SWIM-R stands for Submersible Wireless-controlled Investigative Marine Robot. SWIM-R is designed to increase access to aquatic ecosystems. The system has three parts as depicted below.

Robotics platforms are quickly becoming more available, smarter, and better at unlocking areas of the world that were once inaccessible to the average person. SWIM-R provides a window into the sea through the eyes of a submersible marine robot. Team SWIM-R accomplishes this goal by allowing the user to use a personal computer such as a laptop or desktop computer to control SWIM-R.

Below is a diagram of the electrical hardware along with the interconnects found in the Sub portion of SWIM-R.