

Thanks for purchasing our electronic speed controller (ESC). The power system for RC model can be very dangerous, 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.

【FEATURES】

1. Water-proof and dust-proof for all weather races.
2. Small size with built-in capacitor module.
3. Automatic throttle range calibration, easy to use.
4. Multiple protections: Low voltage cut-off protection for Lipo or NiMH battery / Over-heat protection / Throttle signal loss protection.
5. Easily programmed with the jumpers.

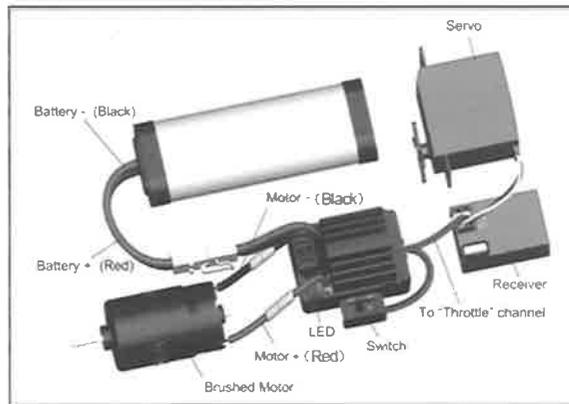
【SPECIFICATIONS】

Model	WP-1040-BRUSHED WP-1040-BRUSHED-CRAWLER & BOAT	WP-1625-BRUSHED WP-1625-BRUSHED-CRAWLER
FWD Cont. / Burst Current BWD Cont. / Burst Current	Forward: 40A / 180A Backward: 20A / 90A	Forward: 25A / 100A Backward: 25A / 100A
Input	2-3S Lipo, 5-9 Cells NiMH/NiCd	
Cars Applicable	1:10 on-road, off-road Buggy, SCT, Truggy 1:10 Crawler, Tank & Boat	1:18 & 1:16 on-road, off-road Buggy, SCT, Truggy 1:18 & 1:16 Crawler, Tank and Boat
Motor Limit	2 Lipo or 6 NiMH	280, 370 or 380 size motor RPM < 30000 @7.2V
	3 Lipo or 9 NiMH	280,370 or 380 size motor RPM < 20000 @7.2V
Resistance	FWD: 0.002 Ohm; BWD: 0.004 Ohm	FWD: 0.003 Ohm; BWD: 0.003 Ohm
Built-in BEC	2A/6V (Linear mode BEC)	1A/6V(Linear mode BEC)
Dimension	46.5mm*34mm*28.5mm	34mm*24mm*14mm
Weight	WP-1040-BRUSHED: 65g WP-1040-BRUSHED-CRAWLER: 70g	23.5g

* There are 2 kinds of WP-1040-BRUSHED-CRAWLER & BOAT, one has 1 output for 1 motor, and the other one has 2 outputs for 2 motors (There is only one input for the ESC, 2 motors work synchronously).

【BEGIN TO USE】

1. Connect the ESC, motor, receiver, battery and servo according to the following diagram



"+" and "-" wires of the ESC are connected to the battery pack.
Attention: The incorrect polarity will damage the ESC immediately.

The control cable of the ESC (trio wires with black, red and white color) is connected to the throttle channel of the receiver (Usually CH2).
The "Motor +" and "Motor -" wires are connected to ESC without any order. If the motor runs in the opposite direction, please swap these two wire connections.

2. Set the Transmitter

Please set the "D/R", "EPA" and "ATL" to 100% for throttle channel (for transmitter without LCD, please turn the knobs to

the maximum value), and set the "TRIM" of the throttle channel to 0 (for transmitter without LCD, please turn the TRIM knob to its neutral position).

For Futaba™ and the similar transmitters, the direction of throttle channel shall be set to "REV", while other radio systems shall be set to "NOR".

The "Fail Save" function of the radio system is strongly recommended to be activated. Please make sure that the motor can be stopped when the "Fail Save" happens.

3. Throttle Range Setting (Throttle Range Calibration)

In order to make the ESC match the throttle range of different transmitters, the calibration of the ESC is necessary. To calibrate the ESC, please turn on the transmitter, keep throttle stick at its neutral position, wait for 3 seconds to let the ESC execute self-test and automatic throttle calibration. When the ESC is ready to run, a long beep sound is emitted from the motor.

Note: Please calibrate the throttle range again when using a new transmitter or changing the settings of the neutral position of throttle channel, D/R, ATV, ATL or EPA parameters, otherwise the ESC may not work properly.

【BEEP SOUND AND LED STATUS】

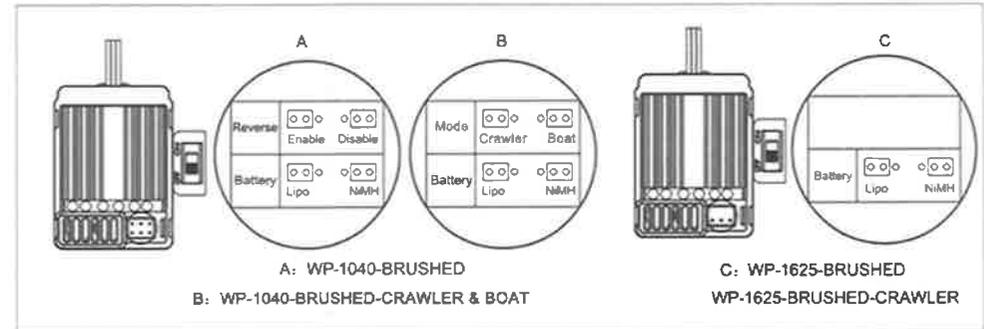
The Meaning of Beep Sound	LED Status
<ul style="list-style-type: none"> ● 1 short Beep: The battery is NiMH/NiCd ● 2 short Beeps: The battery is 2S Lipo ● 3 short Beeps: The battery is 3S Lipo ● 1 long Beep: Self-test and throttle calibration is OK, the ESC is ready to run 	<ul style="list-style-type: none"> ● When the throttle stick is in neutral range, red LED is off ● Forward, brake or reverse at partial throttle, red LED blinks ● Forward, brake or reverse at full throttle, red LED is solid

【THROTTLE STICK POSITION】



【SET THE ESC】

The ESC is programmed by the jumpers (Tweezers is recommended to plug and unplug the jumper).



【PROTECTION FUNCTIONS】

1. Low voltage cut-off protection: If the voltage of battery pack is lower than the threshold for 2 seconds, the ESC will enter the protection mode. When the car stops, the red LED blinks to indicate the low voltage cut-off protection has been activated.

Model	2S Lipo	3S Lipo	5-9 cells NiMH
WP-1040-BRUSHED WP-1625-BRUSHED	Output reduces 50% at 6.5V Output cuts off at 6.0V, cannot be recovered	Output reduces 50% at 9.75V Output cuts off at 9.0V, cannot be recovered	Output reduces 50% at 4.5V Output cuts off at 4.0V, cannot be recovered