

User Manual Housing MIL

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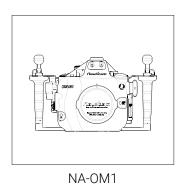
INTRODUCTION

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

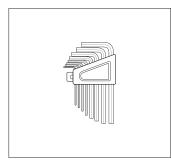
Make sure that you have all the included items listed below before using this product. If some items are missing or damaged, contact your local Nauticam dealer.



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



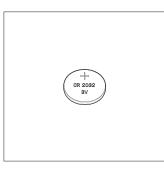
Padded Travel Case



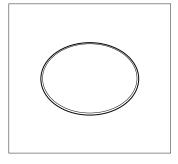
Allen key set



Lubricant

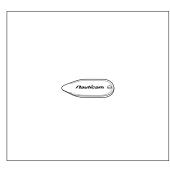


Panasonic CR2032 Battery

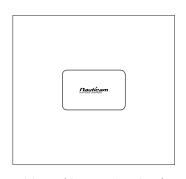


Spare Main O-ring

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

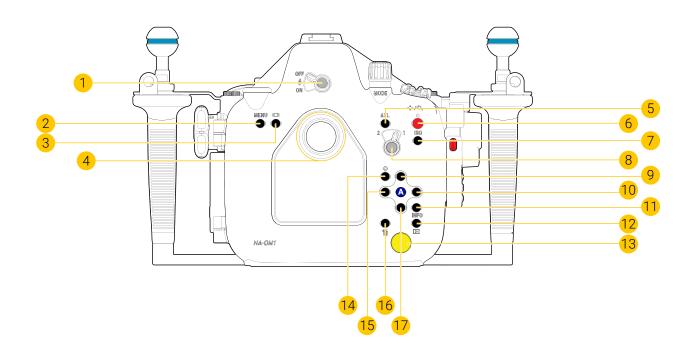
Do not open the housing in wet or sandy environment. Protect the housing from moisture and debris in order to prevent malfunction or leakage.



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

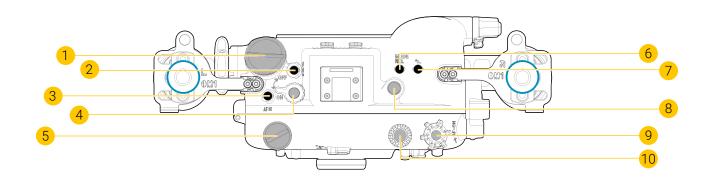


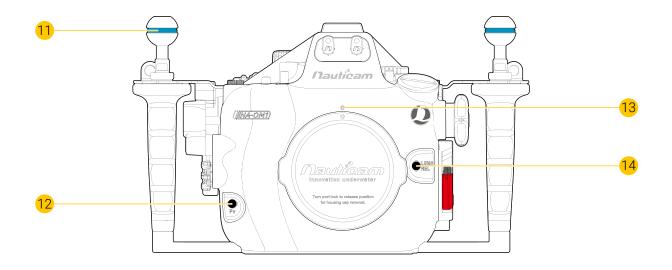
- 1 Flash on/off lever
- 3 LV button
- 5 AEL button
- 7 ISO button
- 9 Up button
- 11 INFO button
- 13 Moisture alarm window
- 15 Left button
- 17 Down button
- A Multi selector center

- 2 MENU button
- 4 0.66x viewfinder
- 6 REC button
- 8 FN lever
- 10 Right button
- 12 Playback button
- 14 Multi selector
- 16 Delete button

PART NAMES AND FUNCTIONS

Top + Front Views



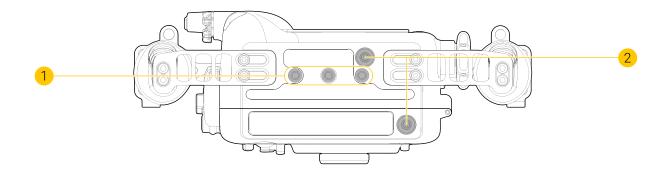


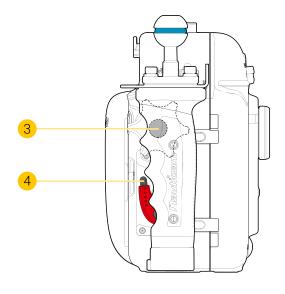
- 1 M24 Accessory port
- 3 AF button
- 5 M14 Accessory port
- 7 Exposure compensation button
- 9 Real dial
- 11 Accessory mounting ball
- 13 Port index mark

