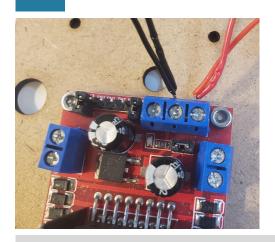
# tBB Electronics Wire Connection Guide



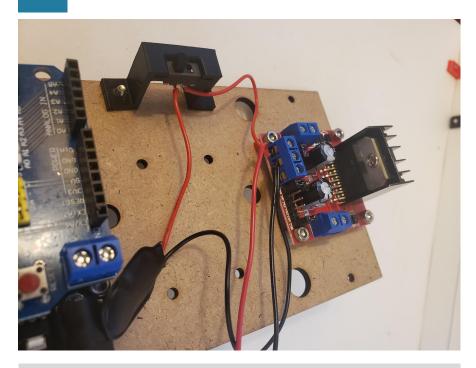
# Main Power | On Off Switch Wiring

1



Attach the soldered red and black wires to the 12v (RED) and GND (Black) screw terminals on L298N motor controller

Note: it may be easier to take off the battery pack brackets until the main power harness has been connected 2



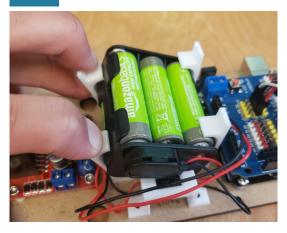
Slide the On/Off switch into the switch bracket

## Main Power | On Off Switch Wiring

3



4



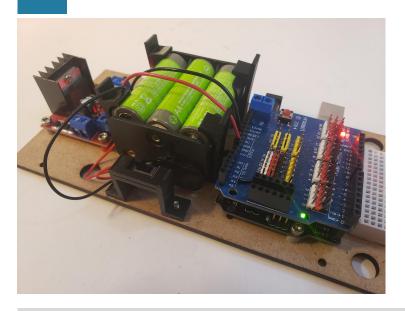


Connect the 9V battery snap to the 6AA battery holder pack

Position the batter back into the battery pack clips. Carefully bend the clips outwards and rotate the battery pack into position

### Main Power | On Off Switch Wire Connection

5



Insert the solid core wires into the Arduino shield paying careful attention to connecting them to the proper terminal

#### **Terminal Connections**

- Red (+) wire to Vin Terminal on Sensor Shield
- Black Wire (-) to GND terminal on the sensor shield

Double check the wiring before turning on the power switch.

A light on the motor control and the sensor shield should come on if power has been connected proper

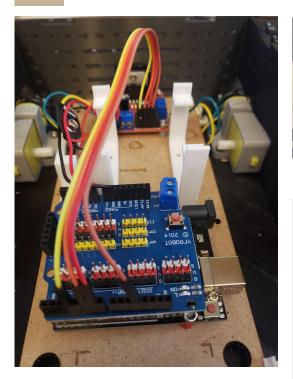
#### **Motor Controller Wire Connection**

1



Connect the 4 wires of a male-to-male wire bundle to the 4 pins on the motor controller

2



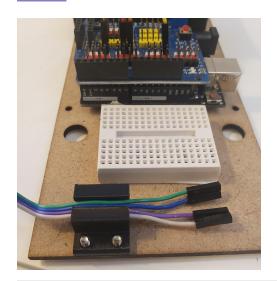


Connect the 4 wires to the white terminal pin on the following pins from left to right:

|3|5|6|11|

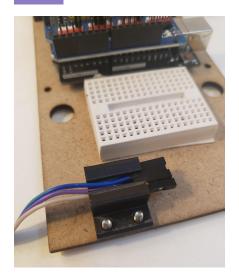
### **Bluetooth Module Wire Connection**

1



Insert the wires from the second male-to-male wiring harness into the slot on the top of the Bluetooth clip

2

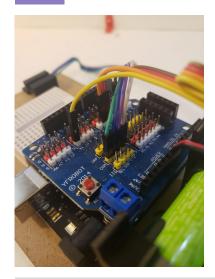




Carefully push the wires into the Bluetooth module clip until the even with the front of the clip, making sure not to cross the wires

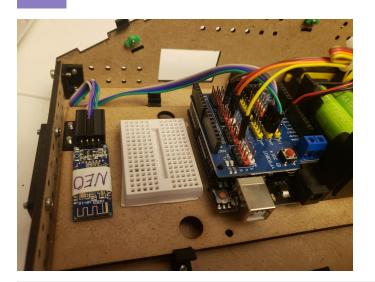
### Bluetooth Module Wiring

3



Connect the Bluetooth wires to the COM terminals on the sensor shield. Pay careful attention to the correct wiring order

4

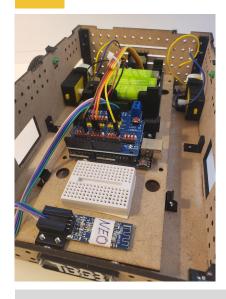


Insert the Bluetooth module into wiring clip bracket as shown above.

**Note:** the Bluetooth module must be removed when uploading code to BB3

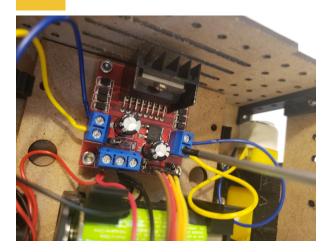
#### **Robot Motor Wire Connection**

1



Insert the electronic base into the BB3 chassis electronic base clips. Insert one side, flex opposite side clips slightly to snap electronic base into place

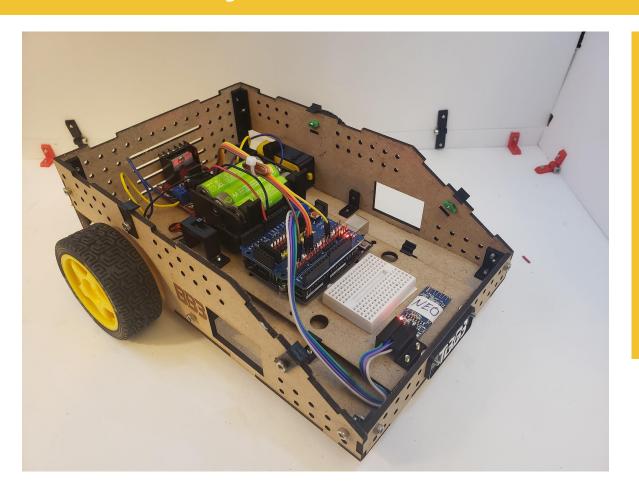
2



Insert the motor wires into the screw terminal on either side of the motor controller. Use a Phillips or flat screwdriver to tighten wires into place.

Note: the wheels spin the wrong direction when driving switch the wires on the affected motor

# **BB3** Ready to Roll



BB3 is now ready to role. The top and front slope pieces can be add at any time. Continue on to the programming guide to upload the robot code and control BB3 using **Bluetooth connection**