

NA - A7

Underwater Camera Housing Instruction manual



Foreword

Thank you for your purchase of a NAUTICAM digital camera housing.

At NAUTICAM, we pride ourselves on 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.

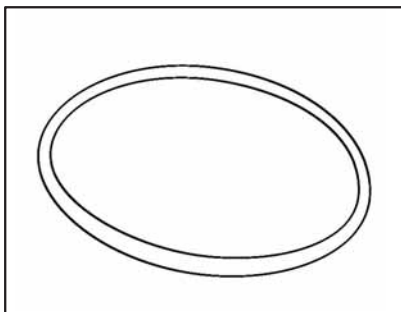
Please read this manual carefully before using the housing, this will maximise its performance as well as its lifetime.

Warranty

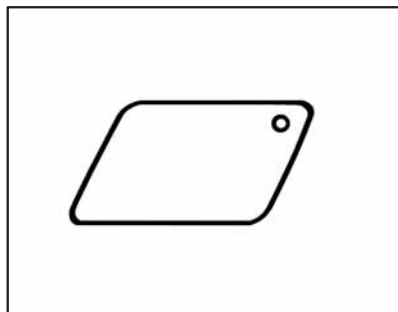
1. All NAUTICAM Products are warranted against any material and manufacturing defects for one year from the date of purchase for consumer use.
2. NAUTICAM accepts no liability for any damage to and defects in the housing caused by improper use and/or poor maintenance; it is the responsibility of the owner to carefully follow the instructions in this manual.
3. NAUTICAM does not hold responsibility for damage, of any nature, to any equipment used with and/or placed within the housing.
4. NAUTICAM accepts no liability for any loss of captured images or the inability to capture images even if it is due to the malfunctioning or leakage of the housing.
5. This warranty only applies to products purchased from authorised NAUTICAM dealers and does not extend beyond the original retail purchaser.
6. Unauthorised modifications and/or repairs of the housing will automatically invalidate this warranty.
7. To return products for service, please contact our regional distributor, normally you would need to notify them by email first and ship them the product by registered mail, along with your contact details and a brief description of the defect.

Package Contents

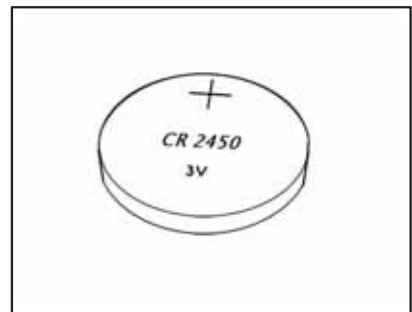
1. NA-A7 housing
2. Instruction manual
3. Spare silicone rubber main o-ring
4. O-ring remover
5. CR2450 battery (for moisture alarm)
6. Lubricant
7. Set of Allen keys
8. M10 plastic plug removal tool
9. M16 plug
10. Universal hotshoe plug



Spare silicone rubber o-ring



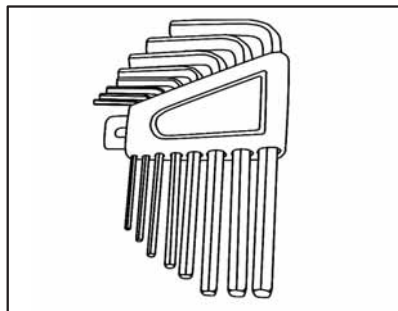
O-ring remover



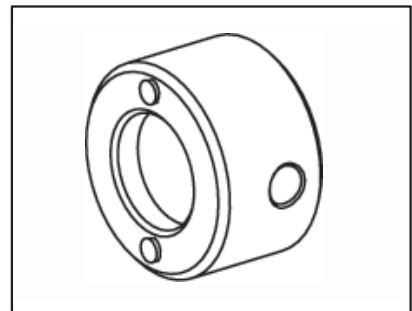
CR2450 battery



Lubricant



Set of Allen keys



M10 plastic plug removal tool

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 O-ring 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.
9. 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.

