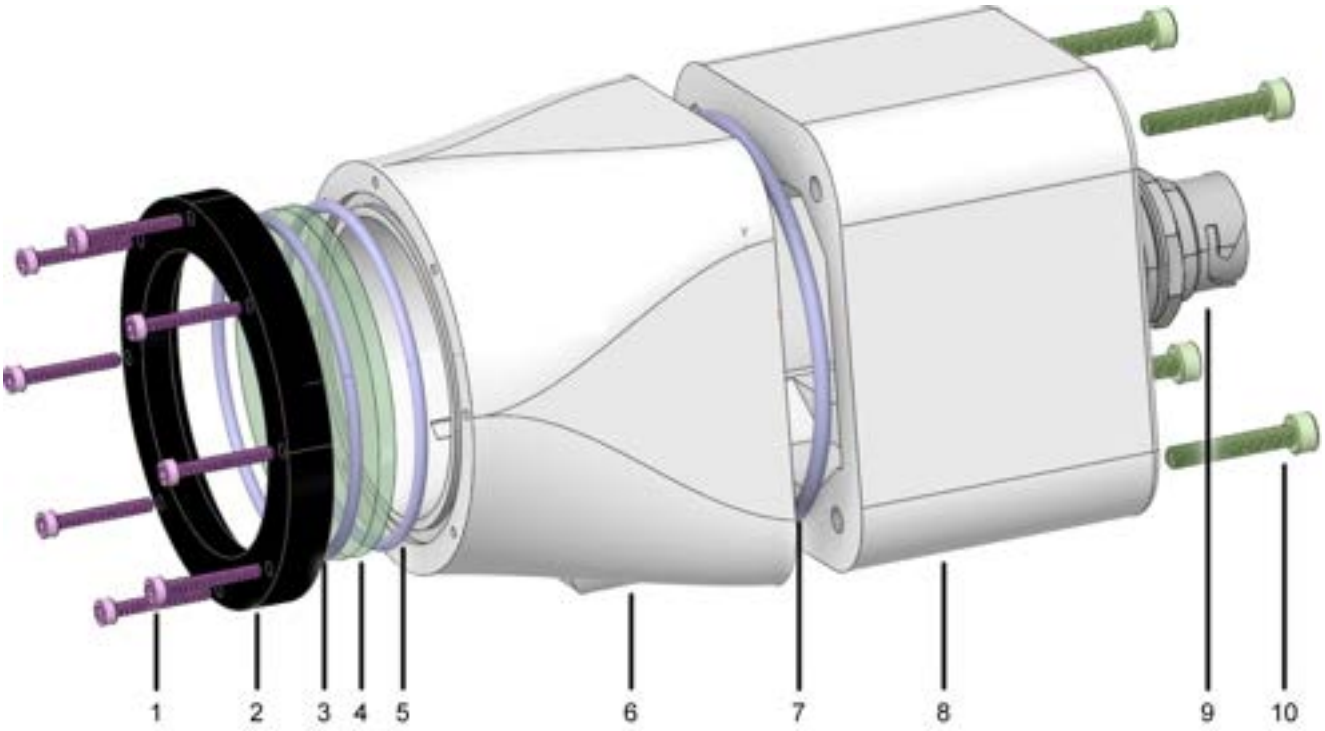
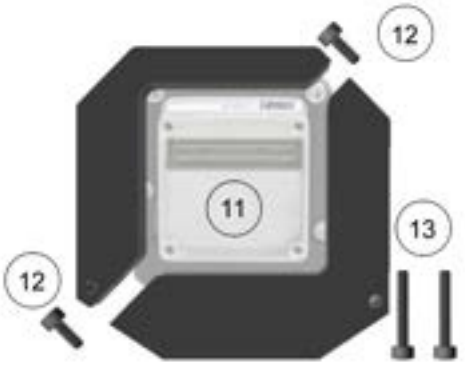
Environmental Enclosure User Guide

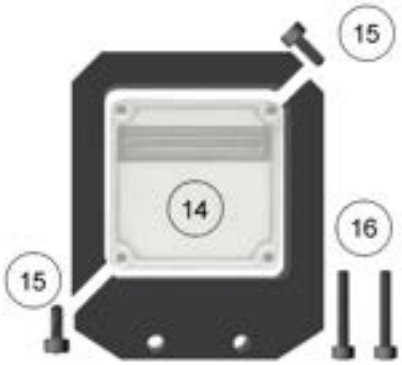
Models:
- **RHP-EN01-3GA04**
- **RHP-EN01-6GA04**

Version 20241003



1. M1.6 x .35 Screws (8)
2. Window Gasket
3. Glass Holder
4. Germanium Glass Window
5. Window Gasket
6. Body Front
7. Body Gasket
8. Body Rear
9. 6-Pin JST to 4 pin M12 Connector
10. M2.5 x .45 Screws (4)





11. Boson 640 Spacer
12. Spacer Screws
13. Spacer Mounting Screws

14. Boson 320 Spacer
15. Spacer Screws
16. Spacer Mounting Screws

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Contents

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BEFORE YOU BEGIN

While this product is not static sensitive the components being installed are.

