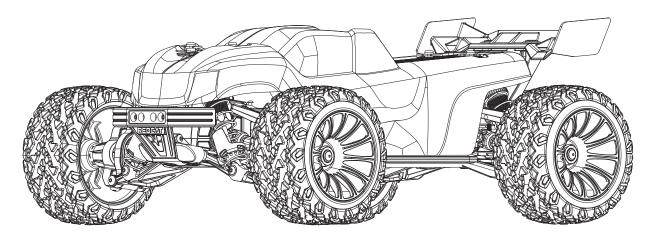
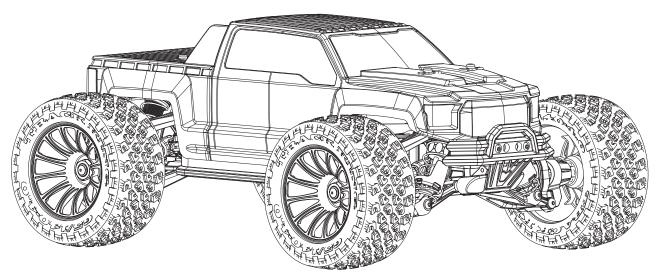


# USER MANUAL

Truggy TR10&TR10 4S





Truck TK10&TK10 4S

It is essential to read the entire manual and familiarise yourself with the model and its operation.

Failure to operate the model correctly, may cause damage to the product, property and cause serious injury.

Not suitable for children under 14 years old.

Never operate the model with low powered transmitter batteries.

Never operate the model with a low powered battery pack.

Ensure that all batteries are of the correct voltage.

Always operate your model in an open space, away from, property, vehicles, roads, people, animals and obstacles.

Always keep the model in sight and at a safe operating distance.

Keep fingers clear of any moving, hot or rotating parts.

After use do not touch any parts which may still be hot, such as the ESC (Electronic Speed Controller) battery, motor and servos.

Before operating, always turn on the transmitter first and then the model.

Turn off the model and then the transmitter, when you have finished.

Disconnect battery after use and store in a safe place.

Check the operation of the model first (particularly the radio equipment, ESC and any servos) prior to usage and with the wheels off the ground.

It is the user's responsibility to ensure that the model is functioning correctly and that all nuts, bolts, screws and parts are tightened properly.

Be careful when conducting any maintenance, avoiding sharp edges, moving parts and exercise caution when using any tools.

Inspect your model for any damage after use and replace any worn or damaged parts, including cables and batteries.

Carry out any additional maintenance such as cleaning or lubrication after use.

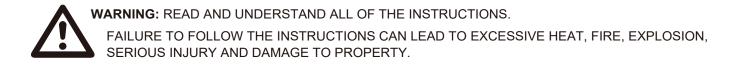
Only used approved spare parts and never fit any unsuitable items.

Follow all instructions for the model and any associated ancillary items, such as batteries and chargers.

Running the model in wet conditions may cause damage and should be avoided.

Never operate the model when it's raining.

Avoid over heating – this can be caused by continued use of throttle, running in unsuitable terrain, such as sand, gravel, mud, long grass etc.



# CHARGE THE BATTERY IN AN APPROVED BATTERY BAG OR TIN, ON A NON-FLAMMABLE SURFACE AND AWAY FROM COMBUSTIBLE MATERIALS.

### NEVER LEAVE THE BATTERY UNATTENDED WHILST CHARGING.

- Disconnect batteries immediately if they become hot or swollen.
- Never charge batteries overnight.
- Do not modify or alter the battery or leads.
- Do not attempt to charge a damaged, swollen or hot battery.
- Only use an approved battery and charger and in accordance with the manufacturer's instructions.
- Batteries and chargers should only be used and charged by an adult.
- Never charge a battery in sunlight and/or excessive hot or cold temperatures.
- · Check that the polarity is correct before charging.
- · Disconnect the battery after charging and allow to cool before use.
- Only charge batteries in a well, ventilated area.

### WARRANTY



### The Warranty Does not cover:

Whilst some items may be water resistant, operating in wet conditions may cause water ingress or damage, which is not covered under the terms of the guarantee.

Any modifications whatsoever made to the manufacturing specification and ancillary items.

Overheating of the components due to continuous operation in unsuitable conditions.

Damage or failure, attributable to Acts of God, abuse, accident, impact damage, improper or abnormal use, loss of components whilst driving, failure to follow the instructions and loss of control.

Wear and tear.

Cosmetic damage.

Postal charges, shipping or insurance.

Returning the item.

Servicing and repairs.

Consumables.

Batteries and chargers.

Failure to conduct maintenance

### **General Conditions**

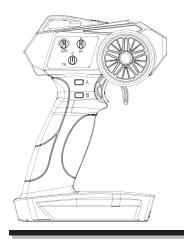
We reserve the right to change at any time and without notice, specifications, materials, design and packaging.

Specifications, information and designs of the actual product may vary from those shown in the instructions, manuals and packaging.

All manuals, operating and safety instructions, form part of this product and failure to follow these procedures will invalidate the warranty.

# TRANSMITTER SPECIFICATIONS





Model: BX300

Channel: 3CH

Frequency: 2.4GHz

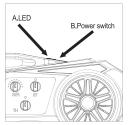
### INSTALLING THE TRANSMITTER BATTERIES

This transmitter requires 4 AA batteries.

- 1. Open the battery cover from the transmitter.
- 2.Install the batteries as shown.
- 3.Close the battery cover.

