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> [4WD Smart Chassis Car Kit with Aluminum Alloy Chassis, TT Motor, 66mm Wheels, Robotic Moving Platform \(Black, Unassembled\) Instruction Manual](#)

LewanSoul LewanSoul Robot Chassis Kit

4WD Smart Chassis Car Kit Instruction Manual

Model: LewanSoul Robot Chassis Kit | Brand: LewanSoul

1. INTRODUCTION

This manual provides detailed instructions for the assembly, operation, and maintenance of your LewanSoul 4WD Smart Chassis Car Kit. This kit is designed for DIY enthusiasts and is an excellent platform for robotic projects. It features a sturdy aluminum alloy chassis, four TT DC gear motors, and anti-skid tires, providing powerful driving force and a high load capacity.

2. SAFETY INFORMATION

- Keep small parts away from children to prevent choking hazards.
- Ensure all connections are secure before operation to prevent short circuits or component damage.
- Do not apply excessive force during assembly to avoid bending or breaking parts.
- Use appropriate tools for assembly.
- This kit is recommended for ages 14 and up.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your kit:



Image: Overview of all kit components including chassis plates, motors, wheels, and fasteners.

- Aluminum Alloy Chassis Plates (Top and Bottom)
- TT DC Gear Motors (x4)
- 66mm Anti-skid Wheels (x4)
- M4*32 Double-pass Columns (x4)
- M4*8 Round Machine Screws
- M3*25 Round Machine Screws
- M3 Nuts
- Motor Brackets
- Other necessary fasteners and spacers

4. ASSEMBLY INSTRUCTIONS

Follow these steps carefully to assemble your 4WD Smart Chassis Car Kit. An assembly video is provided for visual guidance.

Your browser does not support the video tag.

Video: Step-by-step assembly guide for the LewanSoul 4WD Smart Chassis Car Kit.

4.1. Chassis Base Assembly

1. **Attach Double-pass Columns to Chassis:** Secure the four M4*32 Double-pass Columns to the main chassis plate using M4*8 Round Machine Screws. Ensure they are firmly attached to provide a stable base.



Image: The assembled chassis base, showing the main plate, motors, and wheels.

2. **Mount TT Motors:** Attach the TT Motors to the designated slots on the chassis. Use M3 Nuts and M3*25 Round Machine Screws to secure each motor. Ensure the motors are oriented correctly as shown in the video.

