

NA - C70

For Canon EOS C70 Cinema Camera

PN 16507

User Manual
Housing
Digital Cinema

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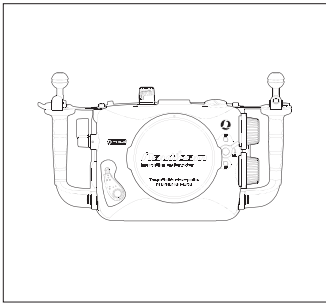
INTRODUCTION

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.

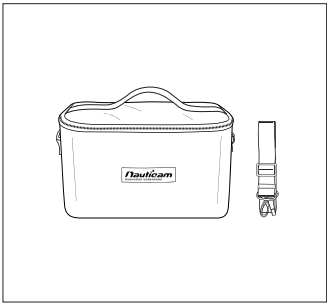
PACKAGE CONTENTS

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.

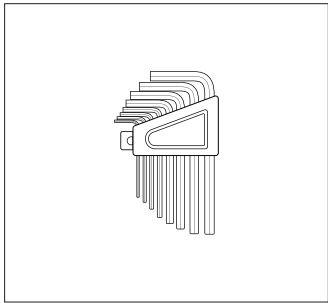


NA-C70

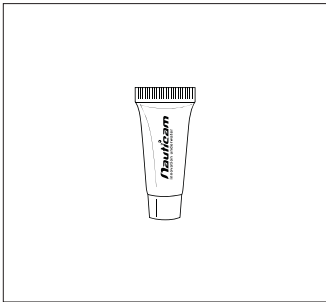
(25625 M16 Vacuum Valve II, Nauticam to Canon SDK Control Board, 2 x Handles with Mounting Balls, 1 x Housing Cap, 2 x Stainless Steel Handle Brackets, Monitor Shade)



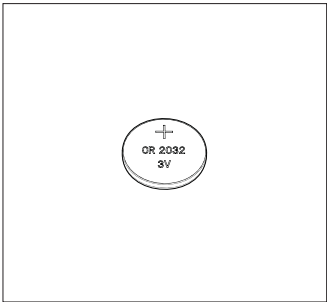
Padded Travel Case



Allen key set

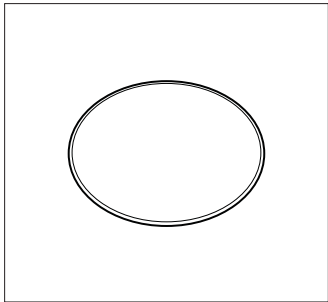


Lubricant

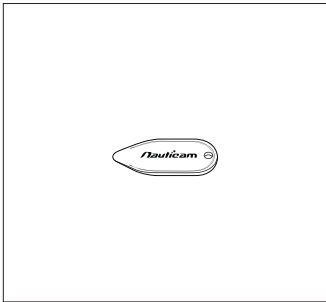


Panasonic CR2032 Battery

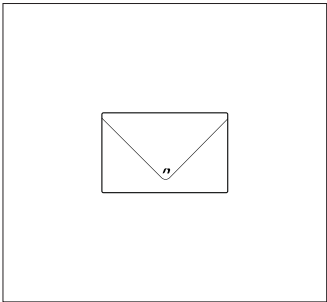
(pre-installed for Moisture Alarm)



Spare Main O-ring



O-ring Remover



Manual Instruction Card

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

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.