### (Does not include the 4 AA batteries.)

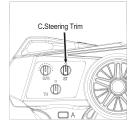




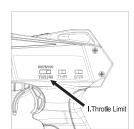
A.LED B.Power switch



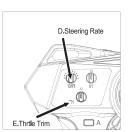
G.Steering Wheel H.Throttle/Brake



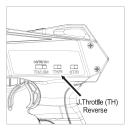
C.Steering Trim



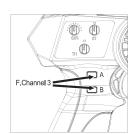
I.Throttle Limit



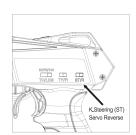
D.Steering Rate E.Throttle Trim



J.Throttle (TH) Reverse

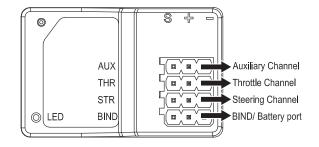


F.Channel 3



K.Steering (ST) Reverse

Model:BRX300	Weight: 6 grams			
Type: FHSS 2.4GHz	Band: 2.4GHz Voltage Range: 4.5- 10V			
Antenna Length: 140mm				
Channels: 3	Bind Type: Bind Plug			
Dimensions (LxWxH): 33.5mm x 21.5mm x 12.5mm				



### **BRX300 BINDING**

- 1.Insert the bind plug into the bind port on receiver.
- 2. Power on the receiver, the LED will flash rapidly to indicate it is in bind mode
- 3.Rotate the steer full to right and hold up, then power on the transitter; the LED on the transmitter will flash, the LED on the receiver stops flashing and lights iluminated indicate that the binding procedure is completed.

# RECEIVER SPECIFICATIONS



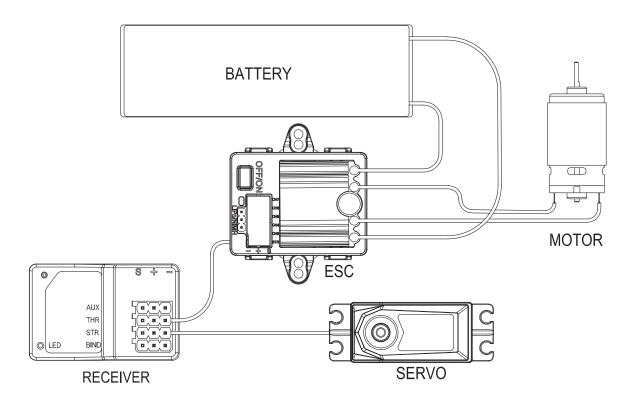
### **SPECIFICATIONS**

- Brushed ESC
- Continuous current 60A
- LiPo/NiMH Cells 2s Lipo, 6-7 Cells NiMHBEC output 6V/5A
- Battery Connector T (T head )
- Motor Connectors 4mm Female Bullet ConnectorsWeight 52g
- Dimensions 45 x 34x 26mm
- Compatible Motors RC540/RC550/RC570/RC590

### **Features**

Jumper selector for battery mode (LiPo or NiMH, jumper pin to put ESC into NIMH mode is included in a separate bag)

### Installation when a motor controller is used





### RECEIVER ANTENNA

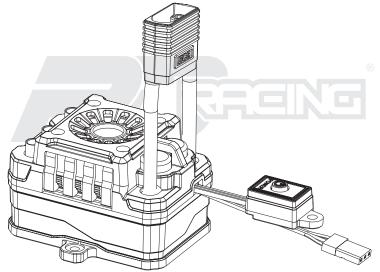
Do not kink, cut or damage the antenna wire. The antenna is made of a coaxial wire; if the outer sheath becomes damaged, the receiver will not work properly. If the antenna is damaged in any way, replace before attempting to use the receiver.

### SPECIFICATIONS Brushless ESC

**USER MANUAL Brushless Electronic Speed Controller** 120A.150A



Congratulations and thanks for purchasing the PDracing electronic speed controller (ESC) series . The power system for RC model can be very dangerous, so please read this manual carefully. Since we have no control over the installation, application, use or maintenance of this product, in no case shall we be liable for any damages, losses or costs.

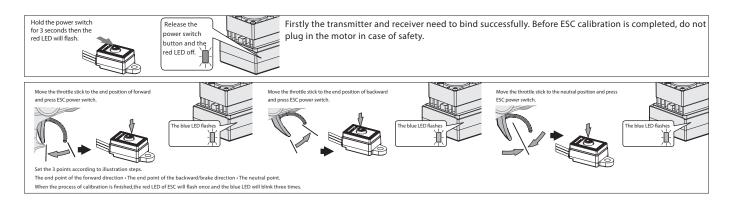


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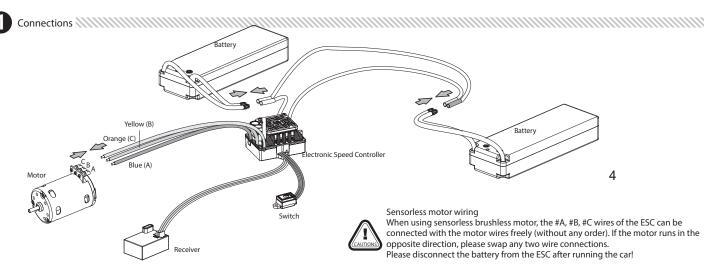
- High performance but low price, users can own this reliable race-ready ESC at an afordable cost.
- Compact size, suitable for various car chassis.
- Core competition program for excellent control feel & multiple programmable items.
- Proportional brake with 4 levels of Maximum Brake Force adjustment, 10 levels of Drag Brake Force adjustment and 6 steps of Initial Brake Force adjustment.
- 15 levels of acceleration (punch) adjustment, from soft to "very aggressive" to it for different kinds of cars, tires and tracks.
- Multiple protections: Low voltage cut-off protection for Lipo / Over-heat protection / Throttle signal loss protection
- One-button (the "power switch" button on the ESC) to calibrate the Throttle signal, and easy to setup all parameters to expected settings and reset to the factory default settings by APP .

