

# 1:24 Mini Rock Crawler Series User Manual

## WARNING

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**NOTICE:** Procedures, which if not be properly followed, will create a possibility of physical property damage AND or possibility of injury.

**WARNING:** Read the **ENTIRE** instruction manual to become familiar with the features of the product before operating. Fail to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Fail to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by VolantexRC Co.,Ltd.. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

**AGE RECOMMENDATION: NOT FOR CHILDREN UNDER 14 YEARS. THIS IS NOT A TOY.**

## Safety Precautions and Warnings

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As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all directions around your boat to avoid collisions or injury. This boat is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your boat in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment(chargers, rechargeable battery packs etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specially designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the boat in your mouth as it could cause serious injury or even death.
- Never operate your boat with low transmitter batteries.
- Always keep your boat in sight and under control.
- Always use fully charged batteries.
- Always keep transmitter powered on while boat is powered.
- Always remove batteries before disassembly to avoid touching throttle and cause damage.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after using before touching.
- Always remove batteries after usage.
- Always ensure failsafe is properly set before running.
- Never operate a boat with damaged wiring.

## Battery and Charging Warnings

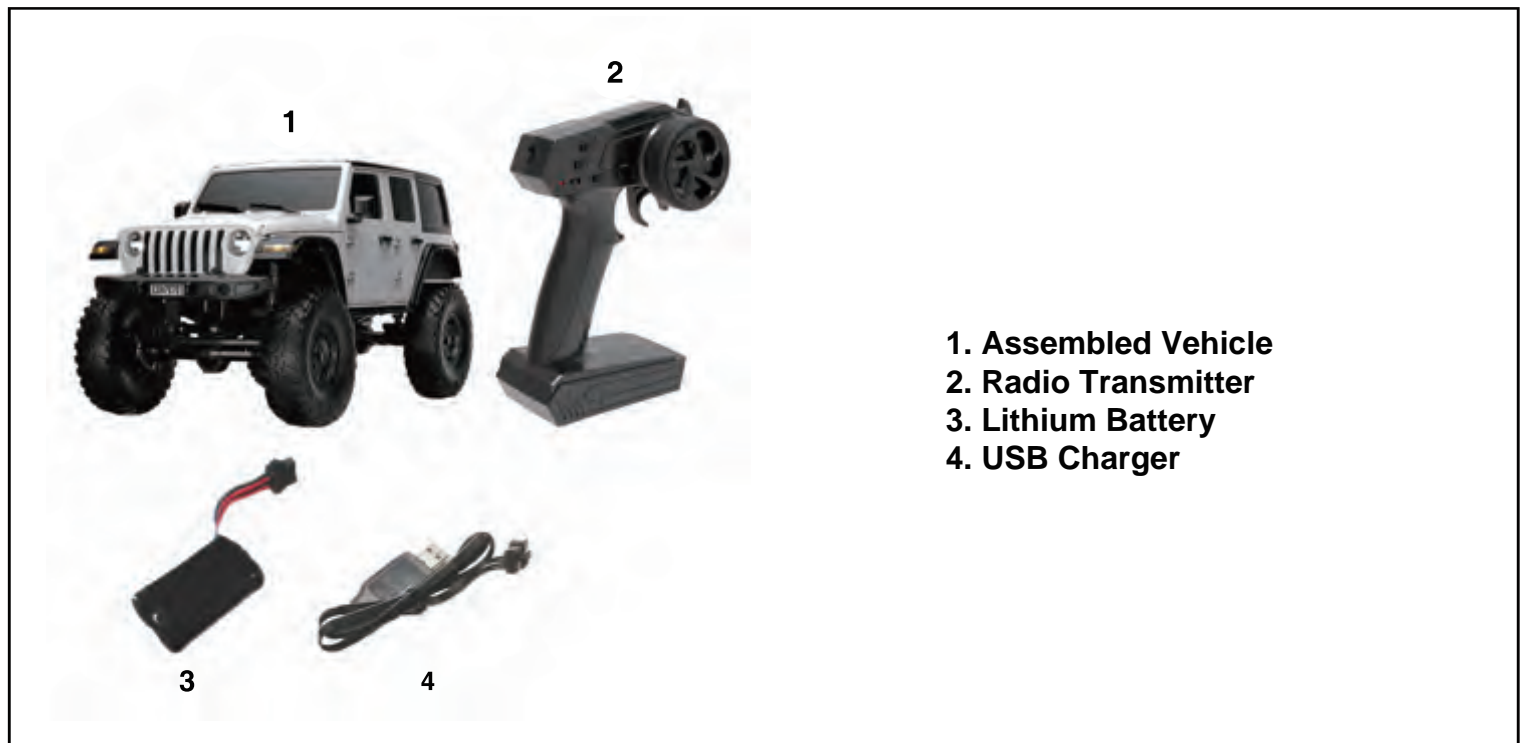
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**CAUTION:** All instructions and warnings must be followed exactly. Mishandling of Li-Po/Li-Ion/Ni-Mh batteries can result in fire, personal injury, and/or property damage.

