

PRODUCT QUALIFICATION CERTIFICATION

The product has conducted IQC (Input Quality Control) and full inspection before delivery. The manufacturer is responsible for quality assurance. Remote Control model is assembled manually, and then there may have some defects in the production process. Once the product is modified or incorrect operation, it cannot apply for replacement and return services, for the parts and accessories may be damaged. Please contact the retail seller for after-sales service when needed. The product conforms to technical requirements of export safety regulations.



1/10TH ROCK CRUISER & DEFIER EX86100 & EX86100JC **V2** USER MANUAL



Specifications:

| ITEM NO. | ITEM | TYPE | SCALE | DESCRIPTION | GIFT BOX SIZE | CERTIFICATION |
|-----------|--------------|----------------|-------|------------------|---------------|------------------|
| EX86100V2 | ROCK CRUISER | Electronic Toy | 1/10 | Off-Road Crawler | 575*275*285mm | EN71,RoHS,CE,FCC |
| EX86100JC | DEFIER | | | | | |

| LENGTH | WIDTH | HEIGHT | WHEEL BASE | DRIVE SYSTEM | DIAMETER OF WHEEL | WIDTH OF WHEEL | GEAR RATIO |
|--------|-------|--------|------------|-----------------|-------------------|----------------|------------|
| 495mm | 235mm | 245mm | 313mm | 4WD Shaft Drive | 120mm | 48mm | 54:1 |

| RADIO | E S C | MOTOR | SERVO | BATTERY PACK | WEIGHT | CHARGER SPEC | TRANSMITTER BATTERY |
|--------|-------|-------|-------|--------------|--------|---------------------------|---------------------|
| 2.4GHZ | 40A | RC540 | 15 KG | 7.2v 2000mAh | 2.64KG | 9V500mAh (Euro/UK/USA) | Exclude |



Please read and follow all the instructions in the manual before use.

Notes:

- ⇒ Read and understand the instructions carefully before operating or assembling your racing model.
- ⇒ Specifications are subject to change without prior notice, and actual received model may vary from the images and/or descriptions in this manual.

Factory Address: Huang Jiang Town, Dong Guan City,
Guang Dong Province, China

Website: www.rgt-racing.com

Production Date: refer to packing instruction



ACCESS TO HOBBY CAR



About US

RGT Racing is a professional and innovative team with more than 10 years experience in RC car development and manufacture.

Our aim is a Simple-Fast-Fun RC car for everyone. RGT Racing has our own design team from the initial development to the final manufacture, including the parts and accessories, as well as a wide vehicle sizes ranging from 1/24 scale to 1/5 scale.

RGT Racing has a completed production line, from the raw material to the fully assembled RTR vehicle. With about 300 -350 workers, RGT Racing has the production capacity of average 30,000 vehicles per month. We warmly welcome you to visit RGT racing.



Introduction

We would like to welcome you to the world of remote control cars. What are RC cars? The simple answer is that they are radio controlled cars that respond precisely to your command. The more complete answer is that they can be a great addition to your lifestyle. RC car building and racing teach valuable mechanical and electrical skills, promote teamwork and encourage racers to test their skills with other racers from around the world. Whether you are just having fun racing your car in your backyard or racing at the world competition contest, radio controlled car racing is a great hobby.

We have been making RC products aimed at making our hobby fun and exciting with an affordable price. We are confident that your experience with our products will be positive. Of all the radio controlled models out there, no question about it, RC cars are the hardest to operate. This user manual covers a wide range of topics from nitro powered remote control cars to electrical powered remote control cars. We highly recommend that you read this user manual thoroughly and carefully before assembling and operating. Please follow all precautions and recommendations located within the manual. Be sure to retain the manual for future reference, routine maintenance, and tuning.

This product is not a toy. It is not recommended for children under 14 years old and any minor should be accompanied by an adult when operating. This product is a precision machine that requires proper assembly and setup to avoid accidents. Failure to take caution when operating this product may result in serious injury or property damage. It is the owner's responsibility to operate this product in a safe manner. Manufacturer and its distributors are not responsible in any way for any and all bodily injury(s) and/or property damage that may occur from the use of or caused by in any way or this product.

Warnings

- The product is not intended for those under 14 years of age without proper adult supervision. The product is not a toy. It is a precision machine requiring proper assembly and setup to avoid accidents and it is the responsibility of the owner to operate this product in a safe manner as it can cause serious personal injury and damage to property due to carelessness or misuse.
- Do not attempt to disassemble or modify any of the product components without the assistance of an experienced RC user.
- Only use the correct type of battery to operate. Using any wrong type of battery will damage the product and possibly make it dangerous to operate.
- The motor(s) may get hot during use. Always allow 10-15 minutes between each operation for the motor to cool down. This will prolong the life of your product.
- Choose an appropriate operating site consisting of flat, smooth ground, and clear open field. Do not operate near buildings, high voltage cable lines, or trees to ensure safety operation. Operate in safe area only, away from other people. RC models are prone to accidents, failures, and crashes due to a variety of reasons including, lack of maintenance, user error, and radio interference. Users are responsible for their actions and damage or injury occurring during the operation.
- Do not operate in inclement weather, such as rain, wind, snow or darkness.
- The product is composed of precision electrical components. It is critical to keep the product away from moisture and other contaminants. Do not allow them to get wet. Electrical damage may occur that could affect safe operation.
- You should complete a successful pre-run check of your radio equipment and model prior to each run.
- Use replacement parts from the original manufacturer to ensure safe operation.
- Operate this product within your ability. Do not operate under tired condition.
- After each use, always allow the battery to cool down before recharging. When charging the battery pack, do not overcharge! If batteries get hot during charging, discontinue charging immediately and disconnect the battery from the charger. Never leave battery unattended while charging. If you are unsure of how to charge this battery, please seek the advice of experienced RC users. Never let children charge the battery without adult supervision.
- Always turn on the transmitter before connecting the battery on the model. When turning off the model, always disconnect the battery first, and then turn off the transmitter. If the order is reversed, the model may become uncontrollable and cause serious damage.
- If you are in doubt of your ability to operate the model, we strongly recommend that you seek assistance from experienced RC users or join your local modeling club to gain the required knowledge and skill. As the manufacturer and distributor, we assume no liability for the use of this product.
- Before turning on your model and transmitter, please check to make sure no one else is operating under the same frequency. Frequency interference can cause your model, or other's models to crash. The guidance provided by experienced RC users will be valuable for the assembly, tuning, trimming, and actual first flight.
- Never allow batteries to run low or you might lose control of the model.
- Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Do not store the model near any source of heat such as oven or heater. Store the model indoors, in a climate-controlled, room temperature environment.
- Never shorten the receiver antenna; or this might affect the transmitting range of the radio system.
- This product is a RC hobby model, do not use for other purpose.

