

# NA-A6300 Underwater Camera Housing Instruction manual

### **Foreword**

Thank you for your purchase of a NAUTICAM camera housing.

At NAUTICAM, we pride ourselves in the ability to recognise the requirements of professional as well as amateur underwater photographers and fulfill them through the innovative designs of our products. We strive to achieve a high level of user-friendliness by allowing stress-free installation and easy operation of all important functions of the camera.

Each housing is individually inspected and water pressure tested to ensure optimum quality.

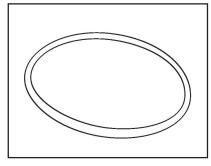
Please read this manual carefully before using the housing, this will maximise its performance as well as its lifetime.

## Warranty

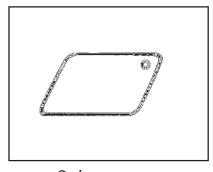
- 1. All NAUTICAM Products are warranted against any material and manufacturing defects for two years from the date of purchase for consumer use. Please fill in the warranty cards shipped with our housings and viewfinders at the time of sale and return them to your point of purchase within a month. If we do not receive the completed warranty card for a particular product, the warranty period would be assumed to begin from the day that the product is shipped from our facility. This warranty only applies to products purchased from authorised NAUTICAM dealers and does not extend beyond the original retail purchaser.
- 2. To return your product for service, please contact your regional authorized service centre(s). Please note that this warranty only applies when the product is purchased in the territory where the service centre is located.
- 3. 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.
- 4. NAUTICAM does not hold responsibility for damage, of any nature, to any equipment used with and/or placed within our products.
- 5. 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.
- 6. Unauthorised modifications and/or repairs of our products will automatically invalidate the warranty.

## **Package Contents**

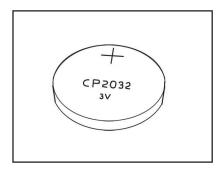
- 1. NA-A6300 housing
- 2. Instruction manual
- 3. Spare silicone rubber housing o-ring
- 4. O-ring remover
- 5. CR2032 battery (for moisture alarm)
- 6. Lubricant
- 7. Set of Allen keys
- 8. Set of handle brackets with shutter release trigger



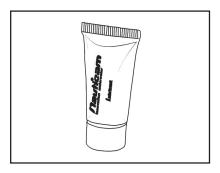
Spare silicone rubber o-ring



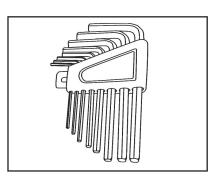
O-ring remover



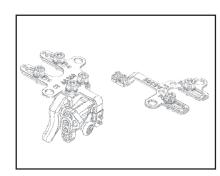
CR2032 battery



Lubricant



Set of Allen keys



Set of handle brackets with shutter release trigger

### **Precautions**

- 1. A water-tight test without the camera inside the housing is highly recommended when using the system for the first time and after the changing of port and O-ring(s).
- 2. Do not use lubricants from other brands with the silicone rubber Oring on this housing, only use the lubricant provided by NAUTICAM.
- 3. Discontinue use immediately should you notice any leakage.
- 4. Store the housing in a robust, shock-proof container during transportation; avoid transporting with any equipment, such as a camera, inside the housing.
- 5. When travelling by air, do not close the housing if the port is installed, as this may lead to a pressure difference between the atmosphere and inside the housing.
- 6. Care must be taken when opening the housing, as pressure may build up inside the housing which increases the opening force.
- 7. Do not open the product in a wet or sandy environment. Protect the interior from moisture and debris in order to prevent malfunction or leakage.
- 8. Do not store the product in an environment of high humidity.
- Do not leave the housing and the camera in direct sunlight for prolonged periods.
- 10. Keep out of reach of children, failure to do so could result in injury.
- 11. Defective products should be shipped to our distributors for service, unauthorized disassembling and/or modifications could result in malfunction or leakage.

