CASP.ER_V02

Name	Purpose
Raspberry pi 2	Logical Controller, handles input from Clients*, Video streaming, Constructs SVG maps from lidar and stepper data.
Dimax Wifi USB	Wifi connection hardware
piCamera	Raspberry pi certified camera for video streaming
Lithium Battery	Power Supply
Arduino Uno	Motor Controller, receives commands from raspberry and sends it to steering servo and motor ESC.
Arduino Nano	Controls Lidar data measuring and rotation via steppers.
Lidar Lite V2	Takes range readings and sends them to the Arduino nano.
Tower Pro Servo 9g	X Angle servo for the piCamera (180 degrees)
Tower Pro Servo 9g	Y Angle servo the piCamera (180 degrees)
Tower Pro Servo 9g	Steering servo
Stepper Motor	Rotates the lidar (up to 360 degrees)
Emax B2040-16 3600kv brushless inrunner	Main engine
Taurus mini ESC	Electronic Speed Controller, handles input passed on from Motor controller to regulate motor behaviour.