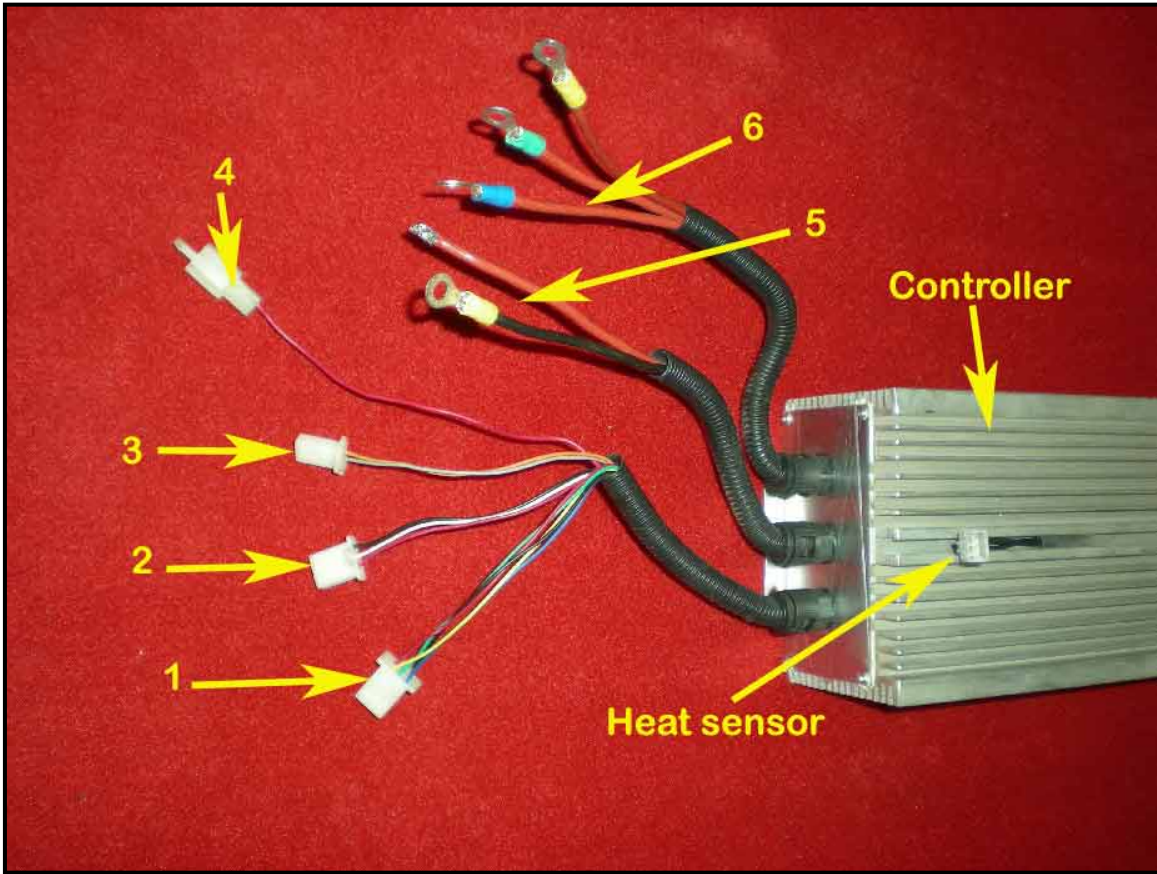


Controller Wires



The following is the function and voltage for all the wires of the controller. Please check the wires shown in the picture. The numbers correspond to tables shown below.

1. Five pin connector with wires to the motor. When the motor is running, these wires provide the signals which tell the controller to change phase.

Color	Yellow	Red	Blue	Black	Green
Normal Voltage (with the circuit breaker and ignition key ON)	0V or 5V	5V	0V or 5V	0V	0V or 5V

If the motor is not working, please check the voltage of these wires when the circuit breaker and the ignition key are ON.

2. Three pin connector with wires to throttle.

Color	Red	White	Black
Normal Voltage (Check the voltage if the throttle has problem)	5V	1-4.5V	0V

3. Two pin connector with wires to both brakes (rear and front brake)

Color	Orange	Grey
Normal Voltage	0V	5V
When brake is activated (squeezed)	12V	0V (Kick stand is on the floor)
		5V (Kick stand is in the air)

4. 60V input (red) control wire. This wire goes to the relay and buzzer plate, which is located in the front of the motorcycle. On the plate there is one relay for the ignition key, one relay for the kill switch and one buzzer for the kill switch. The path that this wire takes is from the batteries to the circuit breaker to the ignition key then to the relay/buzzer plate and finally to the controller. This wire is called the electrical source control line and serves as the ON/ OFF switch of the controller. As a result, only when the key is ON position will the controller work. This wire is also the only wire that will be affected by a bad or faulty DC/DC converter as without a 12V source, the ignition key will not work. In turn, when the ignition key does not work (either because a faulty throttle or bad DC/DC converter) the relay which is controlled by the ignition key could not work either. When there is no signal to the relay then the voltage will become 0V instead of 60V, so the controller will not work.

Color	Red
Normal Voltage	60V
When DC/DC converter or ignition key is broken	0V

5. Main power supply wires to the batteries (red wire goes through circuit breaker to the batteries)

Color	Black	Red
Normal Voltage	0V	60V

6. Three pin connector with wires that provide the power to the motor (values when motor is not running but power is ON)

Color	Blue	Green	Yellow
Normal Voltage	1V	1V	1V

Note: the circuit break and key should be in the ON position when you test for voltages.