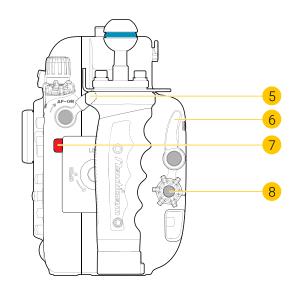
- 2 Sequential shooting/self-timer/flash button
- 4 ON/OFF lever
- 6 Mode button
- 8 M10 thread hole
- 10 Mode dial
- 12 Preview button
- 14 Lens release button

PART NAMES AND FUNCTIONS

Back + Side Views



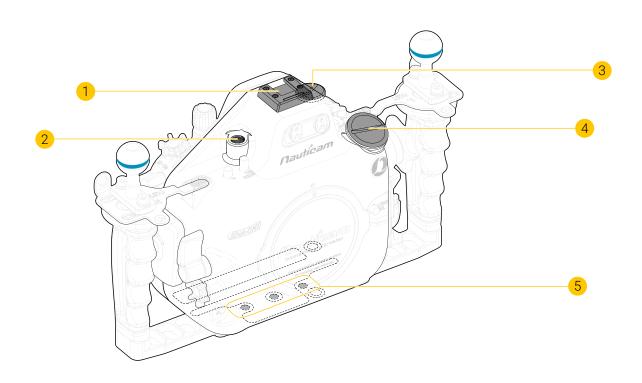




- 1/4" Threaded tripod holes
- 3 Zoom/Focus knob
- 5 AF-ON lever
- 7 Housing unlock button

- 2 Sacrificial zinc anodes
- 4 Port lock safety button
- 6 Shutter release lever
- 8 Front dial

HOUSING MOUNT



Housing mount

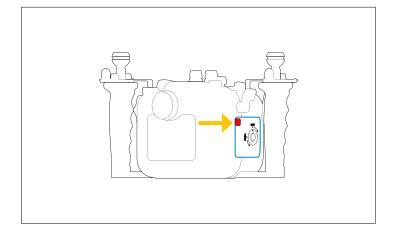
Compatible accessories

1	Accessory coldshoe	25311 25321 25312 25322	Strobe mounting ball for cold shoe M10 Long strobe mounting ball for cold shoe Light mounting stem for cold shoe Long light mounting stem for cold shoe
2	M10 Accessory port	25221 25224	M10 Strobe mounting ball M10 Strobe mounting ball with hole
3	M14 Accessory port	25624	M14 Vacuum valve II (pushbutton release)
4	M24 Accessory port	25086 25077	M24 adaptor for HDMI 2.0 cable HDMI 2.0 cable
5	1/4" -20 mounting threads	17954 17960	Universal tripod plate Universal Quadra-Pod Plate

