

VF180 1.2x

46112

Instruction Manual

Thank you for purchasing SEA&SEA products. Please read this instruction manual carefully prior to using this product. Only with a thorough understanding of this manual's content will you be able to use the products correctly. After reading the manual, please be sure to keep it in a place where you can easily come back to it at any time.

Note:

Pressure-resistance inspection sticker



Products bearing this sticker are those that have passed SEA&SEA's criteria-based inspection for pressure resistance.

The appearance of color evenness or weld lines on the external body of the product is normal and will not affect its performance.

Safety Precautions

For safe handling of the product, please read the following precautions carefully before use.

Failure to heed the precautions listed below could result in serious consequences. To prevent injury or damage to yourself and/or others, please observe the precautions as they contain highly important information related to personal and product safety.

WARNING Situations that could result in severe injury or death.

CAUTION Situations that could result in property damage or personal injury.

WARNING

- Do not look at the sun through the lens or the viewfinder to prevent permanent visual impairment.
- Do not leave the product under the sun without caps or covers attached, to prevent fire due to concentrated sun rays.

CAUTION

- Unauthorized disassembling and/or modification could result in malfunction or flooding, and void product warranty. Take the product to a SEA&SEA authorized service center for repair or inspection.
- Always make sure that the camera, strobe, light and accessories are securely mounted to prevent them from falling off, becoming lost, causing personal injury or equipment malfunction.
- Make sure that the product has been securely mounted to other products in order to prevent damage, fall or missing. SEA&SEA will not be responsible for the replacement or compensation for cameras, lenses or those accessories damaged due to your invalid operation.
- Dew condensation may arise inside/outside of the viewfinder by sudden temperature change. When this occurs, please leave the viewfinder for long enough in order to accommodate the surrounding temperature.
- Do not assemble or set up the underwater photography equipment in sandy or dusty environments.
- Avoid strong shocks/impacts or excess stress to prevent malfunction, damage or breakdown. Make sure that the product has been securely mounted to other products in order to prevent injury, fall or missing.
- Do not leave the product in places with hot temperatures such as inside of a car or in a car trunk in summer.
- Do not store the product in wet or high humidity place, to avoid mold, rust, corrosion or malfunction.
- Always dry the product using a soft cloth to prevent stain or salt residue from marring the glass surface.
- SEA&SEA SUNPAK Co., Ltd. will not be responsible for the replacement or compensation for cameras, lenses or those accessories damaged due to your invalid operation.
- SEA&SEA SUNPAK Co., Ltd. assumes no liability for compensation of loss of captured images or expenses caused by loss of images, even if you are unable to shoot due to a product defect or malfunction.
- SEA&SEA SUNPAK Co., Ltd. assumes no liability for errors or discrepancies in this manual.

Precautions on Handling the O-ring

To keep the O-ring functioning properly, please observe the following. Improper handling of the O-ring could cause flooding.

CAUTION

- SEA&SEA products use blue O-rings. These O-rings are impregnated with silicone oil through a special process. The lubricating effect of the O-ring lasts as long as the silicone oil is gradually seeping out from within.
- For the maintenance of these blue O-rings, make sure to use genuine SEA&SEA silicone grease (O-ring grease for use with the blue O-rings that comes in tubes with blue lettering and blue caps). If you use silicone grease from other companies or SEA&SEA's own silicone grease that comes in tubes with black lettering and black caps, the grease you apply will be sucked into the blue O-rings due to their special characteristics, which will result in insufficient grease. If this happens even once, the O-ring will not revert to its normal state and must be replaced.
- If the grease is insufficient, the O-ring will not slide, and it will become harder to open and close the waterproof parts. Because of this, it could become impossible to open or close the housing or it could cause flooding, so please refrain from using the housing with insufficient grease.

