



SNAKE RIVER PROTOTYPING



Snake River Prototyping
BlurFix™ Installation Instructions

Introduction

Congratulations on your purchase of the BlurFix™ accessory for GoPro® HD Hero and GoPro® HD Hero2 cameras. BlurFix has been constructed to the finest standards. It will allow you to adapt almost any 55 mm filter to your GoPro camera providing you with countless filter options both above and below the waves. Our product is CNC machined from 6061 T6 aluminum and is anodized black to provide you with a durable product that meets the highest optical quality standards. With the included filter you will be able to take underwater video in all WVGA, 720p and 1080p modes with zero vignetting.* By removing the filter you will be able to take video above water in all modes (including still photos) with no vignetting. The desiccant ball groove ensures that the BlurFix stays fog free when you descend under the waves. In addition, should your filter shatter while you are diving because you dive too deep or bump the filter against a rock, your GoPro camera will stay dry because the integrity of the OEM housing and lens will stay intact. Simply install new desiccant balls and screw on a new filter and you're ready for your next dive. All manner of color correcting filters are available for your use with our product. The team at Snake River Prototyping hopes you enjoy using our product as much as we enjoyed bringing it to you. We'd love to hear your comments, suggestions, or experiences with our product. We'd especially love to see the videos you shoot and post to the web. Drop us an email at info@snakeriverprototyping.com.

**Vignetting may occur in WIDE mode on the GoPro HD Hero2 due to variations in housing tolerances. The vignetting is minimal and usually disappears underwater.*

Required Tools

You will need the following items before you begin mounting BlurFix:

- #0 Phillips screwdriver
- Scrap piece of paper (you'll squeeze out the provided silicone onto this)
- Toothpicks for applying silicone

Mounting BlurFix to your GoPro



I. Locate the required tools.





2. Use the #0 Phillips screwdriver to take out all six of the screws in the GoPro flange.



3. Should the OEM lens and/or rubber seal come off, first install the rubber seal with the sharp rubber lip facing away from the housing.



4. Wipe the OEM lens clean if necessary, then place it on the rubber seal. Set the partially assembled unit to the side for now.



5. Squeeze a small dab of the supplied silicone sealant onto a piece of paper.



6. Use a toothpick to apply sealant on only the surface that contains the screw holes (see the highlighted area in the figure to the left). Apply sealant especially along the outside edge of this surface so that it fills in the corner between the surface with the screw holes and the top most surface. Also, place a dab of sealant into each of the screw holes. Be careful not to get any sealant on the inner beveled edge which will come in contact with the GoPro OEM lens in the next step.

Note: The sealant is not used to prevent water from entering the OEM housing – the OEM rubber seal does that. Rather, the sealant is used to prevent water from entering the cavity created by the BlurFix between the OEM housing and the filter. There is NO DANGER of you ruining your GoPro should you apply the sealant incorrectly.



7. Mount the BlurFix onto the housing so that the desiccant groove is at the bottom of the GoPro. Line up the screw holes. Place the GoPro housing on its back as pictured above and press the BlurFix firmly onto the housing.



8. Install the screws loosely. Only turn each screw a few turns until all screws are installed. Once all the screws have been started, turn each screw until its head comes in contact with the BlurFix. Do not tighten yet.





9. Tighten the screws according to the pattern on the left. Repeat the pattern until all screws are snug. **DO NOT** over-tighten as you will strip out the screw holes in the case. Open the back of the GoPro case and look through the housing to verify that the silicone has formed a seal between the GoPro housing and BlurFix.

10. Do not wipe off the excess silicone (it's easy to peel off later once the silicone has cured.) Wait 24 hours for the silicone sealant to cure fully before exposing the unit to water. Do not install the desiccant balls or filter until the sealant has cured.

ATTENTION: Always pressure test the housing without the GoPro® camera inside after any housing modifications.

Desiccant Ball Installation



1. Insert eight desiccant balls into the lollipop groove using the entry hole shown in the above figure. Place your thumb over the entry hole, turn the housing upside down, and shake the whole unit. Replace any balls that fall out with larger ones.

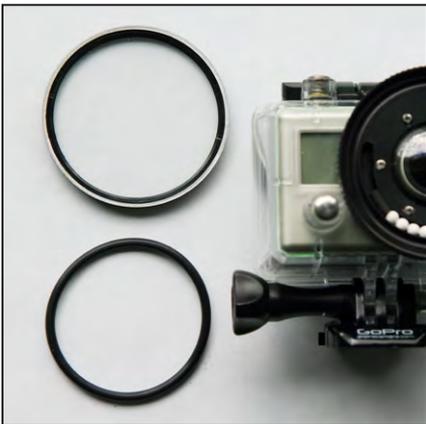
2. Move the desiccant balls into the position shown. Insert two rubber stoppers into the lollipop groove, one on each side of the desiccant balls.



