

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.



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



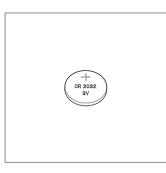
Padded Travel Case



Allen key set

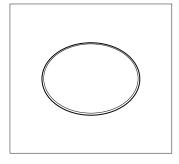


Lubricant



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.

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.

6

Discontinue use immediately when there is

a sign of leakage.

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

10

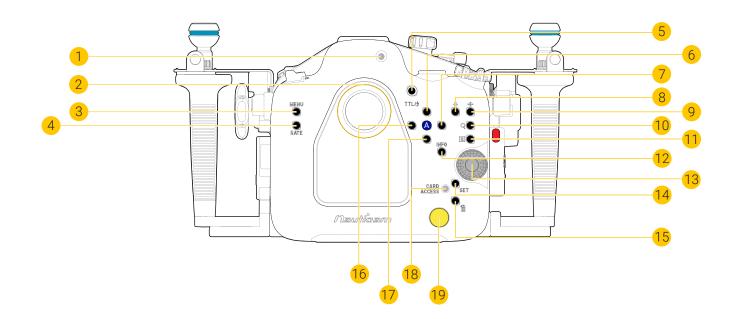
Do not open the housing in wet or sandy environment. Protect the housing from moisture and debris in order to prevent malfunction or leakage.

<u>1</u>2

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

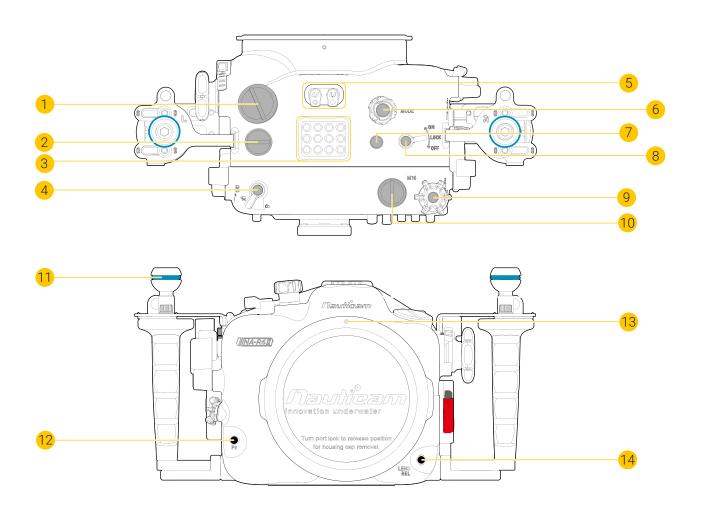


- 1 TTL Indicator window
- 3 Menu button
- 5 TTL on/off button
- 7 Multi selector -Right
- 9 AF point selection
- 11 Quick control button
- 13 Quick control dial 1
- 15 Delete button
- 17 Multi selector -Down
- 19 Moisture alarm window

- Viewfinder
- 4 Rate button
- 6 Multi selector -Up
- 8 AE lock button
- 10 Magnify/reduce button
- 12 Info button
- 14 Set button
- 16 Multi selector -Left
- 18 Access lamp
- A Multi selector center

PART NAMES AND FUNCTIONS

Top + Front Views

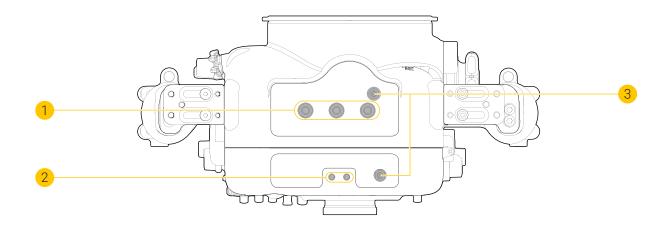


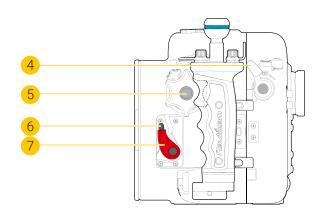
- 1 M24 Accessory port
- 3 1/4" Threaded holes
- Optical fiber cable connection
- 7 M10 Accessory port
- 9 Rear dial
- 11 Accessory mounting ball
- 13 Port index mark

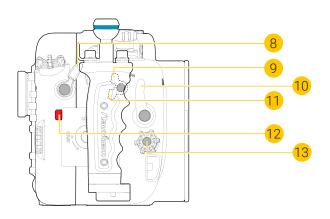
- 2 M14 Accessory port
- 4 Still photo shooting/movie recording switch
- 6 Mode dial
- 8 Main switch
- 10 M16 Accessory port
- 12 Preview button
- 14 Lens release button