Maintenance and Storage

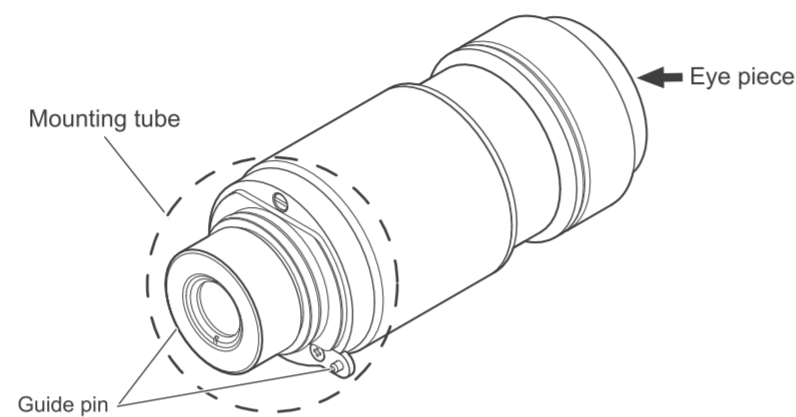
- Never use chemicals, cosmetics, any petroleum solvents such as paint thinner, or neutral detergent on the product. They may deform and damage the product.
- Handle the product carefully so as not to scratch or dirty the lens. To remove dirt or fingerprints, use a blower or lens brush, and clean using a commercial lens cleaner and lens tissue.
- After each use in salt water, soak it sufficiently in fresh water.
- Insufficient soaking causes damage by salt to the product. Salty residue may be left on the product where it will crystallize as it evaporates. Crystallized salt is hard to dissolve and difficult to be removed once formed.
- After rinsing, dry the product well with a soft dry cloth, then let the product dry in the shade, out of direct sunlight.
- Do not store the product in wet or high humidity place, to avoid mold, rust, corrosion or malfunction.
- Do not dry the product by heating (using a hair dryer, for example). Heating can deform and damage the product.
- If you will not use the product for an extended period of time, store it away from high temperatures, high humidity, direct sunlight, or extreme cold.
- Do not store the product with naphthalene or camphor mothballs, or in locations such as a laboratory where chemicals are used. This environment can cause mold, rust, corrosion or malfunction.
- Although it depends on how often it is used and how it is stored, an O-ring generally lasts for one year. Replace the O-ring every year for the best performance of the product.
- Every two years we recommend a complete overhaul of O-rings regardless of the frequency in use, for the best performance of the product.

Accessories

VF180 1.2x	Attachment tool	Spacer (for MDX-PRO 5D Mark II)
VF45 retainer (mounted on the VF180 1.2x)	Lens cap (mounted on the VF180 1.2x)	Eye piece cover (mounted on the VF180 1.2x)

● Instruction Manual for VF180 1.2x (this manual)

Identification of Parts



Compatible Housings

This product can be installed and used with the following SEA&SEA camera housings:

- MDX series housings: MDX-PRO D700, MDX-PRO 5D Mark II, MDX-D300s, MDX-7D, MDX-7000D
- RDX series housings: RDX-600D

* To install this product on the MDX-40D, MDX-D300, or MDX-PRO D3, RDX-550D, the monitor window on the housing rear case must be replaced.

(Current as of Dec.2011)

*Please refer to our website (<http://www.seaandsea.jp>) for the latest information.

Note that housings other than those listed above (such as the SEA&SEA RDX or DX series) are not compatible with this product.

For details, please contact SEA&SEA or a SEA&SEA authorized dealer.

CAUTION

Never install this product to incompatible housings. Unauthorized installation could result in flooding, and will void product warranty.

Preparation for Installation

In order to prevent injury, damage, or malfunction, pay particular attention not to bump your fingers on the components inside the housing rear case when using the attachment tool.

Prepare the housing

Removing the original finder

Remove the originally mounted finder on the housing.

1 Rotate the original finder mounted on the rear case in a counterclockwise direction to remove it (Fig.1)

- Be careful not to touch the surface of the finder lens when removing it.

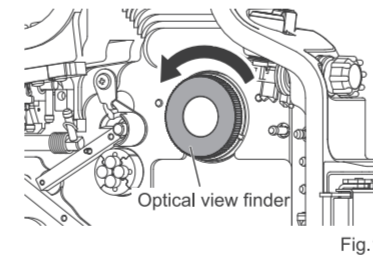


Fig.1

2 Visually confirm the grooves of the original retainer (Fig.2)

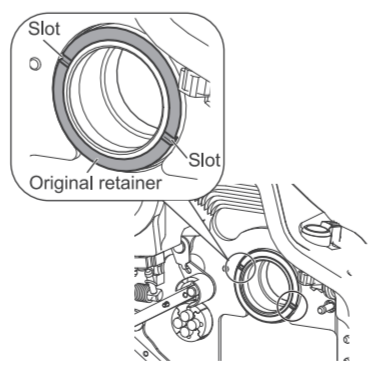


Fig.2

3 Insert the tips of the attachment tool into the grooves of the retainer, then loosen and remove the retainer by turning the tool counterclockwise (Fig.3)

- Hold the eye piece of the original finder on the outside of the rear case to prevent movement or dropping.

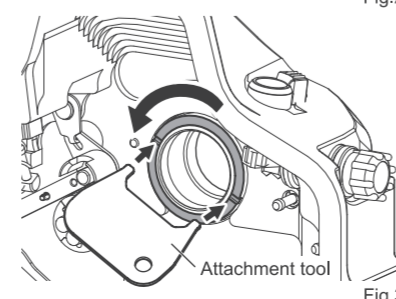


Fig.3

4 Pull the eye piece straight out and remove it (Fig.4)

- Pay attention not to damage the O-ring contact surface of the finder mount hole.
- Make sure there are no specks of dust, scratches, or deformities on the O-ring contact surface of the finder mount hole after removing the original finder.