OPENING THE HOUSING

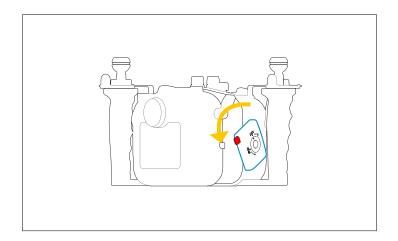
* drawings as illustrations only

1



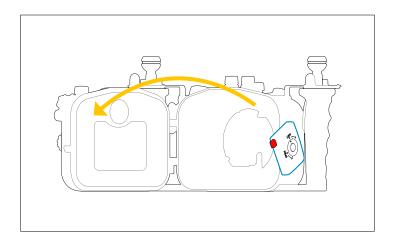
depress housing unlock button

2



turn housing lock latch anti-clockwise to open the housing

3

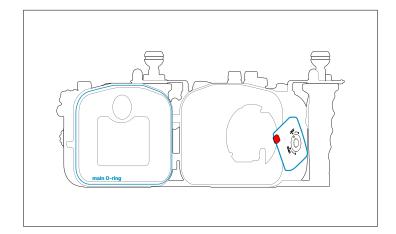


flip open the back housing when lock latch is aligned to 'open' position

CLOSING THE HOUSING

* drawings as illustrations only

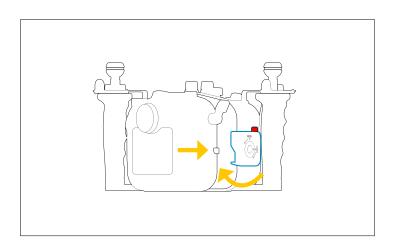
1



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

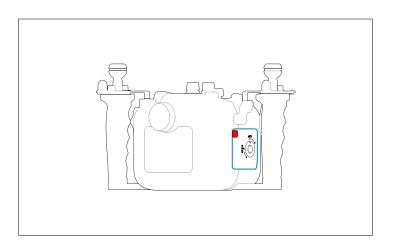
make sure nothing is caught between front and back housing and that they are fully aligned before locking

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

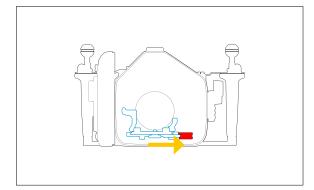


housing locked in place securely

* drawings as illustrations only

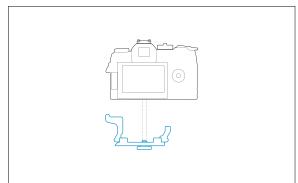
Installing the Camera - housing tray attachment

1



unlock camera tray lever and remove the tray from the housing

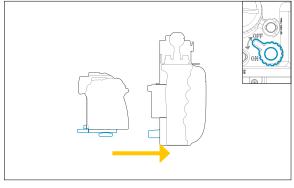
2



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

make sure the camera buttons are engaged with the camera tray

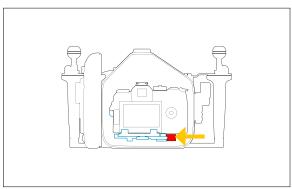
3



- * pull out the zoom/focus knob if installing the camera with lens and gear attached * lift up ON/OFF lever each time
- * lift up ON/OFF lever each time before installing the camera