PART NAMES AND FUNCTIONS

Back + Side Views



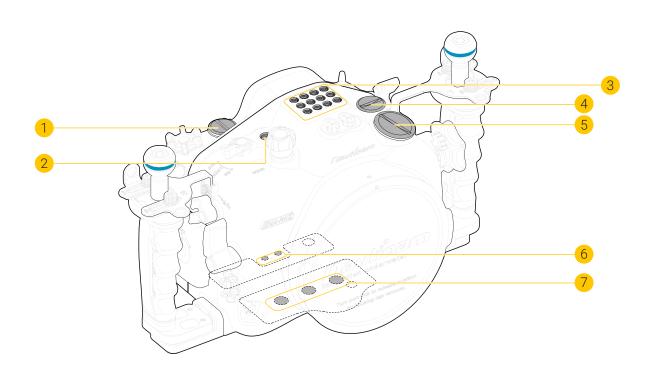




- 1/4" Threaded tripod holes
- 3 Sacrificial zinc anodes
- 5 Zoom/Focus knob
- 7 Port locking lever
- 9 M-Fn lever
- 11 REC lever
- 13 Front dial

- 2 M5 Threaded holes
- 4 Playback lever
- 6 Port lock safety button
- 8 AF-ON lever
- 10 Shutter release lever
- 12 Housing unlock button

HOUSING MOUNT

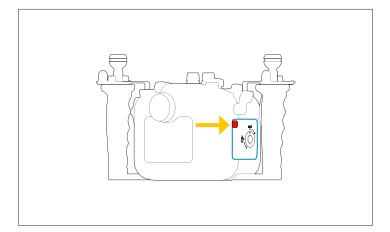


Hou	sing mount	Compa	tible accessories
1	M16 Accessory port	25624	M16 Vacuum Valve II (Optional)
2	M10 Accessory port	25221 25224	M10 Strobe mounting ball M10 Strobe mounting ball with hole
3	1/4" -20 mounting threads	17959	Housing Mounting ball with 1/4" screws
4	M14 Accessory port	25017 25020	M14 6 pin bulkhead for Canon system Canon hotshoe plug to a M14 Nikonos bulkhead (x and ground connection only)
5	M24 Accessory port	25033 25081 25086 25077	Standard HDMI bulkhead with M16 thread M24-M16 Step Down Adaptor M24 adaptor for HDMI 2.0 cable HDMI 2.0 cable
6	M5 Threaded holes	25218	Mounting ball set for tripod legs
7	1/4" -20 mounting threads	17954 17960	Universal tripod plate Universal Quadra-Pod Plate for Nauticam Housings

OPENING THE HOUSING

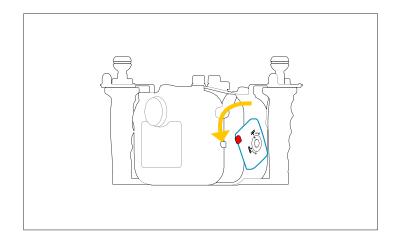
* drawings as illustrations only

1



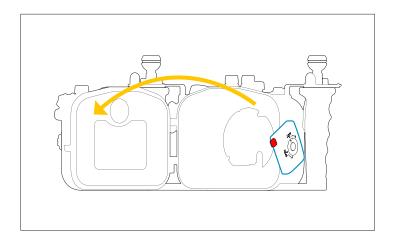
depress housing unlock button

2



turn housing lock latch anti-clockwise to open the housing

3

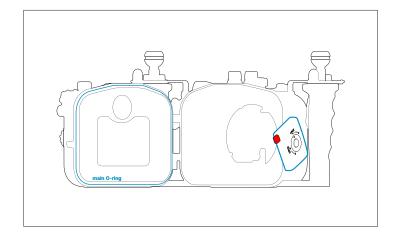


flip open the back housing when lock latch is aligned to 'open' position

CLOSING THE HOUSING

* drawings as illustrations only

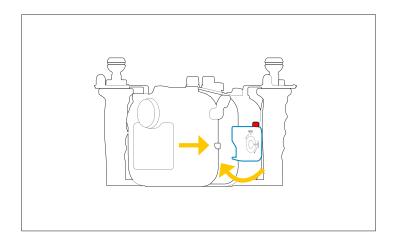
1



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

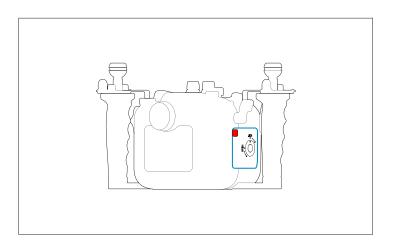
make sure nothing is caught between front and back housing and that they are fully aligned before locking