ESC Type	BrushLess
Power control	On/off Button
Input voltage range	12.6-16.8v (3S-4S LiPO)
# cells battery	LiPo:3S-4S
Current	Max. constant≥120a
BEC	Voltage: 6V/Current: ≥10A
	BEC Type:Switching
Low voltage cutoff	LiPo: 3.4V/1cell (Cutoff action: Soft cut (50% TH) then stop after 20 sec)
Reversible	Yes(50%)
Brake	Yes(selectable by phone APP;default:62%)
(Heat sink)	Yes(Alum6063)
Protection	Thermal(temp(125);Cutoff action: Soft cut (50% TH) then stop after 20 sec)
Battery connection	Wire diameter:12awg/Wire length:150mm/Connector type: EC5-M Plug-Black shell
Motor connection	4.0MM Golden plug -Female head
Case material	Plastic
Receiver connection	Wire diameter:22awg/Wire length:200MM/Connector type:JR-3P
Fan	Plug type
Max. dims (mm)	L58MM*W41MM*H35MM
Max weight (g)	130g

In order to make sure the ESC fits the throttle range of your transmitter, you must calibrate it when begin to use a new ESC, or a used transmitter if some of its settings have been changed, like the Throttle Trim, D/R, EPA or other parameters. Otherwise, the ESC cannot work properly. Besides, we strongly recommend users to enable the "failsafe" function of the transmitter, set the "F/S" of the throttle channel to the Shutdown mode or set the protection value to the neutral position, so the car can be stopped if the receiver fails to get the radio signals from the transmitter. Please calibrate the throttle range according to the following steps.



### 



		Specifications			
Battery type	2S Lipo	2-3S Lipo	2-3S Lipo	3-4S/ (2)2S Lipo	4-6S/ (2)3S Lipo
Continuous Current/Peak Current	>45A	>60A	>80A	>120A	>150A
BEC Output	6V/ Minimun5.0A	6V/ Minimun5.0A	6V/ Minimun5.0A	6V/ Minimun10A	6V/ Minimun10A
Battery Connector	T head	T head	T head	EC5 (IC5 compatible)	EC5 (IC5 compatible)
Motor connect port Supported	Ø 4.0	Ø 4.0	Ø 4.0	Ø 4.0	Ø 5.0
Waterproof standard	IP67 standard	IP67 standard	IP67 standard	P67 standard	IP67 standard

Steps of Throttle calibration operation and check the LED Status

Before beginning to use a new ESC, you need to calibrate it in order to make sure the ESC matches the throttle ratio of your transmitter. Due to the difference in the throttle signal pulse width of the transmitter, the throttle signal needs to be calibrated in order to have 100% power control. Once finish calibration, the transmitter, receiver, and ESC are matched and connected successfully. Steps are as follows:

- (1) Firstly the transmitter and receiver need to bind successfully.
- (2) Before ESC calibration is completed, do not plug in the motor in case of safety. Press and hold the power switch for about 3 seconds then the red LED will blink, then release the power switch, the red LED will stop blinking and turn off. you successfully enter the calibration mode.
- (3) Keep your transmitter in full accelerate throttle position at the same time click ESC power switch once, and the blue LED will blink once.
- (4) Keep your transmitter in full brake throttle position at the same time click ESC power switch once, and the blue LED will
- (5) Keep your transmitter returns to the neutral position (release the throttle), click ESC power switch once, and the blue LED will blink once.
- (6) After completing steps 3-4-5, the red LED of ESC will lash once and the blue LED will blink three times to enter the normal operation mode. Then the throttle calibration operation is completed.
- (7) If the LED status in the preceding steps are incorrect then the operation is failed, you need to repeat all steps from beginning.

## 03 Program the ESC

	Brushless ESC - APP parameter setting																
Item No.	Item Name	Parameter List															
	nom ramo	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Option 11	Option 12	Option 13	Option 14	Option 15	
1	Operation mode	forward+Brake	Forward+Reverse+Brake	Forward + Reverse													
2	Drag Brake Force	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%					
3	Low Voltage Cutoff threhold	No protection	2.6V/CELL	2.8V/CELL	3.0V/CELL	3.2V/CELL	3.4V/CELL										
4	Start Mode(Punch)	1.0Level	2.0Level	3.0Level	4.0Level	5.0Level	6.0Level	7.0Level	8.0Level	9.0Level	10.0Level	11.0Level	12.0Level	13.0Level	14.0Level	15.0Level	
5	Throttle Rate	1.0Level	2.0Level	3.0Level	4.0Level	5.0Level	6.0Level	7.0Level	8.0Level	9.0Level							
6	Max Brake Force	25%	50%	75%	100%	Disable											
7	Max Reverse Force	25%	50%	75%	100%												
8	Intial Brake Force	Drag Brake Force	0%	10%	20%	30%	40%	50%									
9	Throttle Neutral Range	3.0	4.0	5.0	6.0	7.0	8.0	9.0	90.0	10.0	11.0	12.0					
10	Over Temperature Protection	Disable	105 degree	115 degree	125 degree												
11	Motor rotate direction	Clockwise(CW)	Counter Clockwise(CCW)														
12	LiPo Cells	Auto Calculate	2 Cells	3 Cells	4 Cells	5 Cells	6 Cells	7 Cells	8 Cells								
13	Low Voltage Cutoff Delay	0 Seconds	10 Seconds	15 Seconds	20 Seconds	25 Seconds	30 Seconds										
	BEC Voltage	6.0V	7.4V														

