

INSTRUCTION MANUAL

for N120 180/140/230/250mm Optical Glass Wide Angle Port

PN# 18809/18810/18812/18813/18815

*This manual applies to product shipped from 2022,
18809 serial number from A512606 onwards;
18810 from A490446 onwards;
18812 from A522451 onwards;
18813 from A269533 onwards;
18815 from A470614 onwards.*

FORWORD

Thank you for your purchase of a NAUTICAM product.

At NAUTICAM, we pride ourselves in the ability to recognize 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 product is individually inspected and water pressure tested to ensure optimum quality.

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

PRECAUTIONS

- After installation of the port combo, please make sure the O-ring (s) are free from debris and uneven surface issues.
- A water-tight/vacuum test without the camera inside the housing is highly recommended after the changing of port and O-ring(s).
- Do not use lubricants from other brands with the silicone rubber O-ring on this housing, only use the lubricant provided by NAUTICAM.
- Discontinue use immediately should you notice any leakage.
- 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.
- Defective products should be shipped to our distributors for service, unauthorized disassembling and/or modifications could result in malfunction or leakage.
- When travelling by air, do not travel with any port installed as this may lead to a pressure difference between the atmosphere and inside the housing.

WARRANTY

All NAUTICAM Products are warranted against any material and manufacturing defects for two years from the date of purchase for consumer use. This warranty only applies to products purchased from authorized NAUTICAM dealers and does not extend beyond the original retail purchaser.

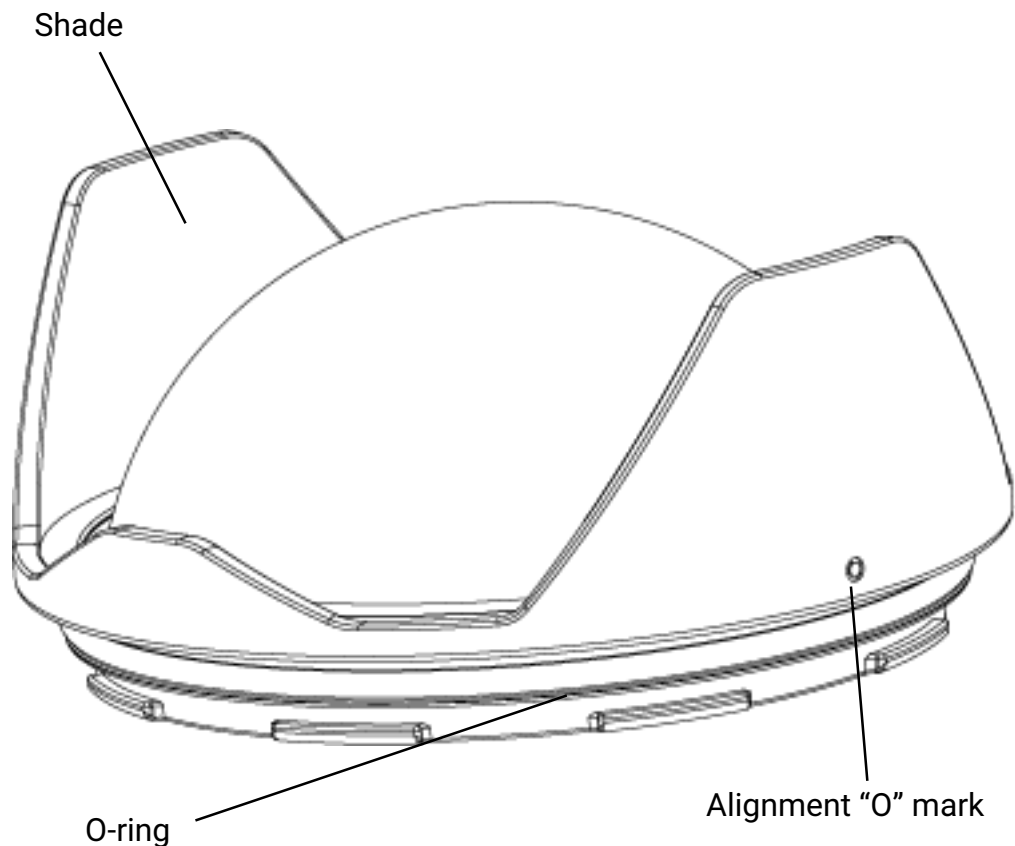
To return your product for service, please contact your regional authorized service center(s). Please note that this warranty only applies when the product is purchased in the territory where the service center is located.