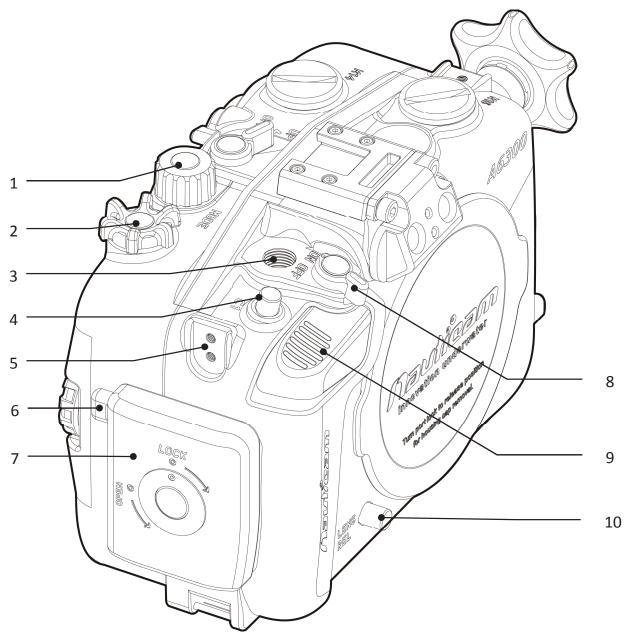
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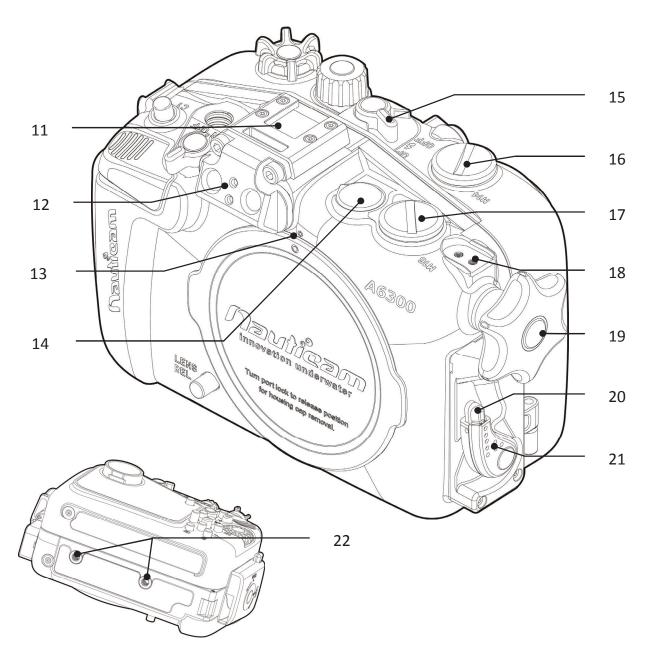
## Specifications

	Housing body:	Aluminium alloy	
Construction	Surface treatment:	Hard anodised	
	Display window:	Abrasion resistant polycarbonate	
	Width:	193mm	
Dimensions (with handles)	Height:	1124mm	
(**************************************	Depth:	100mm	
Weight	Approx. 1.00kg (without camera)		
Buoyancy	Slightly negative		
Depth rating	100 metres		
	Moisture alarm:	Blinking LED and audible alarm	
Features	TTL capability:	Optical fibre mount included for external strobes connection, utilising the camera's pop-up flash as trigger.	
	Port mount:	Patented easy port installation system.	
	Main and Sub dials:	Easily reached by thumb.	
	HDMI bulkhead (Optional):	Allows for connection to external monitor, e.g. NA-502H	

## **Identification of Parts**

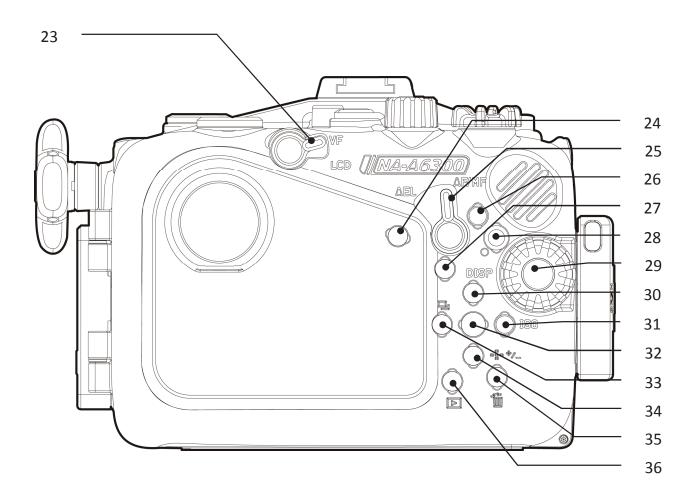


1	Mode dial	6	Housing lock safety button
2	Control dial	7	Housing lock
3	M10 strobe mounting base	8	On/off lever
4	C1 button	9	Shutter release lever
5	Threaded holes for handle brackets	10	Lens release button



