Evmore 16210

Evmore 1/16 Brushless RC Car Instruction Manual

Model: 16210

1. Introduction

Thank you for choosing the Evmore 1/16 Brushless RC Car. This high-performance remote control truck is designed for speed, durability, and an exhilarating off-road experience. Featuring a powerful brushless motor, robust drivetrain, and responsive 2.4GHz control system, it offers exceptional handling and speed up to 43 mph (70 km/h) with a 3S LiPo battery (not included). This manual provides essential information for setting up, operating, maintaining, and troubleshooting your RC car to ensure optimal performance and longevity.

Figure 1.1: The Evmore 1/16 Brushless RC Car and its included components.

2. Safety Information

Operating remote control vehicles requires adherence to safety guidelines to prevent injury or damage. Please read and understand all safety instructions before use.

- **Age Recommendation:** This product is recommended for users 14 years and older. Adult supervision is advised for younger users.
- **Battery Safety:** Use only the specified LiPo batteries and charger. Do not overcharge or discharge batteries. Store batteries in a fireproof bag or container. Never leave charging batteries unattended. Discontinue use if batteries show signs of swelling or damage.
- **Operating Environment:** Operate the RC car in open, clear areas away from people, pets, vehicles, and obstacles. Avoid public roads, crowded areas, and wet conditions.
- **High Speed:** This RC car is capable of high speeds. Exercise caution and maintain control at all times. Be aware of your surroundings.
- **Moving Parts:** Keep fingers, hair, and loose clothing away from rotating parts such as wheels, gears, and

drive shafts.

- **Heat:** The motor, ESC, and battery can become hot during operation. Allow components to cool down before handling or recharging.
- **Modifications:** Do not modify the RC car or its components unless explicitly instructed by the manufacturer. Unauthorized modifications can void the warranty and lead to unsafe operation.

3. Package Contents

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact customer support.

- 1 x Evmore 1/16 Brushless RC Car
- 1 x 2.4 GHz Remote Transmitter
- 2 x 2S 7.4V 1050mAh Li-Po Batteries
- 1 x USB Charging Cable
- 1 x Extra Body Shell
- 1 x Head Up Wheel Assembly (Wheelie Bar)
- 2 x Tail Wing Assembly
- 2 x Extra Metal CVD
- 8 x Body Shell Pins
- 1 x Cross Wrench
- 1 x Screwdriver
- 1 x Sticker Sheet
- 1 x Product Manual (this document)

Figure 3.1: Visual representation of the complete package contents.

4. Setup

4.1 Charging the Li-Po Batteries

1. Connect the USB charging cable to a compatible USB power source (e.g., computer USB port, USB wall adapter).
2. Connect the Li-Po battery to the charging cable. Ensure the connector is properly aligned.

3. The indicator light on the USB charger will show the charging status (e.g., red for charging, green for fully charged).
4. Charging typically takes 2-3 hours for a full charge. Do not overcharge.
5. Always disconnect the battery from the charger once fully charged.

4.2 Installing the RC Car Battery

1. Carefully remove the body shell pins and lift the body shell off the chassis.
2. Locate the battery compartment on the chassis.
3. Insert a fully charged 2S 7.4V 1050mAh Li-Po battery into the compartment.
4. Connect the battery connector to the ESC (Electronic Speed Controller) connector. Ensure a secure connection.
5. Carefully replace the body shell and secure it with the body pins.

4.3 Installing Transmitter Batteries

1. Open the battery compartment cover on the bottom of the remote transmitter.
2. Insert 3 x AA batteries (not included) into the compartment, observing the correct polarity (+/-).
3. Close the battery compartment cover securely.

4.4 Binding the Transmitter and Receiver

Your RC car and transmitter are typically pre-bound from the factory. If re-binding is necessary:

1. Ensure the RC car battery is disconnected and the transmitter is off.
2. Turn on the transmitter.
3. Connect the battery to the RC car. The ESC light will flash.
4. Press and hold the bind button on the receiver (usually located near the ESC) until the ESC light becomes solid, indicating a successful bind.
5. Turn off both the car and transmitter, then turn them back on in sequence (transmitter first, then car) to confirm the bind.

5. Operation

5.1 Turning On/Off

- **To Turn On:** First, turn on the remote transmitter. Then, connect the battery to the RC car and press the power button on the ESC.
- **To Turn Off:** First, turn off the RC car by pressing the power button on the ESC. Then, turn off the remote transmitter. Always disconnect the battery from the car after use.