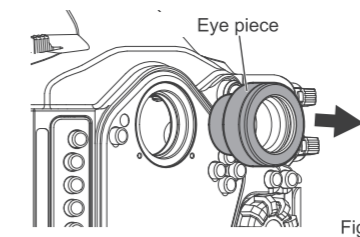


Fig.4

Prepare the VF180 1.2x

Removing the accessories

Remove the lens cap and the VF45 retainer from the mounting tube.

1 Remove the lens cap

- Note that the lens cap cannot be attached after the product is installed to a housing.

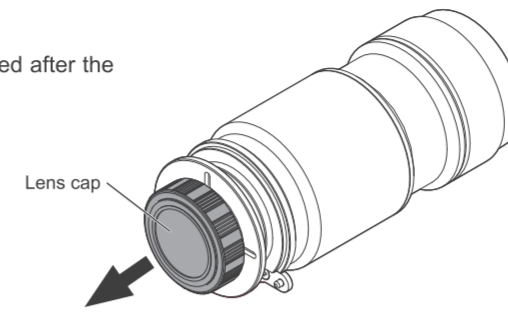


Fig.1

2 Rotate the VF45 retainer counterclockwise to remove

- The VF45 retainer is used to install the product to a housing.
- Be careful not to touch the surface of the finder lens.

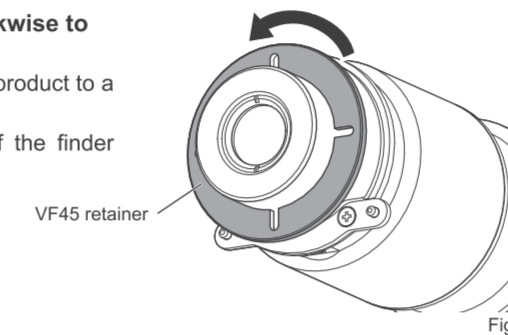
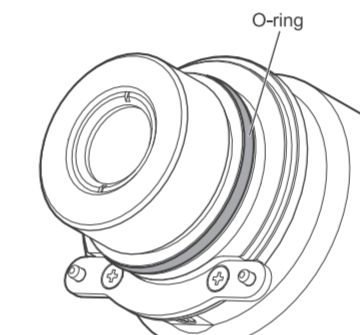


Fig.2

Maintaining the O-ring

This product is kept watertight by the O-ring. To keep the O-ring functioning properly, please observe the following before setting up.

- Make sure to remove the O-ring when maintaining.
- For detailed O-ring maintenance methods, please see the O-ring maintenance manual.
- The O-ring is a consumable item, and it generally lasts for one year. It is advisable to replace it early.



For MDX-PRO 5D Mark II users

When installing this product to a MDX-PRO 5D Mark II, attach the spacer (included in the product package) to the mounting tube before installation.

* The spacer is not used for housings other than the MDX-PRO 5D Mark II.

1 Attach the spacer to the mounting tube by pushing the spacer all the way in (Fig.1)

- Be careful not to touch the surface of the finder lens.
- Use a soft, non-abrasive cloth to eliminate grease or stain on the lens surface.

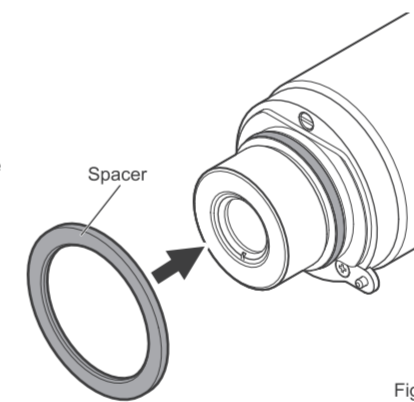


Fig.1

2 Make sure that the spacer is placed beyond the O-ring position (Fig.2)

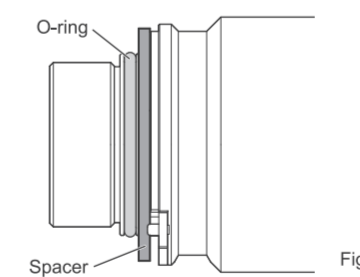


Fig.2

Installation

CAUTION

- Note that for the MDX-40D, MDX-D300, MDX-PRO D3, and RDX-550D, the monitor window on the housing rear case must be replaced before installing this product. Make sure that the monitor window of your housing has been replaced if you are installing this product to one of those housings.
- Make sure that the spacer is properly attached to the mounting tube when you are installing this product to a MDX-PRO 5D Mark II.
- In order to prevent injury, damage, or malfunction, pay particular attention not to bump your fingers on the components inside the housing rear case when using the attachment tool.