11	Accessory coldshoe	17	M16 accessory port
12	Optical fibre mount	18	Threaded holes for handle brackets
13	Port alignment index	19	Zoom/Focus knob
14	Moisture alarm window	20	Port release safety button
15	Flash on/off lever	21	Port lock/release lever
16	M14 accessory port	22	1/4"-20UNC tripod socket x 2*

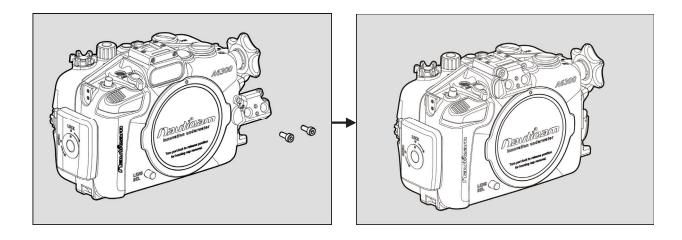
<sup>\*</sup> The maximum length of screws that can be used with the tripod sockets is 4mm



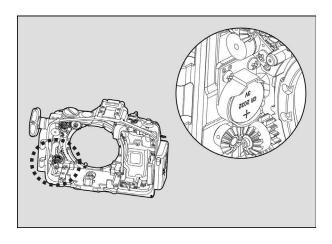
23	Viewfinder/LCD lever	30	Up selection button
24	Menu button	31	Right selection button
25	AF/MF /AEL switch lever	32	OK button
26	AF/MF /AEL /Enlarge button	33	Left selection button
27	Fn button	34	Down selection button
28	Movie button	35	C2 /Delete button
29	Control wheel	36	Playback button

## Preparation of the Housing

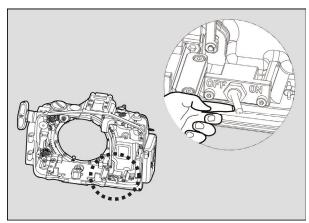
- After verifying that the housing O-ring is in good condition, lightly coat it with the lubricant provided.
- 2. Make sure the O-ring groove located in the rear part of the housing is free from any foreign material; the groove can be cleaned with the aid of a microfiber cloth.
- 3. Place the O-ring into the groove.
- 4. To install the optical fibre mount for external strobe connection, fasten it with the screws provided to the threaded sockets of the accessory coldshoe as shown:



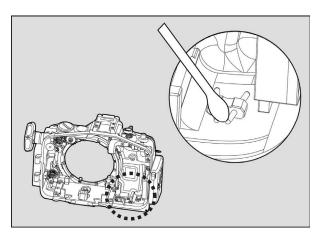
#### 5. Setting up the moisture alarm:



1. Install the CR2032 battery provided into the battery compartment on the circuit board inside the front part of the housing.



 Switch the alarm on. The LED light will turn blue for five seconds indicating the battery is normal. Then it goes into flashing blue light standby mode.



3. Test the alarm by contacting the two wires near the bottom of the housing with a damped cotton bud; the alarm should start giving out a repeating "beep" sound along with a flashing red light. The "beep" sound and the light should keep on going for 5 seconds after the removal of the damped cotton bud.

(Optional) Vacuum valve can be attached to the housing via one of the accessory port for conducting a vacuum seal test. Please refer to the manual of the vacuum valve for more details of the operation.

#### LED status identification:

#### On start up:

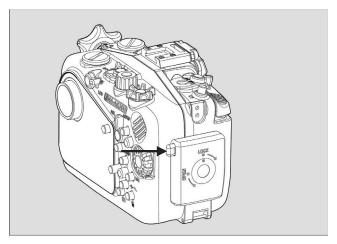
LED indicator	Status
Flash "Blue" light once	Indicates a 2nd generation PCB
Steady "Blue" light	Battery is normal, goes into flashing "Blue" light
	standby mode after 5 seconds.
"Blue" and "Red"	Battery low. Replace battery as soon as possible.
lights alternating	Goes into standby mode after 5 seconds.
Steady "Red" light	Battery empty, replace battery.