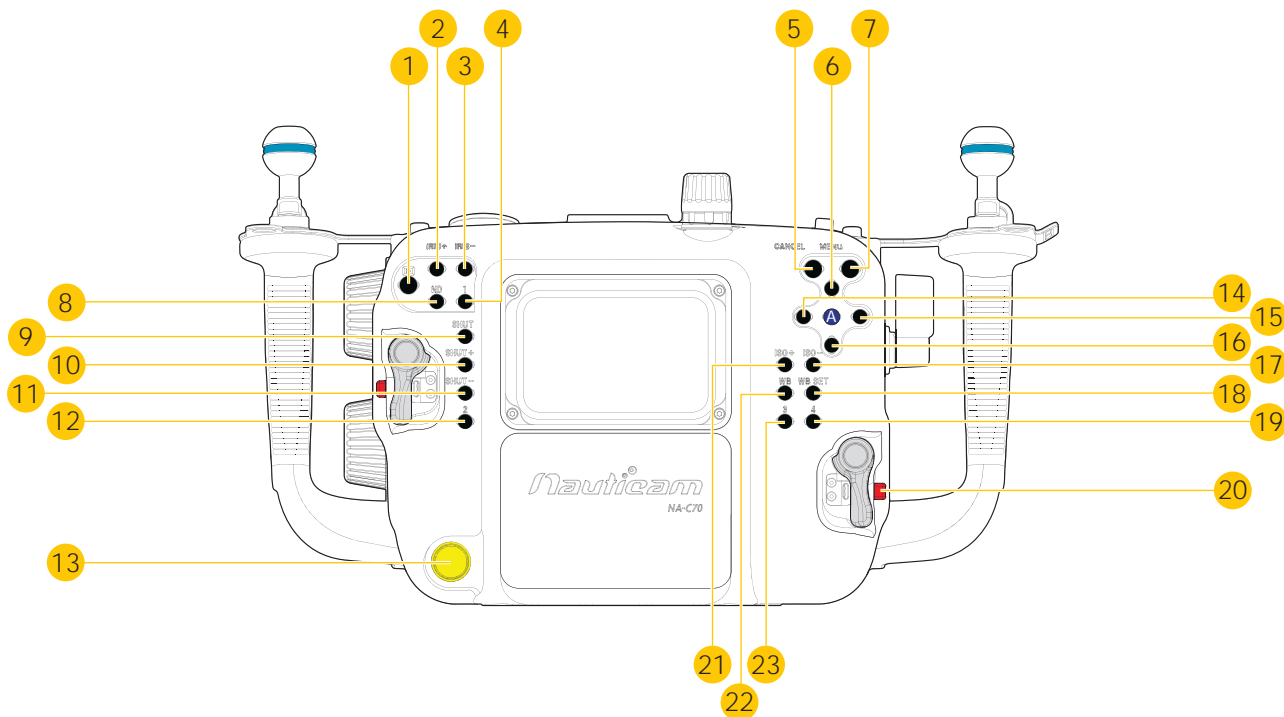


12

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

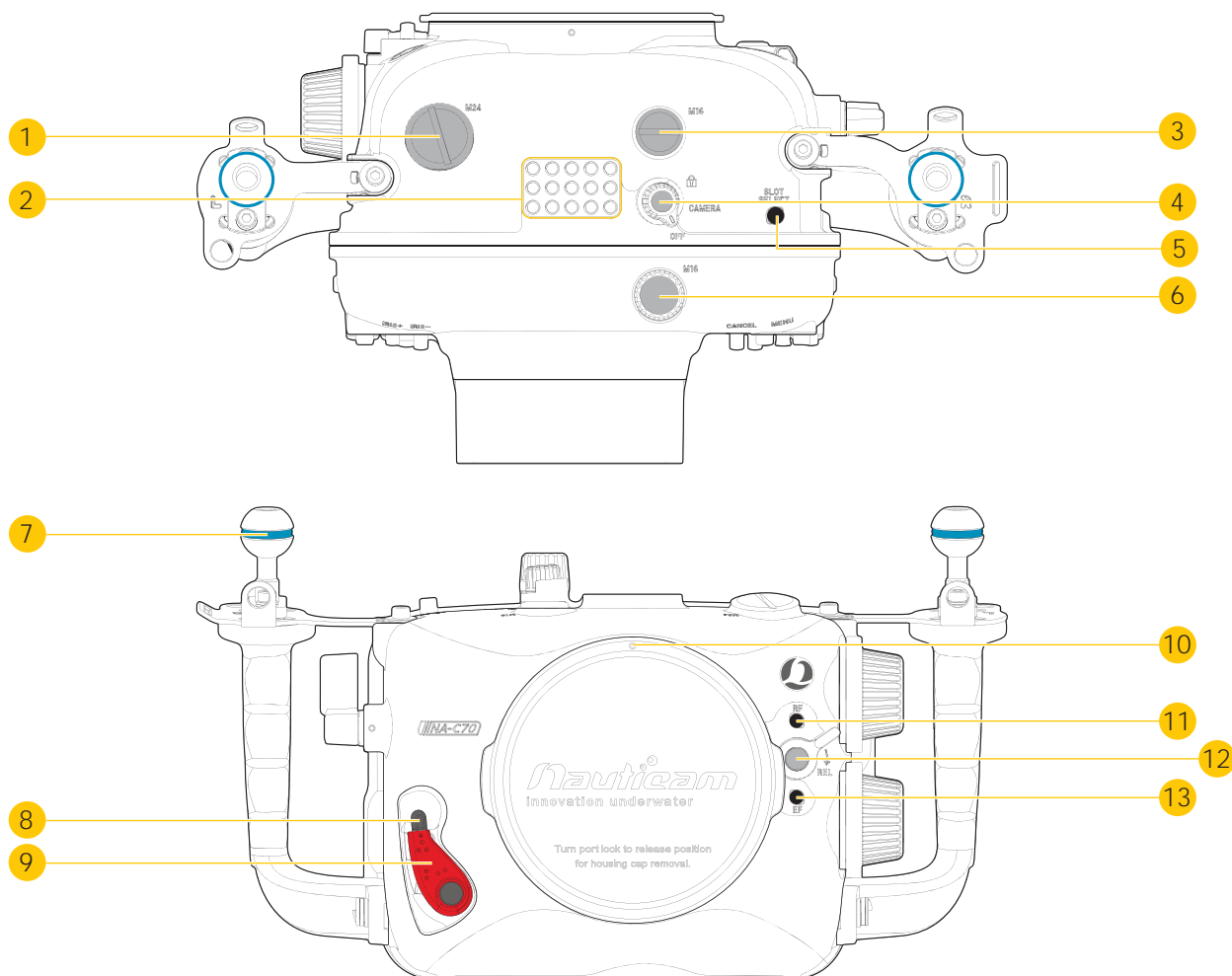


- 1 Playback button
- 3 IRIS - button
- 5 Cancel button
- 7 Menu button
- 9 Shutter mode
- 11 Shutter adjustment -
- 13 Moisture alarm window
- 15 Joystick - right
- 17 ISO - button
- 19 Assignable button 4
- 21 ISO + button
- 23 Assignable button 3

- 2 IRIS + button
- 4 Assignable button 1
- 6 Joystick - up
- 8 ND Filter button
- 10 Shutter adjustment +
- 12 Assignable button 2
- 14 Joystick - left
- 16 Joystick - down
- 18 White balance adjustment button
- 20 Housing unlock button
- 22 White balance button
- A Set button

PART NAMES AND FUNCTIONS

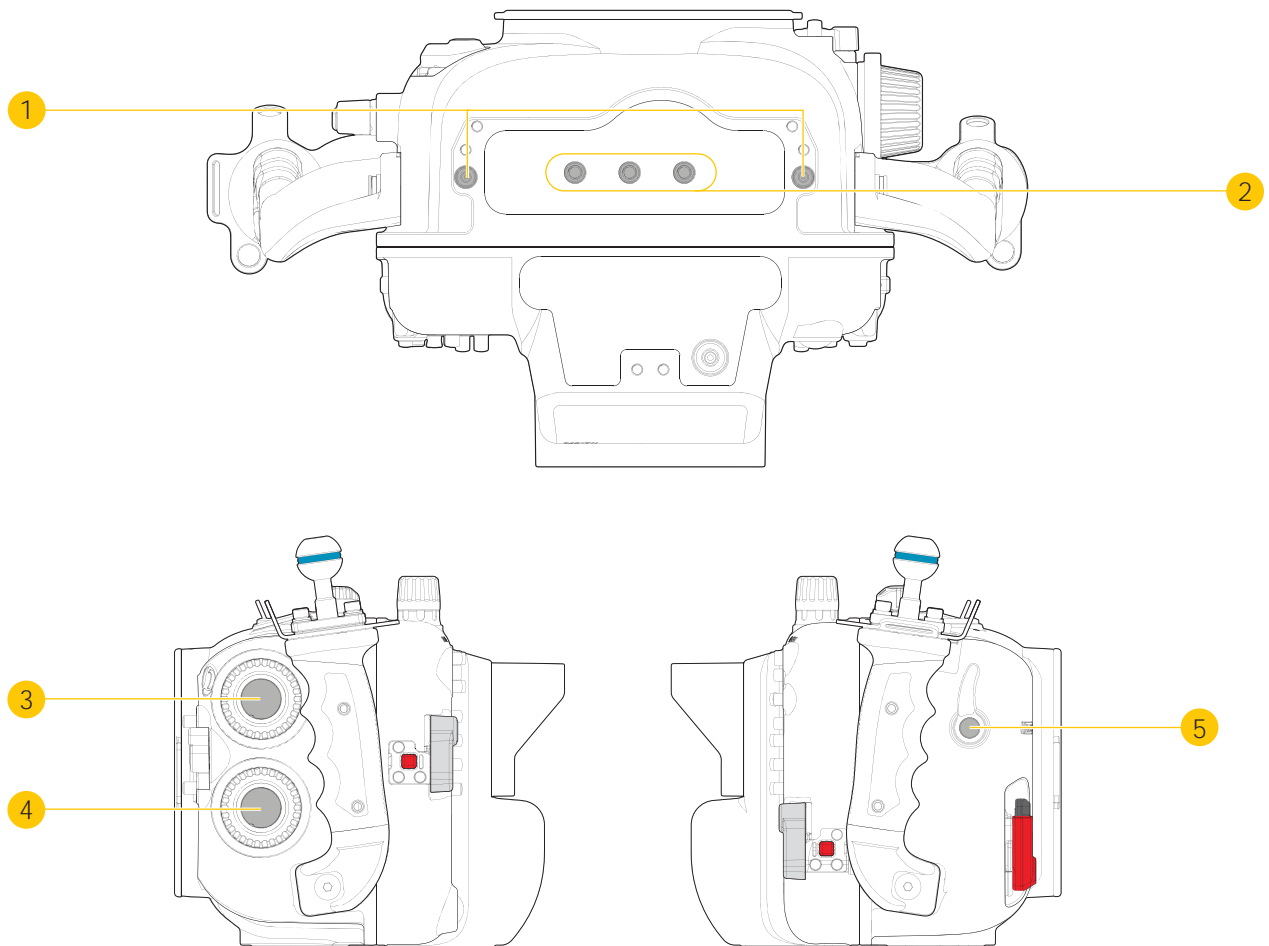
Top + Front Views



- | | |
|---------------------------|-----------------------------|
| 1 M24 Accessory port | 2 1/4" -20 mounting threads |
| 3 M16 Accessory port | 4 Power switch |
| 5 Slot select button | 6 M16 Accessory port |
| 7 Accessory mounting ball | 8 Port lock safety button |
| 9 Port locking lever | 10 Port index mark |
| 11 RF lens release button | 12 Lens release lever |
| 13 EF lens release button | |