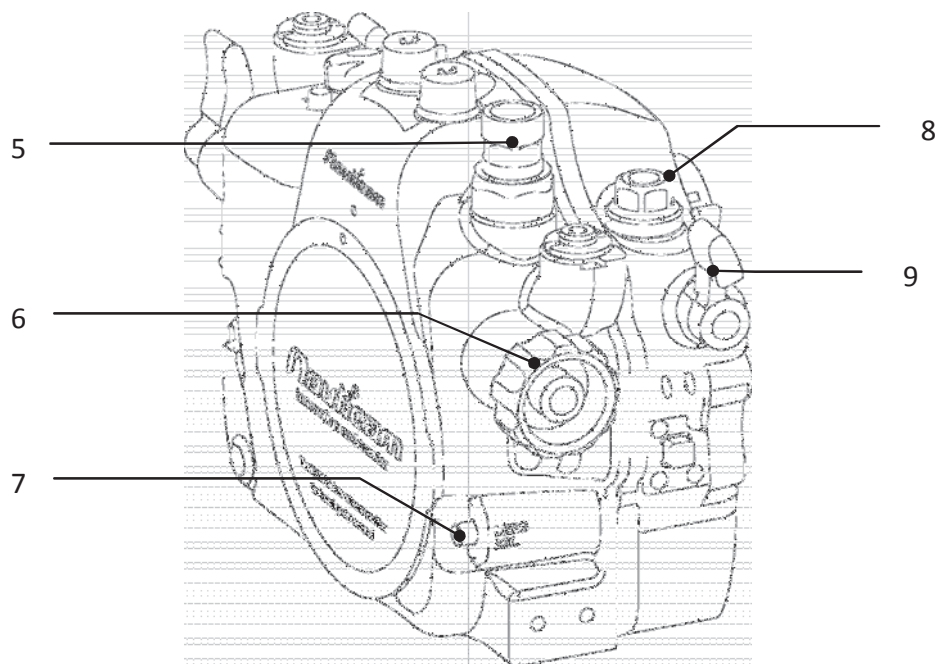
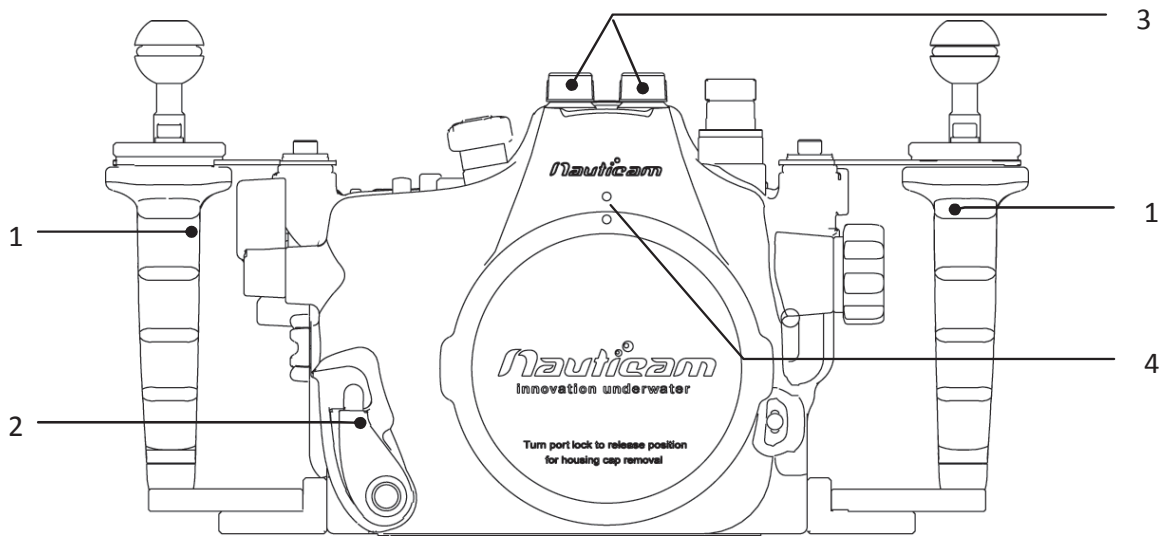
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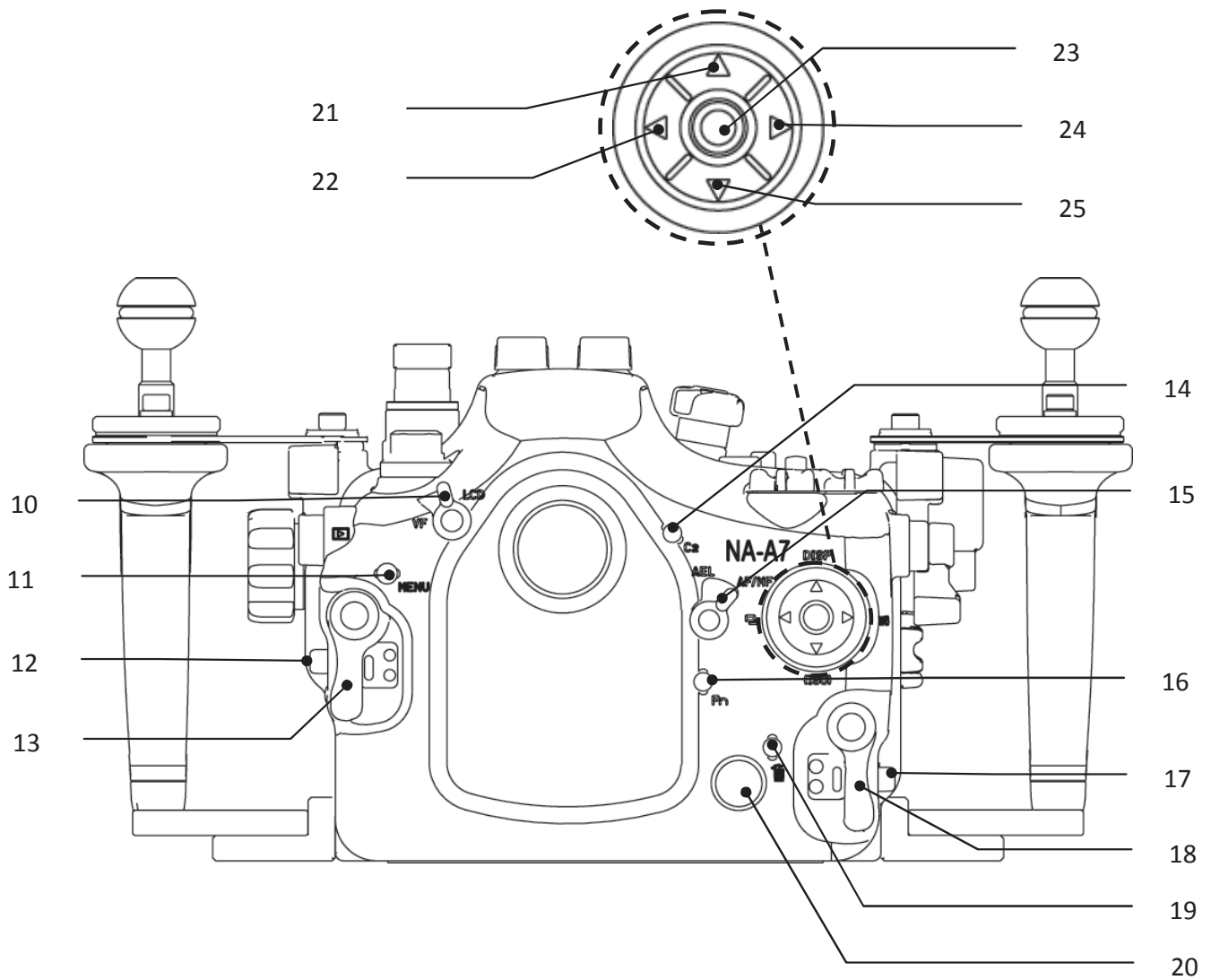
Specifications

