# NeuMotors

## SAE 2019 Regular and Advanced Class

## **Limiter Instructions**

v20181120a



The SAE limiter was updated for the 2018 season with a new operating algorithm and XT60 connectors. The 2019 version operates identically, with the only difference being a red label to identify it as a regular class limiter. A yellow label identifies the advanced class limiter.

Regular Class limit: 1000 watts Advanced Class limit: 750 watts Nominal battery voltage: 22.2v (6S) Maximum continuous current: 100 Amps

The limiter adjusts the throttle command to the electronic speed control (ESC) to limit the power to the class maximum averaged over several readings. The limiter is powered by voltage supplied by the RC system.

### **LED Codes:**

With the unit powered up there is a status LED on the unit that indicates the following codes:

- 1. LED off, motor is stopped: An error condition exist that must be resolved before operation.
- 2. LED blinking 9 times on power up: Unit is booting up and calibrating
- 3. LED on steady: The limiter is ready and the RC receiver has direct control over the ESC
- 4. LED off, motor is turning: The limiter is throttling back the ESC to limit the power to the classes maximum.

If your power system is providing close to the classes limit then the LED may flicker rapidly, indicating it is alternating between codes 3 and 4 above.

#### Installation:

It is required that you get the proper gender XT60 connector on the battery and ESC, they are not interchangeable. It is also required that you get the polarity correct on the connectors, the yellow plastic connector housing is marked with positive and negative.