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

4



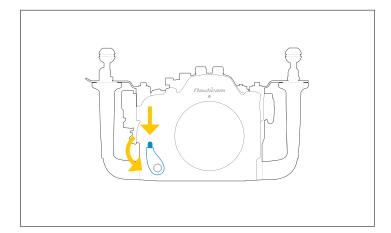
lock camera tray

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

* drawings as illustrations only

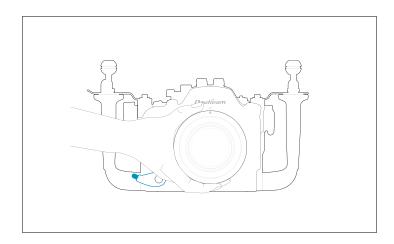
Port Mounting

1



depress port lock safety button and rotate anti-clockwise

2

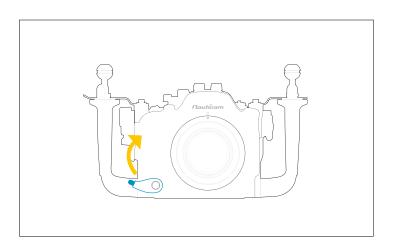


lubricant the port O-ring before mounting

align index mark

push port assembly straight in

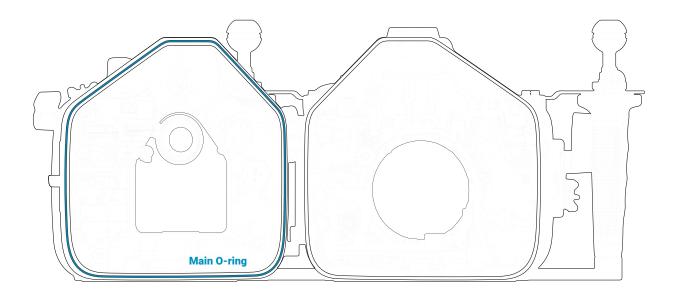
3



rotate locking lever clockwise to lock

* drawings as illustrations only

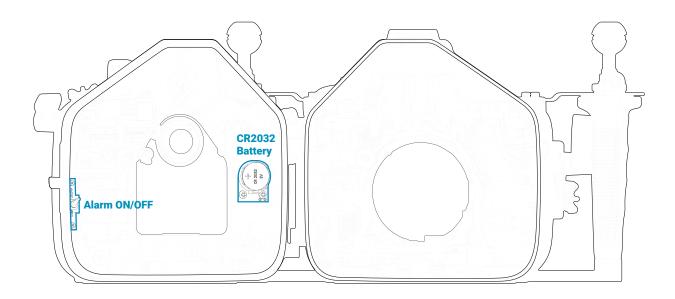
Coating housing O-ring



- 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

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

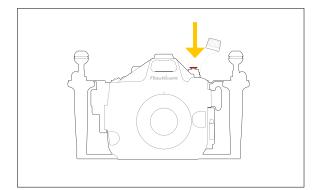
- connect the wires with a dampened cotton bud; the alarm will give a repeating 'beep' and the mositure alarm window will flash RED

^{*} 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

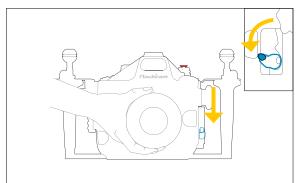


If using with vacuum valve:

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

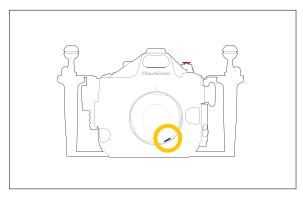
If using without vacuum valve, please follow from step 2

2



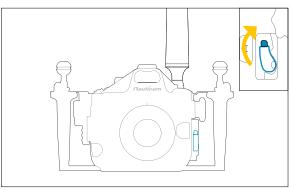
unlock port lock and remove port assembly

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

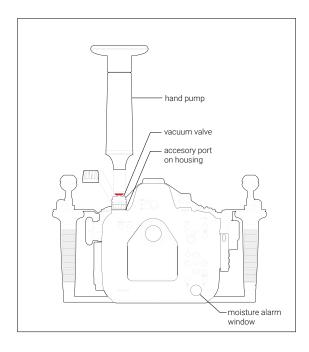
^{*} please refer to page 15 on complete vacuum system guidance

OPTIONAL ACCESSORIES

* drawings as illustrations only

Vacuum valve system

1



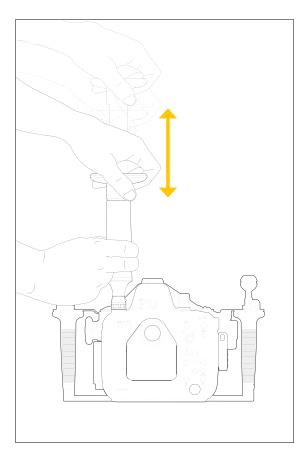
remove the plug of M14 accessory port from the housing

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 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

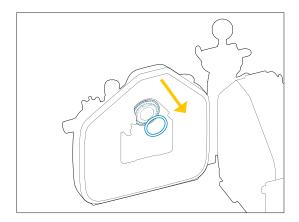
* It is recommended to leave the housing for at least 20mins to ensure it is sealed. If the LED light changes from steady green light to rapidly flashing yellow light, that means there is a leakage. Please check every 0-ring and then conduct the vacuum test again.