| | | |
|------------------------------|---|--|
| Construction | Housing body: | Aluminium alloy |
| | Surface treatment: | Hard anodised |
| | Display window: | Abrasion resistant polycarbonate |
| | Grip handles: | Polycarbonate and rubber |
| Dimensions (with handles) | Width: | 323mm |
| | Height: | 165mm |
| | Depth: | 109mm |
| Weight | Approx. 2.33kg (without camera) | |
| Buoyancy | Slightly negative | |
| Depth rating | 100 metres | |
| Features | Moisture alarm: | Blinking LED and audible alarm |
| | Viewfinder: | 0.66X viewfinder |
| | Flash capability: | One Nikonos 5-pin bulkhead (Trigger and Ground connected only) |
| | | Two optical bulkheads utilising LED flash trigger as commander |
| | Port mount: | Patented port locking lever for easy port installation. |
| | AEL lever: | Enable easy access from the right handle. |
| Movie shooting lever: | Enable easy access from the right handle. | |

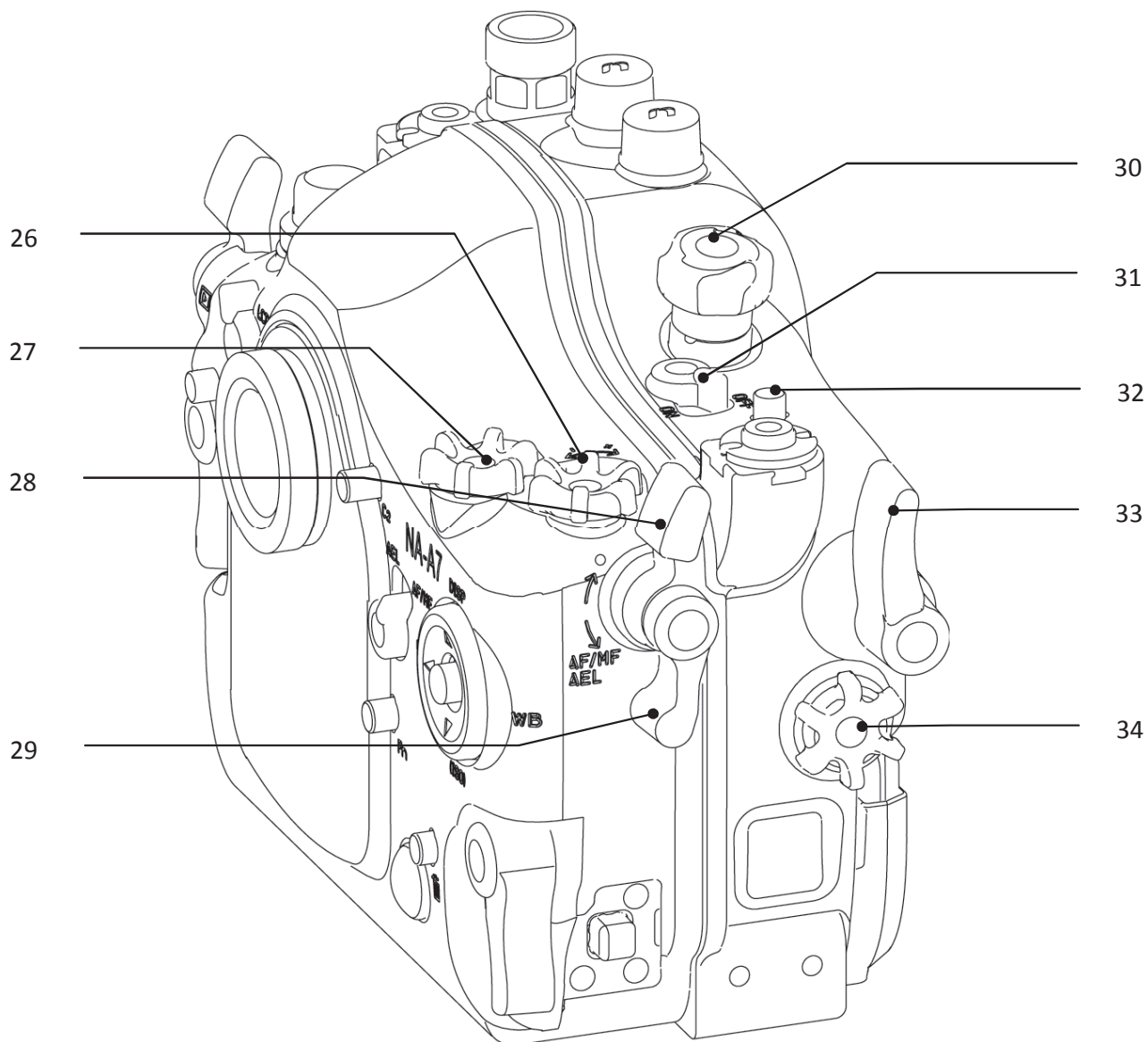
Identification of Parts



| | | | |
|---|--|---|-----------------------------|
| 1 | Grip handle x 2 | 6 | Zoom/focus knob |
| 2 | Port lock/release lever | 7 | Lens release button |
