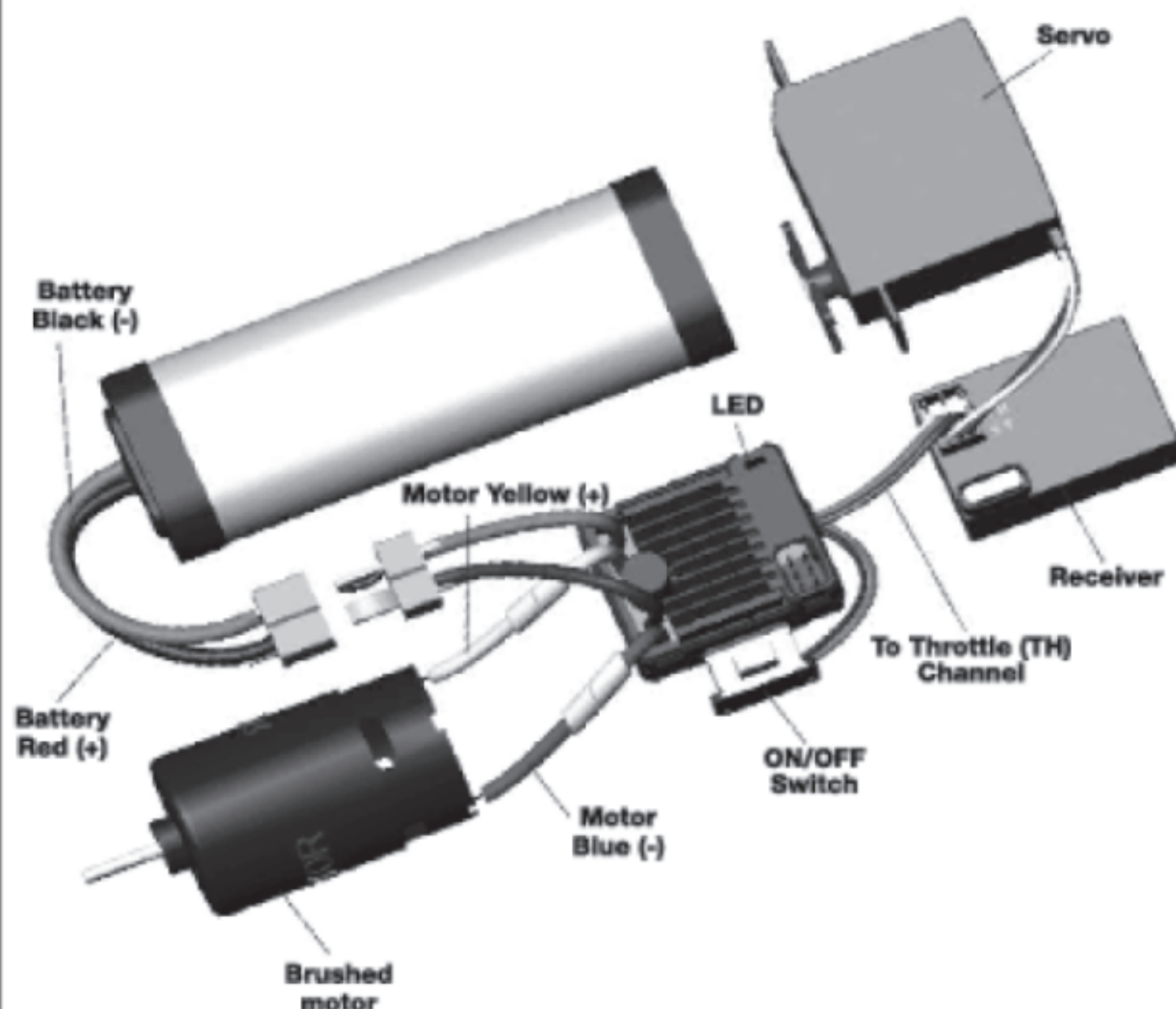


## SAFETY PRECAUTIONS

This product is a sophisticated hobby product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or property. This product is not intended to be used by children without direct adult supervision. It is essential to read and follow all instructions and warnings found in this manual prior to installation, set up, and use, in order for the product to operate properly and to avoid damage or injury.