2



insert the housing shaft into the shaft hole and then rotate the lock latch clockwise until you hear and feel it click into place

3

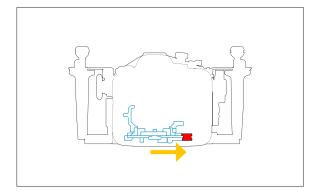


housing locked in place securely

* drawings as illustrations only

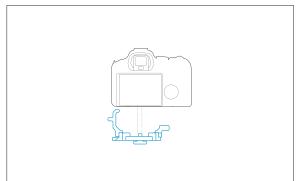
Installing the Camera - housing tray attachment

1



unlock camera tray lever and remove the tray from the housing

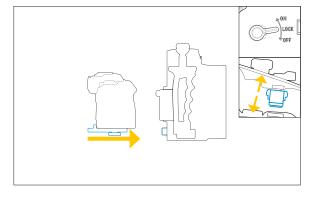
2



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

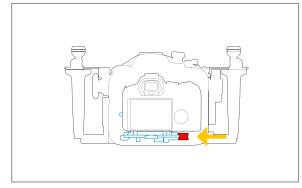
place the actuator on the camera tray in place and make sure it is engaged with the focus mode swtich on the camera

3



- * lift up actuator of ON/OFF lever each time before installing the camera
- * make sure the ON/LOCK/OFF lever is aligned with camera control before sliding the camera into the housing * pull out the zoom/focus knob if installing the camera with lens and
- slide the camera tray back into the housing along the tray rail

4



lock camera tray

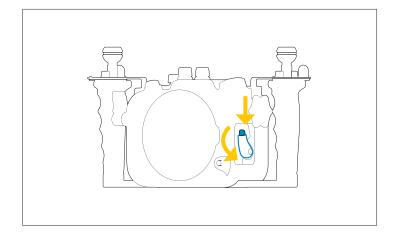
gear attached

- * place the zoom/focus knob in place and make sure it is engaged with lens gear
- *gently push the actuator of ON/OFF lever downwards to make sure it is engaged with the lever on the camera

* drawings as illustrations only

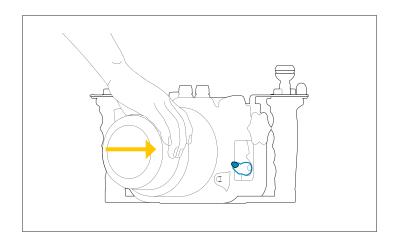
Port Mounting

1



depress port lock safety button and rotate anti-clockwise

2

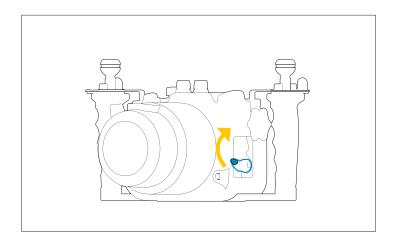


lubricant the port O-ring before mounting

align index mark

push port assembly straight in

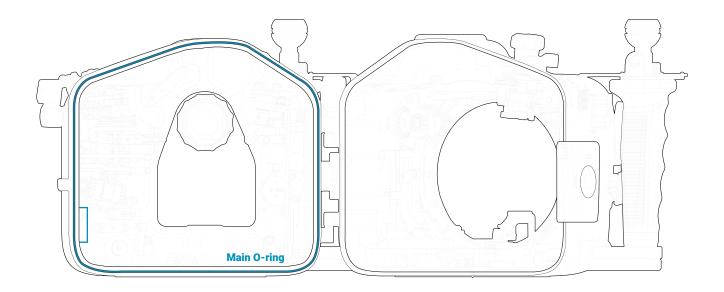
3



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

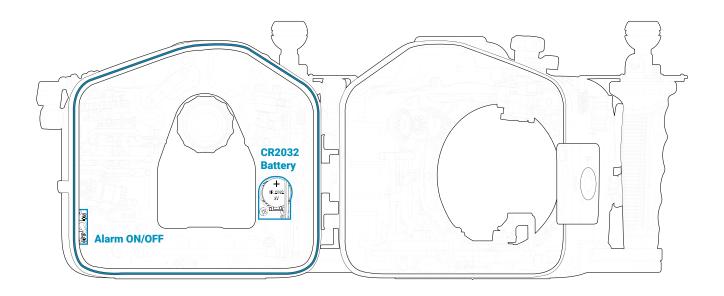
2 clean the O-ring groove with a cloth and ensure that it is free from salt or other foreign materials