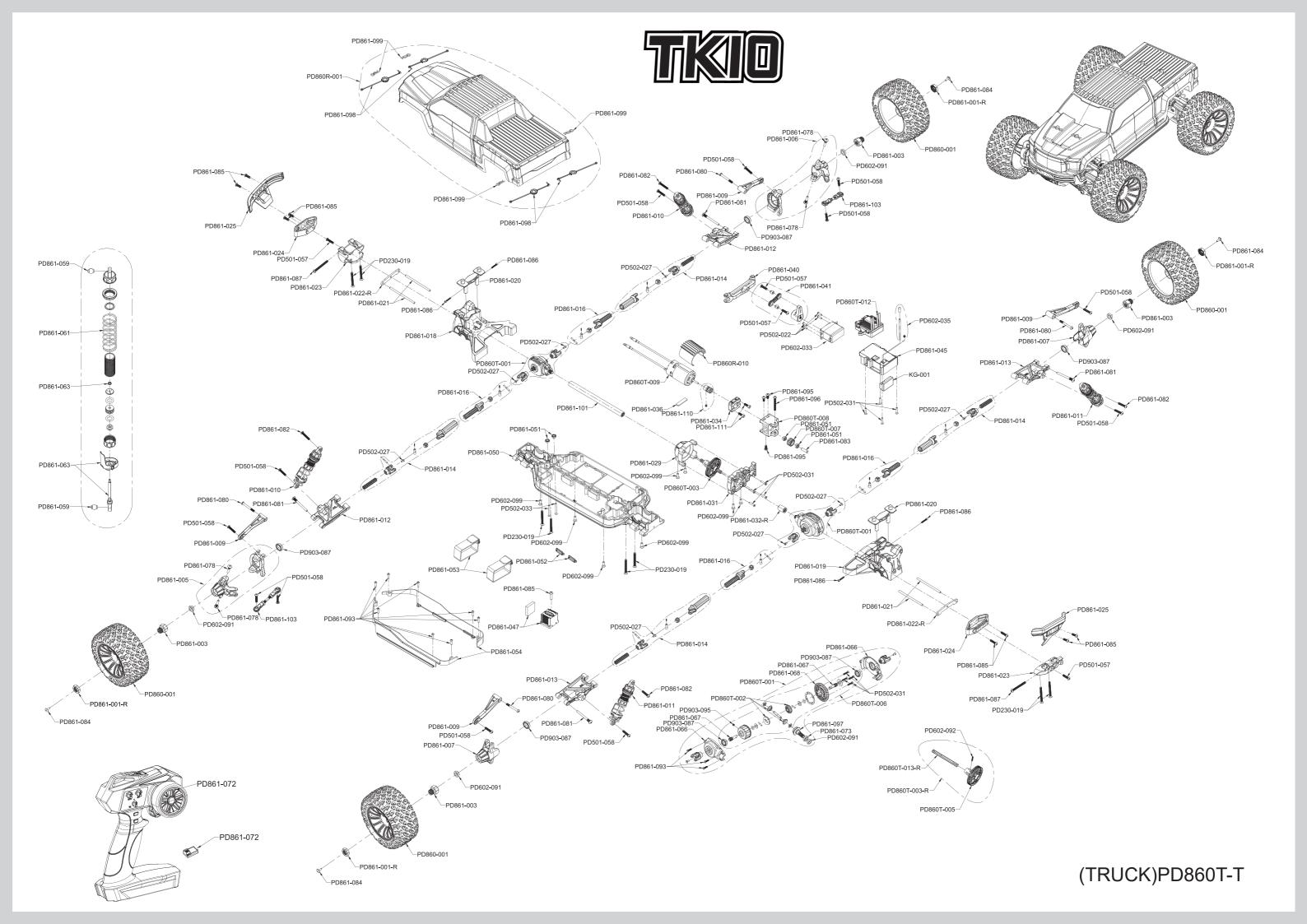
- (1) Ensure that all connections have been completed.
- (2) When begin to use a new ESC, the throttle of the ESC needs to be calibrated.
- (3) When connected the motor and pull the throttle of transmitter, you can confirm that the motor rotates in the correct direction or not. If the direction is reversed, please switch any two output motor cables to adjust the running direction.
- (4) Please ensure that the operation status of ESC is normal then all would be under controlled.
- (5) When you need to shut down the ESC, please hold the power switch then the blue LED would blink three times and ESC is shut down successfully.

