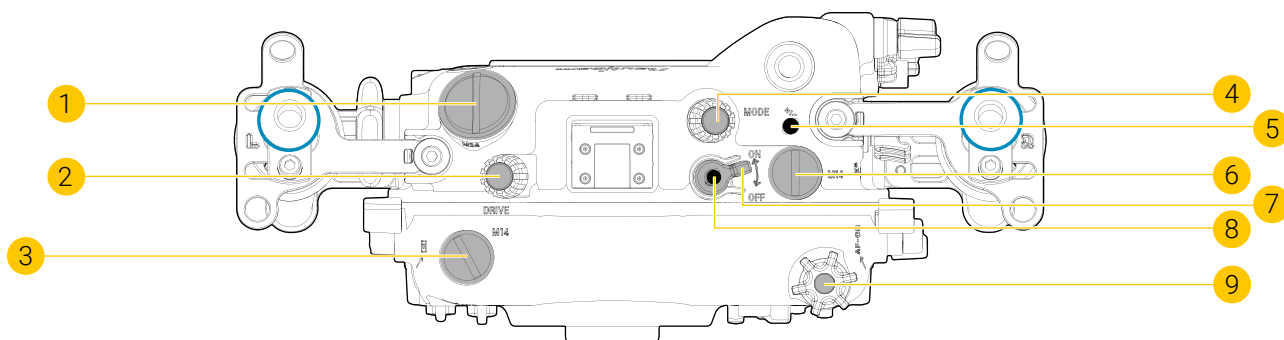
Rear View



- | | | | |
|----|-------------------------|----|-----------------------|
| 1 | LVF lever | 2 | KEY UNLOCK lever |
| 3 | Housing unlock button | 4 | Focus mode lever |
| 5 | AF button | 6 | Quick button |
| 7 | Up button | 8 | Right button |
| 9 | Down button | 10 | Display button |
| 11 | Fn button | 12 | Left button |
| 13 | Delete button | 14 | Moisture alarm window |
| A | Multi selector - center | | |

PART NAMES AND FUNCTIONS

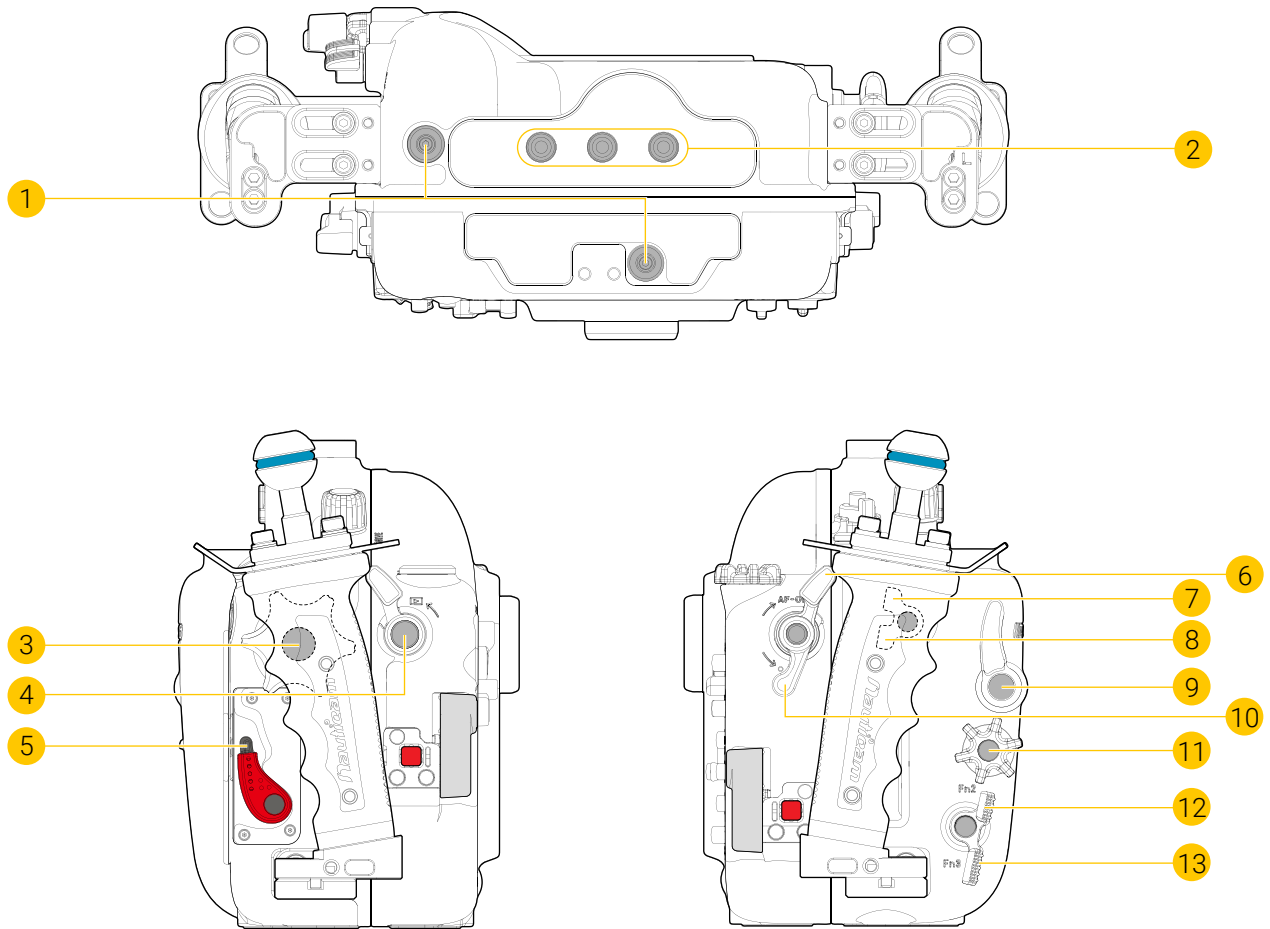
Top + Front Views



- | | | | |
|----|------------------------------|----|-------------------------|
| 1 | M24 Accessory port | 2 | Drive dial |
| 3 | M14 Accessory port | 4 | Mode dial |
| 5 | Exposure compensation button | 6 | M14 Accessory port |
| 7 | Main switch | 8 | Mode dial lock button |
| 9 | Real dial | 10 | Accessory mounting ball |
| 11 | Port index mark | 12 | Lens release button |