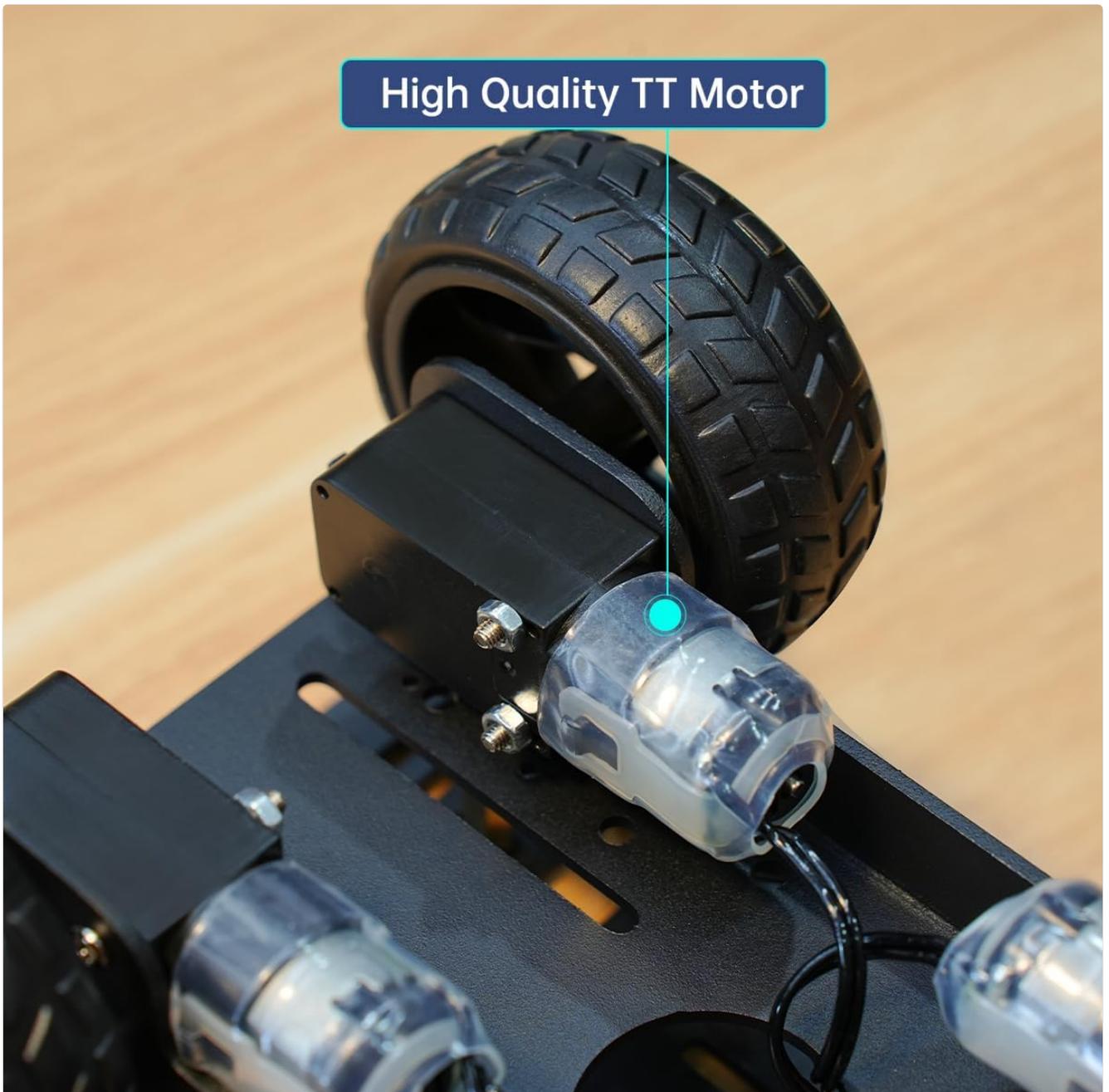


Image: A close-up view of a TT motor mounted on the chassis.

- 3. Attach Wheels:** Press the 66mm Anti-skid Wheels onto the shafts of the TT Motors. Ensure they are fully seated and spin freely without wobbling.