BOX CONTENTS

The items inside the box:

- 1) Ready-to-run vehicle
- 2) Transmitter
- 3) Charger
- 4) Manual
- 5) RGT decal sheet



OPERATION CHECKLIST

1. Read and follow all the instructions in the entire manual before operation
2. Familiar with all the features and parts of the product
3. Check if all screws and nuts are tight before operating
4. Check if the vehicle battery is fully charged, and install it in the vehicle
5. 4AA batteries needed for the transmitter
6. Power on the transmitter, and check the throttle and steering is normal
7. Check the radio system function
8. Maintenance the vehicle when needed

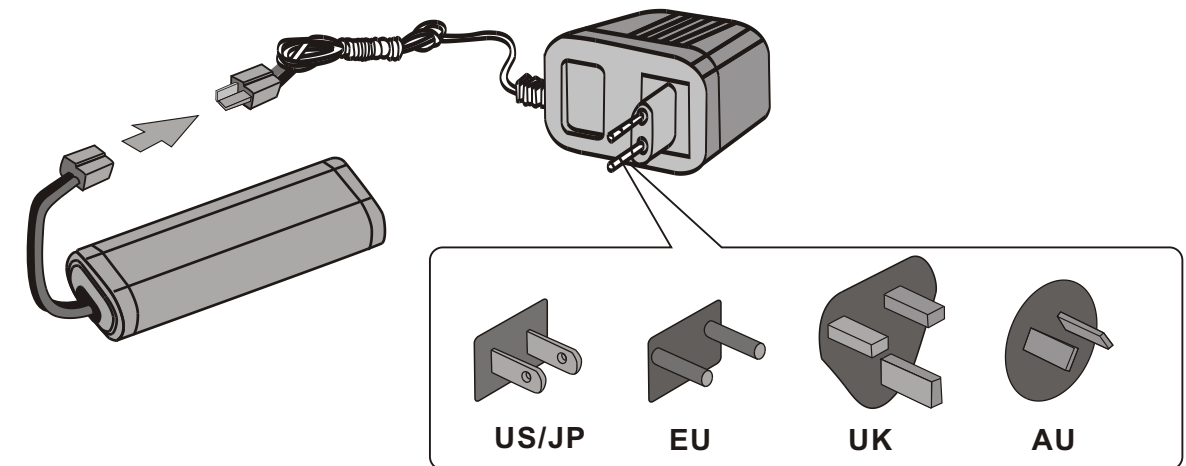
CHARGE THE VEHICLE BATTERY

1. Connect charger plug with mains jack and then connect with connector of battery.
2. Please be care of safety while charging, please remove charger plug from the mains jack once finish charging. Will be over heat if it is too long to be charging or incorrect charging way. must stop charging if over 45 degree for the battery temperature.
3. Do not charge for battery at once when you take it away from your car. Please make sure battery in cool condition before recharge battery to keep battery performance running well and get a longer use life.

BATTERY CHARGING SCHEMATIC

(the Red or Yellow light indicate charging. The Green light indicate full-charged. The charging needs 3 or 4 hours.)

*The factory-fitted battery is NiMh battery
*The battery charger plug is equipped by the ordered region regulation.

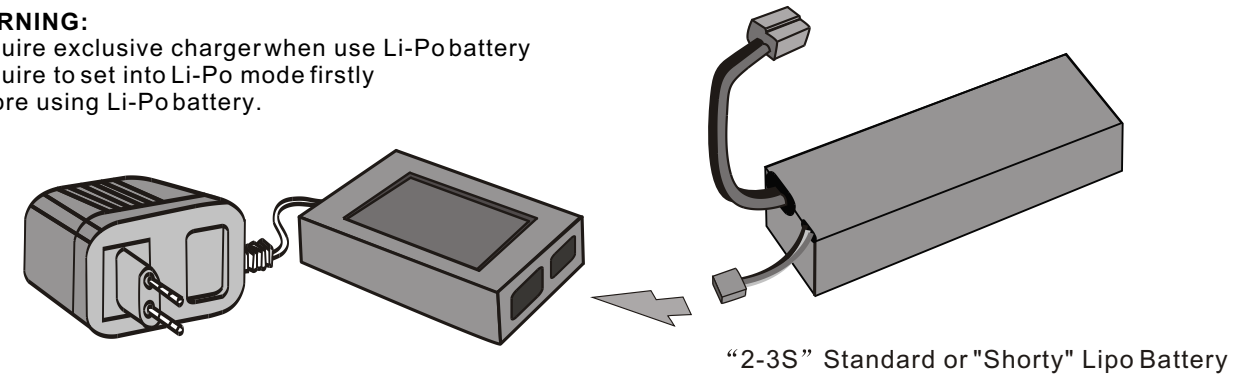


Recommend Li-Po battery and Caution

This product can use the 2S or 3S Li-Po battery.

WARNING:

Require exclusive charger when use Li-Po battery
Require to set into Li-Po mode firstly
before using Li-Po battery.



