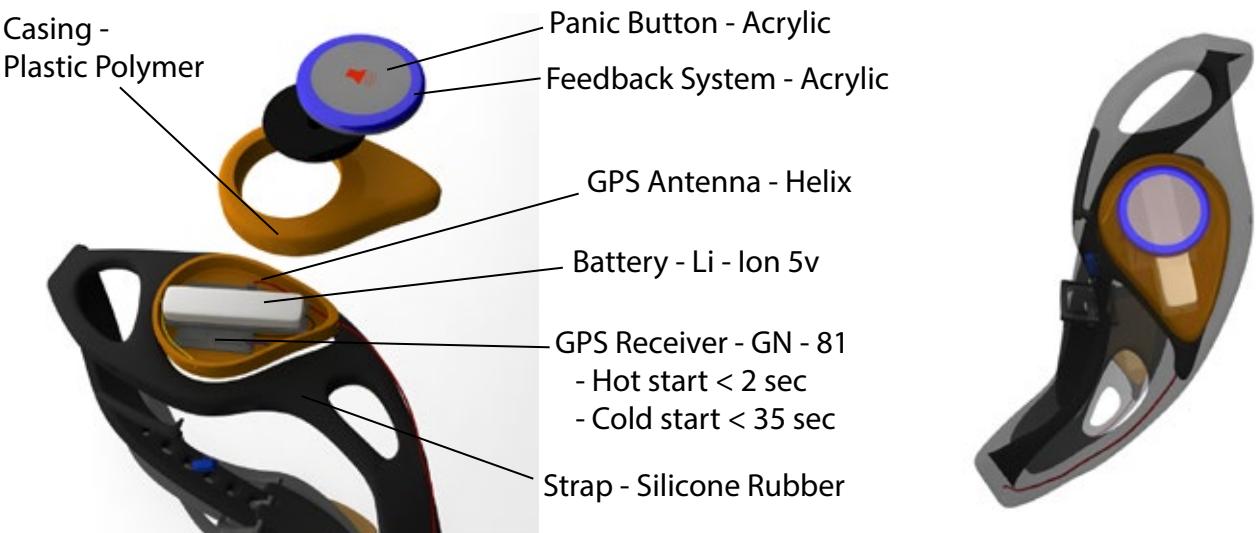# Red Sea System

**A safety GPS based communication system that allows swimmers to call for help in case of an emergency in the water. The system was designed in collaboration with the Life Saving Society Organization.**



The system includes a small, comfortable and estheticly pleasing wristband designed for beach use and equipped with a panic button built for ease of activation in an emergency situation.



- Casing - Plastic Polymer
- Panic Button - Acrylic
- Feedback System - Acrylic
- GPS Antenna - Helix
- Battery - Li - Ion 5v
- GPS Receiver - GN - 81
  - Hot start < 2 sec
  - Cold start < 35 sec
- Strap - Silicone Rubber
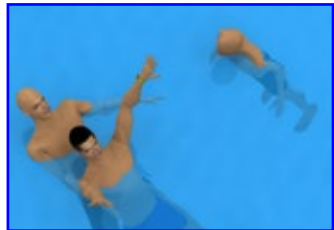
| Victim presses the panic button | GPS signal activates alarm at the beach and lifeguard station | Victim is being rescued by rescue services. | Victim is being rescued by other swimmers |
|---|---|---|---|



## Waterproof System:



- Parylene
- Plasti-dip
- Port Cover: Silicone Rubber
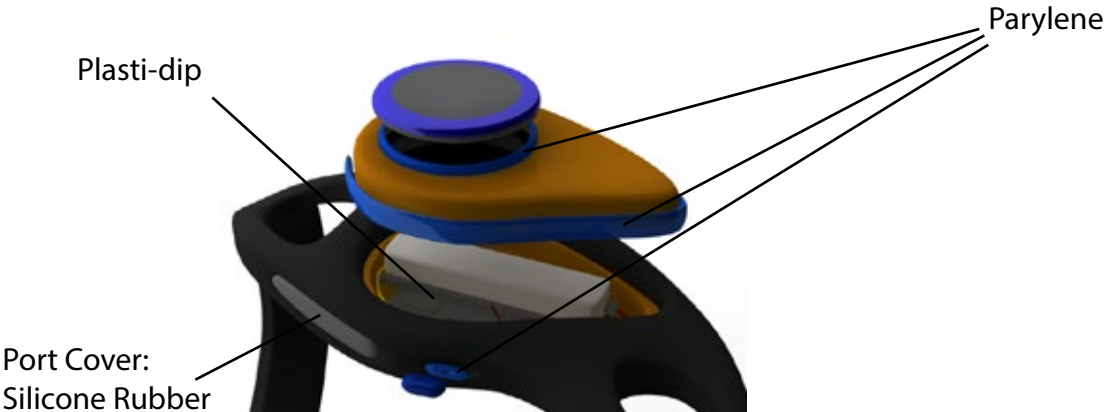
## Future development directions:

In the future, when technology will be smaller, cheaper, and more reliable, sensors will be able to accurately detect hands movement of a drowning person, and send SOS signal automatically
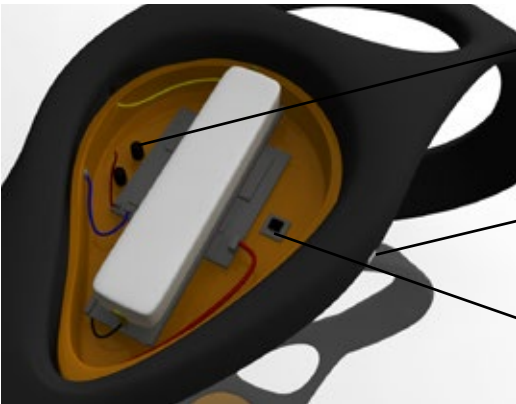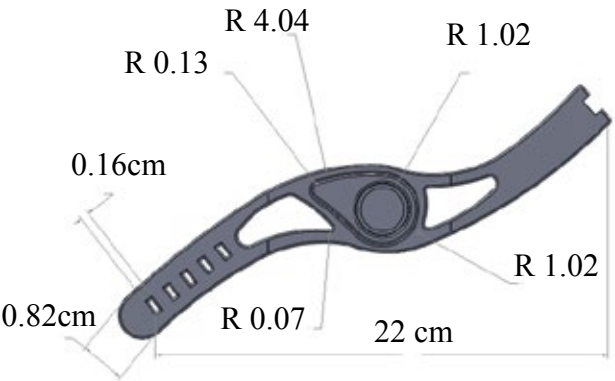


- Gyroscope
- Moisture sensor
- accelerometer

## Specifications:



R 4.04
R 1.02
R 0.13
0.16cm
R 1.02
0.82cm  R 0.07  22 cm

Charging Method: Power Adaper
Working Temperature: -20 to +65 Degrees Celcius
Woking Humidity: 5% - 95%
Storage Temperature: -45 to +90 Degrees Celcius
Start Time:
  - Hot Start: <2 s
  - Cold Start: <35s
Accuratacy Fixed Position: 3.0 ms 2 Ds-RMS.
Speed Position: 0.1 ms/s, DGPS:0.05 ms/s
Work Temperature: -20 to +65 Degree Celsius