PART NAMES AND FUNCTIONS

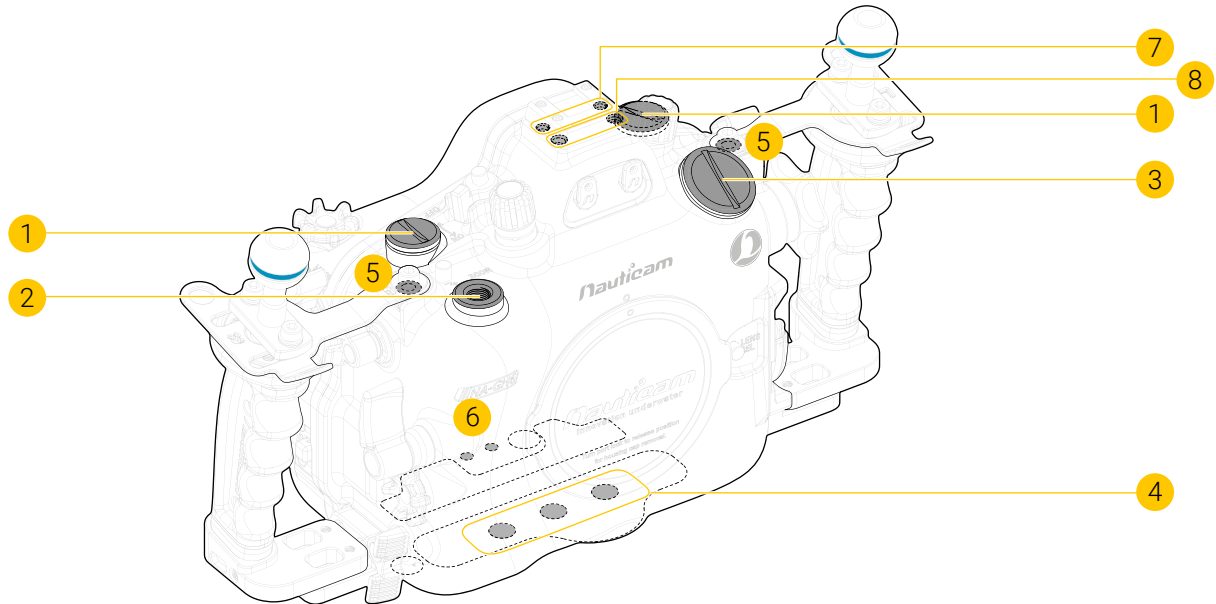
Back + Side Views



- 1 Sacrificial zinc anodes
- 3 Zoom/Focus knob
- 5 Port lock safety button
- 7 White balance lever
- 9 Shutter release lever
- 11 Front dial
- 13 Fn3 lever

- 2 1/4" Threaded tripod holes
- 4 Playback lever
- 6 AF-ON lever
- 8 ISO lever
- 10 Movie record lever
- 12 Fn2 lever

HOUSING MOUNT



Housing mount

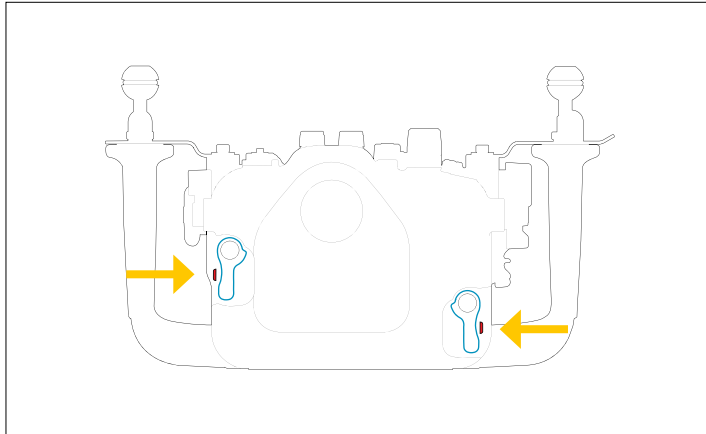
Compatible accessories

1	M14 Accessory port	25624	M14 Vacuum valve II (pushbutton release)
2	M10 Accessory port	25221	M10 Strobe mounting ball
		25224	M10 Strobe mounting ball with hole
3	M24 Accessory port	25086	M24 adaptor for HDMI 2.0 cable
		25099	HDMI 2.0 cable
4	1/4" -20 mounting threads	17954	Universal tripod plate
5	M5 Accessory port	25228	M5 Strobe mounting ball
6	M5 Threaded holes	25217	Mounting Ball Set for Tripod
7	M5 Threaded holes	25111	Strobe mounting ball for handle
8	1/4" -20 mounting threads	17959	Housing Mounting Ball with 1/4" Screws