PART NAMES AND FUNCTIONS

Back + Side Views



1 Sacrificial zinc anodes

2 1/4" Threaded tripod holes

3 Focus knob

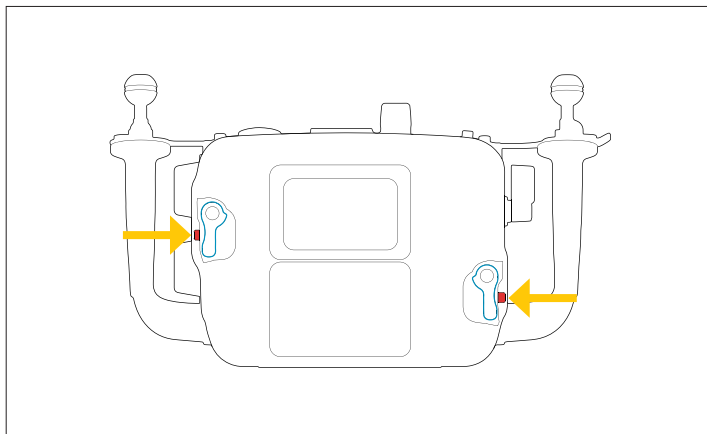
4 Zoom knob

5 Shutter release lever

OPENING THE HOUSING

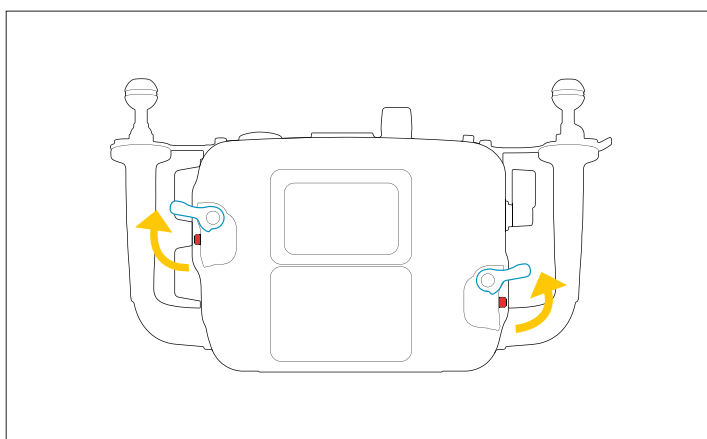
* drawings as illustrations only

1



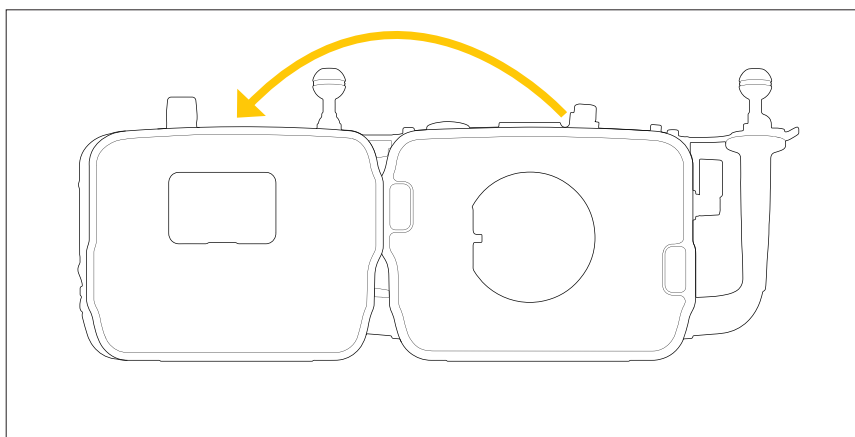
depress housing unlock button

2



turn housing lock outward

3

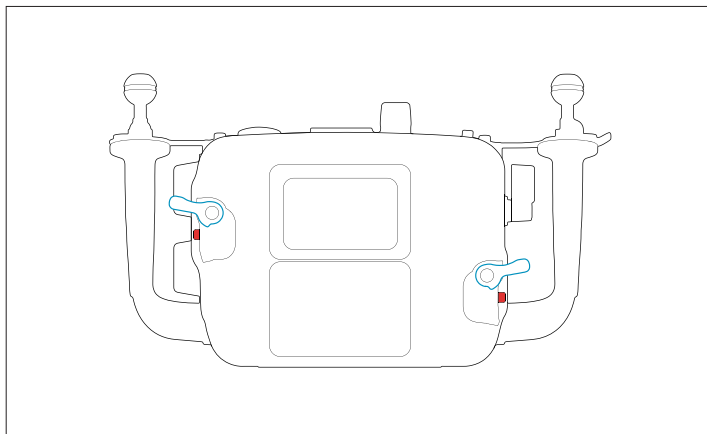


lift up the back housing

CLOSING THE HOUSING

* drawings as illustrations only

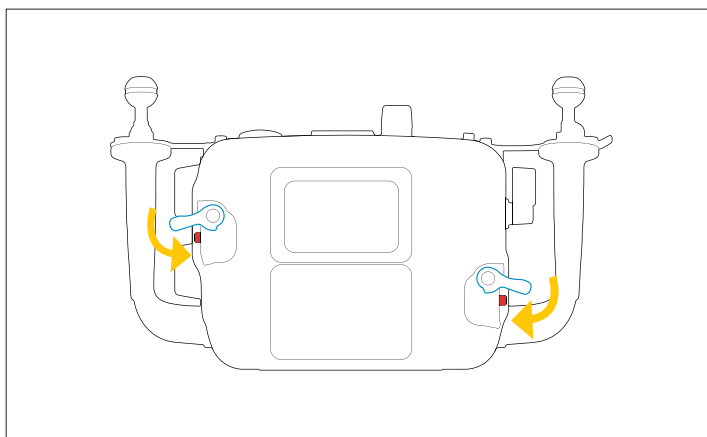
1



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

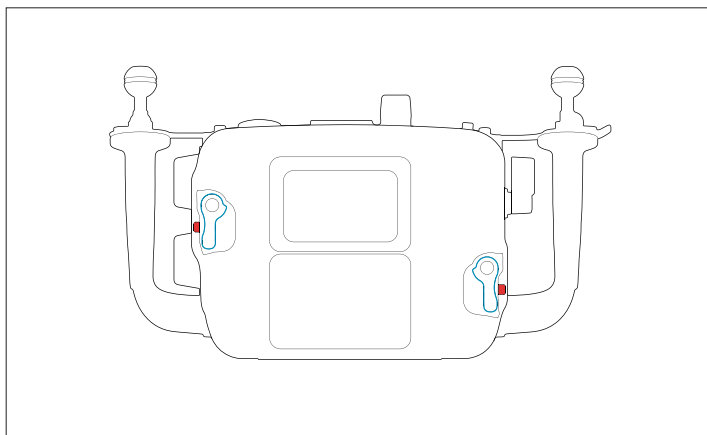
make sure nothing is caught between front and back housing and that they are fully aligned before locking

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

Setting up the housing - RF Lens / EF or EF-S Lens

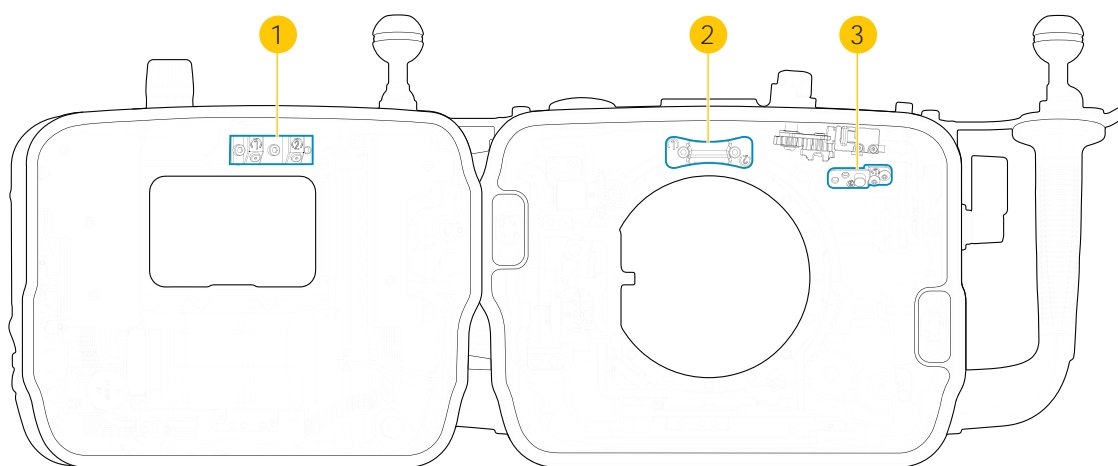
This housing allows you to switch between RF & EF lens by alternating 5 pieces of mechanisms inside the housing :