- The battery charger included with your boat is designed to safely balance and charge the specific Li-Po/Li-Ion/Ni-Mh battery.
- By handling, charging or using the included battery, you shall assume all risks associated with Li-Po/Li-Ion/Ni-Mh battery.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, you should discontinue and disconnect. Continue to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40-120 Fahrenheit degrees (5-49 degrees centigrade). Do not store battery or your boat in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even cause fire.
- Always charge a battery away from flammable materials.
- Always inspect the battery before charging and never charge damaged batteries.
- Always disconnect the battery after charging, and allow the charger cool before next charge.
- Always constantly monitor the temperature of the battery pack while charging.
- **ONLY USE A CHARGER SPECIALLY DESIGNED TO CHARGE SPECIFIC BATTERIES.**
- Never discharge Li-Po cells till below 3V under load.
- Never cover warning labels with hook or loop strips.
- Never leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40-120 Fahrenheit degrees / 5-49 degrees centigrade) or in direct sunlight.

## Box Contents

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1. Assembled Vehicle
2. Radio Transmitter
3. Lithium Battery
4. USB Charger

Note: The Photo shown as an example for all mini rock crawler series. The actual product may vary slightly from manual according to the model you purchased.

## Charging Instruction

For charging the included lithium battery, you can only use the included charger or a suitably compatible lithium battery charger.

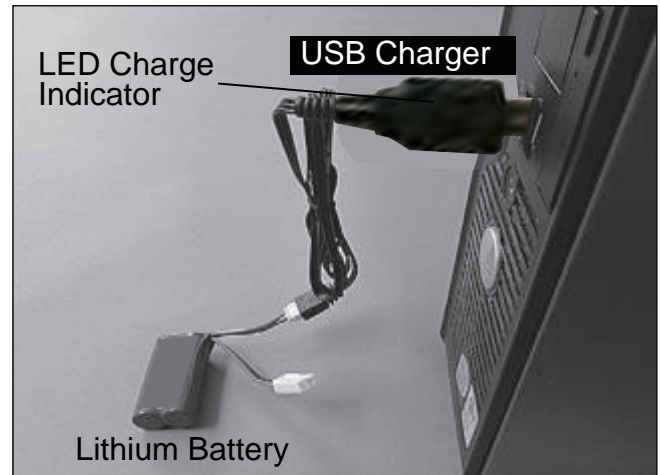
Charging the lithium battery using a none lithium battery compatible charger (such as a NiCd or NiMH battery charger), or even a different lithium battery charger with the incorrect settings, may result in damage to the battery or even fire resulting in property damage and/or personal injury.

**CAUTION: You must be careful to ensure proper polarity before making the connection.**

Follow below steps to charge the lithium battery with the included charger.

For **USB charger** -

1. Power off your vehicle.
2. Carefully plug the charger into the USB port on your computer or USB adaptor.
3. Connect the battery into the charger.
4. While charging, the red LED charge indicator will be solid on. The charging process takes approximate 3.5 hours. For safety reasons, never charge the battery over 4 hours.
5. When the battery is fully charged, the LED charge indicator will be off.



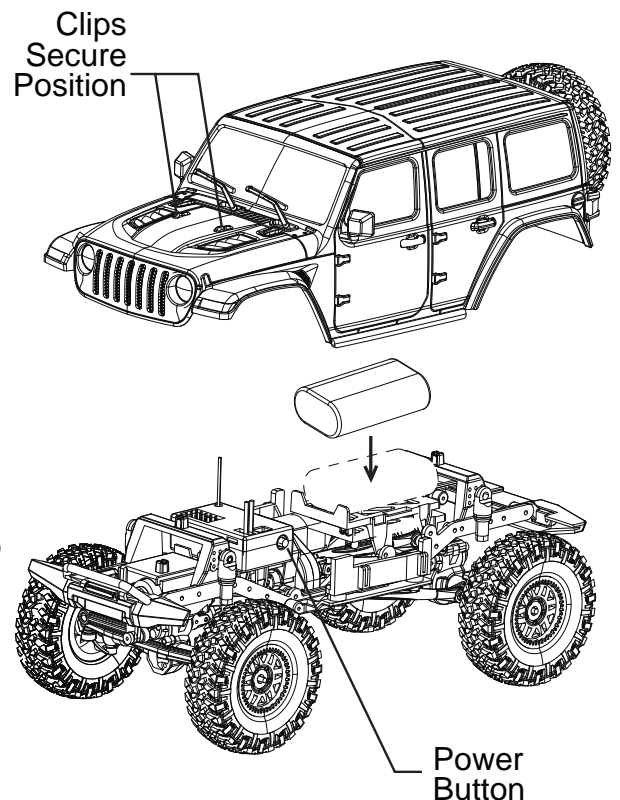
## Vehicle Batteries Installation

1. Remove the vehicle body.
2. Install the vehicle battery.
3. Connect the vehicle battery to the receiver.
4. Press the receiver power button to power on the vehicle.
4. After receiver is bound(see the next chapter), install the vehicle body and secure by the clips.