Lithium Polymer (LiPo) Battery Warnings

- Never charge a lithium polymer battery with a charger designed for NiCd, NiMH, or any other type of battery chemistry. Use ONLY charger designed for LiPo battery.
- Do not leave LiPo battery unattended during charging.
- Do not overcharge the battery.
- Always place the battery on a heat resistant surface alone when charging.
- Always put the LiPo battery inside a charging protection container while charging.
- Do not allow LiPo cells to overheat at any time. Cells which reach greater than 140 Fahrenheit (60C) will usually become damaged and will catch fire.
- Do not charge LiPo cells on or near combustible materials including paper, plastic, carpets, vinyl, leather, and wood. inside an R/C model or full size automobile.
- Do not discharge LiPo; doing so will damage the battery.
- Do not expose LiPo cell to water or moisture at any time.
- Do not store battery near open flame or heater.
- Do not assemble LiPo cells or pre-assembled packs together with other LiPo cells or packs.
- Always store LiPo battery in a secure location away from children.
- Always remove the LiPo battery if model is involved in any kind of crash. Carefully inspect the battery and connectors for even the smallest damage. CAUTION: cells may be hot!
- Do not allow the electrolyte to get into eyes or on skin. Wash affected areas immediately if they come into contact with electrolyte. Do not alter or modify connectors or wires of a LiPo battery pack.
- Always inspect the condition of the battery before charging and operating.
- Do not short circuit the LiPo battery.
- Do not have contact with a leaky/damaged battery directly.
- Do not charge battery out of recommended temperature range (0C - 45C).

NiMH Battery Instructions

- Never dispose of NiMH batteries in a fire or store near sources of heat.
- Only use the supplied NiMH charger to charge the NiMH battery. Using another charger may permanently damage the battery and surrounding components and may also lead to injury.
- Batteries should only be charged on a fireproof surface, away from any flammable materials.
- Never leave the battery unattended when charging or discharging.
- Batteries must be discharged or fully exhausted before being disposed of. Cover exposed poles with adhesive tape to prevent short-circuiting!
- Never disassemble or alter the battery contacts. Do not damage or puncture battery cells. Doing so would result in an explosion hazard!
- Keep the NiMH battery away from children.

Shock Maintenance

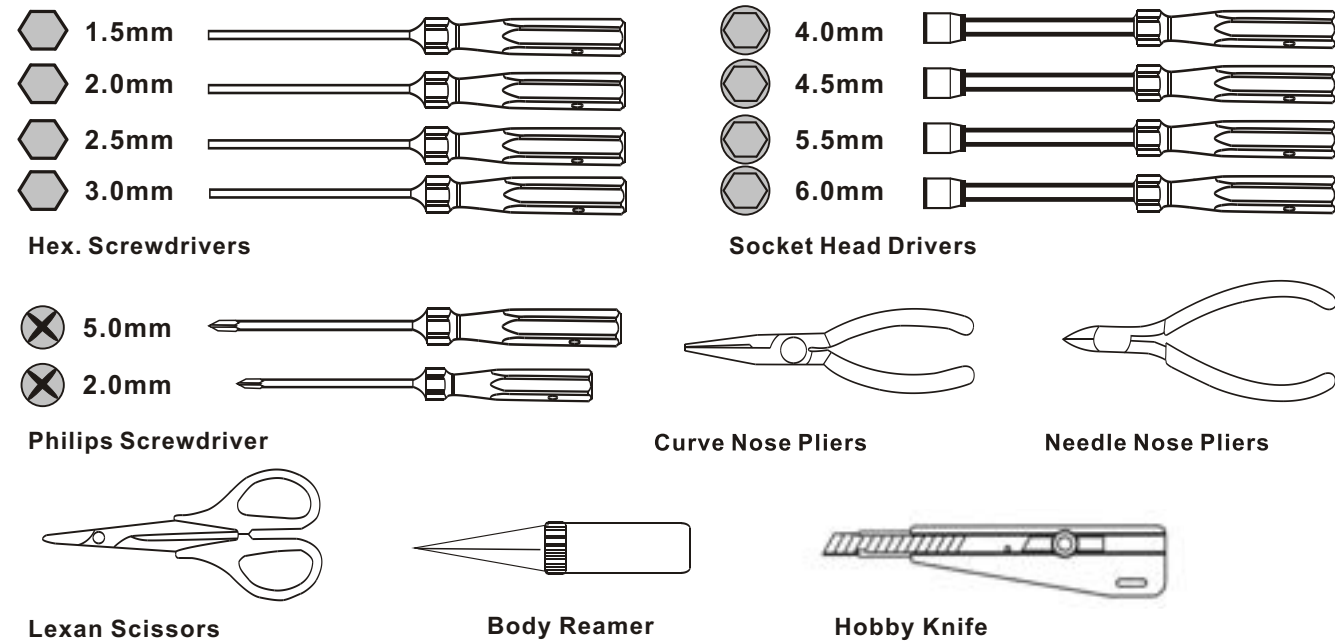
After each day of running, you should check your shocks for adequate fluid. If the fluid is low, or it is getting dirty, you should change the fluid in the shocks. To achieve better performance, you may also want to change the shock fluid and/or the pistons.

Setting The Gear Mesh

Gear mesh is the clearance between the pinion and spur in an electric car or clutch bell and spur in a nitro car. It has impact on the vehicles performance. If the gear mesh is not set properly you may also damage the clutch bell and spur or the pinion gear and spur gear as soon as the vehicle starts running.



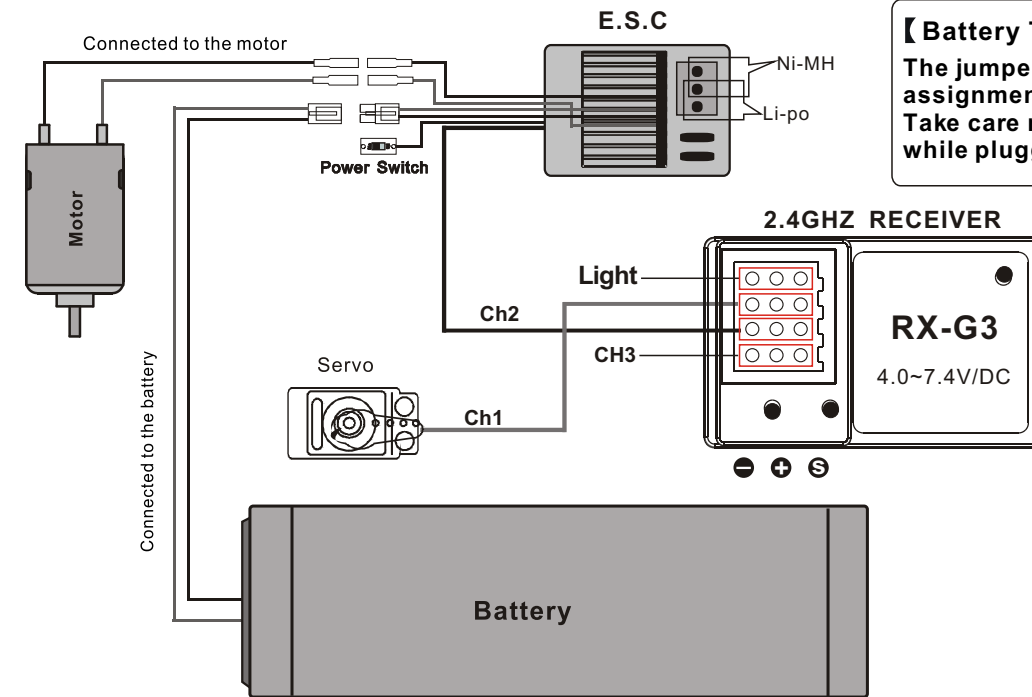
Items for assembling or disassembling your model