For RF Lens - Stay on Position 1 - ①

For EF or EF-S Lens with Canon Mount Adaptor EF-EOS R - Stay on Position 1 - ①

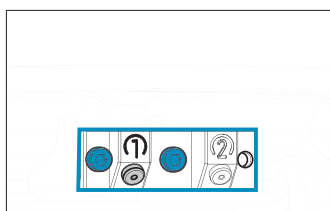
For EF Lens with Canon Mount Adaptor EF-EOS R 0.71x (16702 is required for this setup)- Change to Position 2 - ②

** Please note that Canon EF to EOS R Control Ring Adaptor and Drop-in Filter Mount Adaptor is not compatible with this housing.*

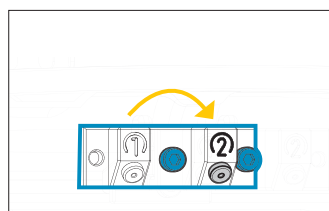


To alternate between Position 1 & 2 :

1

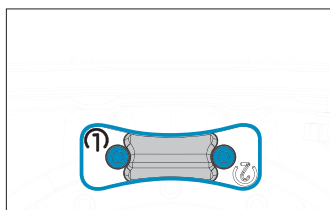


From Position 1
to Position 2

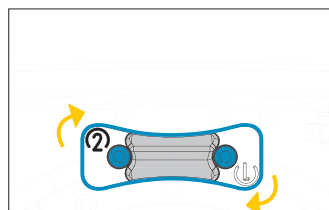


unscrew 2 of the attached screws
swift the part to the right so that the
holes are aligned at position 2
tighten the screws

2

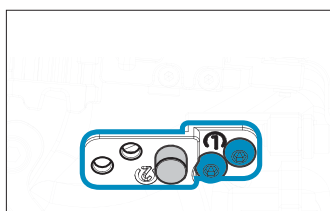


From Position 1
to Position 2

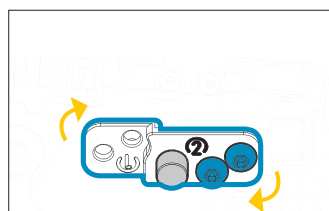


unscrew 2 of the attached screws
flip the part 180° so that it is at
postion 2
tighten the screws

3



From Position 1
to Position 2

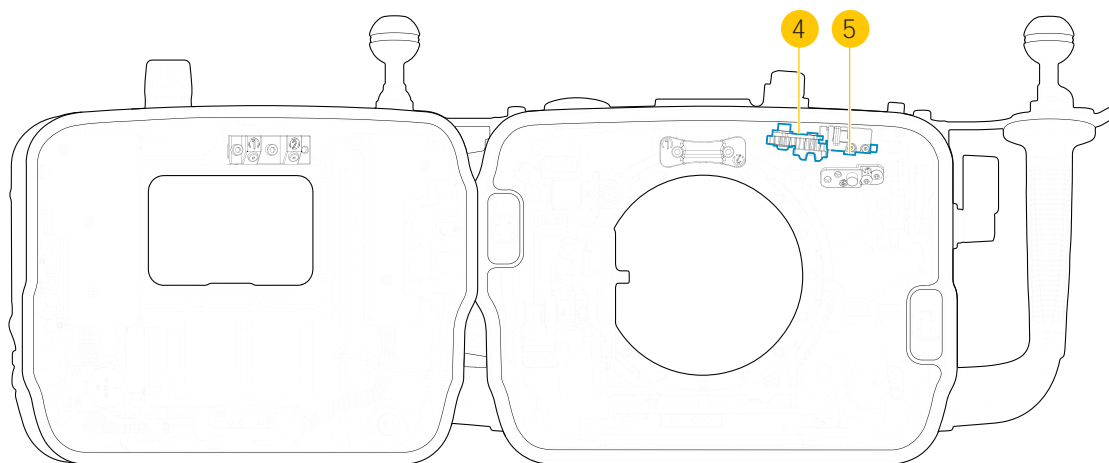


unscrew 2 of the attached screws
flip the part 180° so that it is at
postion 2
tighten the screws

PREPARATION FOR USE

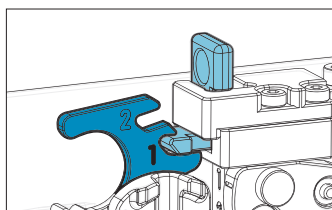
* drawings as illustrations only

Setting up the housing - RF Lens / EF or EF-S Lens

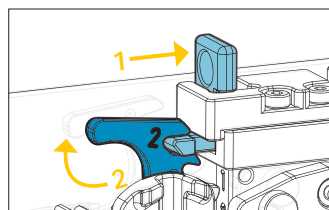


To alternate between Position 1 & 2 :

4

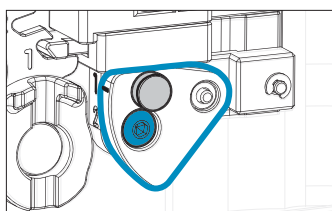


From Position 1
to Position 2

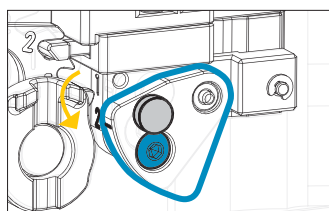


press the unlock button
turn the lever to position 2

5



From Position 1
to Position 2



unscrew the attached screw
turn the part so that it is aligned at
position 2
tighten the screw

PREPARATION FOR USE

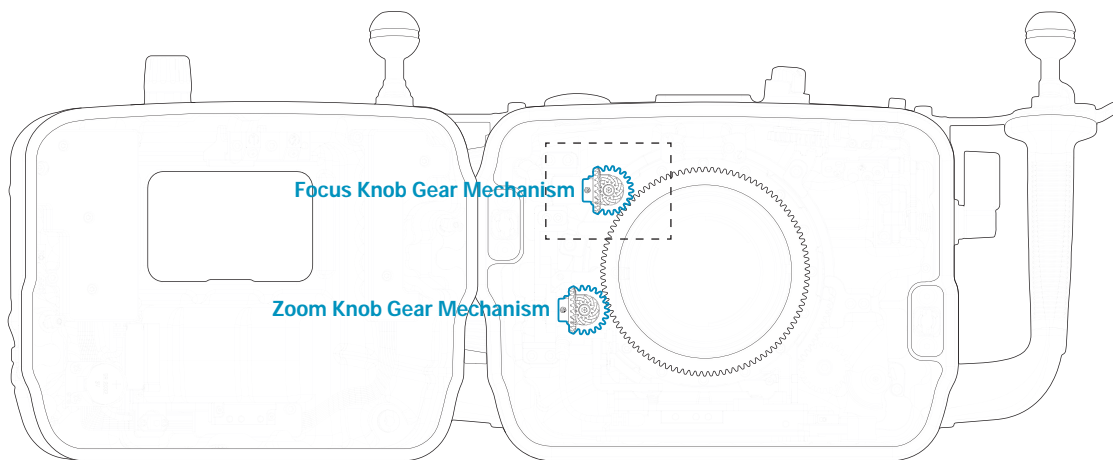
* drawings as illustrations only

Setting up the housing - Zoom/Focus Knob

The housing is designed to maintain an easy access to the focus knob which is positioned as the top from left hand controls and zoom knob at the bottom on the housing, this works using gear mechanisms that drive the gear set attached to the camera lenses.

Majority of the camera lenses have the same ring feature, focus ring on the top and zoom ring at the bottom. But in some cases (e.g. Canon EF-S 10-22mm f3.5-4.5 USM), both rings are arranged oppositely which will also result in the housing.

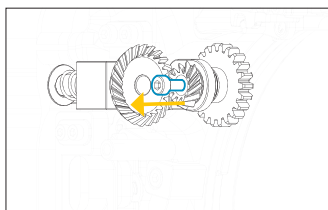
Therefore, this housing also allows you to switch focus and zoom knob positioning in a few steps.