NAUTICAM 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.

For Nauticam full product warranty details, please refer to "Nauticam Product Warranty Terms"

IDENTIFICATION OF PARTS

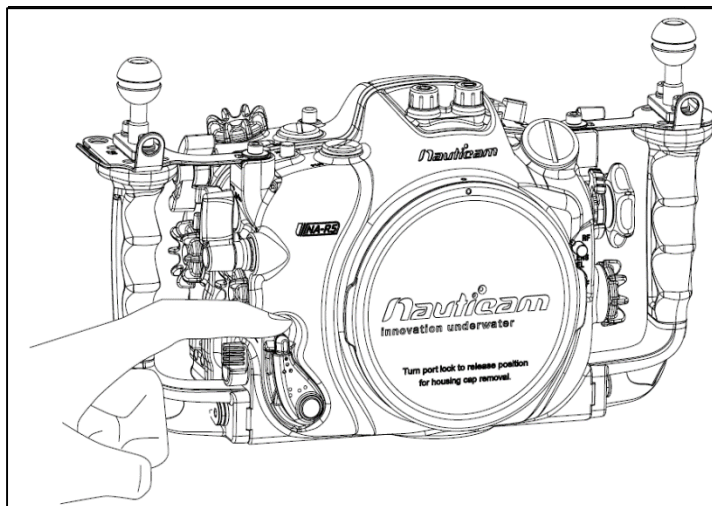


Preparation of the product

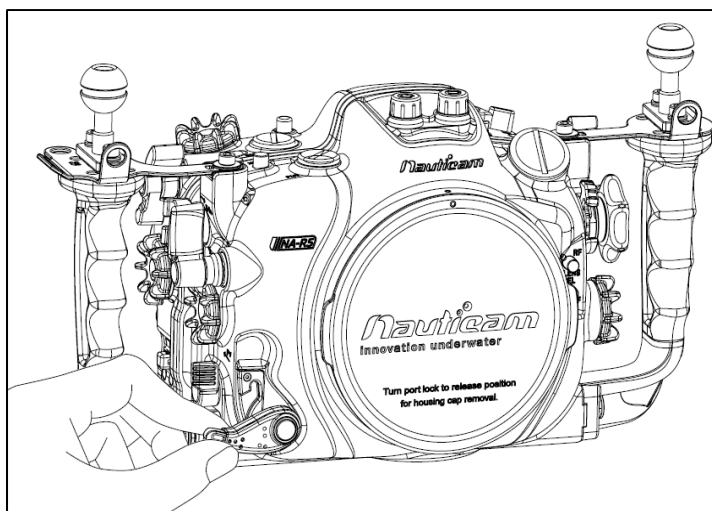
1. After verifying that the sealing O-ring is in good condition, lightly coat it with the lubricant provided and wipe away the excess.
2. Make sure the O-ring groove is free from any foreign material; the groove can be cleaned with the aid of a microfiber cloth.
3. Carefully place the port O-ring into the groove, ensuring that it lays flat and inside the entire groove.
4. Inspect the O-ring again, make sure there is no foreign materials.
5. After installing the port, lift up the entire system and inspect where the housing back and port meet the housing. There should be a thin, uniform gap with no extruded O-ring.