| 3 | Optical bulkhead for strobe connections x 2 | 8 | M14 optional accessory port |
| 4 | Port alignment index | 9 | Playback lever |
| 5 | Nikonos 5-pin bulkhead with M16 to M14 step down adaptor | | |



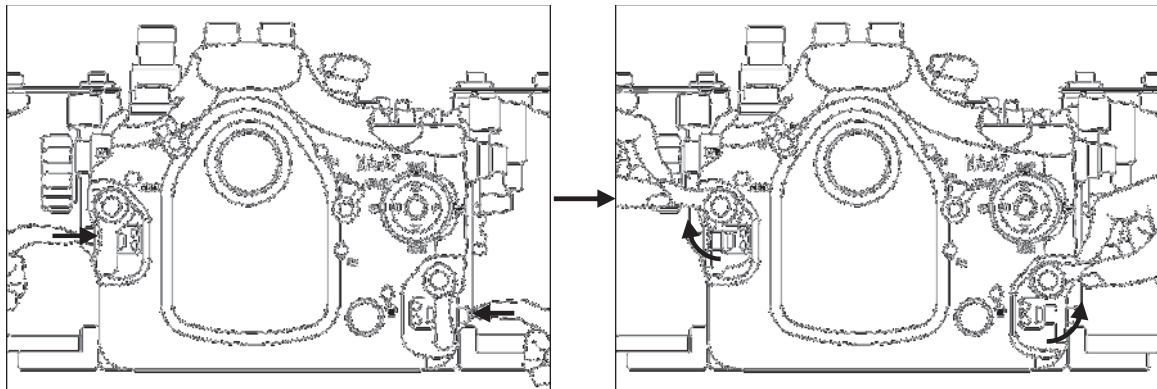
| | | | |
|----|--------------------------------|----|---------------------------------------|
| 10 | VF/ LCD switch lever | 18 | Housing lock (R) |
| 11 | Menu button | 19 | C3/ Delete button |
| 12 | Housing lock safety button (L) | 20 | Moisture alarm window |
| 13 | Housing lock (L) | 21 | Display/ Up selection button |
| 14 | C2/ Enlarge button | 22 | Drive mode/ Left selection button |
| 15 | AF/MF/AEL switch lever | 23 | Set button |
| 16 | Fn button | 24 | White Balance/ Right selection button |
| 17 | Housing lock safety button (R) | 25 | Down selection button |



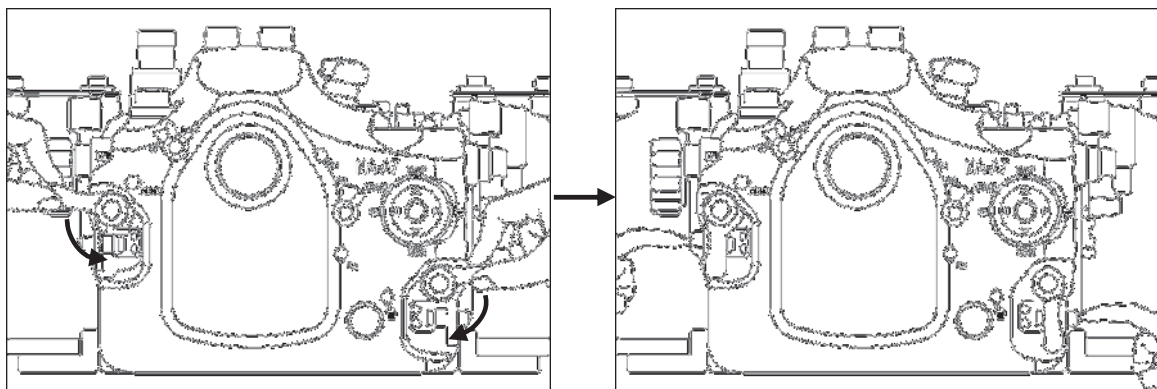
| | | | |
|----|----------------------------|----|-----------------------|
| 26 | Exposure compensation dial | 31 | On/off lever |
| 27 | Rear dial | 32 | C1 button |
| 28 | Movie lever | 33 | Shutter release lever |
| 29 | AF/MF/AEL lever | 34 | Front dial |
| 30 | Mode dial | | |