Please follow the steps for both focus & zoom knob alternation :

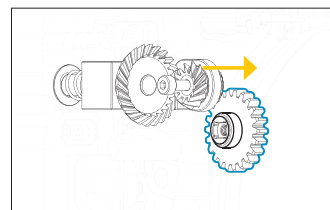
* Before alternation, please firstly remove the camera tray.

1



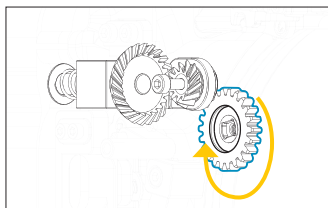
unscrew the attached screw

2



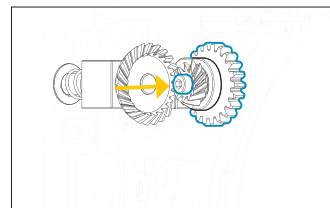
take out the gear connection part

3



flip the part 180° and put it back in place

4



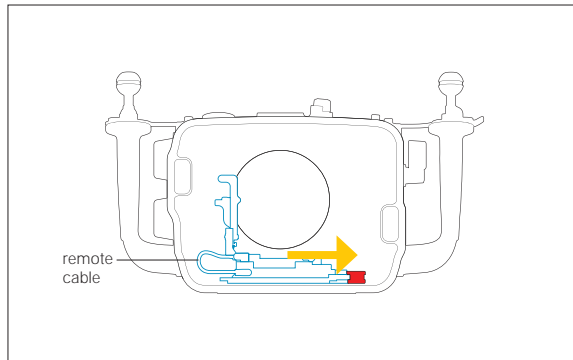
tighten the screw

PREPARATION FOR USE

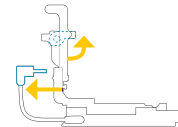
* drawings as illustrations only

Installing the Camera

1

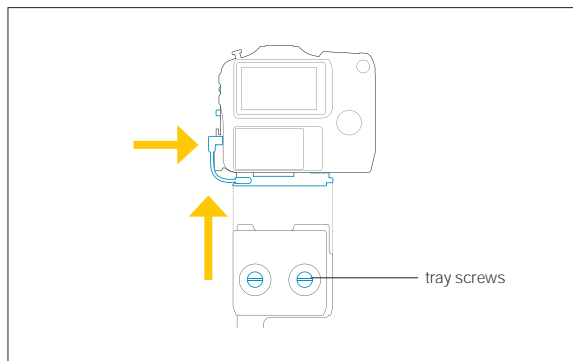


unlock camera tray lever and remove the tray from the housing



detached the remote cable connection from the camera tray before installing the camera
turn the small lever at 90° if you are using a lens adaptor

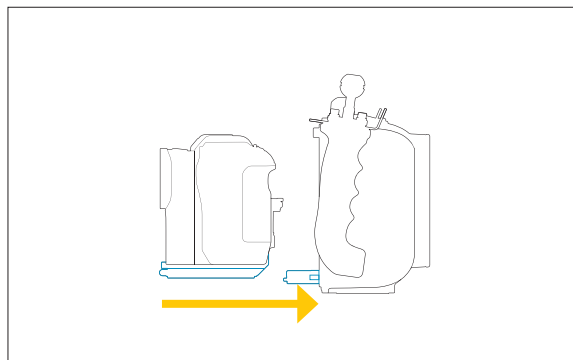
2



attach the camera onto the camera tray by tightening the tray screws into the tripod socket of the camera

connect the remote cable into the REMOTE camera terminal

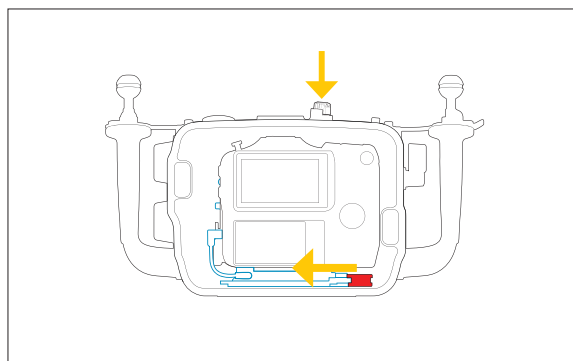
3



** lift up the power switch lever each time before installing the camera*
** turn the lens release lever downwards if installing the camera with lens and gear attached*

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

4



lock camera tray

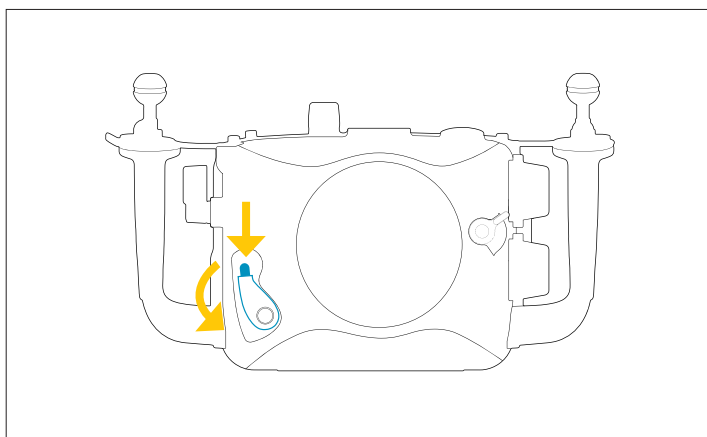
** gently push the power switch lever downwards and make sure they are engaged with the lever on the camera*
** turn the lens release lever back up and make sure it is engaged with lens gear*