MOUNT PORT TO HOUSING

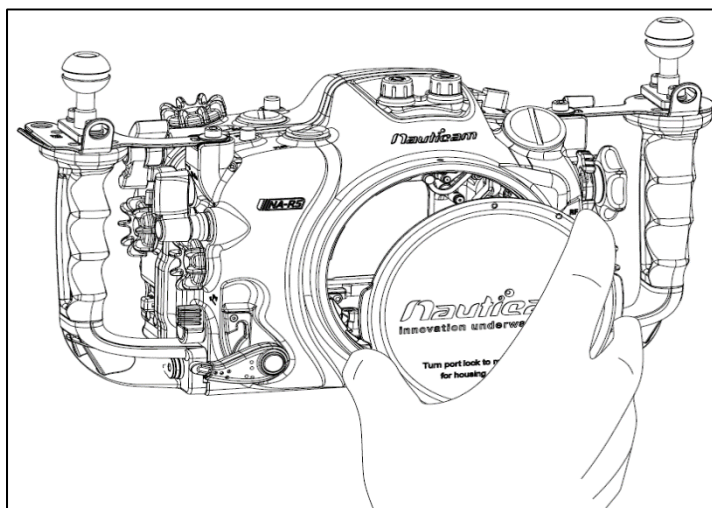
To remove housing cap :



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



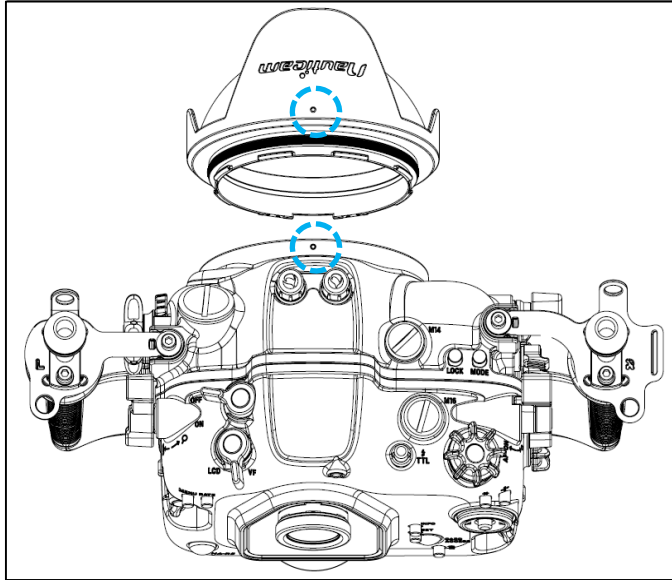
2. Turn the port locking lever to the release position as shown



3. Lift the housing cap

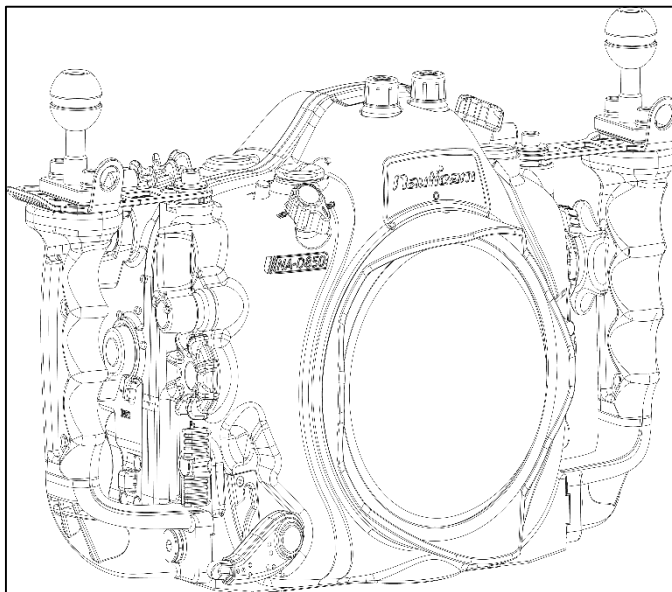
MOUNT PORT TO HOUSING

To mount port :