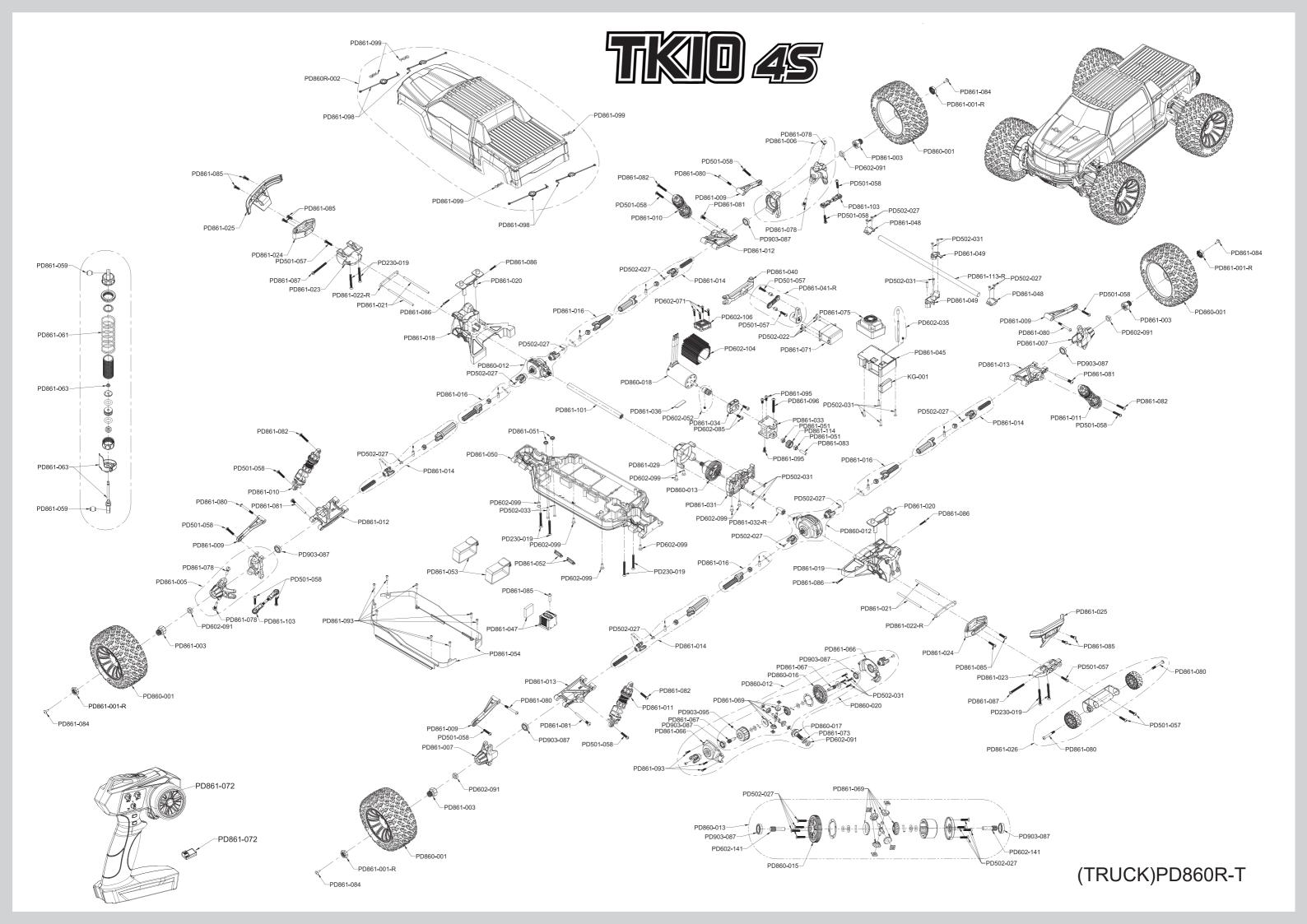
# 

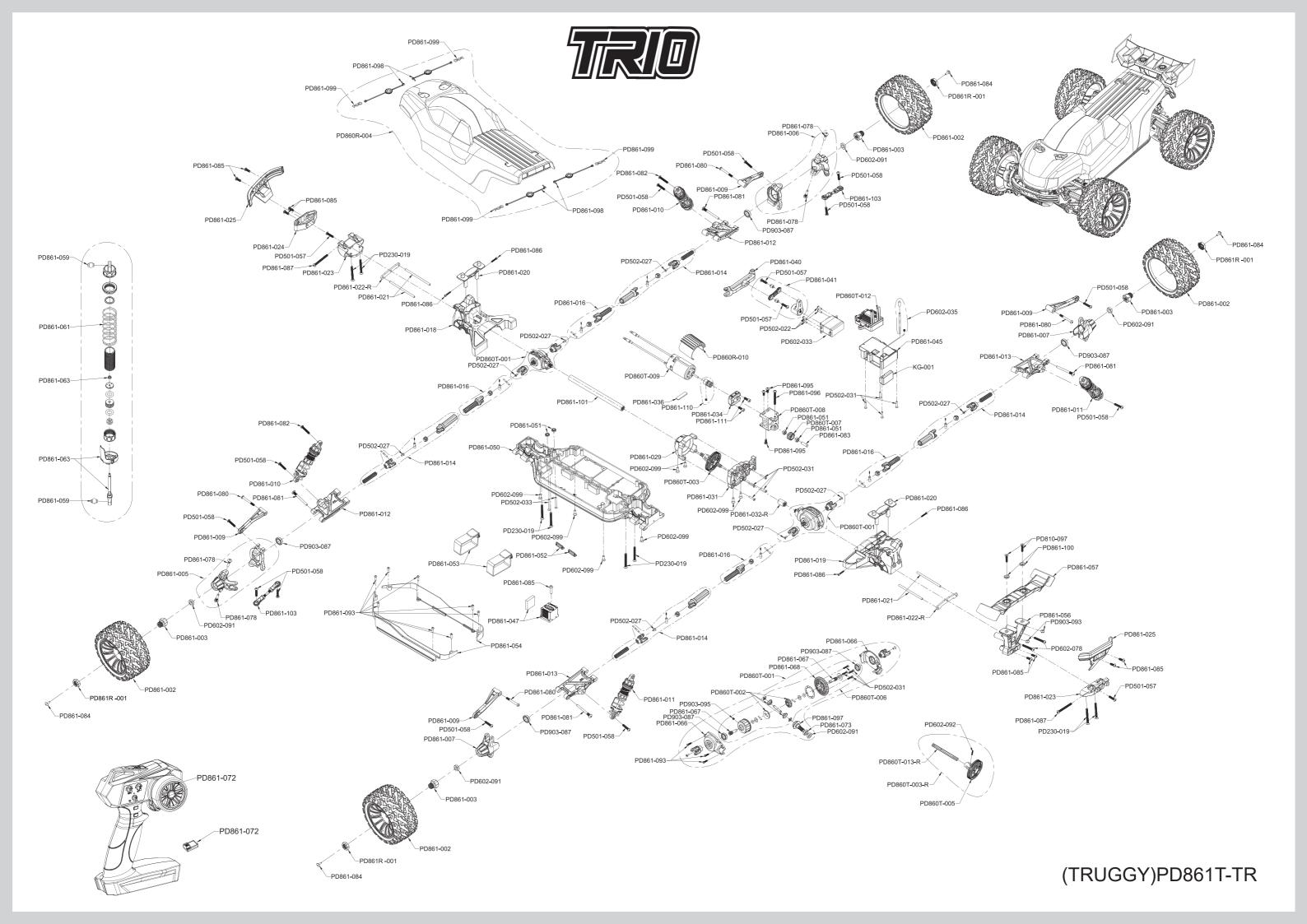
At any time you can reset the parameters to its default value by mobile phone APP. Of course you also can set up the parameters to your expected value easily by APP.