OPENING THE HOUSING

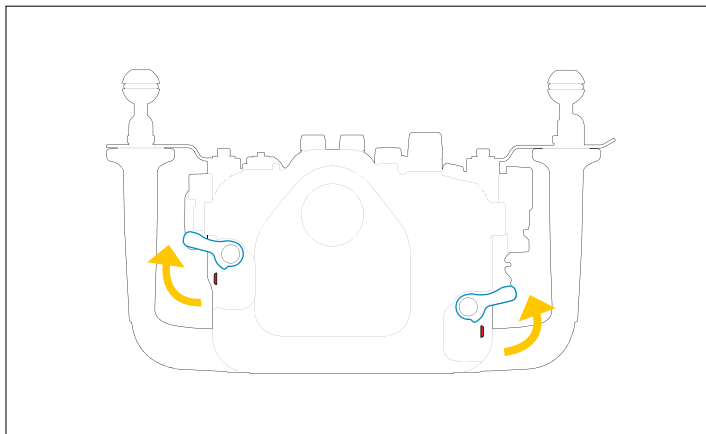
* drawings as illustrations only

1



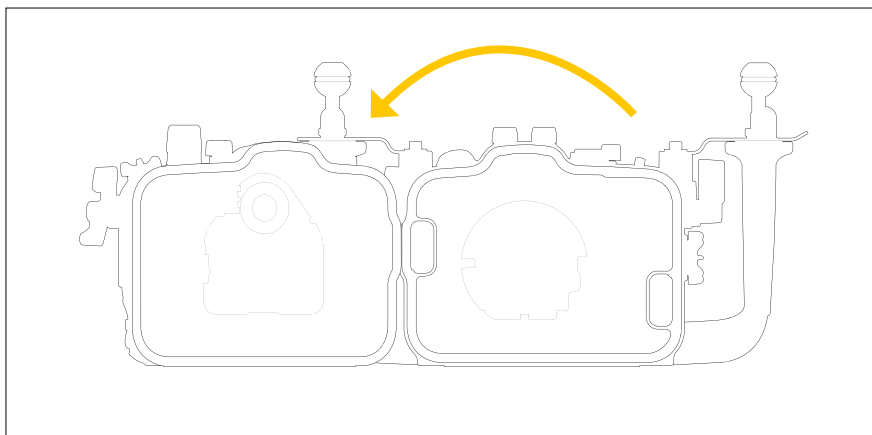
depress housing unlock button

2



turn housing lock outward

3

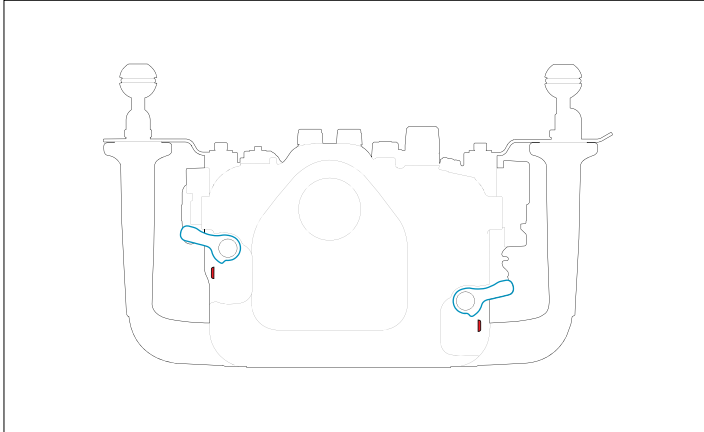


lift up the back housing

CLOSING THE HOUSING

* drawings as illustrations only

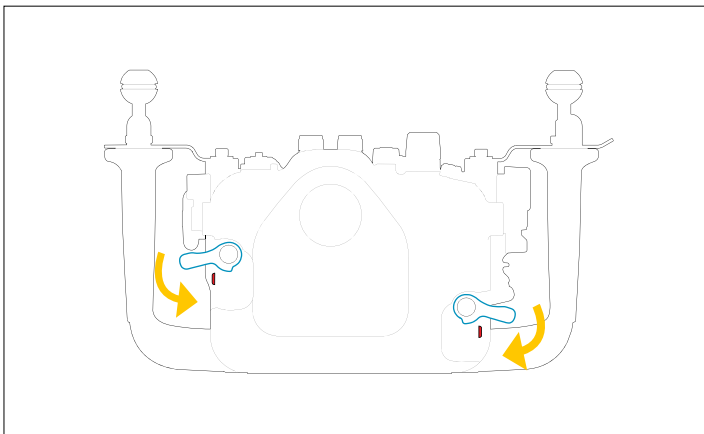
1



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

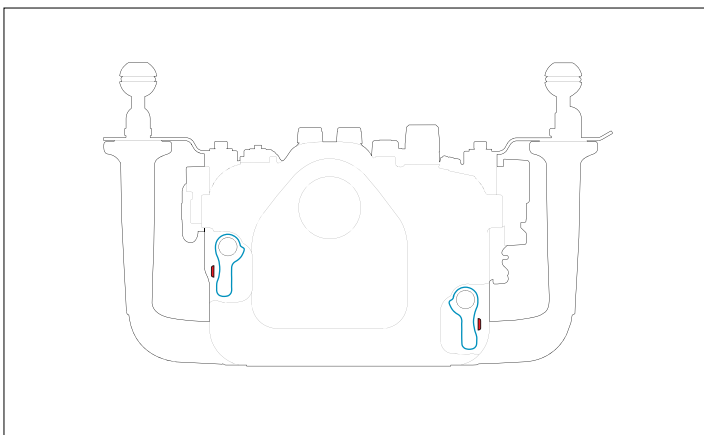
make sure nothing is caught between front and back housing and that they are fully aligned before locking

2



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

3



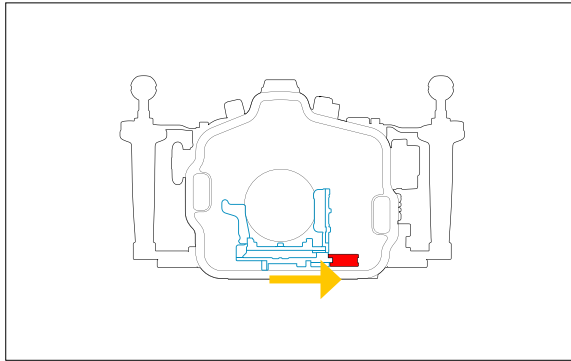
housing locked in place securely

PREPARATION FOR USE

* drawings as illustrations only

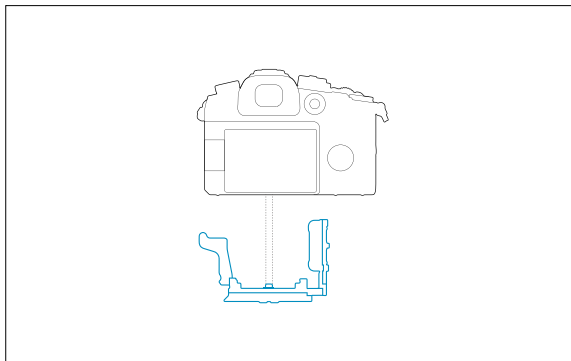
Installing the Camera - housing tray attachment

