After properly installing your ESC, follow these steps for a quick setup:

1. Turn the transmitter on FIRST, then the ESC.
2. Take note of the channel number that is being used for the ESC. Always use the same channel to avoid confusion.
3. Set transmitter throttle trim to 0 and throttle EPP to 100. You can access these features in the transmitter menu.
4. Perform a Calibration, refer to Sections 9 & 10.
5. Factory default voltage cutout is set for a 2.6S LiPo battery @ 4.2V. Double check the voltage settings and adjust Voltage Cutout if needed.
6. Check out our solder help and other tech videos on our website.

**SOLDERING CONT.**

**FACTORY RESET**

All Tekin ESCs have a built-in factory reset mode that resets all user adjustable settings to their default values. To access, turn the ESC off, then press and hold both the INC and MODE buttons for 10 seconds with the ESC powered up. LED 3 will light, confirming the reset is complete. Factory resetting the ESC also resets all the radio calibration settings to their default values. A radio calibration will need to be done.

**ATTACHING WIRES TO THE ESC:**

1. RED is used for battery positive (+BATT) and “A” Phase of the motor. BLACK is for battery negative (-BATT) and “B” Phase. White is for “C” Phase.
2. Turn the transmitter on FIRST, then the ESC. After the ESC is powered up, the LED will light up. Excessive heat can damage the ESC.

**SOLDERING WIRING**

**WIRING INSTRUCTIONS**

1. Make sure the motor/battery are within recommended specs.
2. Check battery polarity; no reverse polarity protection.
3. Connect the power leads. The Black lead is used for battery negative and “A” Phase of the motor. RED is used for battery positive (+BATT) and “B” Phase.
4. Connect the motor end of the ESC to the motor. BLACK is for battery negative (-BATT) and “A” Phase. RED is for battery positive (+BATT) and “B” Phase.
5. Connect the fan power leads. BLACK is for battery negative (-BATT) and “C” Phase. RED is used for battery positive (+BATT) and “C” Phase.

**EXCLUSIVELY RUNNING THE TEKIN DUAL DRIVE TECHNOLOGY, THE RX8 DUALS AS THE FAN CONNECTOR AND DATALOGGING CAPABILITIES.**

**ATTACHING THE WIRES TO THE MOTOR:**

1. Be sure to connect your motor with your ESC with the proper setting order. A, B, C, C - C.
2. Use the same techniques described above, solder the wires to your motor.
QuickTune™ MODES CONT...

**LED: MOTOR TYPE**

1) Brushless, Fwd/Brk (LED 1 ON)
2) Brushless, Fwd/Brk/Rev (LED 2 ON)
3) Brushless/Rev (LED 3 ON)
4) Brushed, Fwd/Brk (LED 4 ON)
5) Brushed, Fwd/Brk/Rev (LED 5 ON)
6) Brushed (LED 6 ON)
7) Brushless, Same as in 4) with motor reversed (LED 7 ON)

**LED: VOLTAGE CUTOFF**

1) OFF (LED1 ON) and can be used for NiMh/ NiCAD
2) 4.6 Volts (LED 2 ON) Use for 2 Cells LiPo (2S)
3) 6.9 Volts (LED 3 ON) Use for 3 Cells LiPo (3S)
4) 12.6 Volt (LED 4 ON) Use for 4 Cells LiPo (4S)
5) 19.2 Volt (LED 5 ON) Use for 5 Cells LiPo (5S)
6) Custom Voltage Programming (LED 6 ON)
7) Off (LED 1 ON)

**NEUTRAL WIDTH:**

- More neutral width allows the vehicle to coast longer without power, and can also be very helpful with free wheeling.
- A tight neutral width can interfere with the Ackermann adjustment.
- Should your ESC show all 7 LEDs, stop driving and let it cool down. You may need to lower your gearing, lower your TQ settings or use an engine with lower comp and a lower rpm cut off.

**LED Display:**

- The LED bar displays values and settings on your ESC in a more readable form.
- The left side of the bar displays the temperature (°F or °C) and the right side shows the voltage (volts) or current (amps)
- Check that transmitter and receiver are properly bound.
- The HotWire makes it easy to load new winning setups. No problem! The HotWire makes it easy to load new winning setups. With access to tons of features not fully accessible from the onboard interface, the HotWire is a must have for Boost and Turbo, a new Datalogging feature and a feature which takes all the guess work out of the equation!