PREPARATION FOR USE

* drawings as illustrations only

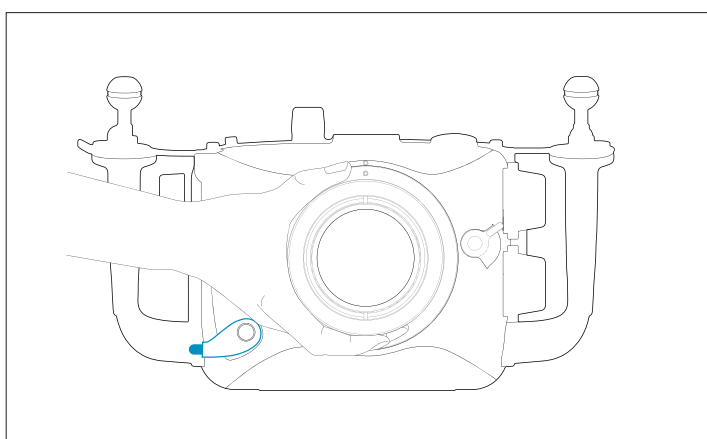
Port Mounting

1



depress safety button and rotate anti-clockwise

2

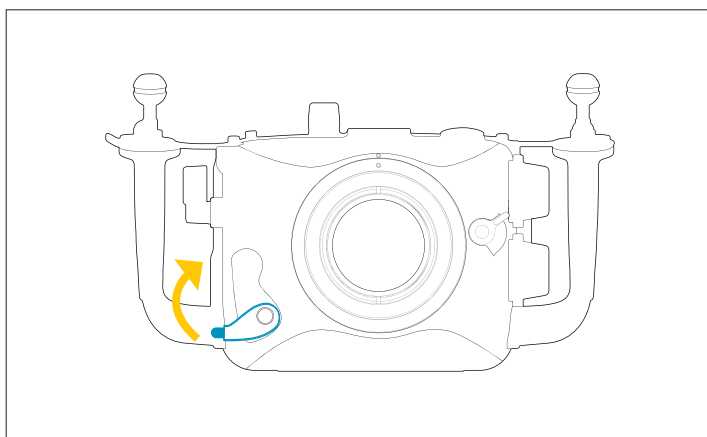


lubricant the port O-ring before mounting

align index mark

push port assembly straight in

3

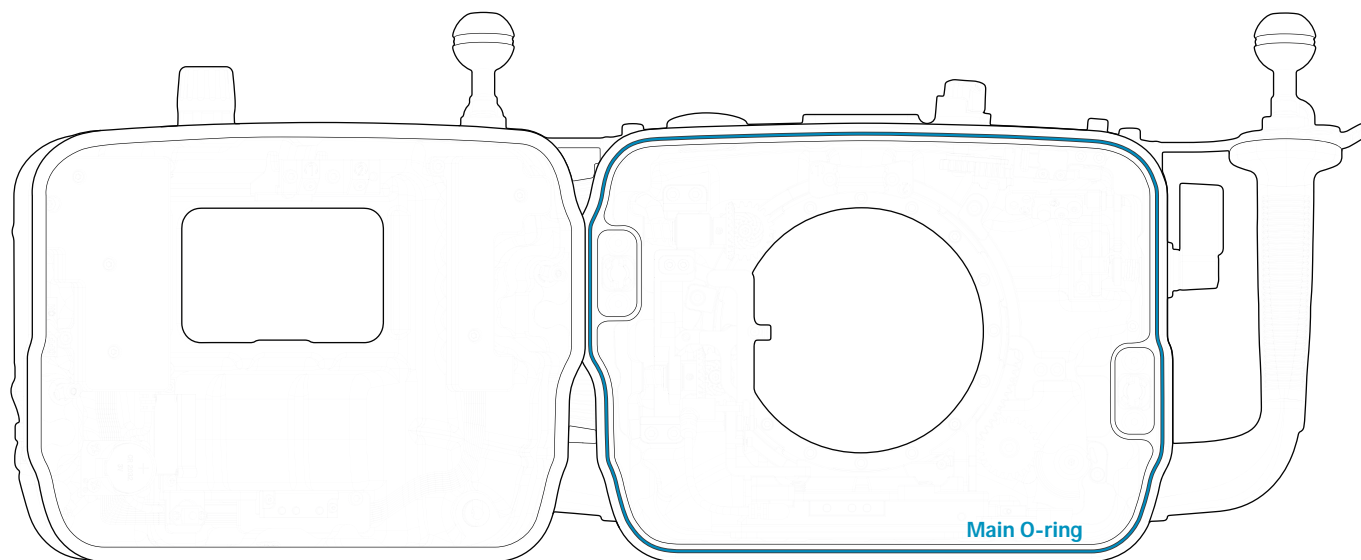


rotate locking lever clockwise to lock

PREPARATION FOR USE

* drawings as illustrations only

Coating housing O-ring

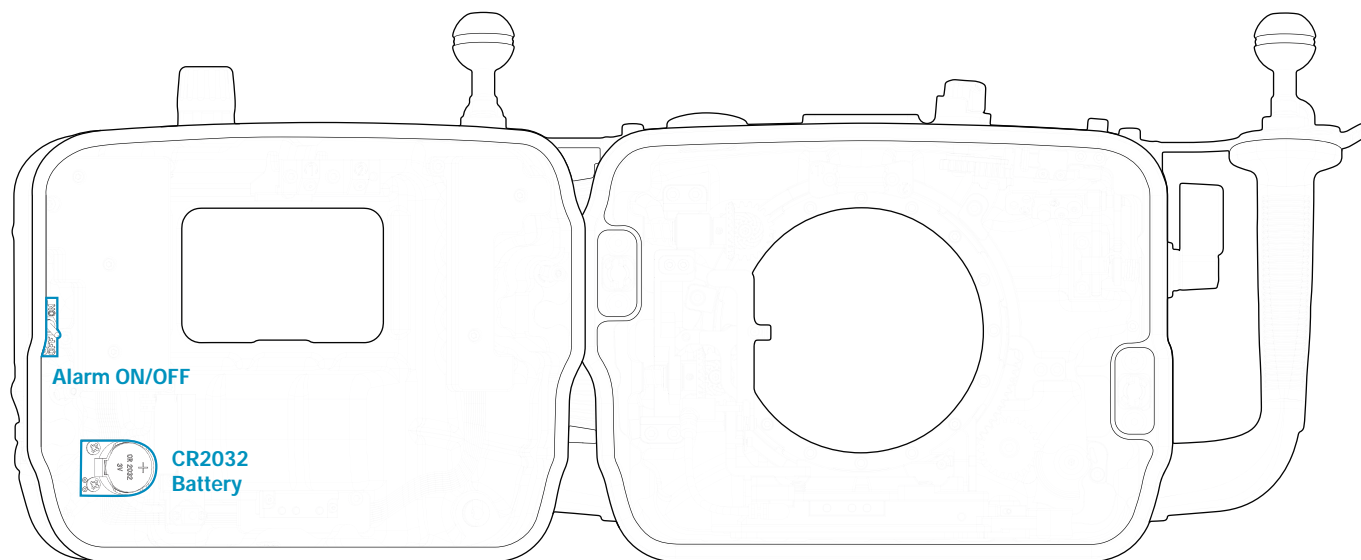


- 1
remove the main O-ring using an O-ring remover
- 2
clean the O-ring groove with a cloth and ensure that it is free from salt or other foreign materials
- 3
lightly coat it with provided lubricant
- 4
return the main O-ring by slowly pressing from one corner to the whole perimeter

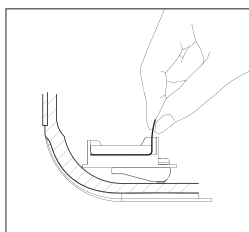
PREPARATION FOR USE

* drawings as illustrations only

Setting up moisture alarm

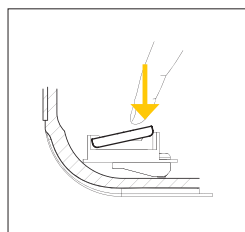


1



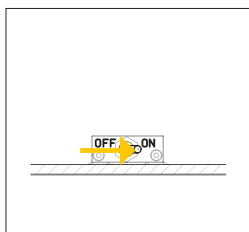
remove battery
insulation film

2



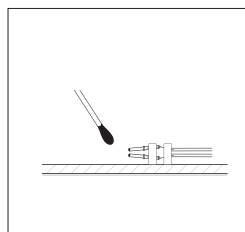
press the battery down until it
click into place

3



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

4



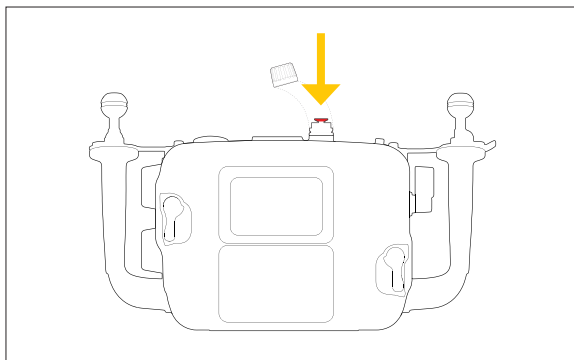
test the alarm
- connect the wires with a
dampened cotton bud; the
alarm will give a repeating
'beep' and the moisture alarm
window will flash **RED**

** please contact our authorized service centers if testing fails
* please refer to page 17 for complete vacuum system guidance*

RESET LEAK DETECTOR CIRCUIT

* drawings as illustrations only

1

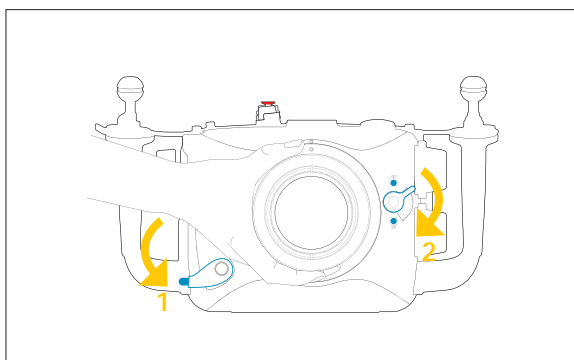


If using with vacuum valve :