1 Be sure to check that there are no specks of dust, scratches, or deformities on the O-ring contact surface of the finder mount hole on the housing rear case (Fig.1)

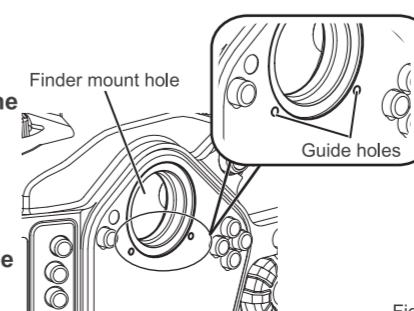


Fig.1

2 Visually confirm the guide holes just under the finder mount hole (Fig.1)

3 Insert the mounting tube straight into the finder mount hole, aligning the guide pins with the guide holes (Fig.2)

- Pay attention not to damage the O-ring contact surface of the finder mount hole.

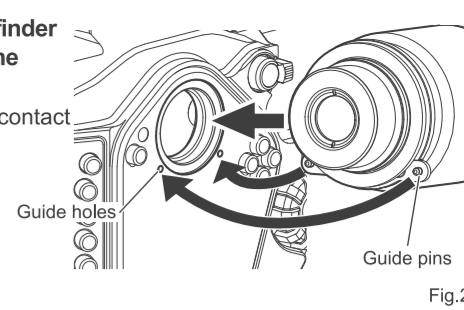


Fig.2

4 Place the VF45 retainer on the mounting tube inside the housing rear case (Fig.3)

- Hold this product on the outside of the rear case to prevent movement or dropping.

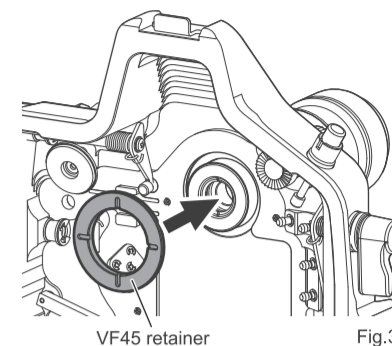


Fig.3

5 Insert the tips of the attachment tool into the grooves of the VF45 retainer, then tighten up the VF45 retainer by turning the tool clockwise until it stops (Fig.4)

- Do not apply excessive force when tightening up the retainer.
- Be sure to tighten up the retainer before each use.

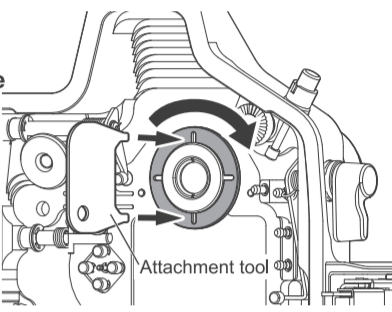


Fig.4

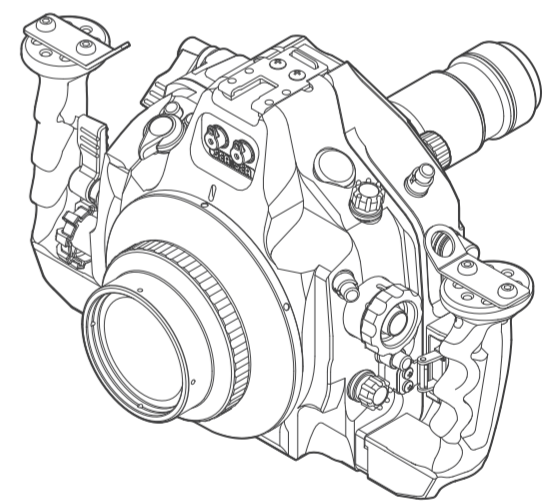
Note: After installation

IMPORTANT: Follow the instructions described below before each use of the housing with this product installed.

- Be sure to check the waterproof performance of the finder mount hole by immersing the empty housing in a water tank before loading a camera.
- Be sure to tighten up the VF45 retainer using the attachment tool. A loose retainer may lead to water leakage.

CAUTION

- It may be possible to damage or break the viewfinder when installed, take caution.
- Do not pick up or carry the housing by holding this product. Be sure to hold the housing body or the grip. Heavy components may fall and cause damage or injury.



How to use

Remove the eye piece cover, and look straightly through the center of the finder lens.

* Attach the eye piece cover to prevent damage to the finder lens in the following cases:

- During the interval time between diving
- While immersing the housing in a water tank to remove any salt
- While stored or being transported

Specifications

Depth rating	100m
Construction	Corrosion-resistant aluminum alloy (black anodized finish)
Weight	Approx. 275g (on land)
Dimensions(DIAXD)	Approx. $\phi 45 \times 111.8$ mm / $\phi 1.77 \times 4.4$ inches
Accessories	<ul style="list-style-type: none"> • VF45 retainer • Spacer (for MDX-PRO 5D Mark II) • Attachment tool • Lens cap • Eye piece cover • Instruction manual (this manual)

*Specifications and appearance are subject to change without notice.