1



unlock camera tray lever and
remove the tray from the housing

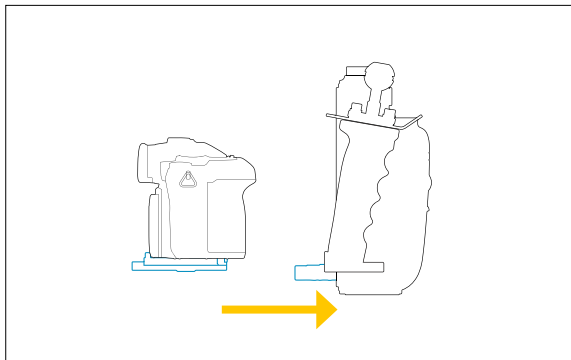
2



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

make sure the camera buttons are
engaged with the camera tray

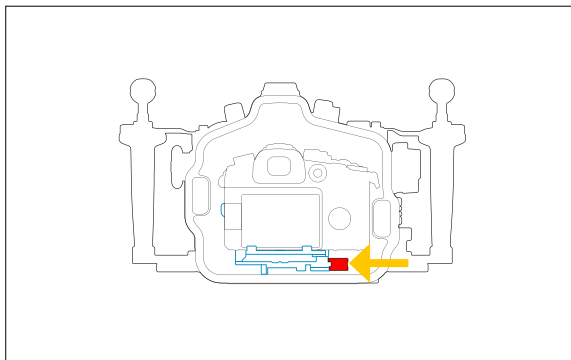
3



** pull out the zoom/focus knob if
installing the camera with lens and
gear attached
* lift up drive dial and main switch
each time before installing the
camera*

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

4



lock camera tray

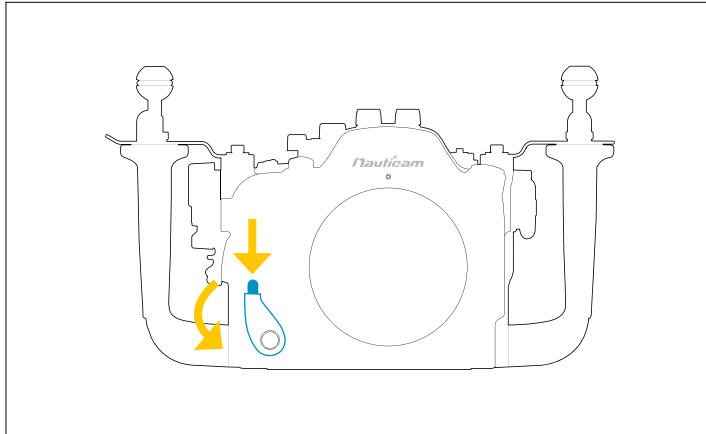
** place the zoom/focus knob in
place and make sure it is engaged
with lens gear
*gently push the drive dial and
main switch downwards make
sure they are engaged with the
levers on the camera*