WARNING!

Do not use a power screw driver to install screws into nylon or plastic materials. The fast locking may heat up the screws being installed that may break the molded parts or strip the threads during installation.

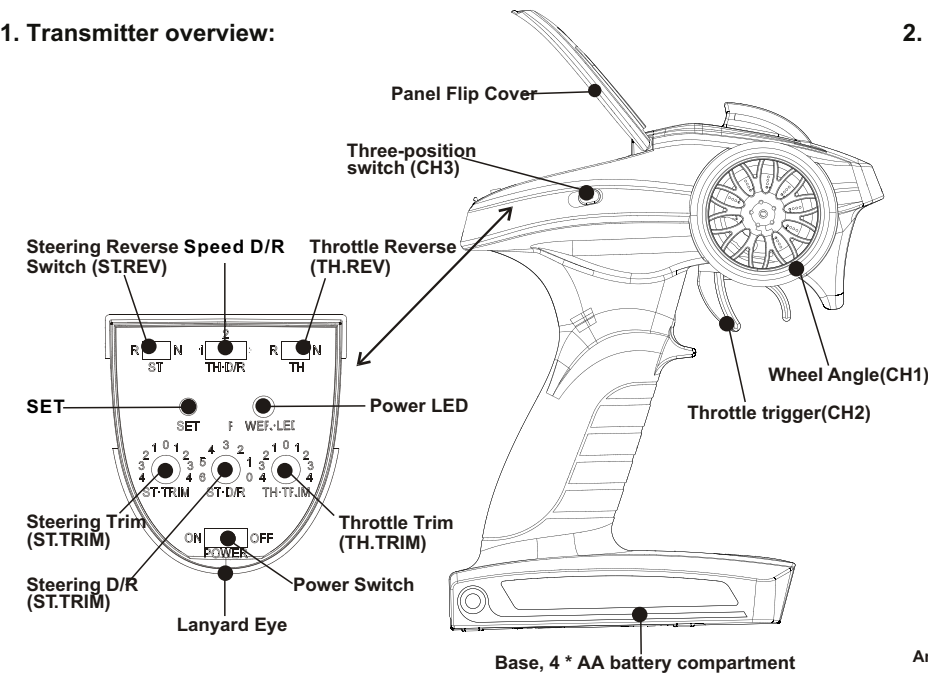
Scheme Of Installation



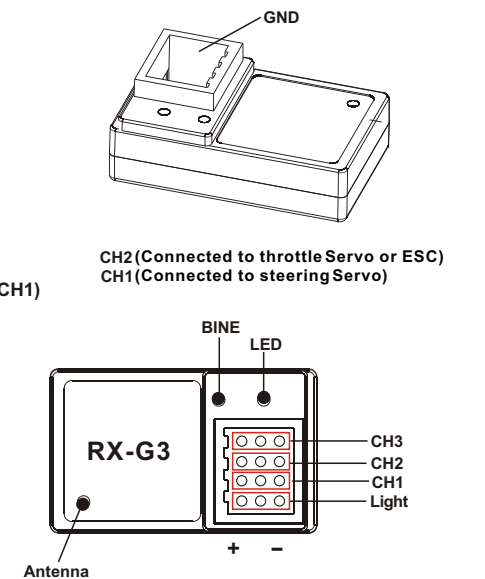
【 Battery Type Selection】
The jumpers are applied to fulfill the assignment. Take care not to damage the jumpers while plugging or unplugging them.

2.4GHZ Radio System (NO.:T-8196A)

1. Transmitter overview:



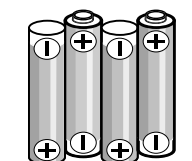
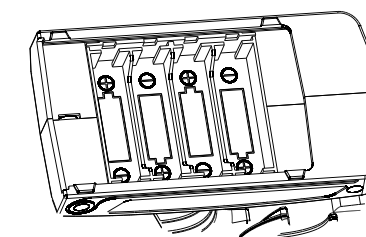
2. Receiver overview



3. Transmitter Battery Installation

Battery Type: AA
Battery Installation:

- 1). Open the battery compartment cover.
 - 2). Insert 4 fully-charged AA batteries into the compartment. Make sure that the battery makes good contact with the battery compartment's contacts.
 - 3). Replace battery compartment cover.
- Low battery alarm: When the battery is lower than 4.4v, the G.LED on the panel will flash slowly




Batteries: 4 x 1.5 V "AA" (not included)

The battery socket is equipped with anti-reverse insertion function, wrong polarity connection will not burn the transmitter.

4. Power On

Follow the steps below to turn on the transmitter:


- 1). Check to make sure that that battery is fully charged and installed correctly.
- 2). Toggle the switch to the [ON] position. When active the R.LED will be lit.
- 3). Connect the receiver to power.

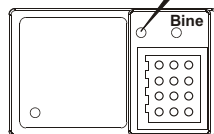
 For safety always power on the transmitter before the receiver.

5. Binding

The transmitter and receiver have already been bound at the factory. However if the receiver needs to be replaced or additional receivers bound follow these steps:

- 1.) Turn off transmitter, power on the receiver and the receiver indicator will flash slowly;
- 2.) Press receiver Bind key for 2 seconds, then release the button, the indicator will flash fast;
- 3.) Power on transmitter, once the light flash, indicating entering the binding process
- 4.) Once binding is successful, the LED of receiver and transmitter will stop flashing.

 applicable to the T-8196A transmitter and the RX-G3 receiver.