## Receiver Binding

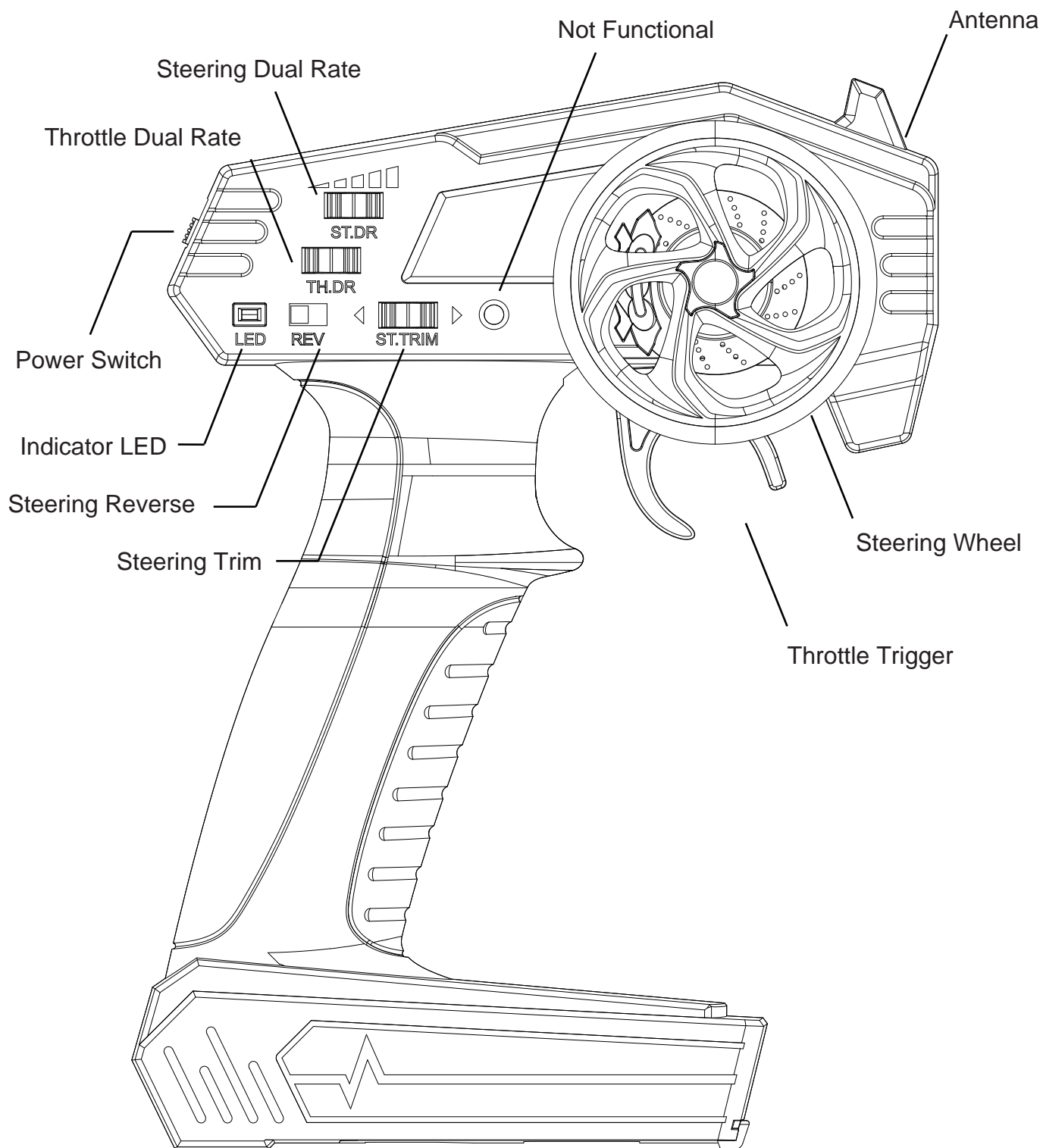
Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. When a receiver is bound to a transmitter, the receiver will only respond to that specific transmitter. If you need to rebind, follow the below steps.

1. With the transmitter switched OFF.
2. Press the power button on the receiver power on the vehicle, then turn on the transmitter within 5 seconds.
3. The receiver LED will flash for 3-8 seconds to bind automatically.
4. After the receiver LED turns to solid, it is bound to the transmitter.



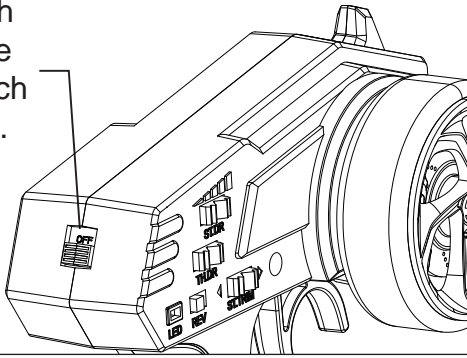


# Transmitter Instruction



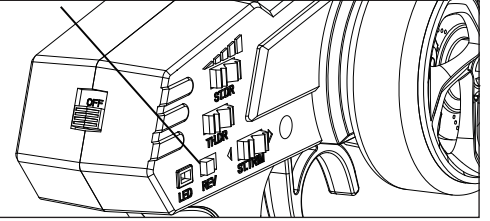
## ON / OFF Switch

Slide the switch up to turn on the transmitter, switch down to turn off.