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

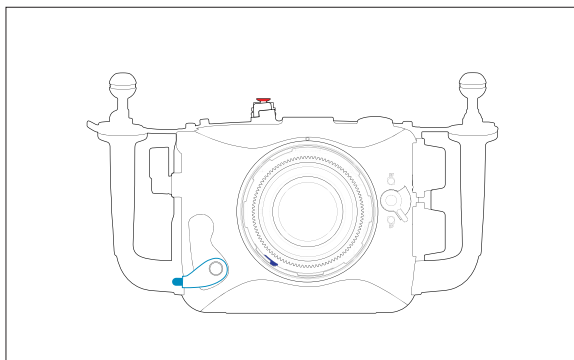
2



unlock port lock and remove port assembly

turn the lens release lever downwards to disengaged the gear mechanisms in order to change camera lens

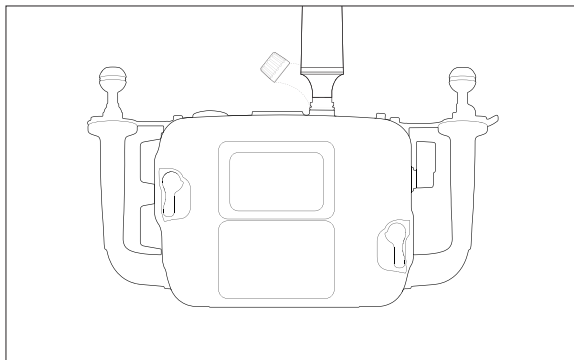
3



press the blue button to reset leak detector circuit before replacing port

make sure the port lock is safely fastened after replacing port

4



reset vacuum level using the hand pump then close the cap

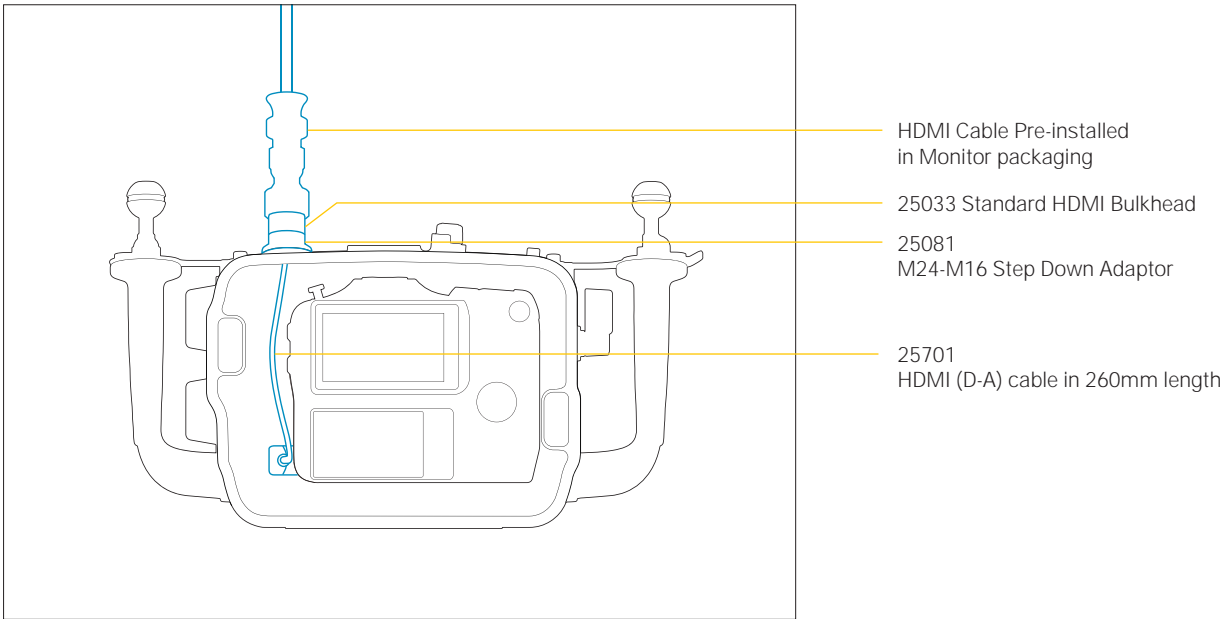
** please refer to page 17 for complete vacuum system guidance*

