

HOUSING SENTRY
SELF-INSTALLATION GUIDE
FOR AN UNUSED BULKHEAD
NAUTICAM
SEA-CAM OR
SUBAL HOUSING



UnderWater Camera Stuff

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**Offering custom-designed products to enhance
currently-available underwater camera equipment**

STEP 6 – Install the Battery

The Housing Sentry box includes a CR-2023 battery. It is important that no body oils are deposited onto the battery during the installation so it is recommended that you wear gloves or use a paper towel when handling the battery. Remove the battery from the packaging and slide it into the battery holder on the electronic circuit board assembly with the positive side of the battery (the totally flat side) away from the circuit board. To quickly check the battery, add moisture to your finger and then touch the moisture pick-ups strips. After a short time, the red LEDs should begin to blink at a fast rate.

STEP 7 – Install the Block-off Plug

Insert the block-off plug into the vacuum connector and determine where and how the other end of the bead chain will be anchored. This location must be on the same half of the housing as the vacuum connector. With this decision made, cut the bead chain to the needed length allowing slack for easy plug removal.

Take the chain end piece from the envelope in the Housing Sentry box. Slip the end piece over the last ball on the chain. With a small pair of needle-nose pliers, gently crimp the end piece around the ball. Then, attach the end piece to the housing at your chosen location.

CONGRATULATIONS!
You have successfully installed the Housing Sentry

STEP 3 – Install Electronic Circuit Board Assembly

Thoroughly clean and dry the area you have chosen to install the circuit board. There are three pieces of a high-bond, double-stick tape under the battery package in the Housing Sentry box. Use one of those pieces to secure the electronic circuit board assembly in the chosen position within the housing.

STEP 4 – Route the LED Wires

Separate the pair of wires for the two green and two red LEDs by pulling on the pre-separated pairs. Move the wires into the position(s) you have previously identified. The stiffness of the wires will not hold them in place however you could use hot glue or the provided high-bond, double-stick tape to assure they stay in the desired position(s). If you have the skills and proper tools, you can shorten the length of the wires and re-solder them to the LEDs if they are too long.

STEP 5 – Secure the Moisture Pick-up Strips

Separate the pair of wires for the brass moisture pick-up strips by pulling on the separated pair. Move the wires so the strips are in the location you have chosen. The brass strips can be trimmed as desired with a pair of scissors. Be sure there is no battery installed when cutting. If you think the wires are too long and you have the skills and proper tools, you can shorten the length of the wires and re-solder them to the pick-up strips.

Remove the backing from the included high-bond, double-stick tape and secure the strips to the bottom of the housing. Once the strips are firmly in place, grasp the blue tab and pull off the clear tape that is on the top of the pick-up strips.

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TOOLS and SUPPLIES NEEDED:

7/16" / 11mm Wrench (Included with Housing Sentry)

Silicone lubricant (o-ring lub)

Small, needle-nose pliers

STEP 1 – Determine Best Location for the Parts

You have already determined that the vacuum connector will be installed in your housing's unused 14mm bulkhead but you still need to identify the best location for the other Housing Sentry components. Install your camera in the housing and observe the areas where there is extra space.

| PART | SPACE REQUIRED |
|------------------------------------|--|
| Electronic Circuit Board Assembly | 2.01" x 1.01" x 0.290" 51.06mm x 25.65mm x 7.51mm |
| LEDs with wires | |
| Moisture Pick-up Strips with wires | |

You can view photos of the Housing Sentry installed in two different housings displayed on the website at http://www.uwcamerastuff.com/housing_sentry_installs.htm.

Electronic Circuit Board Assembly – The preferred location is an area as high in the housing as possible and where the battery holder can be easily accessed for replacement of the battery. It is also important to choose a place that is within seven inches (177.8mm) of the position(s) you choose for the LEDs since that is the length of the attached LED wires.

LEDs – You can separate the pairs of wires for the LEDs so the lights can be in two different areas of the housing. For example, one green and one red can be positioned so they are easily visible through the housing with the other two

positioned so they can be seen through the eyepiece. The LEDs will need to be positioned within seven inches (177.8mm) of the electronic circuit board assembly due to the length of the LED wires. If you choose to only use one set of the LEDs, the other leads may be cut off before the battery is installed.

Moisture Pick-up Strips – The brass strips should be placed at the bottom of the inside of the housing and within the reach of the wires that are connected to the electronic circuit board assembly. You want the pick-up strips at the bottom of the housing as that is where any moisture in the housing will gather when the camera is in its normal photo-taking position. The brass strips may be shortened by cutting with scissors before the battery is installed.

Bear in mind that the circuit board, LEDs and Moisture Pick-up Strips are all connected so they must be installed in the same half of the housing.

STEP 2 – Install Vacuum Connector

Remove an o-ring from the small envelope in your Housing Sentry box. Using silicone grease, lubricate the o-ring. Install the o-ring on the vacuum connector and insert the threaded end of the vacuum connector into the threaded bulkhead opening.

Thread the connector into the housing by hand until it stops. Because there is a restriction on the fitting, you will need to only use the thin wrench included with your Housing Sentry. A thicker wrench may not fit the connector. Tighten the connector until the edge of the adapter touches your housing. You need the vacuum connector fitting to be tight but it is important to not over-tighten