

**Important Notice:** Diving is a dangerous sport that can lead to injury or death. These instructions describe the procedure I have used to set up my rebreather to work with the X-Link™ rebreather interface and the X-1™ dive computer. These instructions have NOT been reviewed, tested, or approved by the rebreather manufacturer or Liquivision, and are not guaranteed to be safe or to constitute best practices. These instructions are provided as a courtesy to the diving community and as guidance only. Each diver is solely responsible for any and all loss or damage (including personal injury or death) resulting from following these instructions. In no event will the writer, Liquivision or any other person be liable for any loss or damage (including personal injury or death) arising from, connected with, or relating to these instructions.

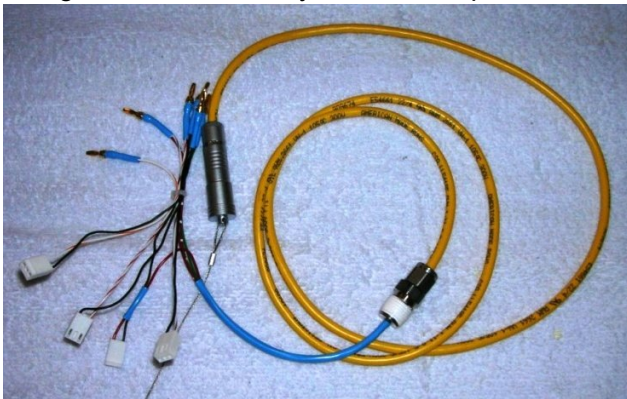
## **Connecting the X-Link to the Hammerhead CC Rebreather**

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The Hammerhead CCR is powered by 2 controllers working in a Primary Secondary fashion. It has the ability to provide online decompression on both handsets. Juergensen believes and advocates the ability to add a 4<sup>th</sup> cell monitoring system on all their products to enhance safety. This manual describes how to connect 2 of the primary cells, as well as a 4<sup>th</sup> cell, to the Liquivision X-Link.

The Hammerhead CCR comes with a 4<sup>th</sup> cell receptacle already in place. All that is needed is the wiring harness assembly that can be purchased directly from Juergensen Marine :



Juergensen Marine  
Electric Film Works, Inc.  
1448 Polk Hill Road  
Addison PA 15411

Ph: (814) 395-9509  
Fax: (814) 395-9950  
e-mail: [webmaster@electricfilm.com](mailto:webmaster@electricfilm.com)  
Or contact Tricia McKenzie directly at  
[accounting@rebreather.us](mailto:accounting@rebreather.us)

The X1 external monitoring system - the X-Link - is designed to be able to track up to 3 oxygen sensors at once, as well as an additional Helium or CO2 cell. Refer to the manual on the X-Link for the schematic on the fisher connector.

The Juergensen cable pictured above will enable the Hammerhead CCR to still monitor all 3 existing cells as well as to allow the X- Link to monitor 2 of the Hammerhead CCR cells along with a 4<sup>th</sup> cell.

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### **Setting up the hardware:**

The Hammerhead CCR already comes with the ability to add the 4<sup>th</sup> cell directly from the factory. You will need the following:

1. Pair of needle nose pliers
2. Oxygen compatible Teflon tape (the Juergensen cable comes pre-prepared )
3. Adjustable wrench
4. Size 6 Allen Key



First remove your old harness assembly. The new harness completely replaces it.

Remove the port blanking plug with an Allen Key.

It is located just above the “ D ” of the Hammerhead insignia on the canister lid.

Store for future use.

Port plug removed.

Make sure the thread is clean.



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Next you will need to lightly apply a coating of oxygen compatible Teflon tape on the thread of the cable gland. Normal Teflon tape might degrade over time. The Juergensen cable already comes prepared from the factory.

The best method I found was to thread the molex connectors through the hole first, one at a time and then follow with 2 banana plugs at a time.

Once all the cabling has been threaded through tighten the gland. You will need to rotate the cable on both sides while you tighten to prevent damage to the cable.



Remove the 4<sup>th</sup> cell blanking plug inside the head.  
Store for future use.

At this point I would advise assembling your CCR unit and perform a positive and negative test paying special attention to the gland. This will be the best time to find out if the gland is leaking, not after all the cables are connected.

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Make sure that the 4 cells are in place first before attempting to connect any wires. The cells are numbered from right to left, starting with cell one on the right and cell 4 on the left.



Next, plug in all the molex connectors first. You will notice the 4<sup>th</sup> cell is a bit more tricky due to limited space, use your pair of needle pliers for the job.

The 4<sup>th</sup> cell cable is marked with a small piece of blue heat shrink wrap. The other cables are similar to your old Hammerhead Harness, they get connected by the color on the harness that corresponds to the color on the banana block. You will notice that they have more wires attached the banana plugs. That enables the X-Link to read 2 of the Hammerhead CCR cells in addition to the clearly marked 4<sup>th</sup> cell.

Your unit is now ready, power up all controllers to insure the cells are all functional. Assemble the X-Link as per manufacturers recommendation.

**DO A POSITIVE AND NEGATIVE CHECK ONCE YOUR UNIT IS ASSEMBLED !**  
Make very sure the gland is not leaking.

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