Open Tag3 Manual

microSD
(Slide and flip up)

Stop

Power Switch

microUSB Charge

Red: Charging
Off: Charged
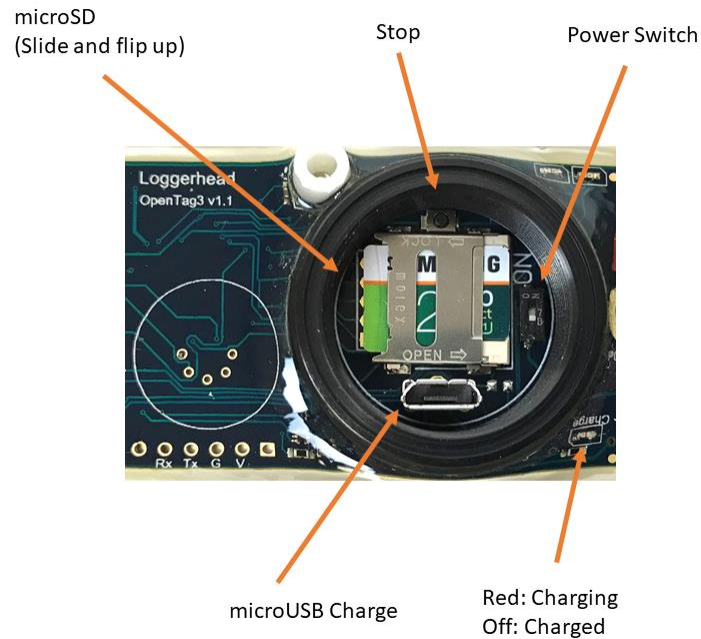
Overview

OpenTag3 records motion sensors at 50 Hz, and depth, temperature, light, and speed sensors at 1 Hz to CSV files. Files are 1 hour long by default. There will be a short gap between files. OpenTag3 supports 32 GB or smaller microSD cards.

OpenTag3 is open source. Software is located at https://github.com/loggerhead-instruments/OpenTag3
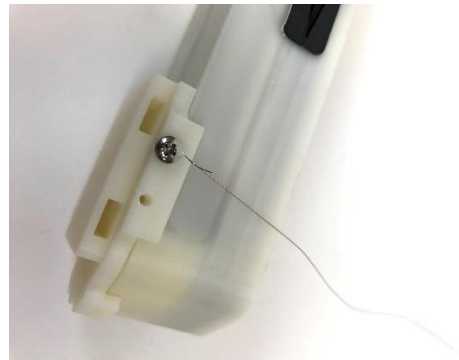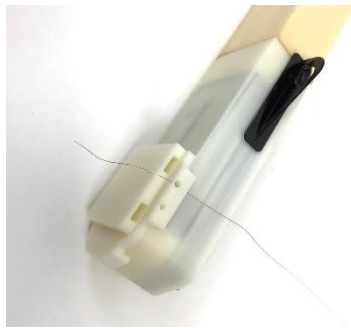
- Accelerometer, Gyroscope, Magnetometer (MPU9250): 100 Hz
- Pressure/Temperature (MS5837 or Keller PA7LD): 1 Hz
- RGB light level (ISL29125): 1 Hz
- Burn wire release: controls a FET switch to ground which can be used to corrode a stainless steel wire in seawater

Burn Wire

A burn wire is a corrodible stainless steel wire that can be used to release the AMX from a platform or release suction from suction cups. The recommended wire is from McMaster-Carr (302/304 stainless steel wire 0.01" diameter). https://www.mcmaster.com/ - 6517k61/=17yvpwx

The timing of the burn wire start is controlled by the BM command in the setup.txt file.

1. Run wire through one of the holes in the mounting plate, and start screw in side. Wrap excess wire around screw.

2. Attach mount plate to tag and wrap wire around center post. Screw down acorn nut to hold wire in place.

3. Run wire through opposite side of plate and insert screw to tighten down. Wrap around screw a few turns. The burn wire should be taut to help it break when it starts to corrode. Cut off excess wire.