## Battery LED Monitor

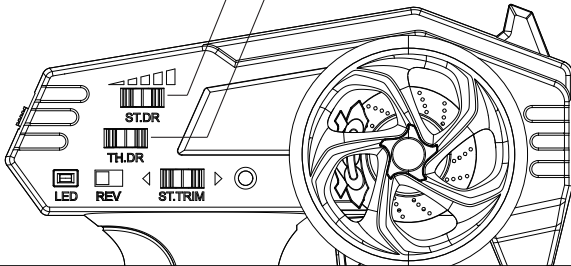
Solid red:  
Battery is in good condition (above 4.3V).  
Flashing red with beeping:  
Battery is at low voltage. Replace batteries.



## Dual Rate

Steering Dual Rate

Throttle Dual Rate

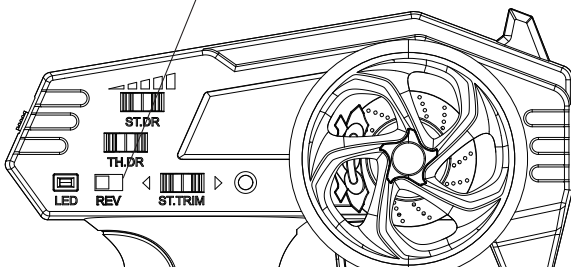


Adjust the steering dual rates to gain the proper steering ratio. Switch left / right to gain smaller / larger steering angle.

Adjust the throttle dual rates to adjust the top speed of throttle. It is initially set at 100% throttle, switch left to slow down the top speed.

## Steering Reverse Switch

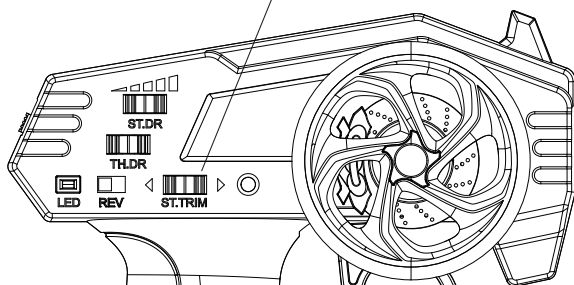
Steering Reverse Switch



If the direction of the servo is wrong, slide the steering reverse switch to the opposite direction.

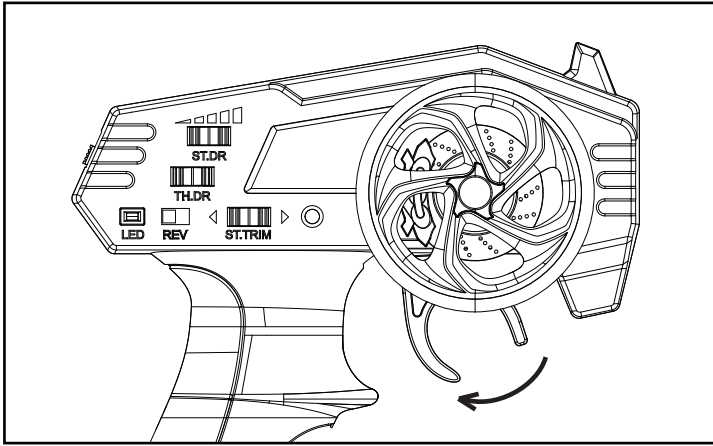
## Steering Trim

Steering Trim

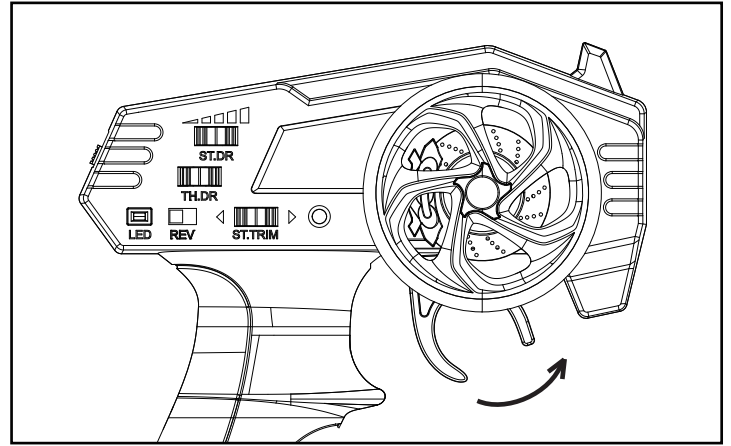


The steering trimmer is used to adjust the central position of servo if the vehicle can't run straightly. Switch left / right to adjust servo central position to left / right.