**TROUBLESHOOTING CONT…**

**LED: 2 & 6 & FLASHING**

- Wrong Motor Type Selected.
- Internal ESC or Motor Short Detected.
- Try a different brushed motor.
- Motor Type set to MT (no reverse)
- Motor Type set to MT (reverse delay) Needs 1 second in neutral before reverse will activate.

**NO BRAKES**

- Check transmitter low Throttle EFA adjustments.
- Check brake strength settings in the ESC.
- Check for high back EMF. All LEDs should flash at full throttle and full brake
electrical hazard.

**LED: RUN WITH NO BRAKET INPUT**

- Set transmitter throttle percentage below 0.1% or 0.4%.
- Motor will not run.

**BRUSHLESS MOTOR WIRING DIAGRAM**

**REPAIR:**

- Should your ESC show all 7 LEDs, stop driving and let it cool down. The ESC is thought to be defective. The ESC may be overheating due to higher gearing than intended or due to a battery that is not properly matched for your application.
- Always run a sensored motor with the ESC in 2S, 3S or 4S systems.
- Wiring improperly while running a sensored motor with the ESC in 2S, 3S or 4S systems will damage the ESC as well as the motor.
- Motor Type can be used to reverse the motor rotation for cars that may need it. Usually these will be the ones with the motor mounted up front on the left side of car.
- Check out more at www.teamtekin.com/hotwire.html

**BRUSHLESS MOTORS FOR**

**RX8 GEN2 Brushless Connection, Refer to Figure 4**

1) Wiring: Connect A, B and C wires from the motor to the A, B and C posts on the ESC, verify this is correct for proper function. Do not use this wiring if you prefer to use connectors from ESC to motor. Refer to the instructions in the Soldering section of this manual for proper information and refer to Figure 2 & 4.
2) Connect the battery pack: BATT (+) to ESC BATT (+) then BATT (-) to ESC BATT (-).
3) Select Motor Type: Press and release the MODE button 6 times to get to the MOTOR TYPE selection in the user setup. Press and release the INC button to view the current motor type. Select the brushless type (brushless types are indicated by LEDs 1 & 2) as necessary, continue to press and release the INC button to scroll through the available brushless motor types until a selected type is indicated.
4) Power off the ESC, disconnect the battery and connect the motor wires if using plugs, matching colors appropriately if applicable.
5) Power off the ESC, listen for the arcing sound.

**BRUSHLESS MOTORS**

**For Brushing Wire Configurations Refer To Fig 5 & 6:**

- Wiring: Wiring (Motor Types A#: Refer to Fig. 5, connect motor POS (+) terminal to ESC POS (+) post, then connect motor NEG (-) terminal to ESC (A) post. NOTE: Speed control (D) post is not used.
- Forward/Reverse Wiring: Wire only Motor Type A#: Refer to Fig. 6. Connect Al on ESC motor outputs (A#) together, then connect them to the NEG (-) terminal of the ESC. Connect another wire from the motor POS (+) terminal to the BATT (+) terminal on the ESC.
- Connect the battery pack: BATT (+) to the speed control BATT (+) then BATT (-) to the speed control BATT (-).
- Select Motor Type: Press and release the MODE button 6 times to get to the MOTOR TYPE selection in the user setup. Press and release the INC button to view the current motor type, select the brushless type (brushless types are indicated by LEDs 1 & 2) as necessary.
- 1) Wiring: Forward/Reverse Wiring (Motor Types B#: Refer to Fig. 5, connect motor POS (+) terminal to ESC POS (+) post, then connect motor NEG (-) terminal to ESC (A) post. NOTE: Speed control (D) post is not used.
- 2) Forward/Reverse Wiring: Wire only Motor Type B#: Refer to Fig. 6. Connect Al on ESC motor outputs (A#) together, then connect them to the NEG (-) terminal of the ESC. Connect another wire from the motor POS (+) terminal to the BATT (+) terminal on the ESC.
- Connect the battery pack: BATT (+) to the speed control BATT (+) then BATT (-) to the speed control BATT (-).
- Select Motor Type: Press and release the MODE button 6 times to get to the MOTOR TYPE selection in the user setup. Press and release the INC button to view the current motor type, select the brushless type (brushless types are indicated by LEDs 1 & 2) as necessary.
- Connect the battery pack: BATT (+) to the speed control BATT (+) then BATT (-) to the speed control BATT (-).