3 lightly coat it with provided lubricant

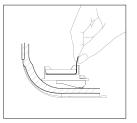
4 return the main O-ring by slowly pressing from one corner to the whole perimeter

* drawings as illustrations only

Setting up moisture alarm

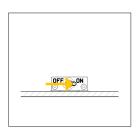


1



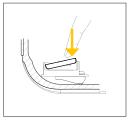
remove battery insulation film

3



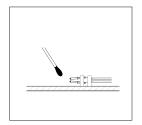
switch on the alarm
- the moisture alarm
window will flash in
BLUE when it is working
correctly

2



press the battery down until it click into place

4



test the alarm

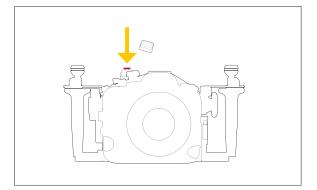
- connect the wires with a dampened cotton bud; the alarm will give a repeating 'beep' and the mositure alarm window will flash RED

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

* drawings as illustrations only

Changing lens/port without opening the housing

1

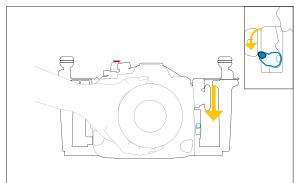


If using with vacuum valve:

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

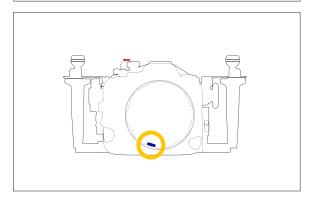
If using without vacuum valve, please follow from step 2

2



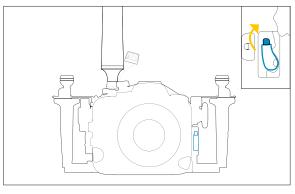
unlock port lock and remove port assembly

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

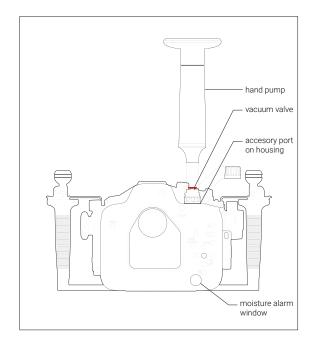
^{*} please refer to page 15 on complete vacuum system guidance

OPTIONAL ACCESSORIES

* drawings as illustrations only

Vacuum valve system

1



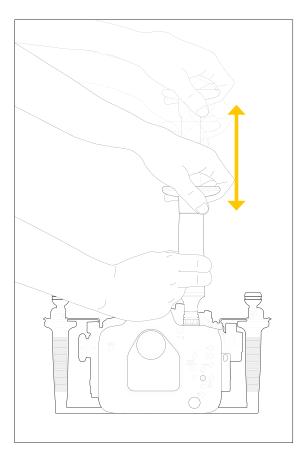
remove the plug of M16 accessory port from the housing

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

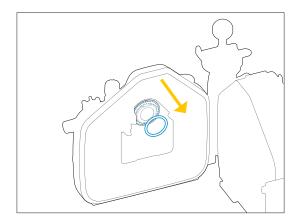
* It is recommended to leave the housing for at least 20mins to ensure it is sealed. If the LED light changes from steady green light to rapidly flashing yellow light, that means there is a leakage. Please check every 0-ring and then conduct the vacuum test again.

^{*} please contact our authorized service centers if testing fails

OPTIONAL ACCESSORIES

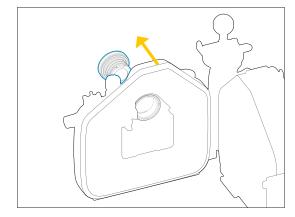
Installing Viewfinder

1



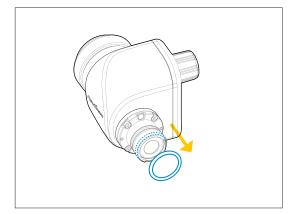
firstly remove the pre-installed 0.66x viewfinder from the housing by removing the retainer o-ring inside rear housing

2



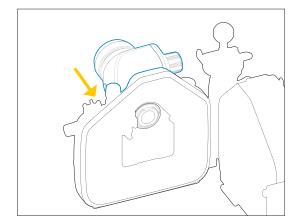
gently push the 0.66x viewfinder from the inside of the housing $% \left(1\right) =\left(1\right) \left(1\right) \left($

