



★ WP-8BL100-RTR / WP-8BL150 RTR User Manual ★



Thanks for purchasing our Electronic Speed Controller (ESC). The power system for RC model can be very dangerous, so please read this manual carefully. In that we have no control over the correct use, installation, application, or maintenance of our products, no liability shall be assumed nor accepted for any damages, losses or costs resulting from the use of the product. Any claims arising from the operating, failure of malfunctioning etc. will be denied. We assume no liability for personal injury, consequential damages resulting from our product or our workmanship.

Warnings

- Ensure all wires and connections are well insulated before connecting the ESC to related devices.
- Ensure all devices are well connected to prevent poor connection that may cause your vehicle out of control or other unpredictable issues.
- Read through the manuals of all power devices and chassis and ensure the power configuration is rational before using this unit.
- Please use a soldering iron with the power of at least 60W to solder all input/output wires and connectors.
- Do not hold the vehicle in the air and rev it up to full throttle, as rubber tires can expand to extremely size until explode and cause serious injury.
- Stop using the ESC when its casing temperature exceeds 90 °C / 194 °F to avoid the ESC or the motor gets damaged even destroyed.
- (We recommend setting the "ESC Thermal Protection" to 105 °C/ 221 °F, this refers to the internal temperature of the ESC.)
- We recommend removing the cooling fan from ESC before exposing vehicle to liquids, and fully dry it right after use.
- Always disconnect batteries after use, as the ESC will continue to consume the current power, even if the ESC is turned off.
- (A long-time connecting will cause batteries discharge completely and break the ESC.)

Features

- Completely water-proof and dust-proof. The ESC works properly even under water.
- (Please remove the cooling fan when running car in water, and after running, please make the ESC clean and then dry it to avoid the oxidation of copper connectors)
- External Programming Port (EPP), easy to connect with program card, and also works as power port for cooling fan.
- Excellent start-up, acceleration and linearity features, suitable for buggy (especially short course trucks) and buggy.
- The built-in switching mode BEC has powerful output to supply all electronic equipments.
- There is a mounting stand for installing the ESC on chassis easily and firmly.
- Proportional ABS brake function with 5 steps of maximum brake force adjustment, 8 steps of drag-brake force adjustment.
- Also compatible with the mechanical disc-brake system.
- Multiple protection features:
 - Over-heat protection / Throttle signal loss protection / Motor blocked protection
 - Low voltage cut-off protection
- Easily programmed with the SET button of the ESC, and also compatible with pocket-sized Program Card.

Specifications

Model	WP-8BL100-RTR	WP-8BL150-RTR
Cont. / Peak Current	100A / 650A	150A/950A
Motor Supported	Sensored / Sensorless Brushless Motor (only in sensorless mode)	
Cars Applicable	1/8 Touring Car , SCT, Buggy , 1/10 Truggy, Buggy	
Motor Limit	<u>Note.1</u> 3S LiPo : 4068 size motor • KV≤3000 4S LiPo : 4068 size motor • KV≤2400	4S LiPo : 4274 size motor • KV≤3000 6S LiPo : 4274 size motor • KV≤2400
Resistance	0.0005 ohm	0.00035 ohm
Battery	8-12 Cells NiMH • 3-4S LiPo	8-18 Cells NiMH • 3-6S LiPo
BEC Output	6V/5A, Switch mode	
Programming Port	FAN / PRG Port	
Dimension	59.5(L) × 48(W) × 42(H)	
Weight (with wires)	173g	178g

Note.1 : The cooling fans of ESC is supplied by the built-in BEC, so it is always working under 6V .

Connection

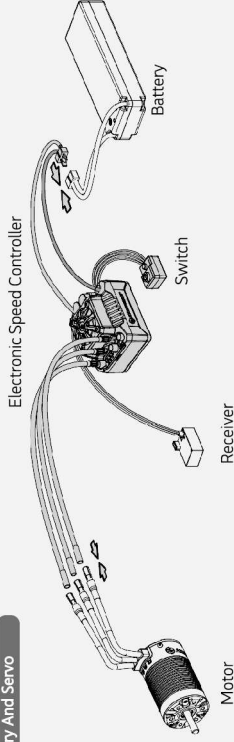
[BEGIN TO USE THE NEW ESC]

Connect The ESC, Motor, Receiver, Battery And Servo

- The #A, #B, #C wires of the ESC can be connected with the motor wires freely (without any sequence). If the motor runs in the opposite direction, please swap any two wire connections.

WARNING!

- For safety, please always keep the wheels away from the track when switching on the ESC.



Throttle Range Setting (Throttle Range Calibration)

- In order to make the ESC match the throttle range, you must calibrate it when you begin to use a new ESC, or a new transmitter, or change the settings of neutral position of the throttle stick, ATV or EPA parameters, etc.

- Switch off the ESC, turn on the transmitter, set the direction of throttle channel to "REV", set the "EPA/ATV" value of throttle channel to "100%", and disable the ABS function of your transmitter.
- Hold the "SET" key and then switch on the ESC, and release the "SET" key as soon as possible when the red LED begins to flash. Note.2
- Set the 3 points according to the steps shown in the pictures on the right side.