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

OPTIONAL ACCESSORIES

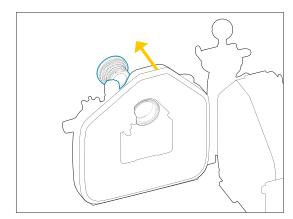
Installing Viewfinder

1



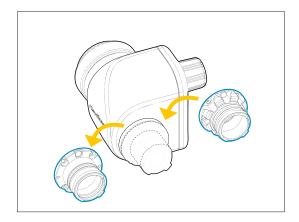
firstly remove the pre-installed 0.66x viewfinder from the housing by removing the retainer o-ring inside rear housing





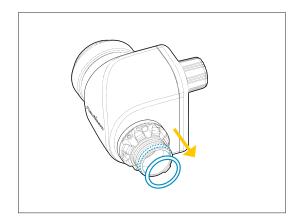
gently push the 0.66x viewfinder from the inside of the housing $% \left(1\right) =\left(1\right) \left(1\right) \left($

3



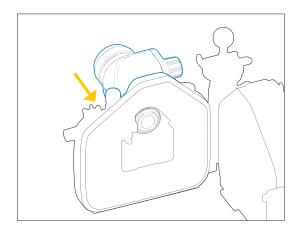
to use with 32211/32213 viewfinder, exhchange a collar of the viewfinder to 32215 collar adaptor. (please refer to the 32215 adaptor manual.)





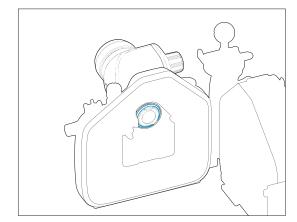
remove the retainer o-ring from the viewfinder

5



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

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 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	307 mm	
Height	179 mm	
Depth	118 mm	

Weight

In air	2.0 kg
Buoyancy in water	negative 0.2 kg (w/ camera & battery)

Depth

Rating	100 m

Port specifications

Port mount	N85 Micro Four Thrids Port System
Port accessories	1 x M24, 1 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
25311 Strobe mounting ball for cold shoe
25321 Long strobe mounting ball for cold shoe
25312 Light mounting stem for cold shoe
25322 Long light mounting stem for cold shoe
25111 Strobe mounting ball for handle with screws

^{*32215} is required for use with NA-OM1

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 25077 M24D1R205-M28A1R170 HDMI 2.0

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)

25028 Socket extension for 25032 HDMI bulkhead with M16 thread
25032 Custom HDMI bulkhead to use with socket extension
25081 M24 -16 Step Down Adaptor
25076 HDMI (D-D) Cable in 200mm Length

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

Optional accessories for monitor mounting system

17951 Nauticam Monitor Housing Mounting System
17952 Nauticam Monitor Housing Mounting Adaptor
17954 Tripod Plate
17960 Universal Quadra-pod Plate

WET LENS COMPATIBILITY

Macro	81301	Compact Macro Convertor 1 (CMC-1, 4.5x Magnification)
	81302	Compact Macro Convertor 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)
Wideangle	83201	Wet Wide Lens 1 (WWL-1) 130 deg. FOV with compatible 28mm Lenses
	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

26306 Mini Flash Trigger for Olympus

26216 Universal Optical Fiber Cable

GEAR COMPATIBILITY

Incompatible acceessories

36147 01250-Z Olympus M.Zuiko 12-50mm F3.5-6.3 EZ zoom gear

36059 01250-Z Zoom Gear for Olympus 12-50mm EZ

36162 Macro Port and Zoom gear set for Olympus M.Zuiko Digital ED 12-50mm F3.5-6.3 EZ

36060 Macro Port and Zoom Gear Set for Olympus 12-50mm EZ

*36146 P1442X-PZ Panazonic Lumix G X Vario PZ 14-42mm F3.5-5.6 ASPH. POWER 0.I.S. (H-PS14042) zoom gear

 $^{\star}36061$ P1442X-PZ Zoom Gear for Panazonic Lumix G X Vario PZ 14-42mm F3.5-5.6 ASPH. POWER 0.I.S.

36051 Adaptor for Olympus 4/3 port and gear system

Compatible acceessories

36167 Macro Port and Zoom Gear Set for Olympus 12-50mm EZ to use with NA-OM1

N85 Micro Four Third Gears

^{*}Please contact to Nauticam for a customized gear.

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