PREPARATION FOR USE

* drawings as illustrations only

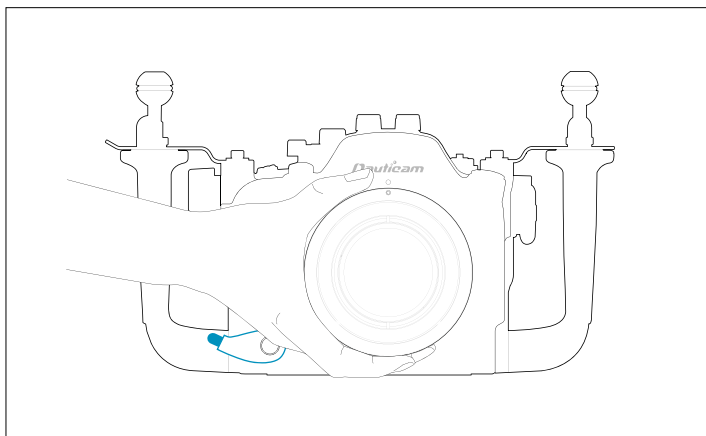
Port Mounting

1



depress safety button and rotate anti-clockwise

2

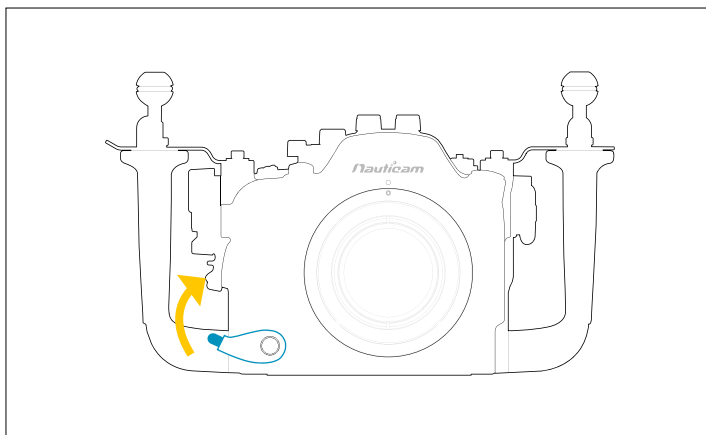


lubricant the port O-ring before mounting

align index mark

push port assembly straight in

3

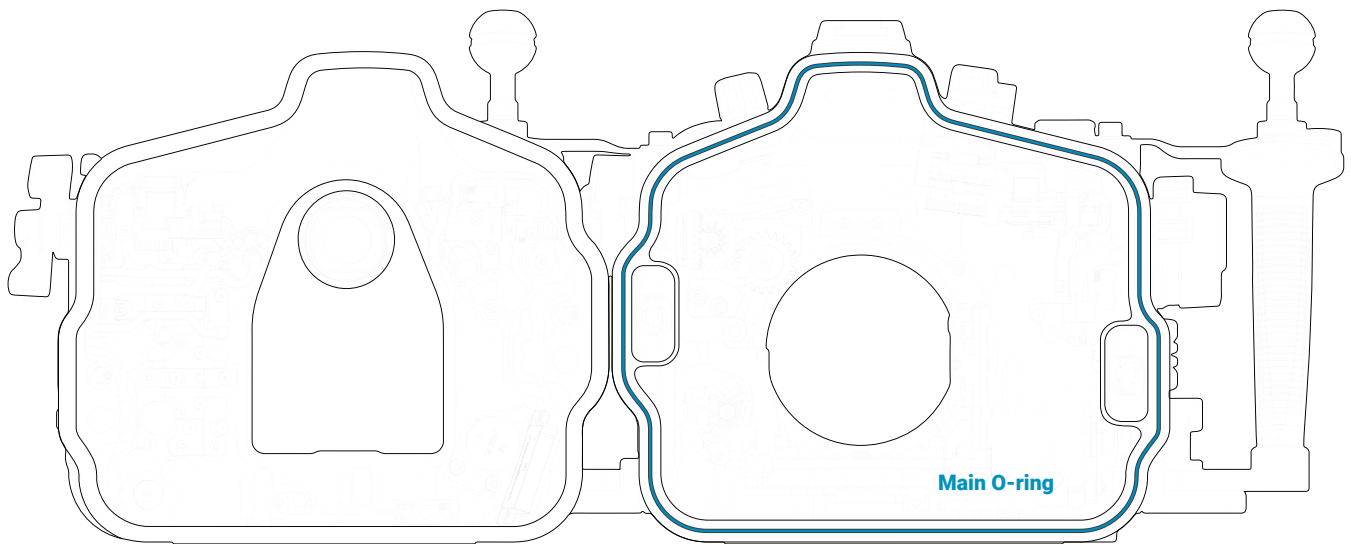


rotate locking lever clockwise to lock

PREPARATION FOR USE

* 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

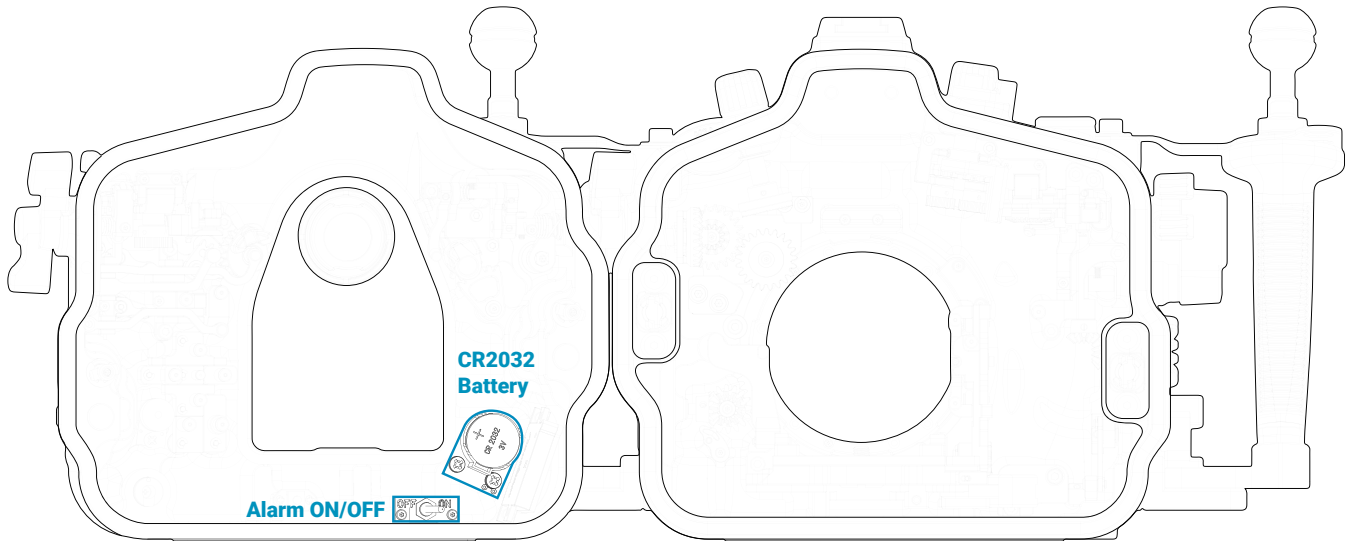
3
lightly coat it with provided lubricant

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

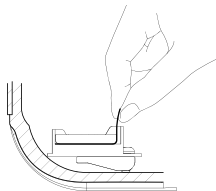
PREPARATION FOR USE

* drawings as illustrations only

Setting up moisture alarm

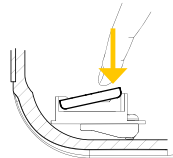


1



remove battery
insulation film

2



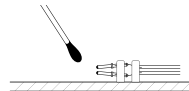
press the battery down until it
click into place

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 moisture alarm
window will flash **RED**

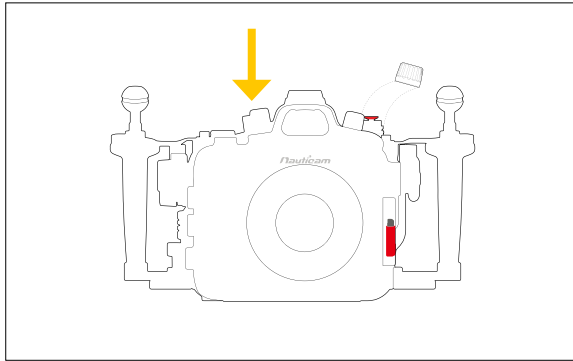
* please contact our authorized service centers if testing fails
*please refer to page 15 for complete vacuum system guidance

PREPARATION FOR USE

* drawings as illustrations only

Changing lens/port without opening the housing

1

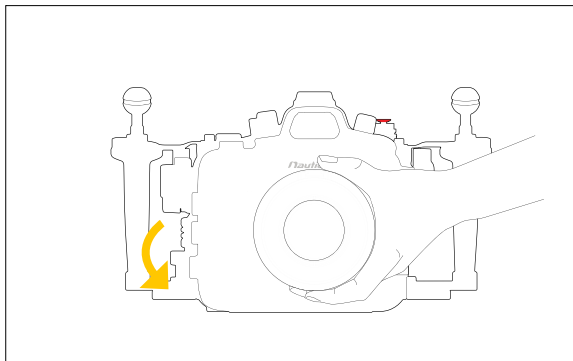


If using with vacuum valve :