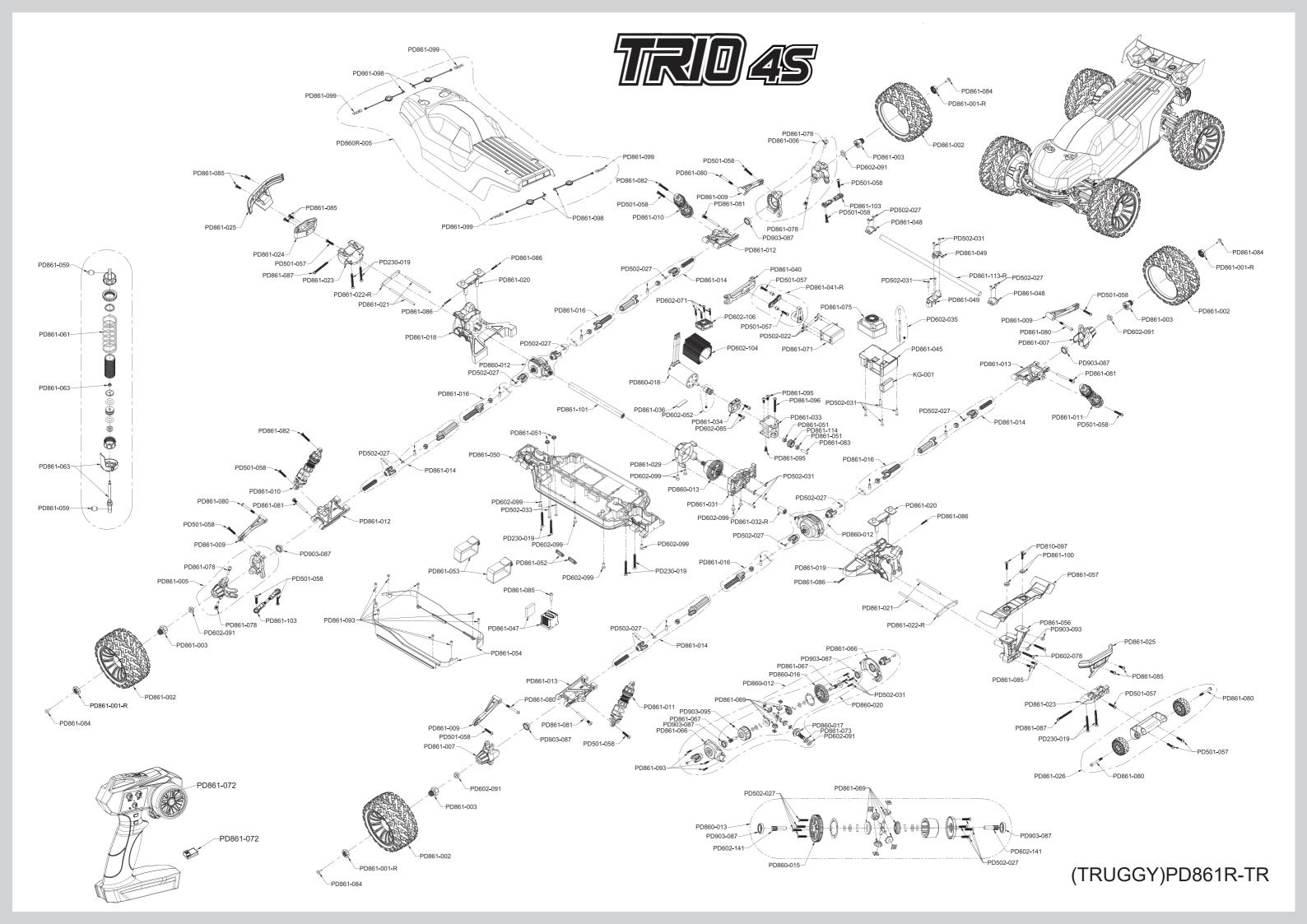
### 05 Trouble Shooting .....