Opening and Closing the Housing

1. Always open and close the housing with the front facing down, place the housing on a flat surface or in your lap.
2. When closing, make sure there is nothing caught between the closing surfaces of the two halves of the housing.
3. The housing can be opened and closed by operating the two housing locks; when opening, press the safety buttons, then turn the locks outwards.



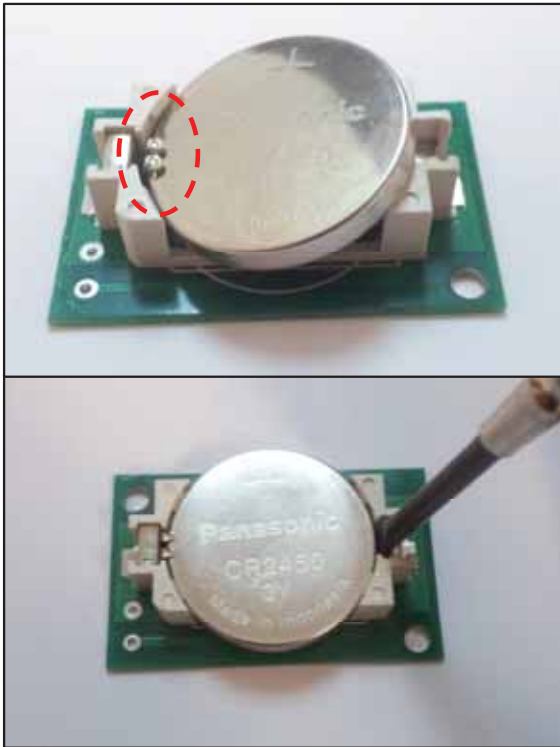
4. To close, turn the locks towards the housing, and then make sure they are locked in place securely.



Preparation of the Housing

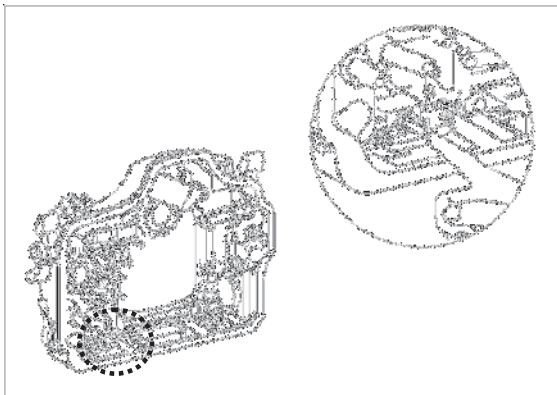
1. After verifying that the main O-ring is in good condition, lightly coat it with the lubricant provided.
2. Make sure the O-ring groove located in the front part of the housing is free from any foreign material; the groove can be cleaned with the aid of a microfiber cloth.
3. Place the main O-ring into the groove by gently pushing it, first at the corners, then the whole perimeter.

4. Setting up the moisture alarm:

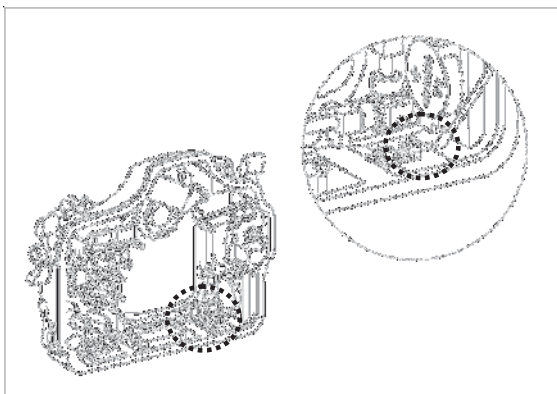


1. Install the CR2450 battery provided into the battery compartment inside the rear housing.

To remove the battery, use a small flat-head screwdriver to lift up the battery as shown.

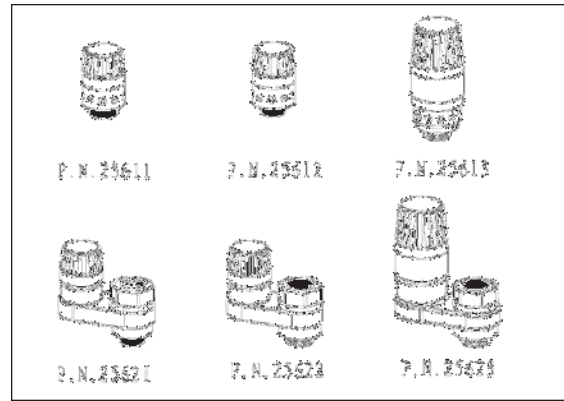


2. Switch the alarm on. The LED light will turn blue for five seconds indicating the battery is normal. Then it goes into flashing blue light standby mode.