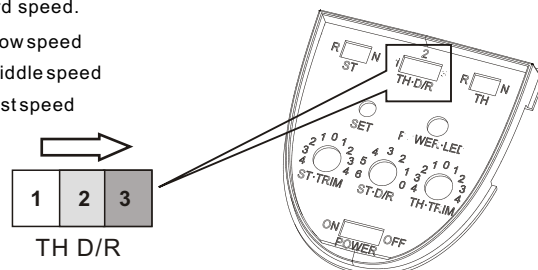


6. Beginner Mode

Beginner mode is designed for people new to the hobby.

Beginner mode Use the speed switch to control the forward speed.

- Gear 1: slow speed
- Gear 2: middle speed
- Gear 3: fast speed



7. Fail-safe Setting

This transmitter has the fail-safe function.


The fail-safe setting as follow:

- 1). Ensure the transmitter and receiver successfully binding, and keep in working;
- 2). Control the throttle channel and make the servo or ESC enter braking state, then hold;
- 3). Press the transmitter set key twice, and the receiver and transmitter will flash three times and remain on, indicating the binding is successful;
- 4). To release the fail-safe, put all channel of the transmitter in neutral position and press twice.

8. Power OFF

Follow the steps below to turn off the system:

- 1). Disconnect the receiver power.
- 2). Toggle the transmitter's power switch to the off position.

 Make sure to disconnect the receiver power before turning of the transmitter. Failure to do so may lead to damage or serious injury.



Thank you for purchasing our product, an ideal radio system for beginners or experienced users. In order to ensure your safety, and the safety of others, read this manual carefully before using This product.

9. System Functions

1). Channel Description

The transmitter outputs a total of 3 channels, which are allocated as follows:

- CH1 : Steering Wheel
- CH2 : Throttle Trigger
- CH3 : Three-position Switch

2). Channel Reverse

This function is used to adjust each channel's direction of movement in relation to its input.

The ST.REV / TH.REV switches are the reverse buttons for CH1 and CH2. If the switch is right it indicates reverse, and the left indicates normal.

3). Trims

The ST.TRIM is the trims for CH1 (steering),

TH.TRIM is the trims for CH2(throttle).

Adjustment range: -120us- + 120us, each step is 4us;

ST.TRIM Clockwise / TH.TRIM Clockwise: increase adjustment step

ST.TRIM Anti Clockwise / TH.TRIM ANTI Anti Clockwise : Decrease adjustment step.

4). Steering D/R

ST.D / R is for servo travel adjustment

Adjustment range: 0-120%(the default is 100%), the step is 5%.

ST.D / R Clockwise: increase servo travel.

ST.D / R Anti Clockwise: decrease servo travel.

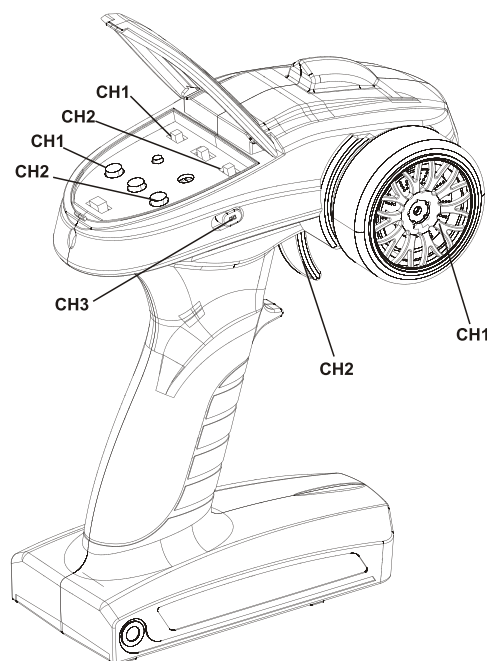
10. Precautions:

Never operate in bad weather, the radio will interfere and out of control;

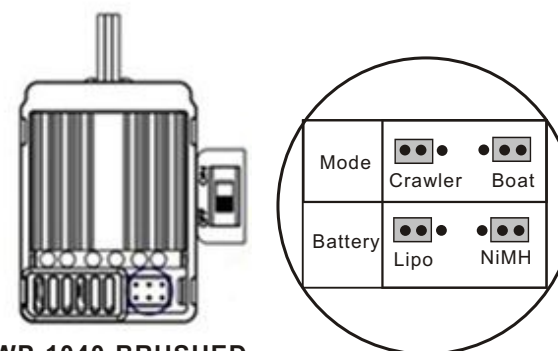
Before running, keep the car or boat in static state for easy operation

Always turn off the receiver before turning the transmitter off. Once wrong, the car will out of control and make accidents.

When power on the transmitter, should not do any action on the transmitter, otherwise it will get out of control.



User Manual of Water-Proof Brushed Speed Controller



WP-1040-BRUSHED

FEATURES

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

[SPECIFICATIONS]

| Model | WP-1040-BRUSHED | |
|-----------------------|---|---|
| Cont. / Burst Current | Forward: 40A / 180A Backward: 20A / 90A | |
| Input | 2-3S Lipo, 5-9 Cells NiMH | |
| Cars Applicable | 1:10 on-road, off-road 1:10 Crawler, Tank & Boat | |
| Motor Limit | 2S Lipo or 5-6 cells NiMH | 540 or 550 size motor ≥12T RPM < 30000 @7.2V |
| | 3S Lipo or 7-9 cells NiMH | 540 or 550 size motor ≥18T RPM < 20000 @7.2V |
| Resistance | FWD: 0.002 Ohm; BWD: 0.004 Ohm | |
| Built-in BEC | 2A/5V (Linear mode BEC) | |
| Dimension & Weight | 46.5mm*34mm*28.5mm 65g | |

 Attention: The incorrect polarity will damage the ESC immediately. If the motor runs in the opposite direction, please swap these two wire connections.