1. Align the mounting dot of the port and the housing; these appear as white circles on both the port and the housing.

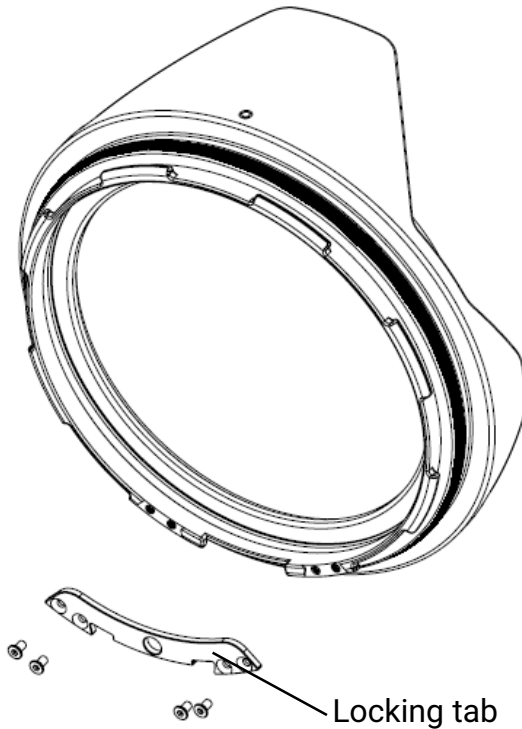
Gently push the port into the opening of the housing, until it cannot go in any further.



2. 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.

REMARKS TO PORT SYSTEM COMPATIBILITY



This port is backwards compatible with N120 port mount housing and all N120 extension rings (Excludes 21110, use 22110 instead).

To be compatible with locking pin style extension rings (produced before 2016), it requires a locking tab which is free of charge.

****Please contact our dealer or innovation@nauticam.com for the part. The macro port is shipped without the locking tab to reduce unnecessary waste.***

SPECIFICATIONS

Port mount : N120

Coating (inner): Multi-layer broadband anti-reflective coating

#18809 180mm optical glass wide angle port

Port Diameter:	180mm
Port Opening Diameter	98mm
Radius of Curvature:	110mm
Weight in air:	1.2kg
Buoyancy in water:	0.38kg
Depth Rating:	60m

#18810 N120 140mm optical glass fisheye port

Port Diameter:	140mm
Port Opening Diameter	98mm
Radius of Curvature:	69mm
Weight in air:	0.63kg
Buoyancy in water:	0.3kg
Depth Rating:	100m

#18812

N120 230mm Optical Glass Wide Angle Port II

Port Diameter:	230mm
Internal Diameter	109mm
Weight in air:	2.54kg
Buoyancy in water:	0.55kg
Depth Rating:	100m

#18813 18815

N120 250mm Optical Glass Wide Angle Port II

Port Diameter:	250mm
Internal Diameter	109mm
Weight in air:	2.91kg
Buoyancy in water:	0.82kg
Depth Rating:	40m (18815), 100m (18813)

CARE AND MAINTENANCE

- Soak the housing system in fresh water after each 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.
- After removing the housing from the rinse tank, carefully press the housing lock safety button for a few times to avoid the accumulation of salt residue.
- After each day of diving, it is advisable to have both the housing main O-ring and port O-ring 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.
- Blow off dust with an air blower or clean antistatic brushes from optical surfaces.
- Remove dust and other foreign matter from the cover/cap before attaching them.
- Use clean, lint free, and soft single-use paper based optics cleaning tissues/pads and avoid abrasive particle contamination of your cleaning supplies and cloths (e.g. by sand) (Dry and clean the dome surface with a microfiber cloth. / Do not use any kind of abrasive solutions to clean the dome surface.)
- When you've finished washing your optical product, wipe them gently with a microfiber cloth dry under shadow or a cool room.
- Always place the lens cover or cap over the lens when not in use or when being stored.
- Always store your optical product in the provided pouches or containers when not in use.
- Store the optical product in a dry and clean place.
- Careful not to drip salty water into the dome port while you are still wet from diving.

Please refer to "Nauticam Product Care and Maintenance Guide" for more details.