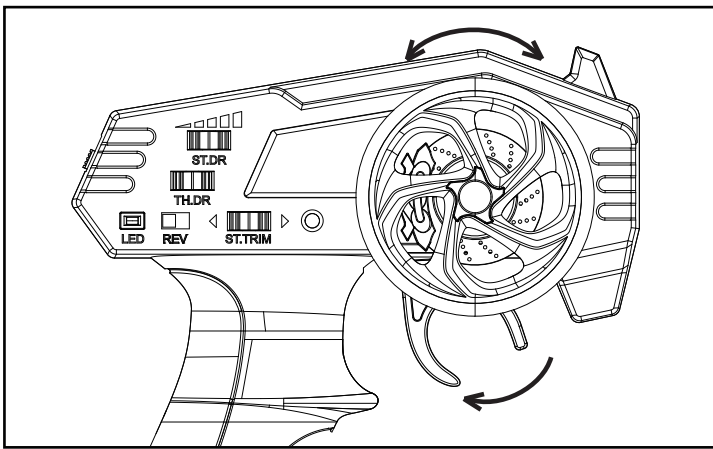
## Operation Instruction



To move forward the vehicle, pull the throttle trigger as shown.



To move backward the vehicle, push the throttle trigger as shown.



Rotate the steering wheel clockwise / counter-clockwise while pulling the trigger to make a right / left turn.

## After Driving

1. Power off the ESC.
2. Disconnect the vehicle battery, and put it in a cool,dry place.
3. Power off the transmitter.
4. Remove batteries from transmitter.

**WARNING: DO NOT TURN OFF THE TRANSMITTER BEFORE UNCONNECTING BATTERY OF RECEIVER, OR THE RECEIVER MAY PICK UP STRAY SIGNALS AND RUN OUT OF CONTROL TO CAUSE ACCIDENT!**