[PROTECTION FUNCTIONS]

1. Low voltage Cut-off (LVC) 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.

Table A: LVC protection for WP-1060-BRUSHED, (F/B/R or F/B mode).

| 2S Lipo | 3S Lipo | 4S Lipo | 5-9 cells NiMH |
|--|---|--|--|
| 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 13V Output cuts off at 12V, cannot be recovered | Output reduces 50% at 4.5V Output cuts off at 4.0V, cannot be recovered |

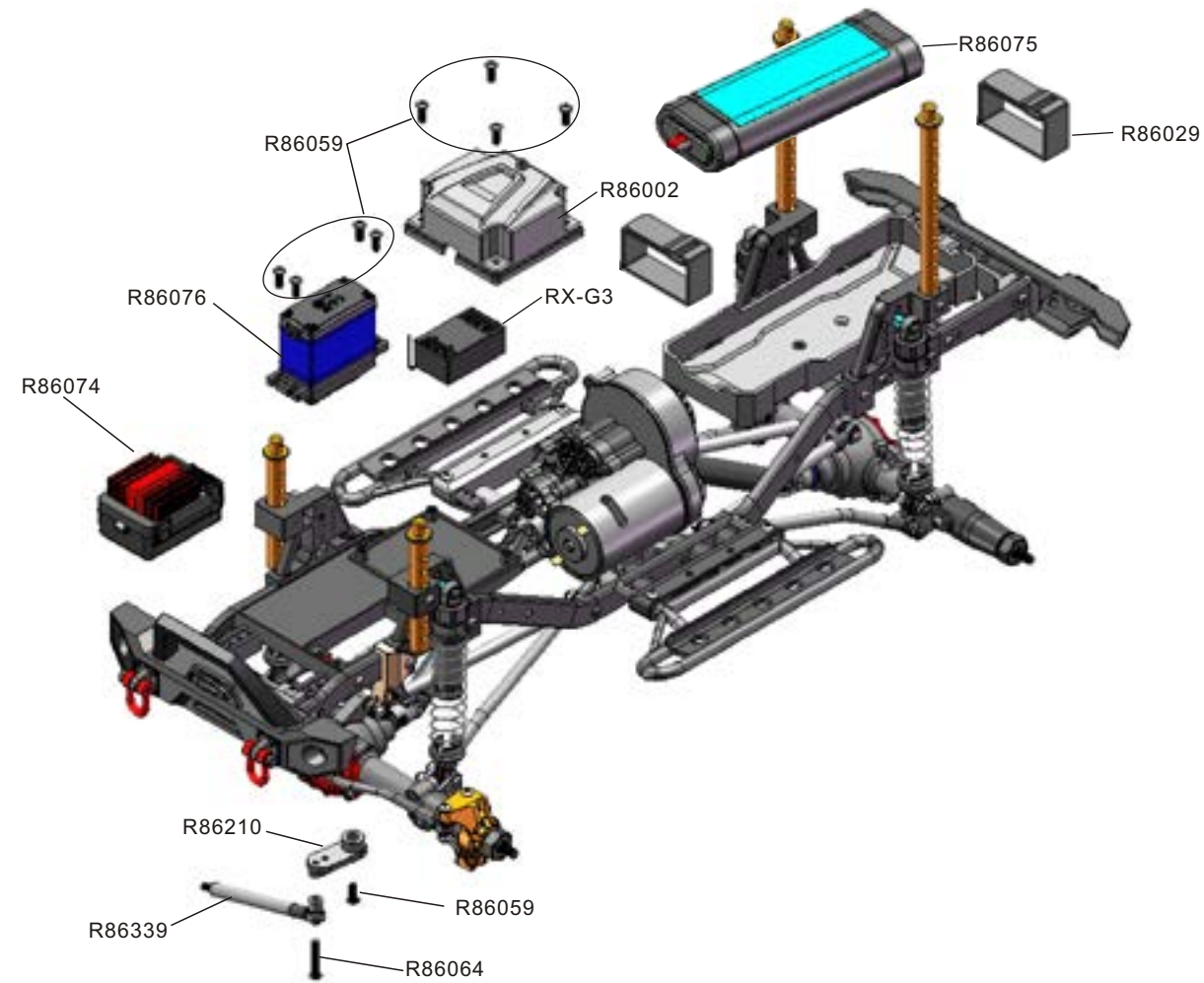
2. Over-heat protection: When the internal temperature of the ESC is higher than 100 Celsius degree or 212 Fahrenheit degree for 5 seconds, the ESC will reduce and cut off the output power. When the car stops, the red LED blinks to indicate the over-heat protection has been activated. If the ESC cools down to 80 Celsius degree (176 Fahrenheit degree) the output power is recovered to normal state.
3. Throttle signal loss protection: The ESC will cut off the output power if the throttle signal has been lost for 0.1 second. The Fail Save function of the radio system is strongly recommended to be activated.

[TROUBLE SHOOTING]