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

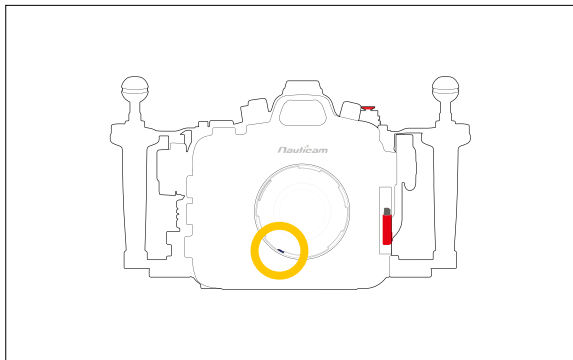
If using without vacuum valve, please follow from step 2

2



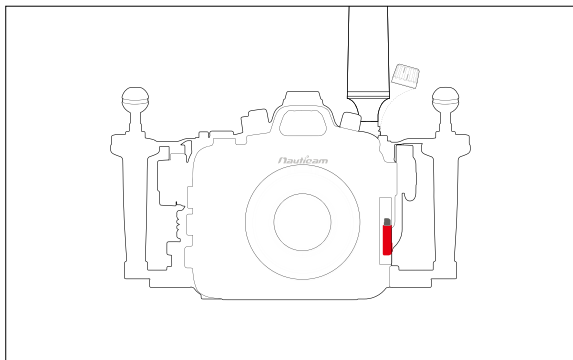
unlock port lock and remove port assembly

3



press the blue button to reset vacuum alarm before replacing port

4



replace port assembly

then reset vacuum valve system using hand pump and close the cap after

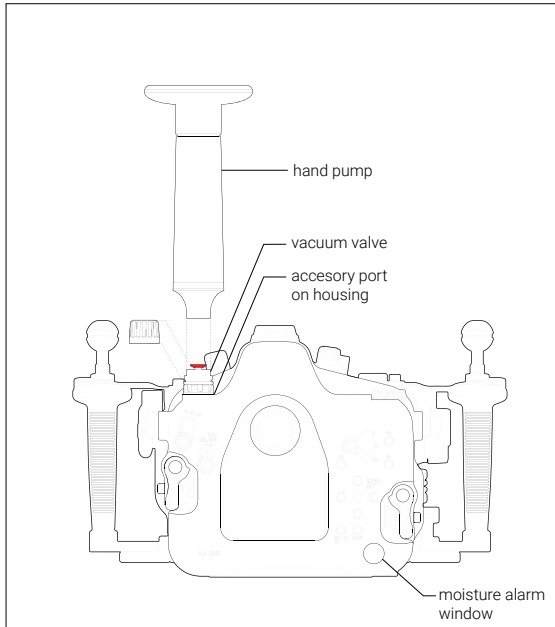
* please refer to page 15 on complete vacuum system guidance

OPTIONAL ACCESSORIES

* drawings as illustrations only

Vacuum valve system

1



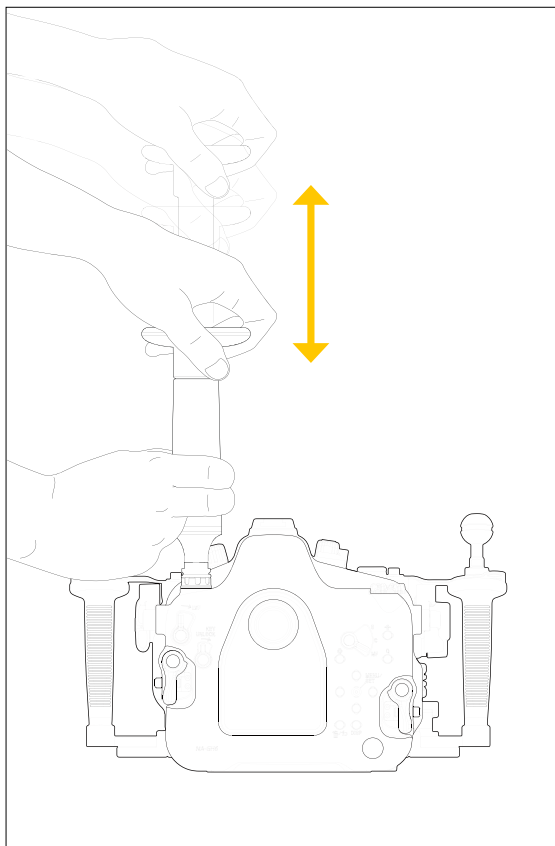
remove the plug of M14 accessory port from the housing

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 pumping
Steady Green		target vacuum level is reached
Flashing Yellow		vacuum level is dropping
Flashing Red		vacuum is totally lost, circuit stalled until device is switched off
Alternating Blue and Red		vacuum is totally lost, circuit stalled until device is switched off
Steady Red		out of battery

** 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 O-ring and then conduct the vacuum test again.*

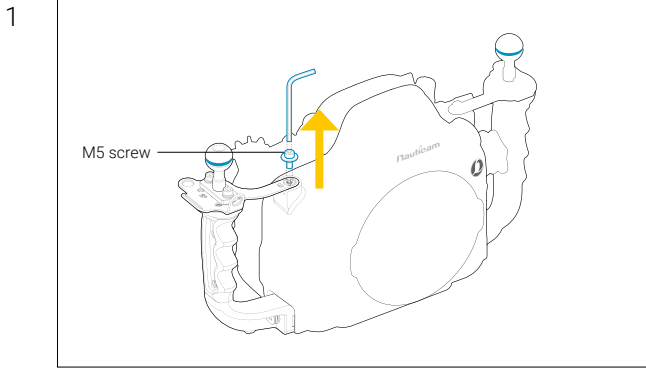
** please contact our authorized service centers if testing fails*