3



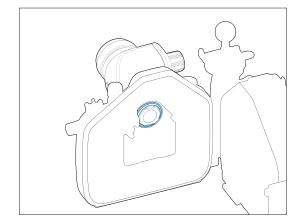
remove the retainer o-ring from the viewfinder

4



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

5



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

3

We recommand cleaning and inspecting the main O-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 500 dives/every 3 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

Housing body	Hard Anodized Aluminium Alloy
Display window	Abrasion Resistant Polycarbonate
Dimensions	
Width	320 mm
Height	175 mm
Depth	160 mm
Weight	
In air	2.5 kg
Buoyancy in water	0.3 kg (includes camera and battery)
Depth	
Rating	100 m
Port specifications	
Port mount	N 120 Port System

1 x M24, 1 x M14, 1 x M10, 1x M16 12x 1/4"-20 threaded holes

Buoyancy options

Port accessories

72216 Ø70x200mm Carbon Fibre Aluminium Float Arm (Buoyancy 37 0g)
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 Bayonet Holder for Arms
83253 Double Bayonet Holder for Arms
83254 Bayonet Lens Holder for Inon Float Arms
87516 EMWL Bayonet Holder for Ø70 Float Arm
87517 EMWL Bayonet Holder for Ø90 Float Arm

Optional accessories

25624 M14 Vacuum Valve II (Pushbutton Release)
25625 M16 Vacuum Valve II (Pushbutton Release)
32211 Nauticam Full Frame Straight Viewfinder 32°/ 1:1
32212 Nauticam Full Frame Straight Viewfinder 40°/ 0.8:1
32213 Nauticam Full Frame Angle Viewinder 32°/ 1:1
32214 Nauticam Full Frame Angle Viewfinder 40°/ 0.8:1
*32212/32214 is preferable.
26216 Universal Optical Fiber Cable
25081 M24-M16 Step Down Adaptor
25019 M16 to M14 step down adaptor for electrical bulkhead
25218 Mounting ball set for tripod

HDMI CONNECTION & MONITOR OPTIONS

HDMI connectivity required accessories (2.0)

25086 M24 adaptor for HDMI 2.0 cable 25077 M24D1R205-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"

HDMI connectivity required accessories (1.4)

25033 Standard HDMI bulkhead with M16 thread

25081 M24-M16 Step Down Adaptor

25076 HDMI (D-D) Cable in 200mm Length for NA-R6II

*25033 is included in monitor housing

Monitor options (1.4)

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

17925 NA-503-H Housing for SmallHD 503 UltraBright On-Camera Monitor

WET LENS COMPATIBILITY

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

Macro	81201 Super Macro Convertor 1 (2.3v Magnification)			
	81201 Super Macro Convertor 1 (2.3x Magnification)			
	81202 Super Macro Convertor 2 (4x Magnification)			
Macro to Wideangle	86201 Macro to Wideangle Lens 1 (MWL-1) 150 deg. FOV with full frame 60mm macro lens			
to Widearigie	87302 EMWL Set #2 (incl. focusing unit #2, 150mm relay lens and 3 objective lenses)			
	87202 EMWL Focusing Unit #2 (for Canon FF 100mm & APS-C 60mm)			
	87211 EMWL 150mm Relay Lens			
	87212 EMWL Angled Relay Lens			
	87221 EMWL 60° Objective Lens			
	87222 EMWL 100° Objective Lens			
	87223 EMWL 130° Objective Lens			
	87226 EMWL 160° Objective Lens			
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)			
	85204 0.57x Wide Angle Conversion Port - 2 (WACP-2) 140 Deg. FOV with Compatible 14mm Lenes (incl. float collar)			
	85205 N100 0.36x Wide Angle Conversion Port Compact (WACP-C)			

Optional 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

83250 M67 to Bayonet Mount Converter II

83251 M77 to Bayonet Mount Converter II

87501 Flip Holder for EMWL

87512 Shade for 130° Objective Lens

87513 Shade for 100° Objective Lens

87519 Shade for 160° Objective Lens

87515 M67 Mount to EMWL Focusing Unit

87518 Strobe Mounting Brackets for EMWL Relay Lens

FLASH TRIGGERING

Manual Flash Trigger

26305 mini Flash trigger for Fujifilm/Canon (compatible with NA-XT3/4/5, NA-R7/R6II)
26321 TTL Flash Trigger for Canon

Electronic Strobe Connection

25017 M14 6 pin bulkhead for Canon system

25020 Canon hotshoe plug to a M14 Nikonos bulkhead (x and ground connection only)

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