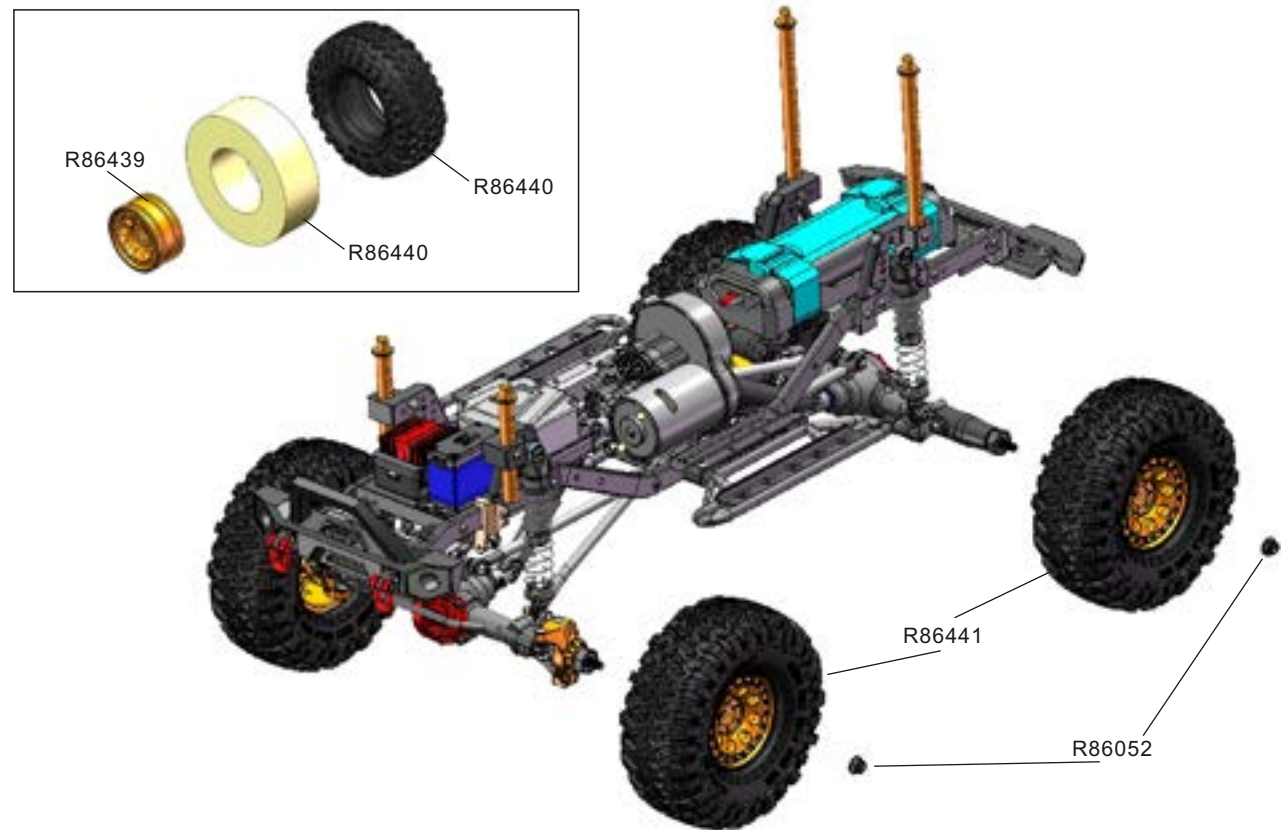
| Trouble | Possible Reason | Solution |
|---|---|--|
| After power on, motor can't work, no sound is emitted, and LED is off. | The ESC doesn't get its working voltage; Connections between battery pack and ESC are broken. | Check the battery wires connection or replace the defective connectors. |
| | Switch is damaged. | Replace the switch. |
| After power on, motor can't work; red LED blinks. | Throttle signal is abnormal. | Check the throttle wire connection; make sure it is plugged into the throttle channel of the receiver. |
| | Automatic throttle range calibration is failed. | Set the TRIM of throttle channel to 0 or turn the knob to its neutral position. |
| The car runs backward while giving throttle. (The motor runs in the opposite direction) | The wire connections between ESC and the motor need to be changed. | Swap two wire connections between the ESC and the motor. |
| The car can't go backward. | The jumper position is wrong. | Check the jumper and plug it to the correct position. |
| | The neutral point of throttle channel is changed or drifted. | Set the TRIM of throttle channel to 0 or turn the knob to its neutral position. |
| The car can't go forward, but can go backward. | The direction of throttle channel is not correct. | Reset the direction of throttle channel from original NOR to REV or from original REV to NOR. |

Please review the ESC manual for more details.