OPTIONAL ACCESSORIES

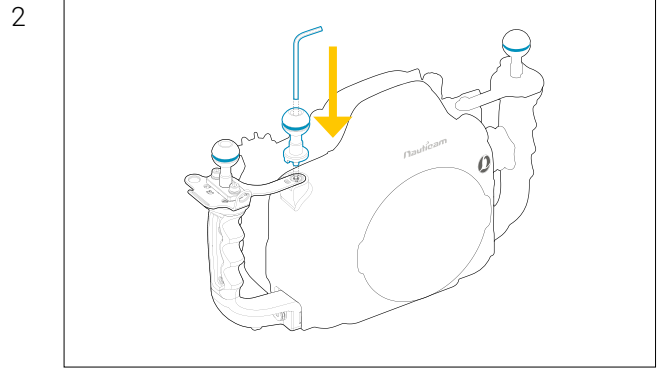
* drawings as illustrations only

Strobe Mounting Ball

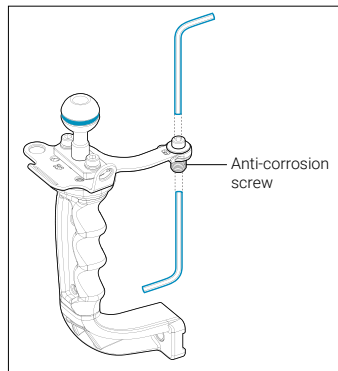
Installing M5 Strobe Mounting Ball - **RECOMMENDED**



remove M5 screw with the allen key provided in the housing package

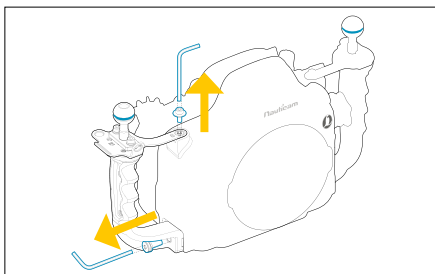


screw #25228 M5 Strobe mounting ball directing onto the M5 thread

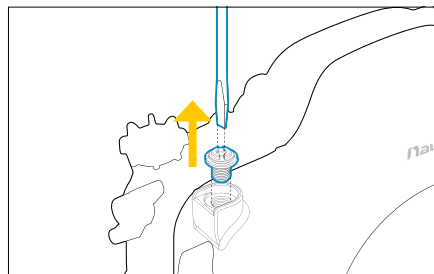


** the anti-corrosion screw may also be unscrewed while removing M5 screw, if this is happening, you can separate the parts as shown in the diagram on the left*

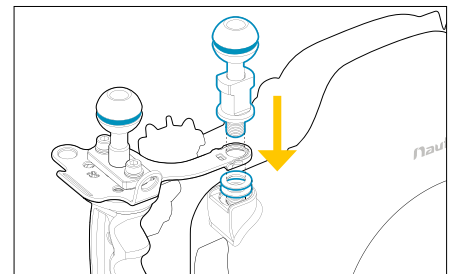
Installing M10 Strobe Mounting Ball - Optional



remove M5 screw and housing handle screw on the side

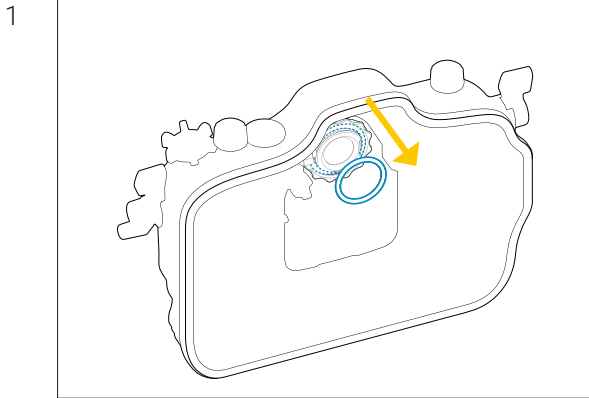


take out the handle and remove the anti-corrosion screw

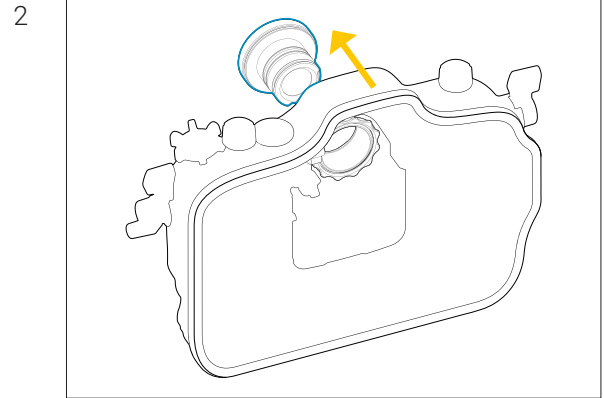


replace the handle and screw the M10 Strobe mounting ball onto the housing as shown

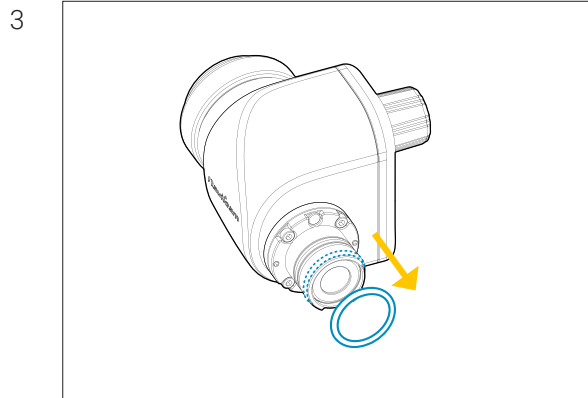
OPTIONAL ACCESSORIES



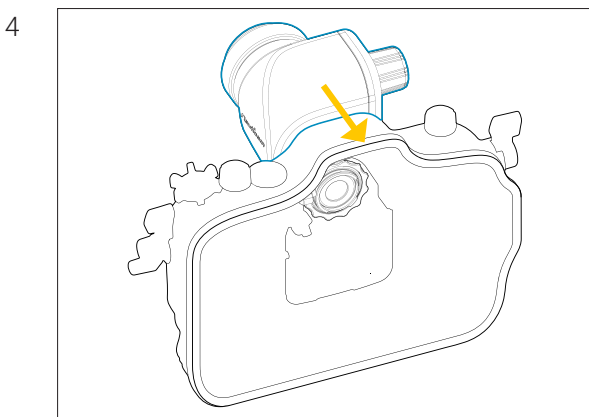
firstly remove the pre-installed 0.66x viewfinder from the housing by removing the retainer o-ring inside rear housing