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:

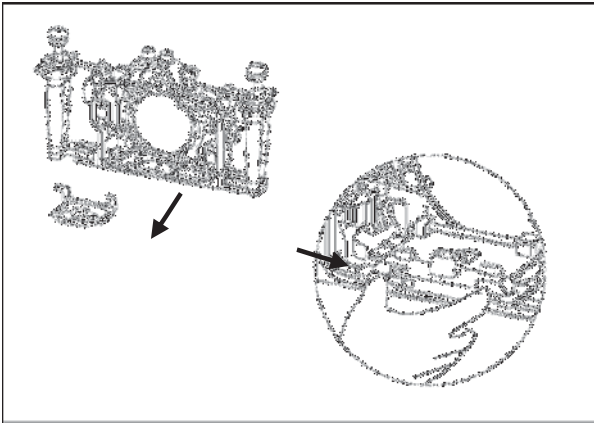
On start up:

| LED indicator | Status |
|-------------------------------------|---|
| Steady "Blue" light | Battery is normal, goes into flashing "Blue" light standby mode after 5 seconds. |
| "Blue" and "Red" lights alternating | Battery low. Replace battery as soon as possible. Goes into standby mode after 5 seconds. |
| Steady "Red" light | Battery empty, replace battery. |

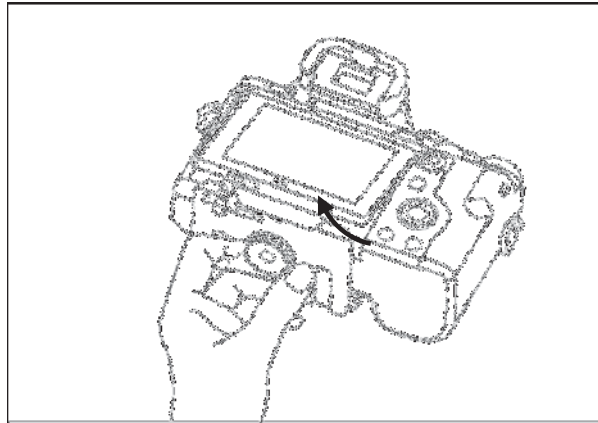
After start up:

| 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 with beeping sound | Moisture is detected. |
| Flashing "Yellow" light | Some vacuum is detected, target vacuum level is not reached. |
| Steady "Green" light | Target vacuum level is reached. |
| Rapidly flash "Yellow" light | Vacuum is dropping. (Will occur only after target vacuum level is reached) |
| Rapidly flashing "Red" light | Vacuum is totally lost. Circuit stalled until switched off. (Will occur only after target vacuum level is reached) |

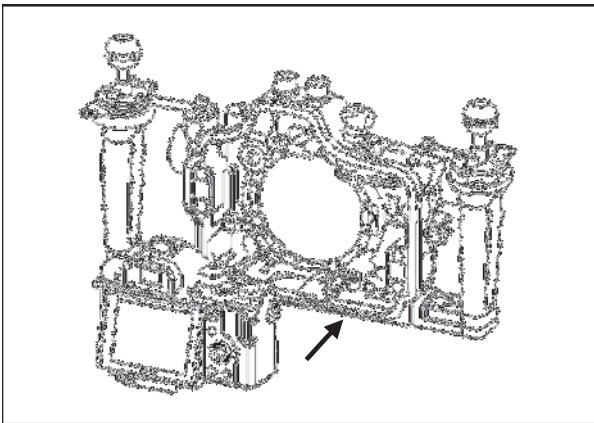
Installing the Camera



1. Disengage the red camera saddle lock by pressing it inwards. Remove the camera saddle from the housing by sliding it outwards.



2. 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.



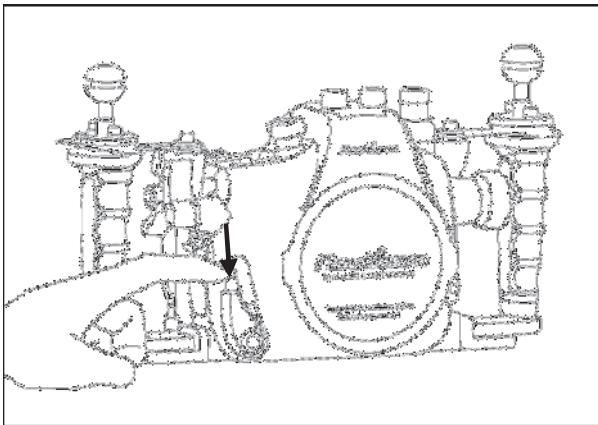
3. Install the camera by sliding the attached saddle along the rail in the housing until it cannot go in any further.