3. Use the Phillips screwdriver to move the rubber stoppers into contact with the desiccant balls so that the balls stay centered at the bottom of the lollipop groove.

Note: The desiccant balls included in the BlurFix adapter kit are reusable. To remove the moisture from the desiccant balls after multiple uses, heat them in an oven at 150 degrees Fahrenheit for 15 minutes. Store the desiccant balls in an air tight container. The desiccant balls have a two year shelf-life.

Installing the filter



1. Locate the provided o-ring and filter.



2. Place the o-ring in the o-ring groove.



3. Gently thread the filter onto the BlurFix. Holding the housing in your left hand, wrap your right thumb around the filter as shown. Using your thumb, index finger, and the side of your middle finger to maximize your surface contact with the filter, tighten the filter down allowing it to slip in your fingers. Repeat several times. Look through the filter at the o-ring. You should see a dark black line where the filter seals against the o-ring.

Note: Applying too much force to the sides of the filter may cause its shape to distort. Be gentle.

The BlurFix adapter is now ready for underwater use (provided you've allowed the sealant to cure for 24 hours.) Now go get wet!!

Note: Pressing the filter against a rubber surface (such as the heel of your shoe) and turning the housing counter-clockwise can aid in unscrewing the filter.

Disclaimer

Snake River Prototyping cannot guarantee the water tightness of the GoPro housing itself before or after installation of the BlurFix. Therefore, Snake River Prototyping is not responsible for any damage to your camera due to water intrusion into the housing. We strongly recommend pressure testing the housing without the GoPro® camera inside after any housing modifications. In addition, proper housing maintenance is required to ensure the longterm waterproofness of your housing.

Our development team has tested a wide variety of color correcting and clear filters with the BlurFix from a variety of different filter manufacturers. We rate the Zeikos and URPRO filters sold through Snake River Prototyping and its dealer network to 130 ft. We have tested other filters that do not perform to this depth. As you can imagine, it would be impossible for us to test all the 55 mm filters available on the market. All filters sold by Snake River Prototyping and our dealer network are milled down to a lower profile so that vignetting does not occur in the WVGA, 720p, and 1080p modes. If you buy an aftermarket filter you will have to sand or mill down the filter to a lower profile or vignetting may occur.



Underwater Filters

Underwater filters are designed to take out the blue or green hue that is inherent to underwater photography, allowing you to take video which has colors that are more true to life. Although not necessary, color correcting filters allow the vivid colors of coral and fish to stand out in your videos. The following color correcting filters are available through Snake River Prototyping and our dealers. These filters have all been milled to a lower profile by SRP to prevent vignetting in all WVGA, 720p, and 1080p modes.

Filter	Ideal Usage Zone
URPRO Cyan (CY)	Blue-green tropical fresh and salt water (12 ft to 50 ft)
URPRO Shallow Water Cyan (SWCY)	Blue-green tropical fresh and salt water (above 25 ft)
URPRO Green (GR)	Green algae fresh and salt water

Above Water Filters

The BlurFix adapter also opens up a whole gamut of filter use above water. For instance, you can install a simple UV filter to improve image quality in bright sunlight as well as providing a “shield” for your GoPro from bugs and mud when recording motorsport footage. Concerning the latter, simply replace or wipe clean a pitted or dirty UV filter during a pit stop to restore optical quality. Polarizing filters can be used for capturing fishing (or other activities) videos performed around bodies of water. Polarizing filters can also be used for snow sports. These filters reduce the glare on water or snow, allowing you to capture the best video you possibly can. Fluorescent filters adjust your video during indoor use to bring you the most natural colors possible. These filters can also be used outside for bringing a different color temperature to your videos.

The filters listed previously are just a small sample of the 55 mm filters available to you today. I’m sure you’ll use the BlurFix adapter in ways we’ve never even conceived of. If you think you have, drop us a note at info@snakeriverprototyping.com. We’d love to hear from you!

Contact Information

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Instructions Updates

The installation instructions are periodically updated. Please visit the following URL to view the most up-to-date instructions: www.snakeriverprototyping.com/support.html

Thank you for your interest in our BlurFix accessory for your GoPro® HD camera.