ASSEMBLE ELECTRIC SYSTEM



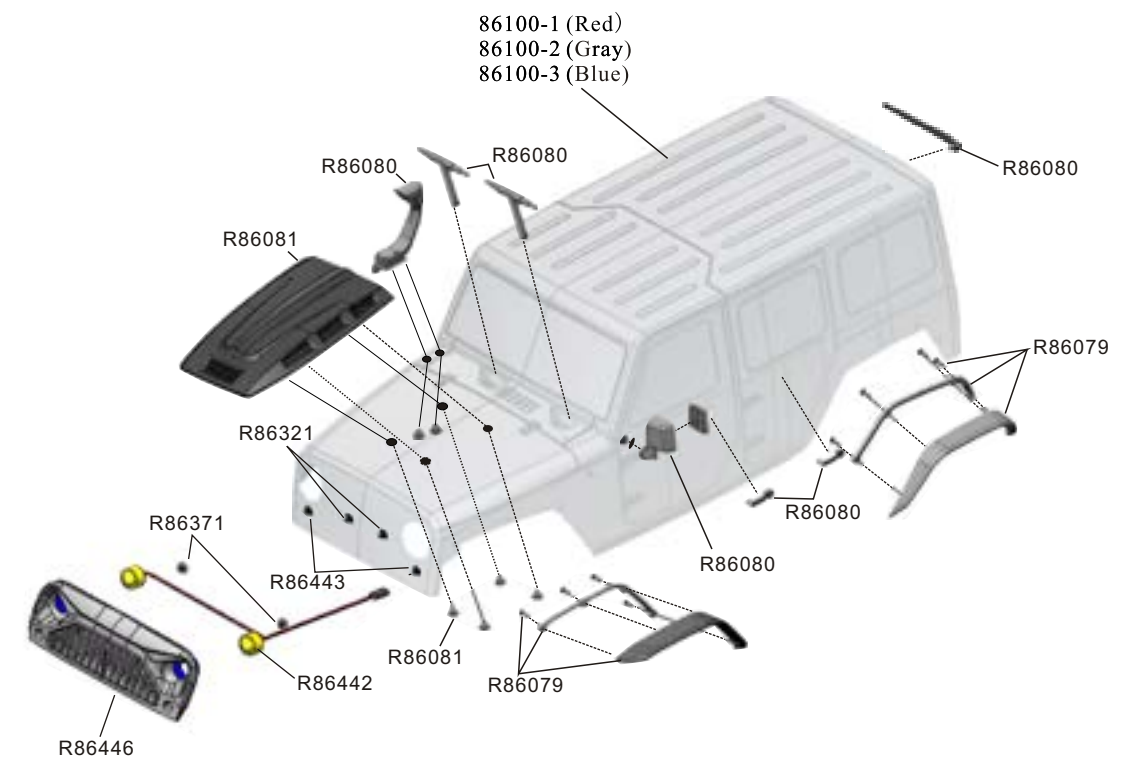
WHEELS



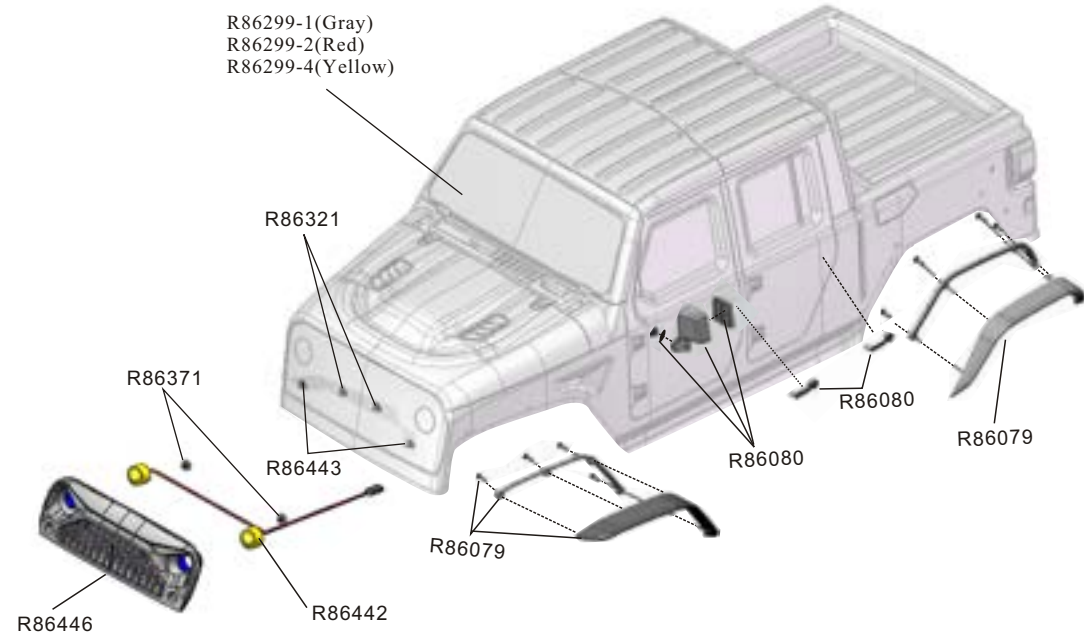
Spare Part

| T-8196A | RX-G3 | R86076 | R86075 | R86074 |
|---------------|--------------------|-------------|-----------------------|------------------|
| | | | | |
| Radio | Receiver | Servo-15KG | Battery (7.2v2000mAh) | ESC -40A |
| R86210 | R86439 | R86440 | R86441 | R86064 |
| | | | | |
| Servo Horn | Wheel Rim | Tire W/Foam | Wheel Complete | Button Head 3*18 |
| R86059 | R86052 | R86339 | | |
| | | | | |
| Flat Head 3*8 | Flange M4 Lock Nut | Servo link | | |






BODY(ROCK CRUISER)





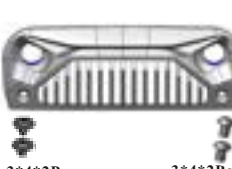


BODY(DEFIER)





















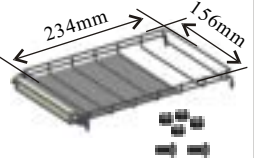
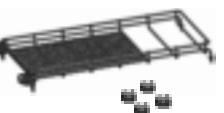
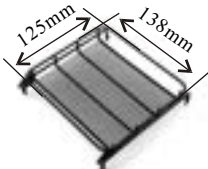



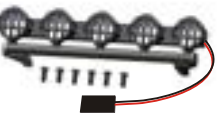




Spare Part

| PVC Body | PVC Body | PC Body | PC Body | R86256 |
|---|---|---|--|--|
| 86100-1 (Red) 86100-2 (Gray) 86100-3 (Blue) | R86299-1(Gray) R86299-2(Red) R86299-4(Yellow) | P86100-0-(Clear) P86100-1 (Red) P86100-2 (Gray) P86100-3 (Blue) | P86300-0(Clear) P86300-1(Red) P86300-2(Green) P86300-3(Blue) |  RGT Sticker |
|  |  |  (Option) |  (Option) | |

| R86079 | R86080 | R86442 | R86321 |
|--|---|--|---|
|  2.5*10 16Pcs Wheel Eyebrow |  3*4 4Pcs Body Shell Parts |  LED Body Shell Light |  2.0 Flange Head Screws3*4 |

| R86444 | R86081 | R86446 | R86371 | R86443 |
|--|---|--|--|---|
|  1.5 Button Head 2.5*10 |  3*4*4Pcs Engine Cover |  3*4*2Pcs 3*4*2Pcs Air Grill(New) |  1.5 Button Head 2*6 |  2.0 Button Head 3*4 |

Upgradable Optionals

| | | | | |
|---|---|---|--|--|
| P860075- Caster Mounts (AL.) (L/R)  | P860001- Shock Absorber  | P860018-straight axle mount (AL.)  | Portal Axle Box Cover (AL.) P860002-1(Silvery) P860002 (Red)  | P860005- Mount for Link (AL.)  |
| P860008- Rear Straight Axle Cover (AL.)  | P860039- Steering Mount  | P860007- Sway Bar Upper Mount (AL.)  | P860006- Sway Bar Lower Mount (AL.)  | P860014-CVD Drive Axle Mount (AL.)  |
| P860067- Alloy Wheel WeighSet 132g  | P860065- Wheel (AL.) 2.5*11  | P860066- Wheel (AL.) 2.5*11  | P860031- Front Bumper (AL.)  | P860032-Rear Bumper (AL.)  |
| P860009- Front/Rear body plates (AL.)  | P860013- Front Bumper (AL.)  | 68146-Light For Rear/ Front Bumper  | P860016- Roof Rack+LED 234mm 156mm  | P860017- Roof Rack  |
| P860082- Roof Rack 125mm 138mm (JC only)  | P860083- Roof Rack+ LED Set (JC only)  | P860082- Roll Ceye (JC only)  | 68149- LED Set  | P860084- LED Set  |
| P86168-Snow Tires  | P860024-Front Snow WheelTrack  | P860025-Rear Snow WheelTrack  | R86349-Tire W/Foam  | |