## INSTALLATION

- Mount your ESC and switch securely using high quality double-sided tape.
- Install your ESC in a position that allows easy access to all connectors.
- Plug the ESC's receiver wire into the receiver (refer to radio manufacturer's manual).
- To prevent radio interference, arrange ESC wiring so that it is not in close proximity to the receiver antenna wire.
- Connect the motor leads exiting the ESC to the leads exiting the motor observing the correct polarity indicated by matching wire colors.
- Always power ON your transmitter before the ESC and power OFF the ESC before the transmitter.



## PROGRAMMING YOUR ESC

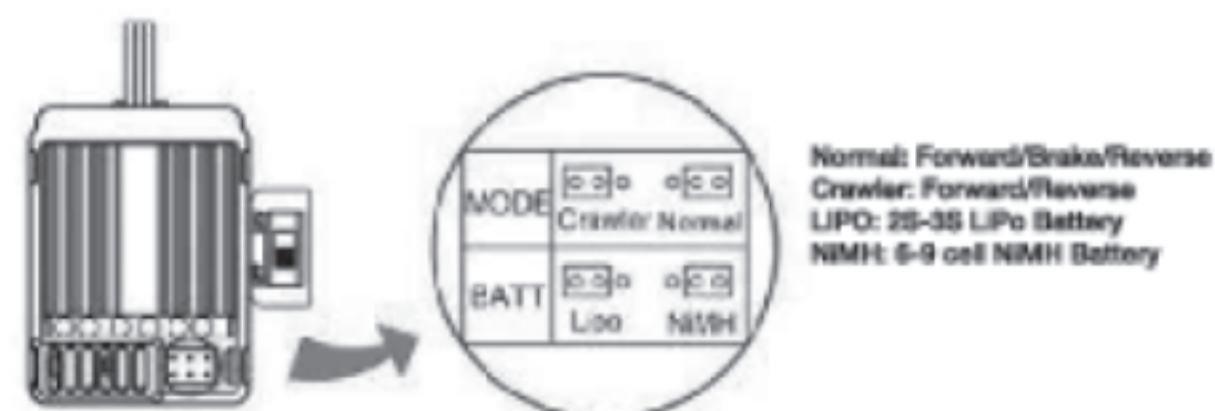
Both the run mode and battery type can be programmed using the jumpers. By moving the position of the jumper, you are able to select the desired setting.

**LiPo and NiMH Battery Modes:** A choice of either LiPo mode or NiMH mode activates the low voltage cutoff point. This is particularly important when using LiPo batteries that should not, for performance and safety reasons, be discharged below 3.2V per cell.

**Run Mode:** The NORMAL setting is appropriate for most applications. This allows standard forward and brakes operation. Reverse can be activated when you apply maximum brakes, return the trigger to neutral, and immediately apply brakes again. The vehicle will now move in reverse until forward throttle is applied.

Please see the diagram below to select the appropriate jumper position. Note: If no jumpers are installed, the ESC automatically defaults to LiPo and Normal.

**WARNING: FAILURE TO SELECT LiPo MODE WHEN USING LiPo BATTERIES MAY RESULT IN PERMANENT DAMAGE TO THE BATTERY AND/OR FIRE.**



## THROTTLE CALIBRATION

Each time you install a new ESC, a new transmitter, or after changing the neutral position, ATV or EPA parameters on your radio, the throttle range must be re-calibrated. The ESC will not work properly until it has been calibrated.

1. Set your radio's throttle and brake EPA/ATV and D/R (Dual Rate) to 100% and your throttle trim to neutral.
2. Making sure the throttle trigger is in the neutral position, turn on the transmitter and then the ESC. Wait for three seconds to allow the ESC to execute a self-test and throttle calibration.
3. When a long beep is emitted, the calibration procedure is complete and the ESC is ready to use.



**Note:** ESCs that came installed in an RTR vehicle have already been calibrated and are ready to use.

**Note:** Each time the ESC is turned on; it will perform a self test and verify throttle calibration.

## SOUND AND LED STATUS

**When your ESC is switched on:**

- One short beep: The battery is NiMH/NiCd mode
- Two short beeps: The battery is in LiPo mode, 2S connected
- Three short beeps: The battery is in LiPo mode, 3S connected
- One long beep: The self-test and throttle calibration is complete, and the ESC is ready to run

**LED Status:**

- When the throttle trigger is at neutral, the red LED is off
- When the throttle trigger is at partial throttle, brake, or reverse, the red LED blinks
- When the throttle trigger is at full throttle, brake, or reverse, the red LED is solid