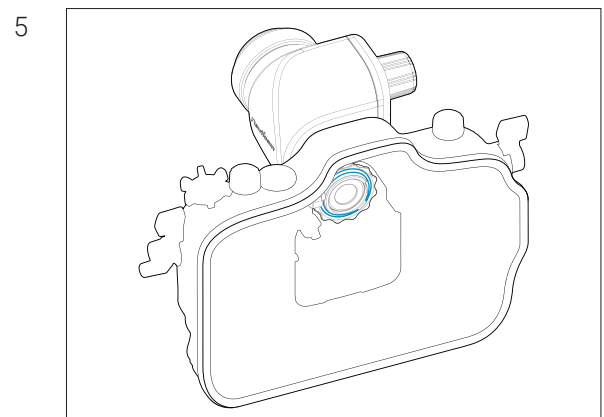
gently push the 0.66x viewfinder from the inside of the housing



remove the retainer o-ring from the viewfinder



align the viewfinder alignment pins with the LCD display window and push the viewfinder into the housing until it cannot go in any further



lightly lubricate the retainer o-ring and place it back from inside the housing

CARE/STORAGE

1

Soak the housing system in fresh water after salt water usage

2

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

3

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

4

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

5

We recommend to ship the housing to our service centers for a complete overhaul after 500 dives/every 3 years.

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

Housing body	Hard Anodized Aluminium Alloy
Display window	Abrasion Resistant Polycarbonate

Dimensions

Width	331 mm
Height	176 mm
Depth	136 mm

Weight

In air	2.8 kg
Buoyancy in water	negative 0.5 kg (w/ camera & battery)

Depth

Rating	100 m
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Port specifications

Port mount	N85 Micro Four Thirds Port System
Port accessories	1 x M24, 2 x M14, 1 x M10

Optional accessories

25624 M14 Vacuum Valve II (Pushbutton Release)
32204 Nauticam 180° straight viewfinder for MIL housings
32205 Nauticam 45° viewfinder for MIL housings
32211 Nauticam Full Frame Straight Viewfinder 32° / 1:1
32213 Nauticam Full Frame Angle Viewfinder 32° / 1:1
32215 Viewfinder Collar Adaptor for 32211/2/3/4 to use with MIL Housings
25221 M10 strobe mounting ball for housing
25228 M5 strobe mounting ball for housing
25311 Strobe mounting ball for cold shoe
25312 Light mounting stem for cold shoe
25111 Strobe mounting ball for handle with screws
17959 Housing Mounting Ball with 1/4" Screws
25217 Mounting Ball Set for Tripod (for NA-GH5SV/GH6)

Buoyancy options

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 Ø90x220mm Carbon 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 Single Bayonet Holder for Arms
83253 Double Bayonet Holder for Arms

HDMI CONNECTION, MONITOR & ETHERNET OPTIONS

HDMI connectivity required accessories (2.0)

25086 M24 adaptor for HDMI 2.0 cable
25099 M24A2R200-M28A1R170 HDMI 2.0 cable

Monitor options (2.0)

17922 Nauticam Atomos Ninja V Housing for Atomos Ninja V 5"
17922S Nauticam Atomos Ninja V-S Housing for Atomos Ninja V 5" with Atomos AtomX SDI Module

HDMI connectivity required accessories (1.4)

25033 Standard HDMI Bulkhead with M16 Thread
25081 M24 -16 Step Down Adaptor
25100 HDMI (D-C) 1.4 Cable in 200mm length
<i>*25033 is included in monitor housing packaging</i>

Monitor options (1.4)

17923 NA-Shinobi-H Housing for Atomos Shinobi 5.2" 4K HDMI Monitor
17920 NA-502B-H Housing for SmallHD 502 Bright Monitor
17925 NA-503-H Housing for SmallHD 503 UltraBright On-Camera Monitor

Optional accessories for monitor mounting system

17951 Nauticam Monitor Housing Mounting System
17953 Nauticam Monitor Housing Mounting Adaptor to use with NA-GH5/GH5SV/GH6
17954 Tripof Plate
17960 Universal Quadra-pod Plate

WET LENS COMPATIBILITY

Macro	81301	Compact Macro Converter 1 (CMC-1, 4.5x Magnification)
	81302	Compact Macro Converter 2 (CMC-2, 2.8X Magnification)
Macro to Wideangle	86201	Macro to Wideangle Lens 1 (MWL-1, 150 deg. FOV with full frame 60mm macro lens)
	87301	EMWL Set#1 (incl. focusing unit #1, 150mm relay lens & 3 objective lenses)
	87303	EMWL Set#3 (incl. focusing unit #2, 150mm relay lens & 3 objective lenses)
Wideangle	83202	Wet Wide Lens 1B (WWL-1B) 130 deg. FOV with compatible 28mm lenses (incl. float collar)
	83203	Wet Wide Lens Compact (WWL-C) 130 Deg. FOV with Compatible 24mm Lenses (incl. float collar)
	85201	0.36x Wide Angle Conversion Port with Aluminium Float Collar (incl. N120 to N100 port adaptor)

Optional wet lens accessories

25101	M67 flip diopter holder for M67 macro ports
25108	M67 Double Flip Holder for M67 Macro Ports
83250	M67 to Bayonet Mount Converter II
83251	M77 to Bayonet Mount Converter II
83214	Bayonet Mount Adaptor for SMC/CMC
86221	M67 Flip holder for MWL-1
86222	Double Flip Holder for MWL-1
87501	Flip Holder for EMWL
87512	Shade for 130° Objective Lens
87513	Shade for 100° Objective Lens
87518	Strobe Mounting Brackets for EMWL Relay Lens
87517	EMWL Bayonet Holder for Ø90 Float Arm

**please refer to Nauticam port charts for more setup information.*

FLASH TRIGGERING

Optical TTL

26309 Mini Flash Trigger for NA-GH5/G9/S1R/S1H/GH6

26216 Universal Optical Fiber Cable

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