HDMI OUTPUT

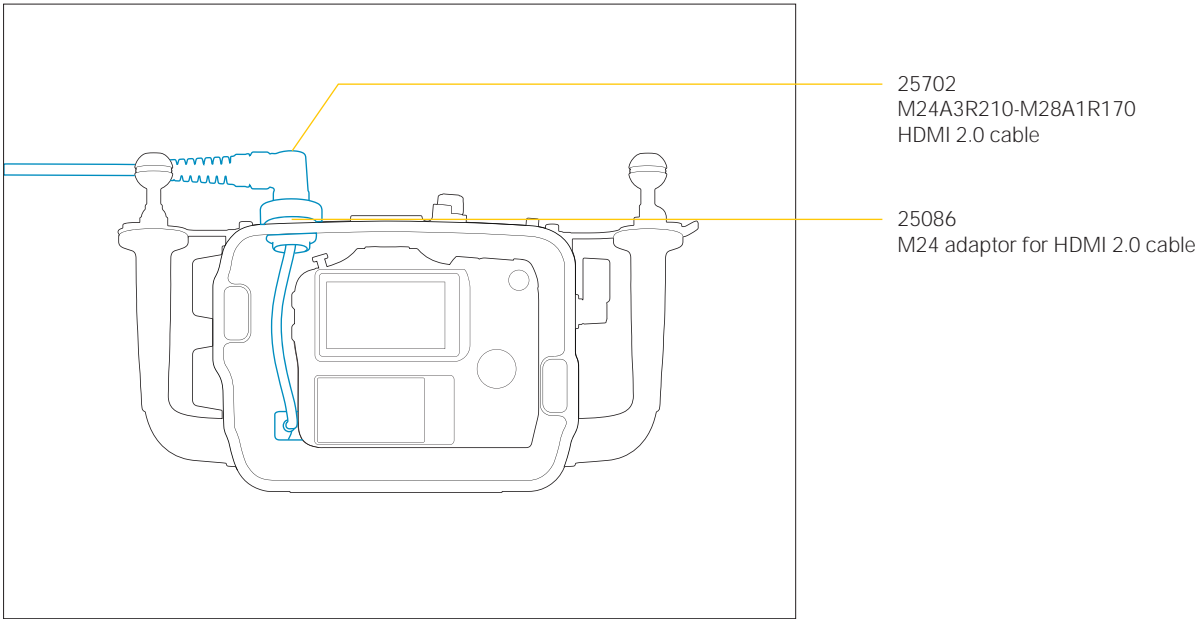
* drawings as illustrations only

HDMI 1.4 / 2.0

HDMI 1.4



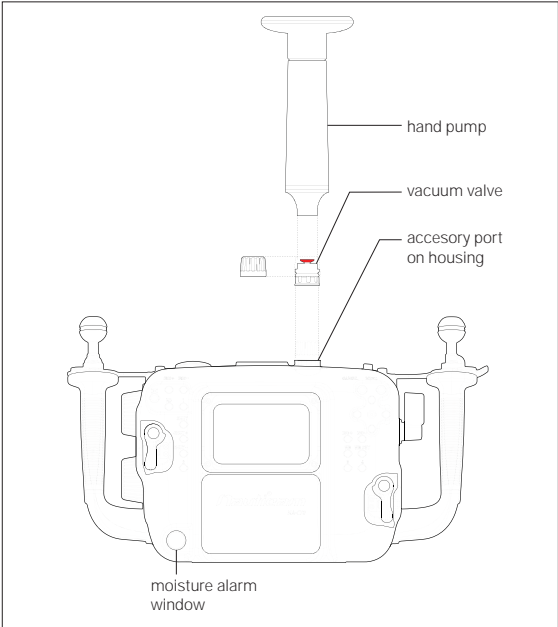
HDMI 2.0



VACUUM VALVE SYSTEM

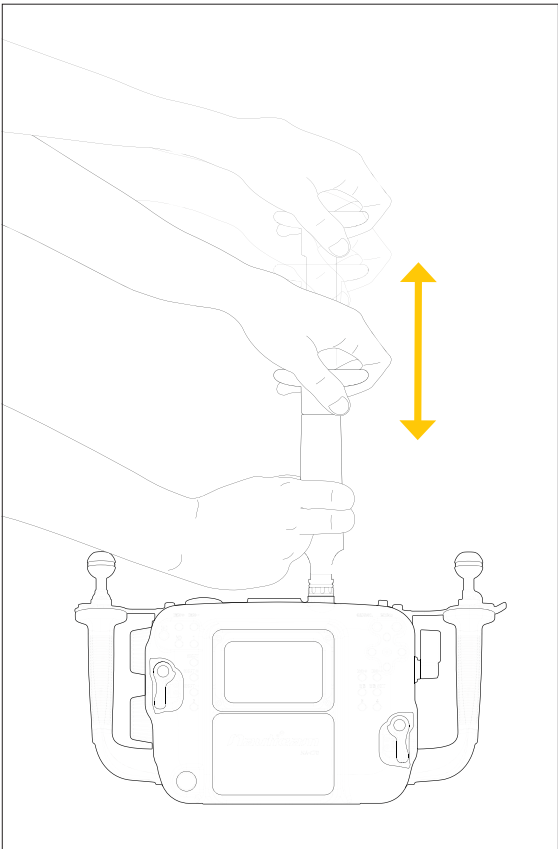
* drawings as illustrations only

1



- remove the plug of M16 accessory port from the housing
- remove the cap from the vacuum valve
- slightly lubricate the o-ring and tighten the vacuum valve to the housing with the tool provided

2



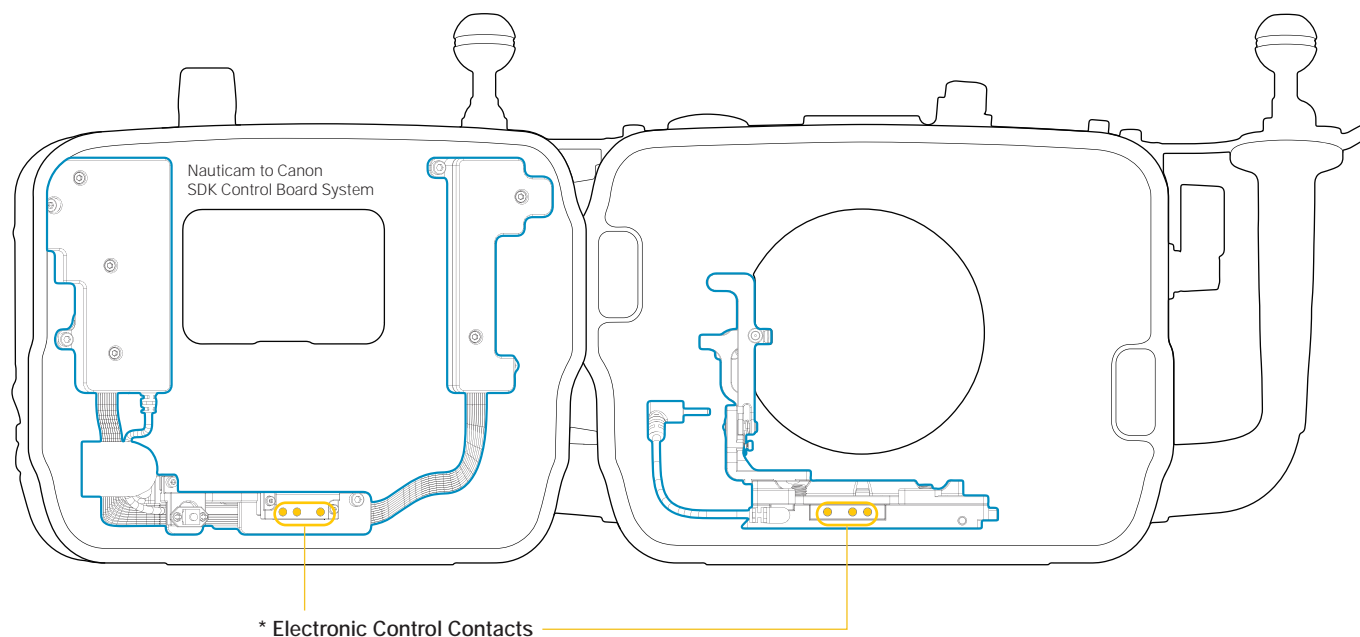
- connect hand pump to the valve and pump several times until it reaches the target vacuum level
- close vacuum valve cap

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.*

CARE/STORAGE



* 1

If the contacts get soiled, scratched, or have fingerprints on them, corrosion or faulty connections can result. Clean them with a soft cloth.

2

Soak the housing system in fresh water after salt water usage

3

Soak the housing system in fresh water after salt water usage

4

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

5

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

6

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

7

We recommend to ship the housing to our service centers for a complete overhaul after 200 dives/every 2 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	366 mm
Height	195 mm
Depth	193 mm

Weight

In air	3.56 kg
Buoyancy In water	0.60 kg (w/ camera & battery)

Depth

Rating	100 m
--------	-------

Port specifications

Port mount	N 120 Cinema Port System for Canon EF-Mount Camera System
Port accessories	1 x M24, 2 x M16

HDMI connectivity accessories (2.0)

25086 M24 Adaptor for HDMI 2.0 Cable (incl. tightening tool)
25702 M24A3R210-M28A1R170 HDMI 2.0 Cable

Monitor options

17922/S Nauticam Atomos Ninja V/V-S Housing for Atomos Ninja V 5" (excl. HDMI 2.0 cable)
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HDMI connectivity accessories (1.4)

25033 Standard HDMI Bulkhead with M16 Thread
25081 M24-M16 Step Down Adaptor
25701 HDMI (D-A) Cable in 260mm Length (for connection from HDMI bulkhead to camera)

Monitor options

17906 NA-502H Housing for Small HD 502 5-inch HD Monitor
17920 NA-502B-H Housing for SmallHD 502 Bright Monitor
17923 NA-Shinobi-H Housing for Atomos Shinobi 5.2" 4K HDMI Monitor

Recommended accessories

25625 M16 Vacuum Valve II (pushbutton release)
25613 M16 Dual Activation Vacuum Valve
16701 Top Handle for Cinema System
17959 Housing Mounting ball with 1/4" screws
25218 Mounting Ball Set for Tripod
16702 NA-C70 Camera Tray to use with EF-EOSR 0.71X Mount Adapter

Wet Lens Compatibility

Macro	81301	Compact Macro Converter 1 (CMC-1, 4.5x magnification)
	81302	Compact Macro Converter 2 (CMC-2, 2.8x magnification)
	81201	Super macro converter 1 (SMC-1, 2.3x magnification)
	81202	Super macro converter 2 (SMC-2, 4.0x magnification)
Macro to Wideangle	86201	Macro to Wideangle Lens 1 (MWL-1, 150 deg. FOV with full frame 60mm macro lens)
	87302	EMWL Set#2 (incl. focusing unit #2, 150mm relay lens & 3 objective lenses)
Wideangle	85201	0.36x Wide Angle Conversion Port with Aluminium Float Collar (incl. N120 to N100 port adaptor)
	85202	0.36x Wide Angle Conversion Port with Aluminium Float Collar For Sigma 18-55mm F1.8
	85204	0.57x Wide Angle Conversion Port 2 with Aluminium Float Collar (compatible with 14mm lenses)

Optional accessories to use with wet lens

83214 Bayonet Mount Adaptor for SMC/CMC
83250 M67 to Bayonet Converter II
86221 M67 Flip holder for MWL-1
86222 Double Flip Holder for MWL-1
25101 M67 Flip Diopter Holder for M67 Macro Ports
25103 M67 Flip Diopter Holder for M77 Macro Ports
25108 M67 Double Flip Diopter Holder for M67 Macro Ports
25109 M67 Double Flip Holder for M77 Macro Ports
87501 Flip Holder for EMWL
87512 Shade for 130° Objective Lens
87513 Shade for 100° Objective Lens
87515 M67 Mount to EMWL Focusing Unit
87518 Strobe Mounting Brackets for EMWL Relay Lens

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