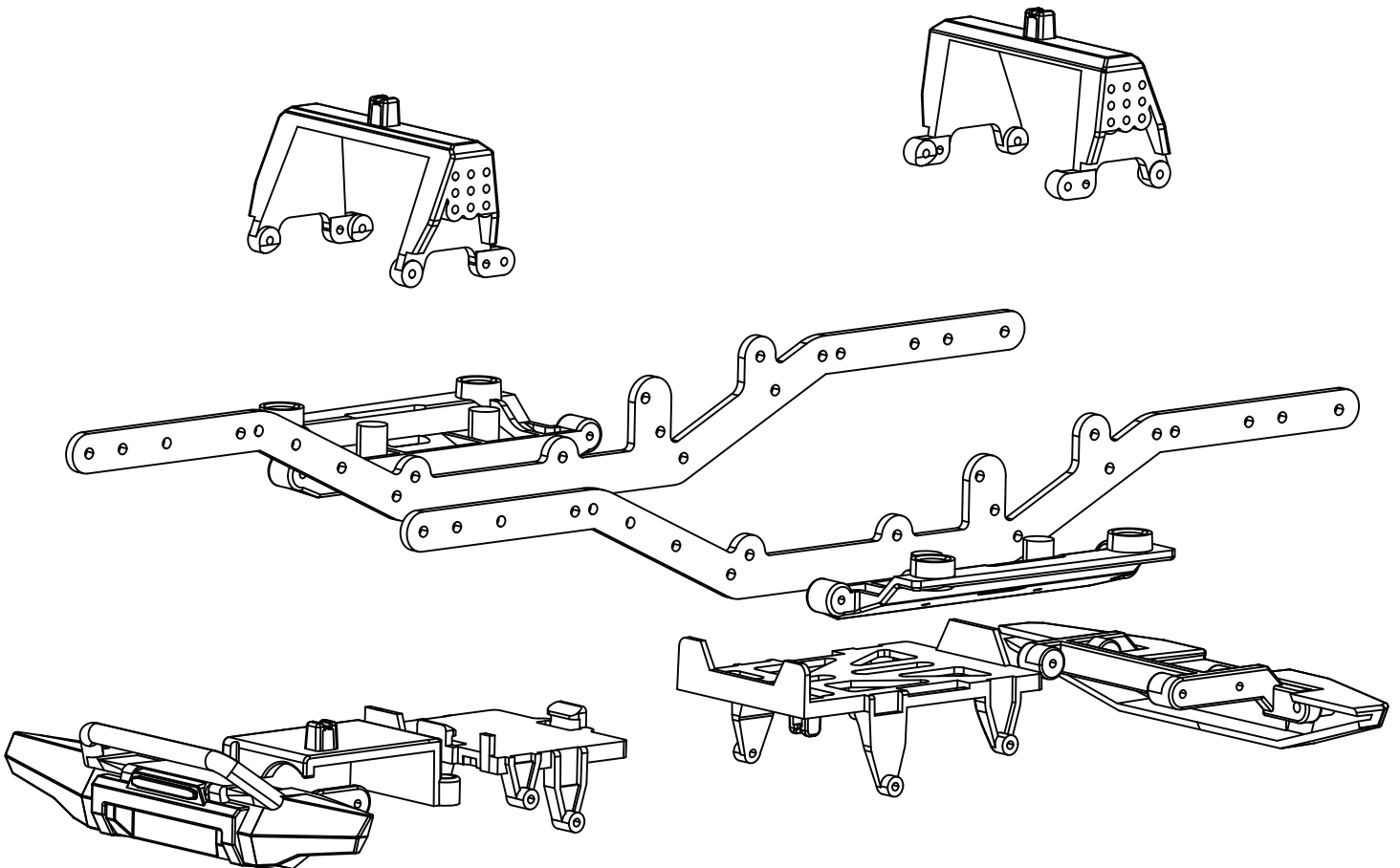
## Motor Care

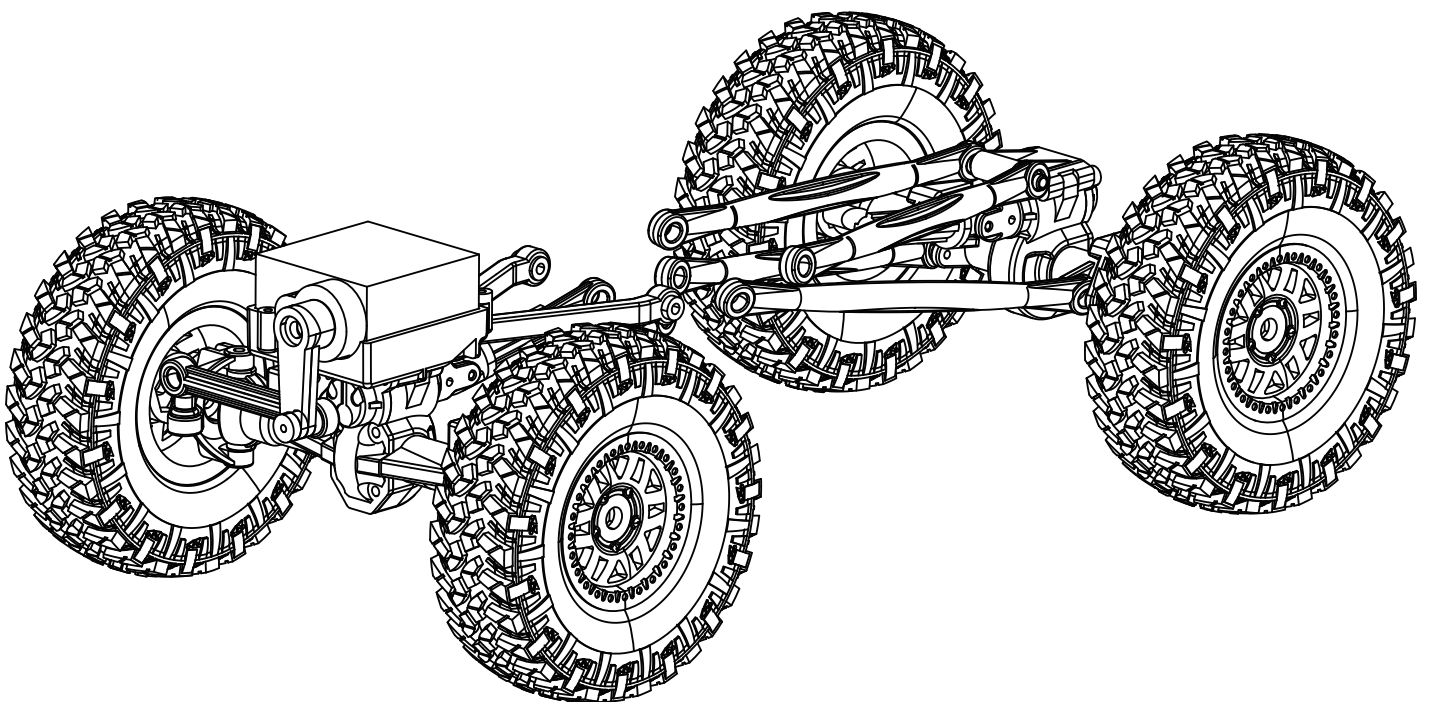
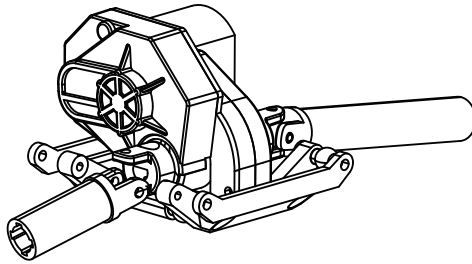
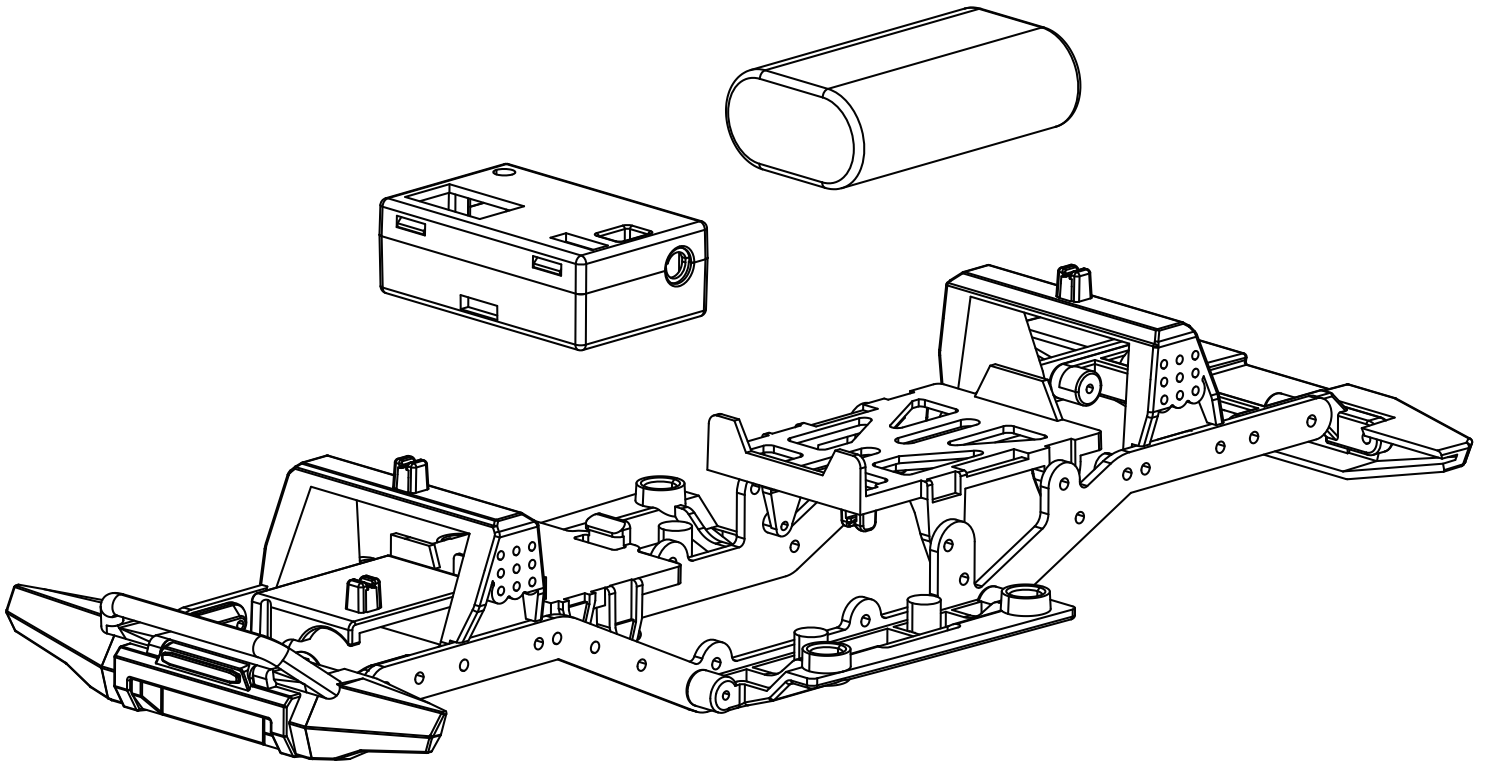
Prolong motor life by preventing overheating conditions. Undue motor wear results from frequent turns, stops and starts, pushing object, boating in rough or vegetation and boating continuously at high speed. Over-temperature protection is installed on the ESC to prevent circuit damage, but cannot protect the motor from pushing against heavy resistance.