4. Confirm that all the controls of the housing are correctly engaged.
5. For removal of the camera from the housing, reverse the above procedures.

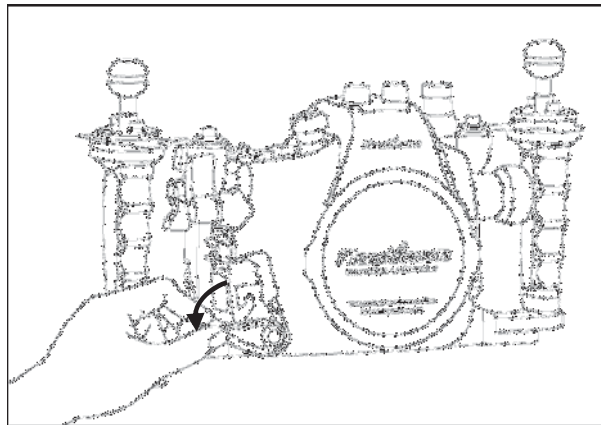
Mounting the Port

Please refer to the NAUTICAM port system chart for a range of compatible ports; note that extension rings may be needed for certain lenses and adaptors are available for the attachment of ports of other manufacturers.

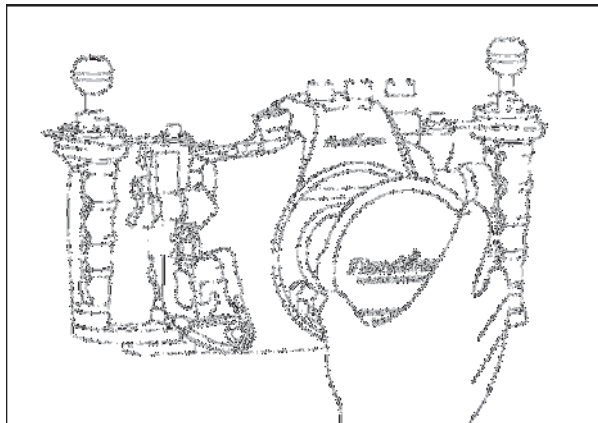
To remove housing cap:



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



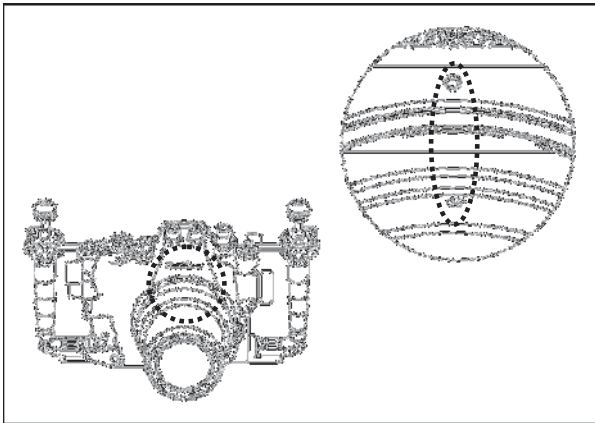
2. Turn the port locking lever to the release position as shown.



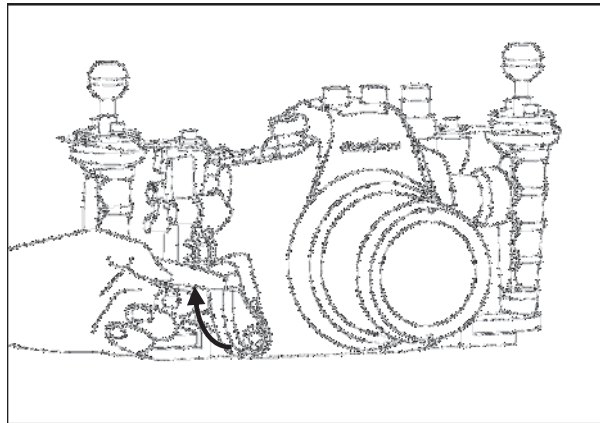
3. Lift housing cap.

To mount port:

5. 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.
6. Verify that the port opening of the housing is clean and free from foreign material.



7. Align the mounting indices of the port and the housing; these appear as white circles on both the port and the housing.
8. Gently push the port into the opening of the housing, until it cannot go in any further.

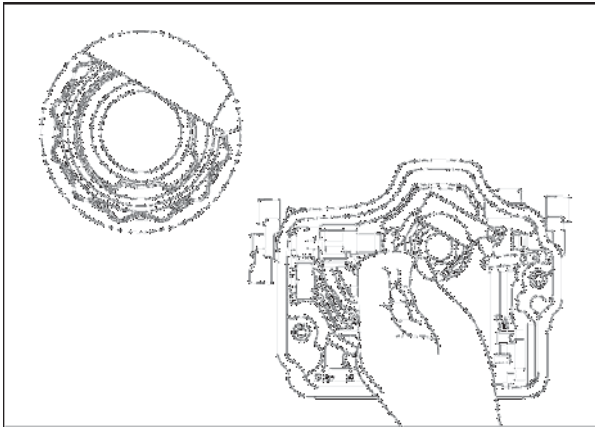


9. Lock the port into place by turning the port locking lever to the inward position. To ensure that the port is securely mounted, confirm that the green line on the safety button of the port locking lever is visible.
10. To remove the port from the housing, simply turn the port locking lever to the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