5.2 Basic Controls

Figure 5.1: The 2.4GHz remote transmitter for the Evmore RC Car.

- **Steering Wheel:** Rotate the steering wheel on the transmitter left or right to control the direction of the RC car.
- **Throttle Trigger:** Pull the trigger towards you to accelerate forward. Push the trigger away from you to brake or reverse.
- **Trim Adjustments:** Use the steering trim dial to fine-tune the steering if the car pulls to one side when the steering wheel is centered. Use the throttle trim dial to adjust the neutral throttle position.

5.3 Throttle Limit Adjustment

The 2.4 GHz radio system allows for throttle range control, which is friendly for different turns and tracks, and for users of varying skill levels. New users can set throttle limits at 70% until they are ready to use the full speed potential. Refer to your transmitter's specific instructions for adjusting the throttle limit switch or dial.

5.4 Driving Environment Considerations

The Evmore RC car is designed for all-road use, including sandy, grassy, concrete, and gravelly ground. However, avoid operating in water, mud, or extremely dusty conditions to prevent damage to electronic components. Always ensure a clear path and sufficient space for high-speed maneuvers.

Figure 5.2: The RC car features anti-slip tires and an optional wheelie bar for enhanced performance.

6. Key Features

6.1 2845 4200kV Brushless Motor

The RC car is equipped with a powerful 2845 brushless 4200KV high-torque motor. This motor features an aluminum heatsink and cooling fans design to maintain optimal operating temperatures. It supports speeds up to 43 mph (70 km/h) when powered by a 3S LiPo battery (not included), providing explosive power for stunts like big jumps, wheelies, and backflips.

Figure 6.1: The 4200KV Brushless Motor ensures exceptional high-speed performance.

6.2 Independent 2S/3S 45A ESC

The independent smart 2S/3S 45A ESC (Electronic Speed Controller) supports the powerful 3S-capable power system, enabling the super fast 43+ mph (70 kph) speeds achievable in optimum conditions using a 3S LiPo battery. This ESC provides precise control over the motor's speed and direction.

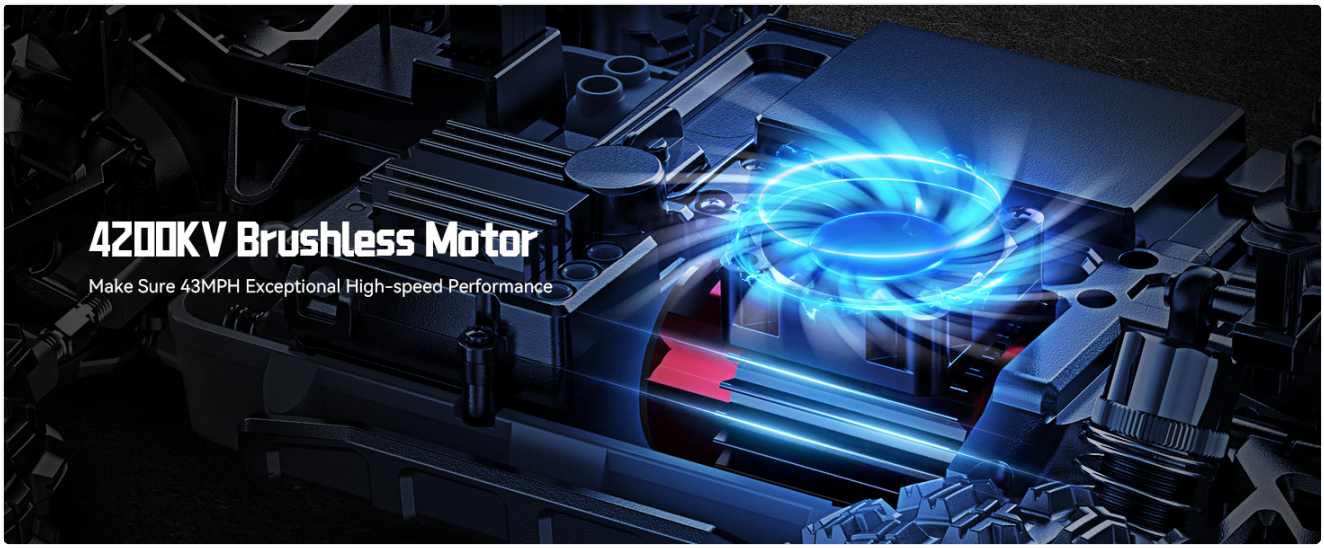

Figure 6.2: The Independent 45A Brushless ESC for robust power management.