Trouble(s)	Possible Causes	Solution(s)
When powering on the ESC, the red LED light blinks twice to stop for once and the repetition period is one second.	No throttle PWM signal is received	1)Check connect of wire of the PWM signal 2)check if the receiver and the transmitter works normally.  3)check if the receiver has bind to transmitter.
When power on the ESC, the red LED blinks rapidly.	Throttle stick is not in neutral or offset of throttle- trim position	1)Make sure the position of throttle stick is in neutral     2)Make sure no offset of throttle- trim
The blue LED blink rapidly and the motor power will be cut off, when the temperature restore 65 degree. If the red LED flashes rapidly, the motor stutters and can not start up.	High temperature warning: (alarm temperature: 125 degree), ESC enter into thermal protection. Throttle stick is not in neutral or offset of throttle- trim position	Wait several minutes to cool the ESC,When the temperature drops down to (65 degrees), the blue LED will go off and ESC will be restored to normal working operation.  Make sure the position of throttle stick is in neutral Make sure no offset of throttle- trim
The red LED will flash slowly and the power will be halved, and the power will stop about 25 seconds later. the red LED keep blinking slowly all the time.	ESC enter into Low voltage cutoff protection	Check the battery voltage. If still has some capacity, lower the cut-off threshold voltage; if not, replace a new battery.

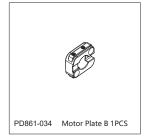




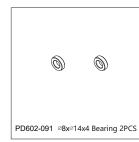


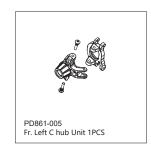




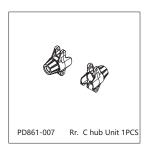




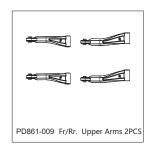






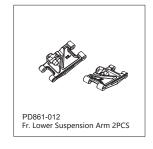


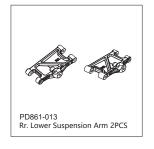








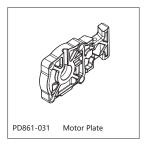




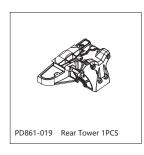


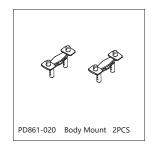


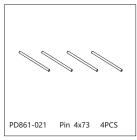




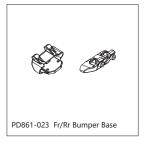




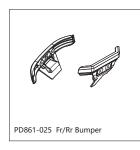


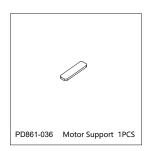












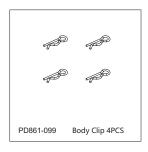


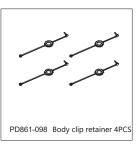


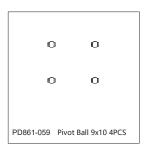








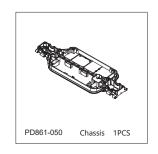


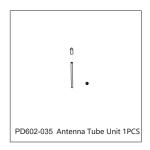


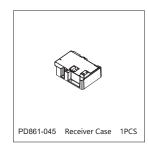


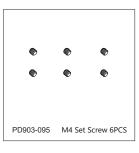


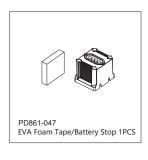




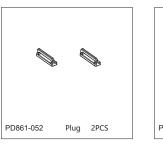


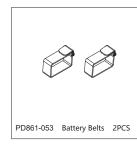






















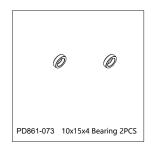








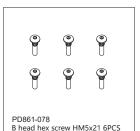




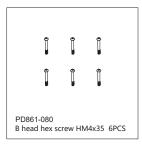




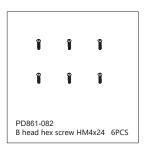


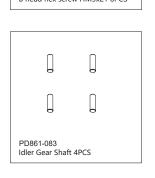


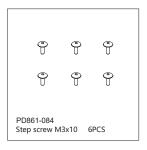






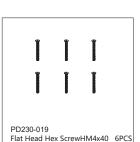








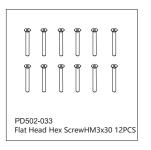












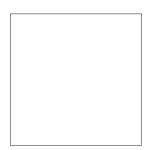


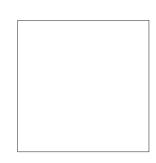








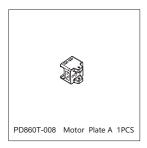




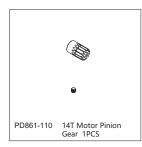
# (TRUCK)PD860T-T TK10





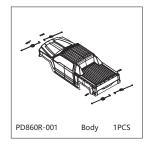




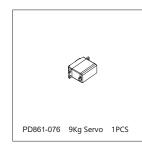








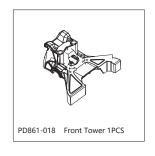




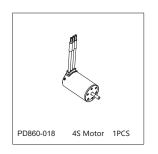
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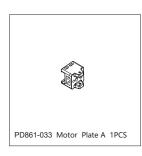






