**12 V Buss Bar:**

* Red to battery
* White to H-bridge PWR+
* White to Arduino VIN
* White to L298N power

**5 V Buss Bar:**

* Red to L298N +5V
* Red to Arduino 5V
* Blue to actuator
* White to servo
* Red to autoloader

**L298N:**

* White to 12 V Buss Bar
* Red to 5 V Buss Bar
* Black to GND
* Blue IN1 to Arduino 9 (LPWM)
* Purple IN2 to Arduino 10 (RPWM)
* Green OUT1 to AL
* White OUT2 to AL

**H-Bridge:**

* Red MOTOR + to actuator
* Black MOTOR – to actuator
* White PWR+ to 12 V Buss Bar
* Black PWR- to GND
* Yellow IN1 to Arduino 3 (RPWM)
* Orange IN2 to Arduino 4 (LPWM)
* Black to GND

**Actuator:**

* Red to H-bridge MOTOR+
* Black to H-bridge MOTOR-
* Blue to 5 V Buss Bar
* White to GND
* Yellow to A0

**Servo:**

* Yellow to 5 V
* Blue to GND
* White to Arduino 2 (servo pin)

**Autoloader:**

* Green to L298N OUT1
* White to L298N OUT2

**Proximity Sensor:**

* Red to 5 V Buss Bar
* Black to GND
* Yellow to Arduino SCL with IMU
* Blue to Arduino SDA with IMU

**IMU:**

* Red to 5 V Buss Bar
* Black to GND
* Yellow to Arduino SCL with autoloader
* Blue to Arduino SDA with autoloader

**Red Switch:**

* Red to Arduino 8
* Black to GND

**Blue Switch:**

* Red to Arduino 9
* Black to GND