6.3 Aluminum Oil-Filled Shocks

The RC car features aluminum oil-filled shocks designed to reduce drag during off-road races and manage the downforce from the rear wing during rapid acceleration. These shocks provide excellent support to maintain vehicle balance and ensure the chassis does not hit the ground during jumps, making it ideal for various terrains.

Figure 6.3: Upgraded design oil-filled shock absorbers for superior damping.

6.4 Durable and Efficient Transmission

The vehicle boasts a durable and efficient transmission system with metal gears and metal differentials, ensuring perfect 4WD power distribution. Key components include a 5.5MM diameter axle and M4 nuts. The smooth operation of 16 ball bearings minimizes power loss, contributing to the car's consistent and powerful performance.

Figure 6.4: The ultra-durable metal driving system ensures robust power delivery.

6.5 Powerful Battery System

The RC car comes equipped with two 2S 7.4V 1050mAh Li-Po batteries, providing approximately 40 minutes of playtime. A USB charging cable is included for convenient recharging. The system is also compatible with 3S 11.1V LiPo batteries for increased speed and performance (3S battery not included).

Figure 6.5: Battery performance and speed capabilities with 2S and 3S LiPo batteries.

6.6 2.4 GHz Radio Transmitter

The 2.4 GHz radio system allows for control from up to 400 feet (120 meters) away, enabling multiple RC cars to operate simultaneously without signal interference. The transmitter features a 3-wire independent 2.5KG digital servo for superb steering performance and responsive control.

7. Maintenance

7.1 General Care

- Regularly inspect the RC car for any loose screws, damaged parts, or debris.
- Ensure all connections are secure before and after each use.
- Avoid exposing the RC car to extreme temperatures or direct sunlight for prolonged periods.

7.2 Cleaning

- After each use, especially after driving in dirty or dusty conditions, clean the RC car.
- Use a soft brush or compressed air to remove dirt and debris from the chassis, suspension, and motor area.
- Wipe down the body shell with a damp cloth. Do not use harsh chemicals or solvents.
- Ensure the car is completely dry before storing or recharging batteries.

7.3 Storage

- Store the RC car in a cool, dry place away from direct sunlight and moisture.
- Always disconnect the battery from the RC car before storage.
- For long-term storage, it is recommended to store LiPo batteries at a storage voltage (approximately 3.8V per cell) rather than fully charged or fully discharged.

8. Troubleshooting

Problem	Possible Cause	Solution
RC car does not respond to transmitter.	Battery low/dead (car or transmitter); Not bound; Power switch off.	Charge/replace batteries; Re-bind transmitter and receiver; Ensure power switches are on.
Car runs slowly or lacks power.	Low battery charge; Motor/ESC overheating; Obstruction in drivetrain.	Recharge battery; Allow components to cool; Check for debris in gears/axles.
Steering is erratic or unresponsive.	Steering trim incorrect; Damaged servo; Loose steering linkage.	Adjust steering trim; Inspect servo and linkages for damage or looseness.
Car makes unusual noises.	Debris in gears; Damaged gears; Loose motor mount.	Clean gears; Inspect for damaged gears; Tighten motor mount screws.
Short playtime.	Battery not fully charged; Battery degradation; Aggressive driving style.	Ensure full charge; Consider replacing battery; Adjust driving style.

9. Specifications

Feature	Detail
Model Number	16210
Scale	1:16
Motor	2845 4200KV Brushless Motor
ESC	Independent 2S/3S 45A Brushless ESC
Top Speed	Up to 43 mph (70 km/h) with 3S LiPo battery
Drive System	4WD (Four-Wheel Drive) with Metal Gears and Differentials
Shocks	Aluminum Oil-Filled Shocks
Radio System	2.4 GHz (Range up to 400 feet / 120 meters)

Feature	Detail
Servo	3-wire independent 2.5KG Digital Servo
Batteries (Included)	2 x 2S 7.4V 1050mAh Li-Po Batteries
Playtime	Approx. 40 minutes (with included 2S batteries)
Product Dimensions	12 x 6.8 x 8.6 inches (30.5 x 17.3 x 21.8 cm)
Item Weight	3 pounds (1.36 kg)
Manufacturer	Evmore

10. Warranty and Support

Evmore products are manufactured to high quality standards. For information regarding warranty coverage, technical support, or replacement parts, please refer to the contact information provided on the product packaging or visit the official Evmore website. Please retain your proof of purchase for warranty claims.