# Troubleshooting Guide

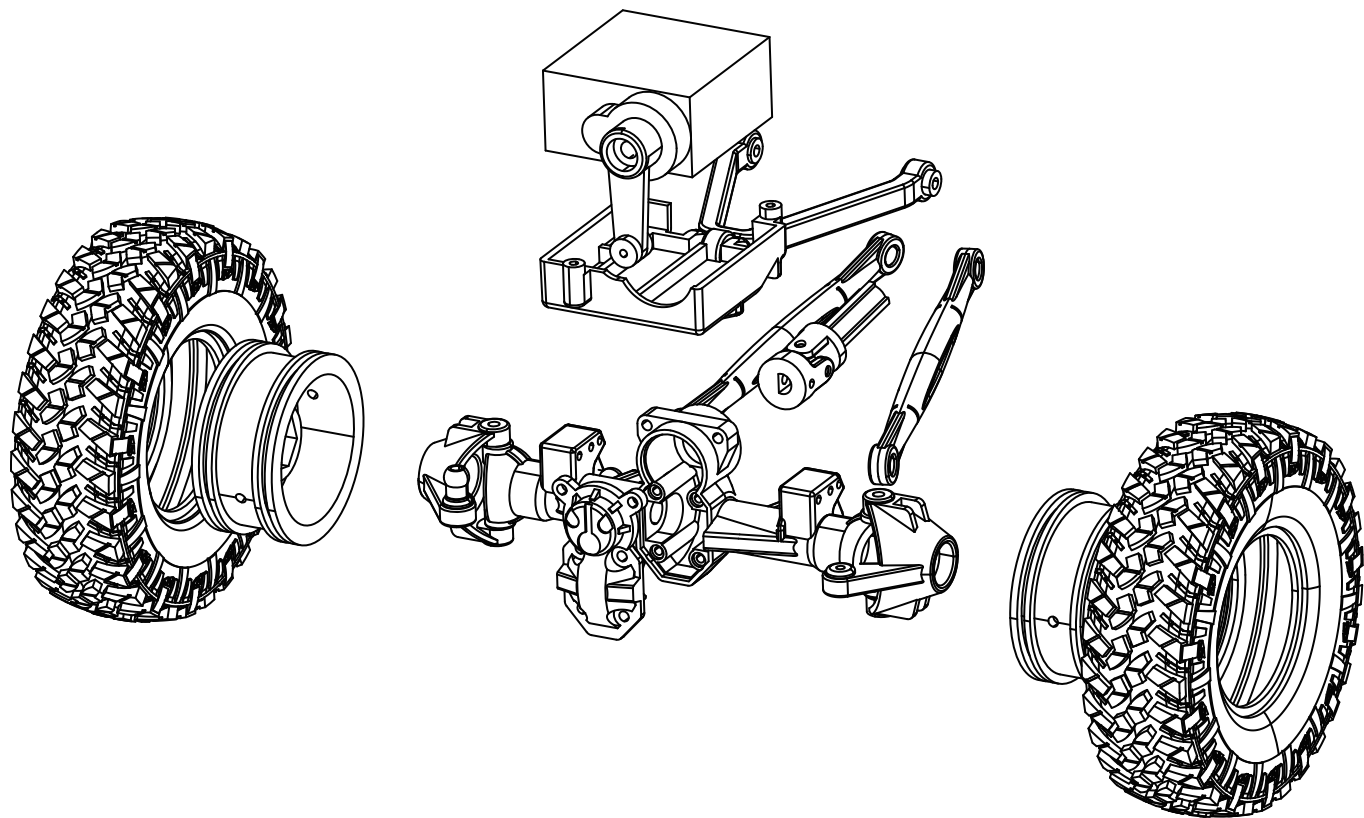
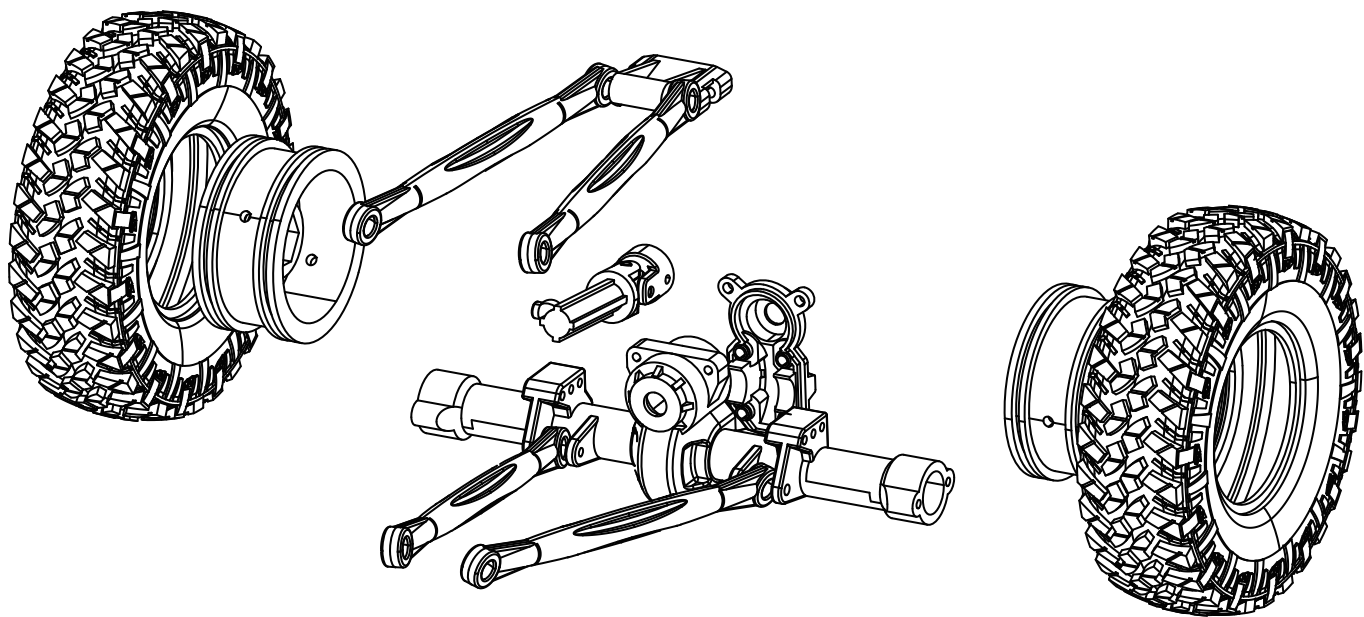
Problem	Possible Cause	Solution
Vehicle does not move	Batteries are not installed properly in the transmitter	Ensure the transmitter batteries are properly installed in correct polarity
	The transmitter or the vehicle battery is low power	Make sure you use full power transmitter and vehicle batteries
	Damaged motor or servo	Replace damaged parts
	ESC is shut down by heat protection circuit	Allow the ESC to cool down completely
Loss of vehicle control	Weak or no batteries in the transmitter or vehicle	Make sure you use full power transmitter and vehicle batteries
	Neutral or trim position is incorrect	Adjust the steering trim
	Receiver and/or battery not connected properly	Check all receiver and battery connections properly
Steering and/or throttle function is reversed	Servo travel is reversed at the transmitter	Set the transmitter servo reversing switch to the correct position
	Motor wires are not connected properly	Check all motor wires for correct polarity and secure connection

# Exploded Views











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AND BACKED BY **EXHOBBY** 