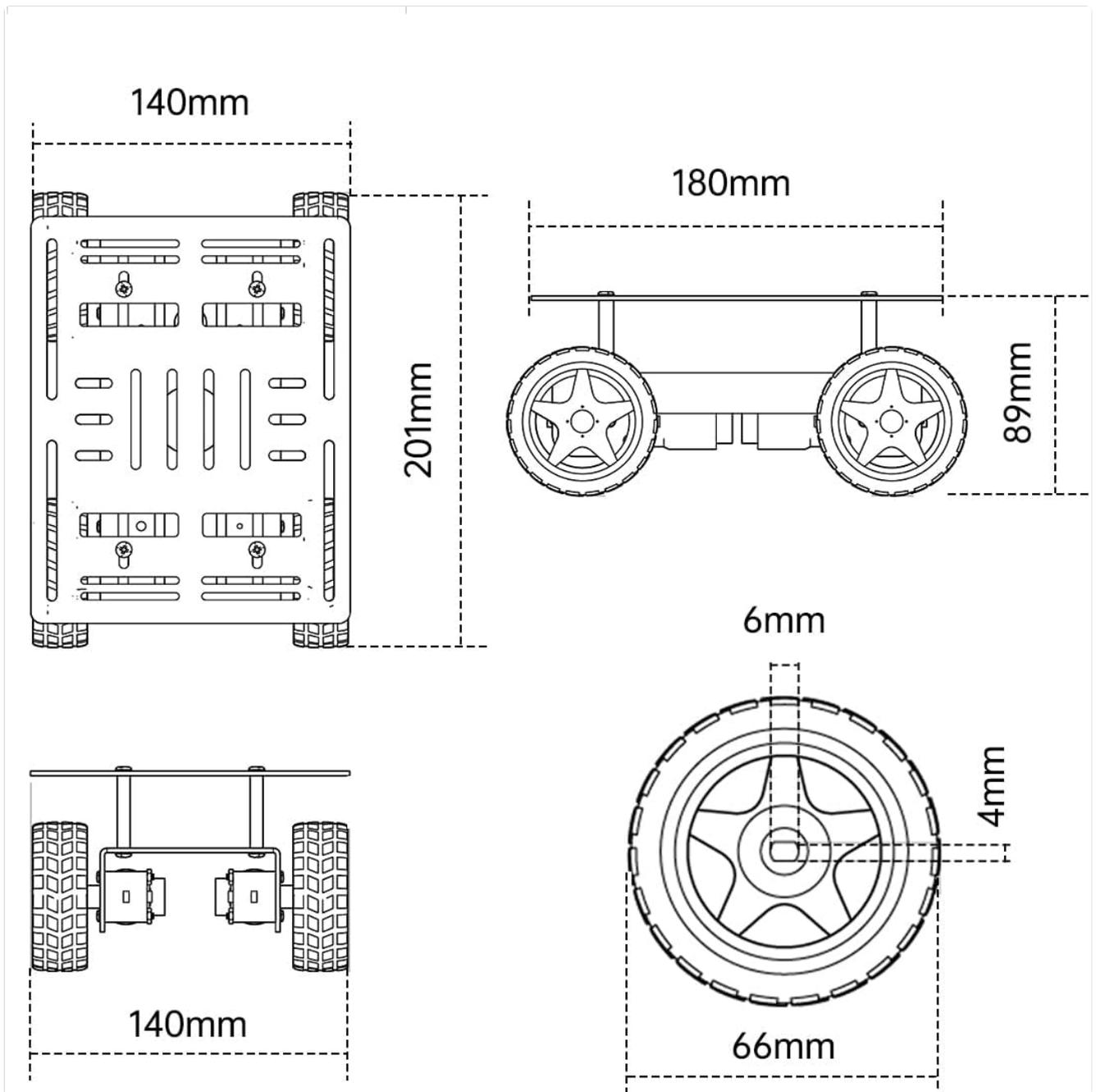


Image: A detailed view of a wheel properly attached to its motor.

4.2. Expansion Bracket Installation

4. **Mount Expansion Bracket:** Place the Expansion Bracket (top plate) onto the four Double-pass Columns. Secure it using M4*8 Machine Screws. This top plate provides space for mounting additional electronics and sensors.