#### After start up:

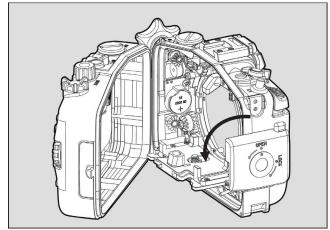
LED indicator	Status
Flashing "Blue" light	Standby mode. The moisture alarm is active, and
	the system is ready for vacuum indication
	whenever a vacuum is detected.
Flashing "Red" light	Moisture is detected.
with audio sounds.	
Flashing "Yellow"	Some vacuum is detected, target vacuum level is
light	not reached.
Steady "Green" light	Target vacuum level is reached.
Rapidly flash "Yellow"	Vacuum is dropping. (Will occur only after target
light	vacuum level is reached)
Rapidly flashing	Vacuum is totally lost. Circuit stalled until switched
"Red" light	off. (Will occur only after target vacuum level is
	reached)

## Opening and locking the housing

#### To open the housing:

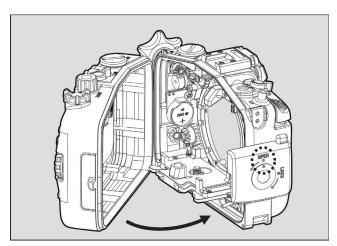


1. Press the housing lock safety button.

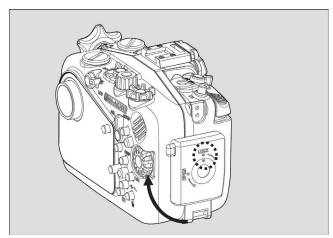


2. Turn the housing lock anticlockwise for 270°, until the lock reaches the "Open" position as shown.

#### To lock the housing:

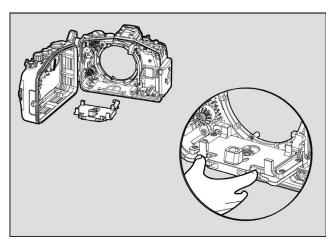


Close the housing while the housing lock is in the "Open" position.

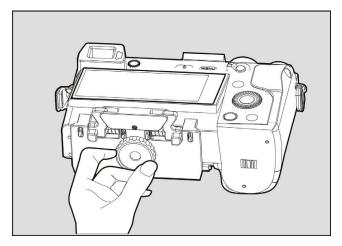


4. Turn the housing lock clockwise for 270°, until the lock reaches the "lock" position as shown.
Confirm that the white indicator line on the safety button is visible.

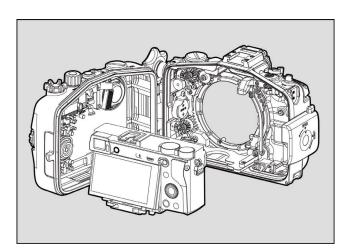
## Installing the Camera



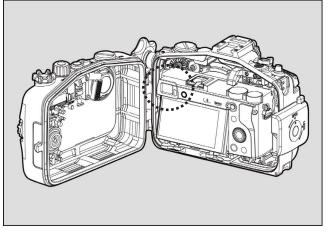
 Disengage the red camera saddle locks by pressing them inwards. Remove the camera saddle from the housing by sliding it outwards.



 Tilt the LCD monitor of the camera upwards, then attach the saddle to the camera by tightening the screw to the tripod socket of the camera.



3. Install the camera by sliding the attached saddle along the rail in the housing until it cannot go in any further.

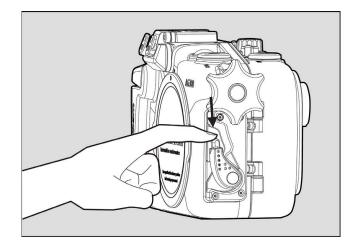


4. Please make sure the eyepiece cup is not attached to the camera. Confirm that the red camera saddle locks are in the engaged position before closing the housing.

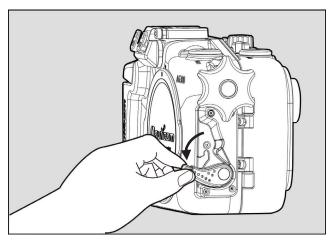
## Mounting the Port

Please refer to the NAUTICAM system port chart for a range of compatible ports.

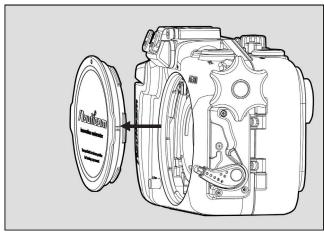
- Remove the O-ring from the port, inspect for any damage and lightly coat it with the provided lubricant before placing it back into its groove.
- Verify that the port opening of the housing is clean and free from foreign material.



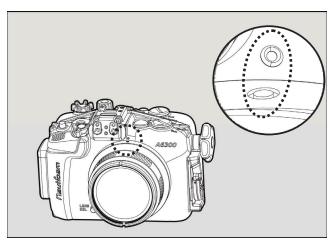
3. Push the safety button of the port locking lever downwards.



