COUGAR ROBOTICS

BETTA FISH

Rugged Efficient Depenable Effective

18 Cm

40 Cm

Fuse

Step down transformer

Arduino

Fuse

Fuse

9 Volt battery

Clear Eletronics Capslule

Depth sensor

Fuse

Motor controller

Thruster

Figure 1 , System desgin (Mark spurrell)
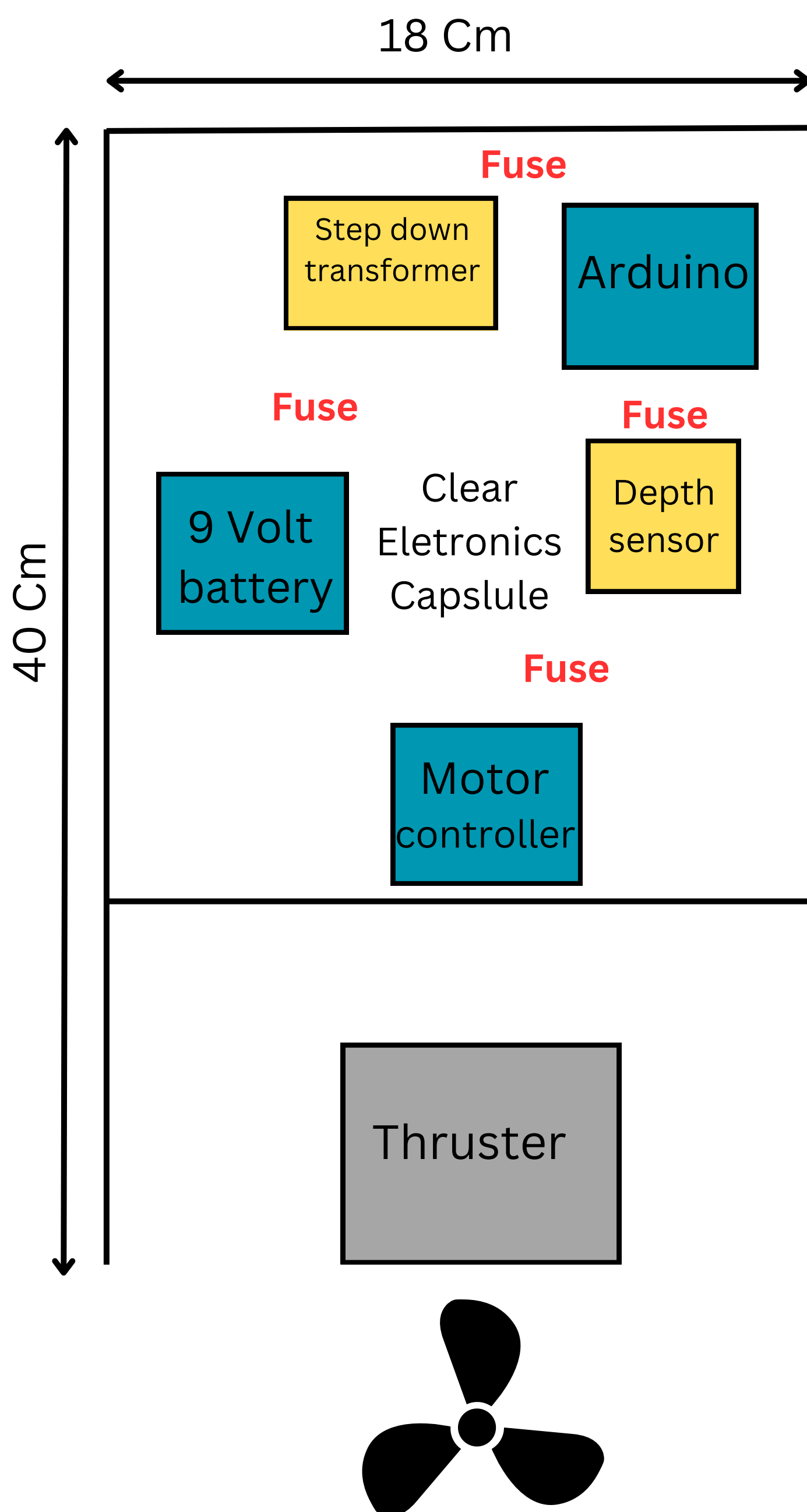
The Betta fish vertical profiler is an autonomous bouy capable of wirelessly transmitting data to a surface receiver. Powered by a Arduino UNO and a bilge pump motor. The Betta fish is a one of a kind designd by t constructed from common is materials capable of effortlessly descending and ascending to depths up to 15m before the pressure release valve is activated. Once powered on the Betta fish waits 20 seconds before transmitting the unique data package.

After another 20 seconds the Betta Fish will commence its first vertical profile. Once it has completed its first vertical profile the Betta fish transmit the depth data to the receiver. Once The Betta fish has completed the data transfer The Betta Fish will commence the second vertical profile recording depth data every 5 seconds. ONce the Betta fish has completed the second vertical profile the betta fish will transmit the depth data to the receiver on the surface size of the pool.