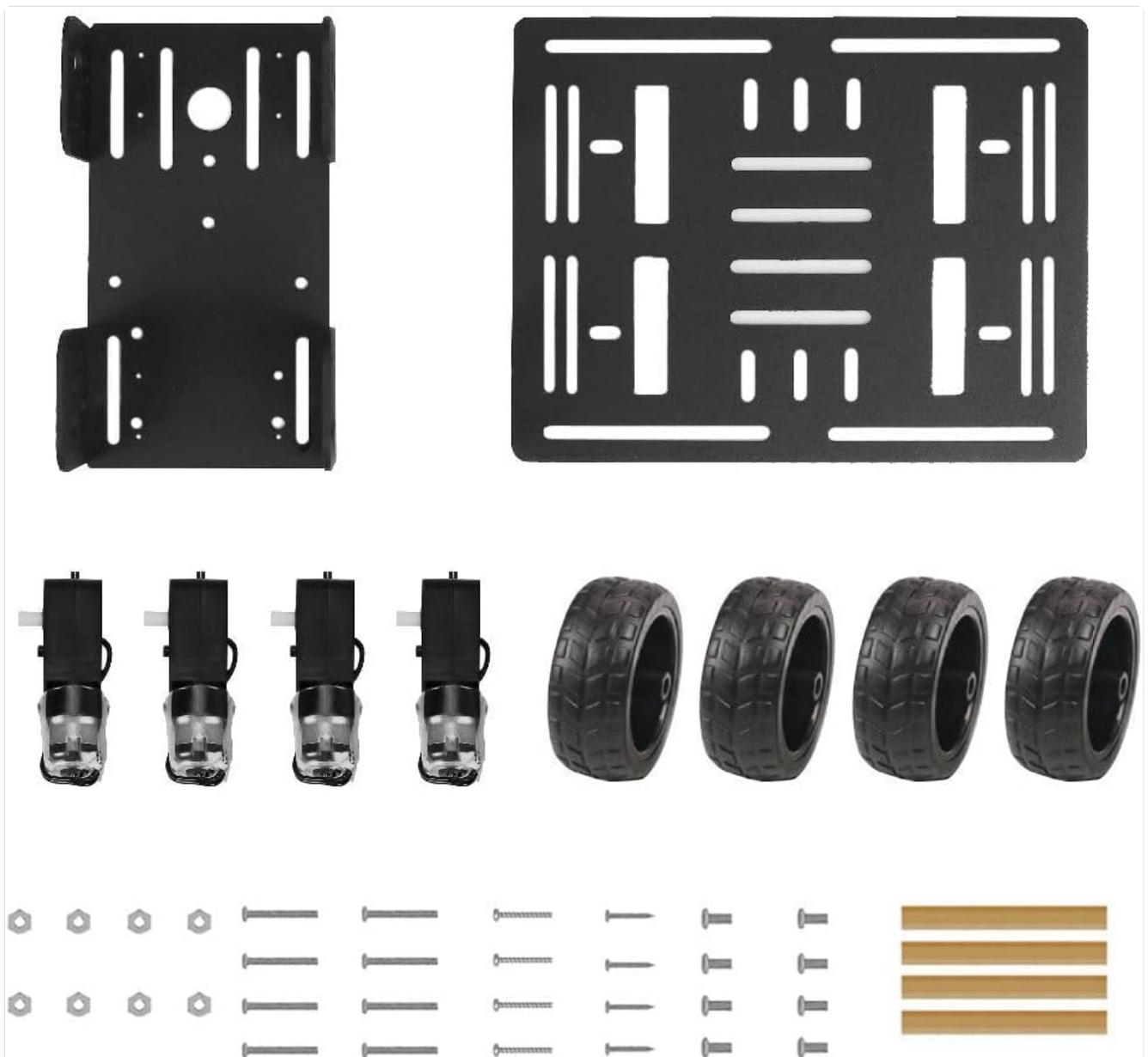


Image: The top expansion bracket positioned above the main chassis.

5. OPERATING INSTRUCTIONS

This 4WD Smart Chassis Car Kit serves as a foundational platform. To operate it, you will need to integrate additional components such as a microcontroller (e.g., Arduino, Raspberry Pi), motor drivers, and a power source. Once these are connected and programmed, the chassis can be controlled for various robotic applications.

- **Power Supply:** Ensure your chosen power supply (e.g., battery pack) meets the voltage and current requirements of your motors and microcontroller.
- **Motor Driver:** A motor driver is essential to control the speed and direction of the TT motors. Connect the motors to the driver and the driver to your microcontroller.
- **Programming:** Write code for your microcontroller to send commands to the motor driver, enabling movement and control of the chassis.
- **Expansion:** Utilize the expansion bracket to mount sensors, cameras, or other modules to enhance the robot's functionality.

6. MAINTENANCE

- Regularly check all screws and nuts for tightness, especially after extended use.

- Keep the chassis clean and free from dust and debris.
- Inspect motor connections for any signs of wear or damage.
- Ensure wheels are securely attached to motor shafts. If wheels frequently detach, consider applying a small amount of adhesive or a more secure mounting method if possible.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Wheels fall off easily	Loose fit on motor shaft; vibration during operation.	Ensure wheels are fully pressed onto the motor shafts. For persistent issues, a small amount of non-permanent adhesive (e.g., hot glue) can be used to secure them, or consider alternative wheel hubs if available.
Motors not spinning	Incorrect wiring; insufficient power; faulty motor driver or motor.	Check all wiring connections. Verify power supply voltage and current. Test motors individually if possible. Ensure motor driver is correctly configured and receiving signals from the microcontroller.
Chassis not moving straight	Motors spinning at different speeds; wheel alignment issues.	Calibrate motor speeds in your code. Check that all wheels are mounted straight and are not rubbing against the chassis.

8. SPECIFICATIONS

- **Product Dimensions:** 7.09 x 5.51 x 3.5 inches (180 x 140 x 89 mm)
- **Item Weight:** 1.03 pounds (0.47 kg)
- **Material:** Aluminum Alloy Chassis
- **Motors:** 4 x TT DC Gear Motors (Reduction ratio: 1:120)
- **Wheels:** 66mm Anti-skid Wheels
- **Maximum Load:** 1500g
- **Recommended Age:** 14 years and up



Image: Technical drawing showing the dimensions of the chassis.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or any questions regarding your LewanSoul 4WD Smart Chassis Car Kit, please contact LewanSoul customer service through the official brand store or the platform where you purchased the product.

Visit the official LewanSoul Store: [LewanSoul Store](#)

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