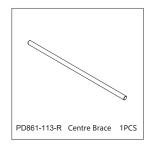




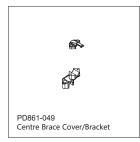


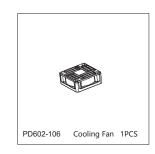






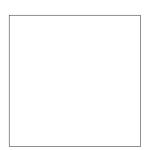


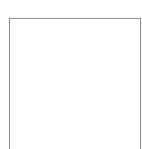


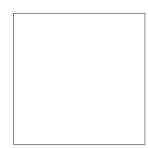












# (TRUGGY)PD861T-TR TR10

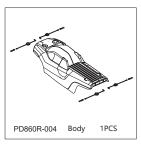




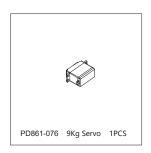


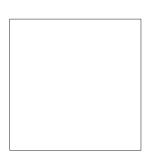


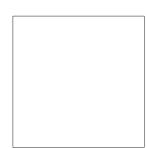










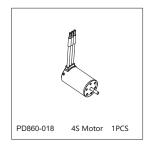


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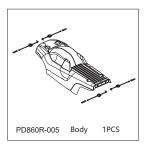


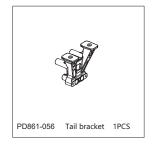








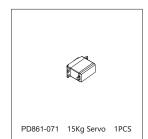






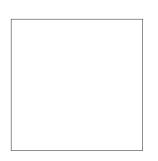






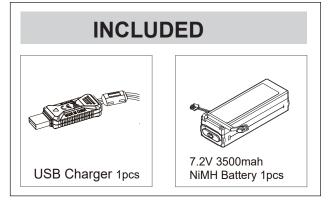


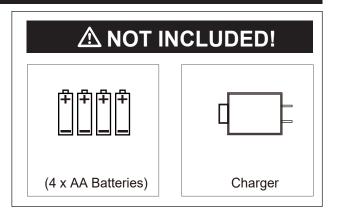




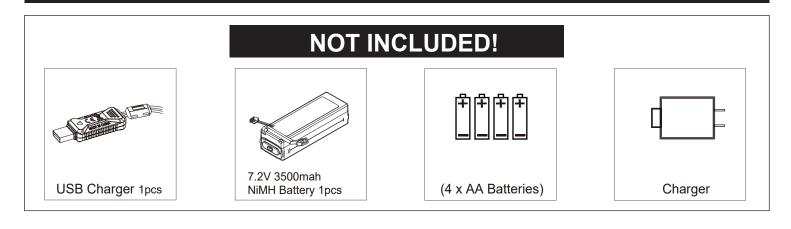


# TR10/TK10 BRUSHED





# TR10 4S/TK10 4S BRUSHLESS



# **TROUBLESHOOTING**

Problem	Possible Cause	Solution			
	Batteries are incorrectly installed in transmitter	Check transmitter batteries			
	Weak, damaged or no drive	Install fresh, charged batteries			
	Frayed or broken motor or ESC wires	Replace with new unit			
Vehicle does not	ESC has shut down due to overheating Red/Blue LED flash quickly.	Stop driving and allow ESC or motor to cool down			
move	Electric motor is damaged	Replace with new unit			
	ESC is damaged or transmitter faulty	Replace with new unit			
	Possible damage to transmission/drive-line	Check components and replace			
	ESC low voltage cut off has activated to protect batteries. Red/Blue LED flash quickly.	Remove drive battery, leave to cool down if necessary, and re-charge			
Vehicle does not reverse	ESC is damaged or transmitter faulty	Replace with new unit			
	Battery damaged or not fully charged	Check condition, replace or recharge			
Short runtime	Electric motor dirty or damaged	Clean, check condition or replace			
	Incorrect ESC battery mode - voltage cut off too high for the battery you are using	Adjust the battery mode of the unit			
	Battery damaged or not fully charged	Check condition, replace or recharge			
Sluggish performance	Electric motor dirty or damaged	Clean, check condition or replace			
	Drivetrain dirty or damaged	Clean, check condition or replace			

	Transmitter batteries are weak or fitted incorrectly	Check transmitter batteries and refit or replace			
No control of vehicle or short range	Servo wires to receiver loose or connected incorrectly	Reinstall signal wires to the ESC			
	Transmitter and receiver unit are not 'bound' correctly	Transmitter and receiver need to be bound			
Steering/Throttle operation	ESC has shut down due to overheating Red/Blue LED flash quickly.	Stop driving and allow ESC or motor to cool down			
intermittent	Transmitter and receiver unit are not 'bound' correctly	Check for sources of interference and re-bind transmitter/receiver			
	Steering trim setting out	Adjust steering trim			
Vehicle wanders left/right without steering input	Damaged steering components	Check components and replace			
ctosimg input	Drivetrain dirty or damaged	Clean, check condition and/or replace			
Throttle operation reversed	Check that the wires from the ESC to the motor are connected correctly	Exchange the connect of wires until throttle operation become normal.			
Limited steering angle	Damaged steering components	Check components and replace			
Motor does not	Battery voltage is below the LVC setting. Red LED flashes slowly.	Verify the battery is charged.			
operate.	The ESC is taking too much load. Blue LED flashes quickly.	Turn off the ESC and allow it to cool before resuming operation. Consider making changes to gear ratio to reduce load to the ESC.			
	USB Cable Damaged	Check and replace USB Cable if dam aged or not working on known source.			
USB Charger does not charge	USB Power Adaptor input weak/damaged	Check specification and replace USB Power Adaptor			
battery	Battery or charger damaged	Replace with new unit			



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