Please use proper grounding techniques during installation.

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Attaching the Spacer

There are two spacers available for the environmental housing enclosure: the 320 spacer and the 640 spacer.

It is important to note that the 320 spacer is specifically designed for use with the Boson 320 model, while the 640 spacer is meant to be used exclusively with the Boson 640 models. It is crucial that the appropriate spacer is specified when placing an order to ensure compatibility and proper functioning of the equipment.

The spacer is required for the camera when it is placed inside the enclosure. It should be attached firmly to the inner wall to prevent any vibrations.

Boson 320 Spacer

Review the images to determine the correct way the spacer fits together. Two corners of one side have through-holes. The other side will be threaded. Once you have lined up the corners as shown, the long screw will insert into the bottom and the short screw in the top.
If the screw protrudes the outside wall of the spacer, the camera will not fit into the enclosure.

Incorrect

Correct

Screws

Threaded Side

Through hole Side

PLEASE NOTE:
DO NOT OVER TIGHTEN THE SCREWS. Using other screws than the ones provided could damage the enclosure or spacer.

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Boson 640 Spacer

Review the images to determine the correct way the spacer fits together.

Two corners of one side have through-holes. The other side will be threaded.

Once you have lined up the corners as shown, the long screw will insert into the bottom and the short screw in the top.

Once it is pieced together, slide the camera into the spacer and tighten the spacer screws.

If the screw protrudes the outside wall of the spacer, the camera will not properly fit into the enclosure.

Incorrect

Correct

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Inserting the Boson 320 camera with attached spacer

This device is precision cut to eliminate play, therefore it's important to line up the camera before attempting to slide it into the enclosure.

When the camera is correctly installed, the Boson 320 bracket should be flush with the enclosure as shown.

Incorrect

Correct

With the camera now inserted into the enclosure, thread the screws into the spacer mounting holes on the bottom of the bracket. Tighten the screws using the provided driver.

PLEASE NOTE:
DO NOT OVER TIGHTEN THE SCREWS.
Using other screws than the ones provided could damage the enclosure.

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Inserting the Boson 640 camera with attached spacer

This device is precision cut to eliminate play, therefore it's important to line up the camera before attempting to slide it into the enclosure.

When the camera is correctly installed, the bracket should hang off the back of the enclosure as shown.

Incorrect

Correct

With the camera now inserted into the enclosure, thread the screws into the spacer mounting holes on the bottom of the bracket. Tighten the screws using the provided driver.

PLEASE NOTE:
DO NOT OVER TIGHTEN THE SCREWS.
Using other screws than the ones provided could damage the enclosure.

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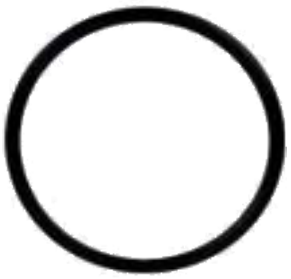
Body O-Ring Installation

The O-Ring is a vital component that helps maintain a sealed enclosure, protecting it from external elements.

The body O-Ring should be installed before the rear cover is connected.



Three O-Rings are included in the enclosure kit. The largest one is meant for the body. The two smaller, identical O-Rings are for the Germanium glass front seal.

Start by inserting the largest O-Ring into the track, on the body of the enclosure.

This ring should be inspected whenever the enclosure is opened.

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Connecting the Interface

Connecting the Interface 6-Pin JST to
4 pin M12 Connector
The JST to M12 passthrough allows communication to pass through the water tight housing.
Locate the JST connector on the inside of the back portion of the housing.

Simply connect the JST to the installed interface on the Boson.
Once the JST connector is in place, attach the back to the enclosure body.

Attaching the back to the body enclosure

Thread the four M2.5 x .45 screws into the rear cover and line them up with the screw holes on the body.

Slowly turn the screws to thread them into the holes. Once threaded, tighten the screws.

PLEASE NOTE:
DO NOT OVER TIGHTEN THE SCREWS.
Using other screws than the ones provided could damage the enclosure.

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Installing the Front Seal and Glass

PLEASE NOTE:
The germanium glass is prone to scratches. Use a lint-free cloth or glove when handling the glass. Do not use solvents to clean the germanium glass.

The germanium glass lens assembly is shipped preassembled. In the event maintenance is needed, please follow these instructions.

The enclosure kit includes two glass window gasket O-Rings.
To start the installation process, insert one glass window gasket O-Ring into the track located on the body of the enclosure.
The second O-Ring is installed in the glass holder.

The glass should be placed carefully and accurately in the center position on the body with the diamond coating side (dark) facing outward. The anti-reflective coating (purple) should face into the enclosure.
To position the Glass Holder, align the holes and begin threading each screw into place. Do not tighten the screws yet.

PLEASE NOTE:
DO NOT OVER TIGHTEN THE SCREWS.
Using other screws than the ones provided could damage the enclosure.

To ensure a strong seal without any weak points, it is recommended to tighten the screws in increments while alternating between them. By following this method, the potential weak points in the seal can be prevented effectively.

For example, if you assign a number to each screw, tighten in this order: 1, 3, 5, 7, 2, 4, 6, 8.