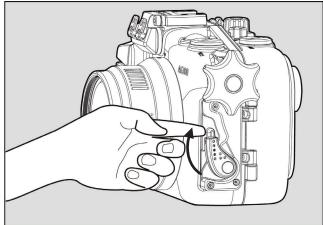
4. Turn the port locking lever to the release position as shown.



5. Lift housing cap.



- 6. Align the Port mounting indices of the port and the housing.
- 7. Gently push the port into the port opening of the housing, until it cannot go in any further.

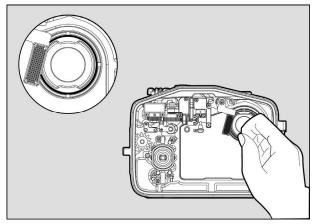


- 8. Lock the port into place by turning the port locking lever to the inward position. To ensure that the port is securely mounted, confirm that the green line on the safety button of the port locking lever is visible.
- To remove the port from the housing, simply turn the port locking lever to the outward position and gently pull it out.

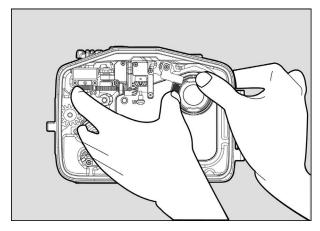
## Changing the Viewfinder

In order that users can change to a preferred viewfinder easily, the o.66X viewfinder which comes with this housing is designed so that it can be removed and re-installed by following the simple steps described below.

#### To remove the viewfinder:

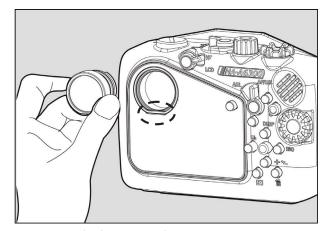


 Remove the retainer O-ring of the viewfinder inside the rear half of the housing by making use of the recess on the

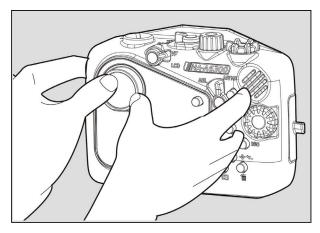


2. Gently push the viewfinder from the inside of the housing.

#### To re-install the viewfinder:



- Lightly coat the O-rings on the outer periphery of the viewfinder body with lubricant.
- 2. Align the viewfinder with the sleeve in the display window.



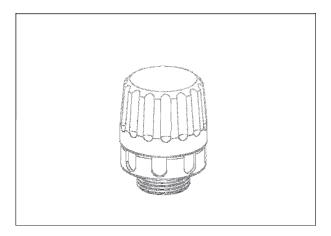
- Push the viewfinder from the outside of the housing until it cannot go in any further.
- 4. Place the retainer O-ring of the viewfinder back from inside the housing.

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## Care and Maintanence

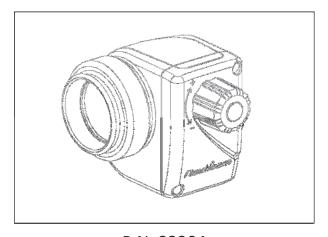
- Soak the housing system in fresh water after each salt water use, during which all control buttons/knobs should be operated a few times to avoid the accumulation of salt residue; wipe the housing with a towel before opening.
- 2. After each day of diving, it is advisable to have the main O-ring in the rear part of the housing removed from its groove with the O-ring remover and inspected for damage. Also check that the O-ring retains its original circular shape; never stretch the O-ring excessively or remove it with a sharp object. The O-ring groove should be cleaned to ensure it is free from any salt deposit or foreign material; lightly coat the O-ring with the provided lubricant before reinstalling it in the groove. A damaged O-ring should be discarded immediately and replaced only with one that is provided by NAUTICAM.
- 3. Replace the main O-ring annually.
- 4. It is recommended that you ship the housing to our distributor for a complete overhaul every year or after every 200 dives.

## **Optional Accessories**



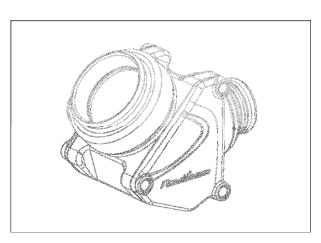
P.N. 25624

M14 Vacuum Valve II (Pushbutton Release)



P.N. 32204

Nauticam 180° straight viewfinder for MIL housings



P.N. 32205

Nauticam 45° viewfinder for MIL housings

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