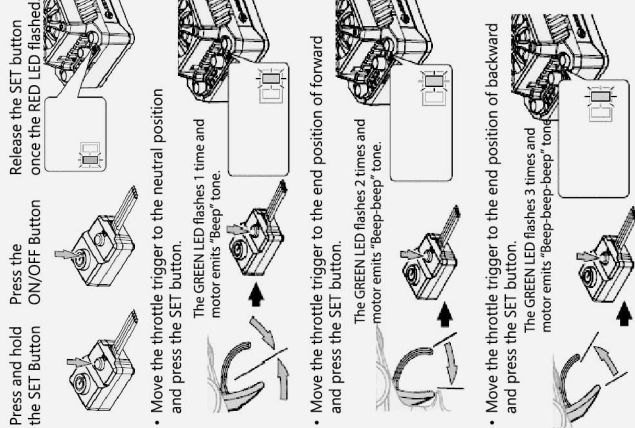
- The neutral point
Move the throttle stick at the neutral point, and then click the SET key, the green LED flashes 1 time.
 - The end point of forward direction
Move the throttle stick at the end point of forward direction, and then click the SET key, the green LED flashes 2 times.
 - The end point of backward direction
Move the throttle stick at the end point of backward direction, and then click the SET key, the green LED flashes 3 times.
- D. Throttle range is calibrated; motor can be started after 3 seconds.

Note 2

If you don't release the "SET" key as soon as the red LED begins to flash, the ESC will enter the program mode, in such a case, please switch off the ESC and re-calibrate the throttle range again from step A to step D.

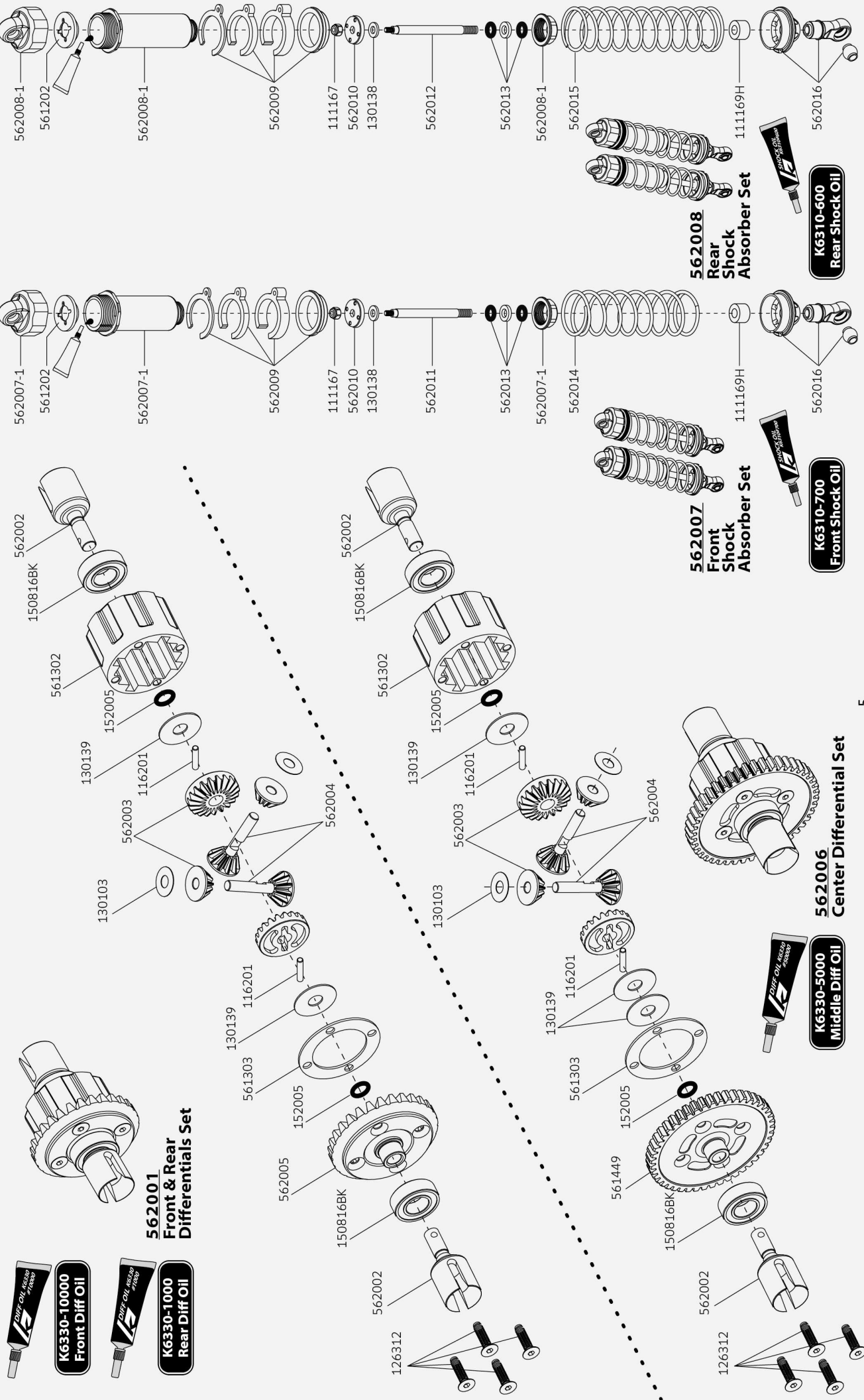
Check LED Status in Normal Running

- When the throttle stick is in the neutral range, neither the Red LED nor the Green LED lights up.
- When the car moves forward, the Red LED solidly lights; the Green LED also lights up when the throttle stick is at the top position.
- When the car brakes, the Red LED solidly lights; the Green LED also lights up when the throttle stick is at the bottom position and the maximum brake force is set to 100%.
- When the car reverses, the Red LED solidly lights.





★ 3 Differentials & F/R Shock Absorbers ★





Front Part