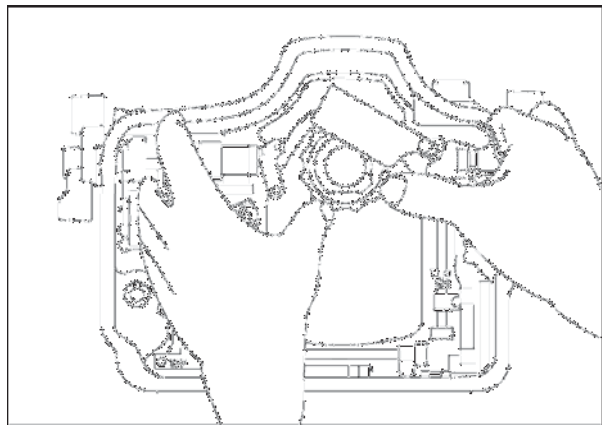
Changing the Viewfinder

In order that users can change to a preferred viewfinder easily, the 0.66X 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:

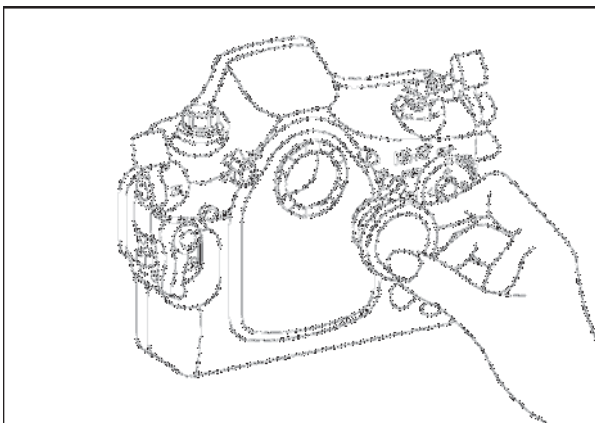


1. Remove the retainer O-ring of the viewfinder inside the rear half of the housing by making use of the recess on the viewfinder.

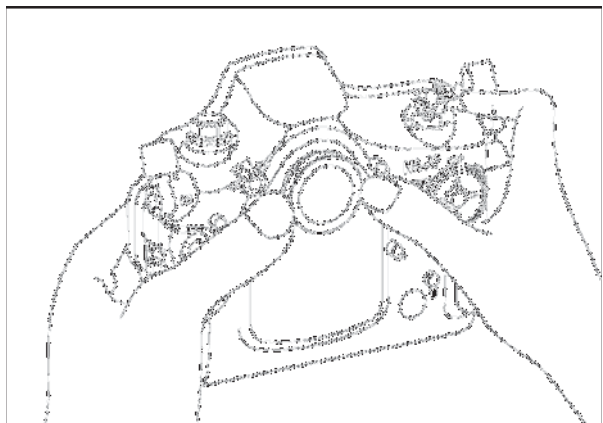


2. Gently push the viewfinder from the inside of the housing.

To re-install the viewfinder:



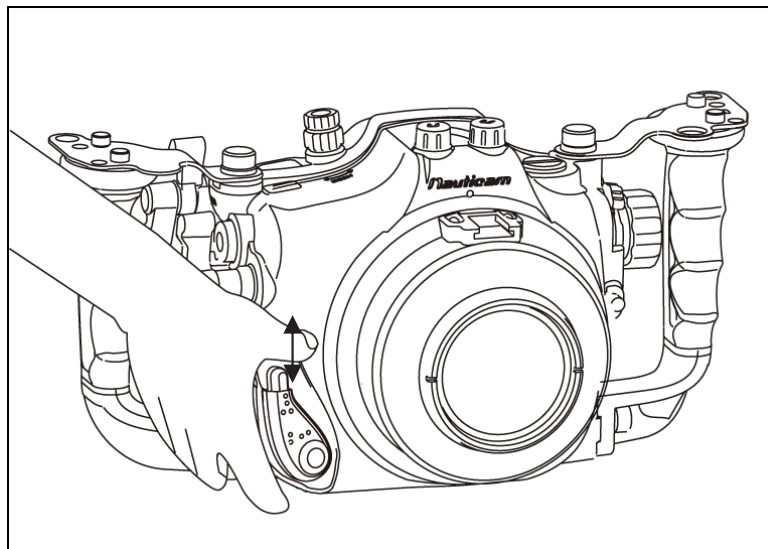
1. Lightly coat the O-rings on the outer periphery of the viewfinder body with lubricant.
2. Align the viewfinder with the sleeve in the display window.



3. 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.

Care and Maintenance

1. 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. Carefully press the port locking safety button and the two housing lock safety buttons for a few times to avoid the accumulation of salt residue. Hold the port lock in "locked" position while pressing the safety buttons.



3. After each day of diving, it is advisable to have the main O-ring in the front 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.
4. Replace the main O-ring annually.
5. It is recommended that you ship the housing to our distributor for a complete overhaul every year or after every 200 dives.

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