#### **WATUDOU B0D9679LMN**

# **WATUDOU 12-in-1 Solar Robot Kit**

## INSTRUCTION MANUAL

Model: B0D9679LMN

# 1. Setup and Assembly

This section guides you through the initial setup and assembly of your WATUDOU 12-in-1 Solar Robot Kit. Please ensure all components are present before beginning.

#### 1.1 Package Contents

Your kit includes all necessary parts to build 12 different robot models. Refer to the product list image for a visual representation of all components.



Image: Overview of all components included in the 12-in-1 Solar Robot Kit.

#### 1.2 Assembly Steps

Follow the detailed instructions provided in the included manual to assemble your desired robot model. The kit allows for the creation of 12 unique robots, each with specific assembly requirements.

- 1. **Step 1: Robot Body Gearbox Module Assembly.** Carefully assemble the central gearbox module, which forms the core of your robot.
- 2. **Step 2: Robot Head Installation and Sticker Attachment.** Attach the robot's head and apply any decorative stickers as indicated in the manual.
- 3. **Step 3: Test Motor Functionality.** After initial assembly, test if the motor operates in direct sunlight. If not, use a battery for testing to ensure proper connection.
- 4. **Step 4: Complete Robot Construction.** Continue building the rest of your chosen robot model according to the step-by-step guide.



Image: Visual guide for the DIY assembly and testing process.

The kit is designed to enhance hands-on experience and problem-solving skills. Multiple children can collaborate on assembly, fostering teamwork.



Image: Children engaged in assembling the robot kit.

## 2. Operating Instructions

The WATUDOU Solar Robot Kit is primarily powered by solar energy, offering an educational experience in renewable resources.

#### 2.1 Powering the Robot

The robot utilizes an upgraded large solar panel to capture sunlight, which is then converted into electrical energy to drive the motor. For optimal performance, operate the robot in direct sunlight.

- **Solar Power:** Sunlight hits the solar panels, creating an electric field. The generated electricity flows to a conductive wire, which brings it to an inverter to power the robot.
- Battery Power (Alternative): If direct sunlight is insufficient, the robot can also be powered by a battery. Ensure correct polarity when connecting (blue wire: positive, red wire: negative).

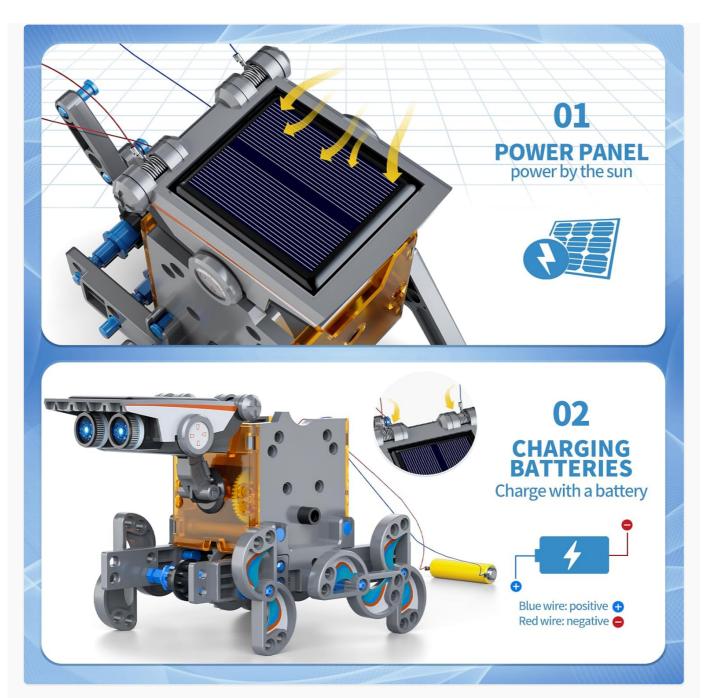


Image: Solar panel and battery power options for the robot.

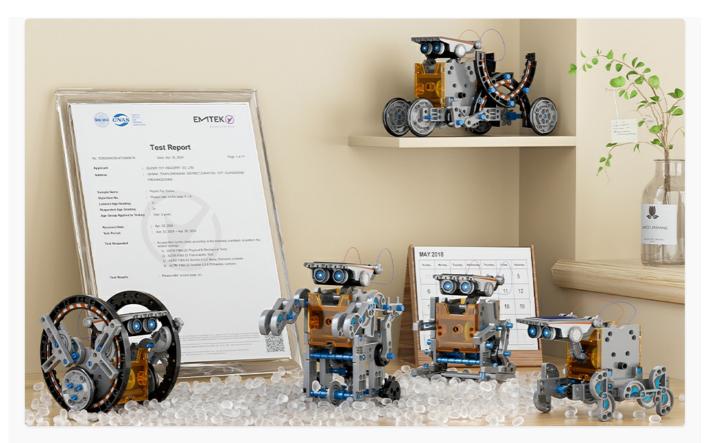


Image: Detailed explanation of the solar power mechanism.

#### 2.2 Robot Models and Movement

The kit allows for the construction of 12 distinct robot models, each capable of unique movements on land or water. Experiment with different designs to observe their varied functionalities.



Image: The 12-in-1 Solar Robot Kit showcasing all possible robot configurations.

Some models are designed for land movement, while others are amphibious, capable of sailing on water.



Image: Examples of robots moving on land and sailing on water.

#### 3. Maintenance

Proper maintenance ensures the longevity and continued functionality of your solar robot kit.

## 3.1 Cleaning

- Wipe down robot parts with a dry, soft cloth to remove dust and debris.
- Avoid using harsh chemicals or abrasive cleaners, as these can damage the plastic components.
- Ensure the solar panel is clean and free of obstructions for efficient power generation.

#### 3.2 Storage

- Store the kit in a cool, dry place away from direct sunlight when not in use.
- · Keep all small parts organized in their original packaging or a suitable storage container to prevent loss.
- The high-quality ABS plastic ensures durability and wear resistance, allowing for multiple assemblies and

#### 4. Troubleshooting

If you encounter issues with your solar robot, refer to the following common problems and solutions.

#### • Robot Does Not Move in Sunlight:

- Ensure the solar panel is exposed to direct, strong sunlight. Indoor lighting or cloudy conditions may not provide sufficient power.
- Check all wire connections to the solar panel and motor. Ensure they are secure and correctly aligned (blue wire positive, red wire negative).
- Verify that the gears are properly aligned and rotate freely. Misaligned or overly tight gears can prevent movement.
- Test the motor using a battery to confirm it is functional. If the motor works with a battery but not solar, the issue is likely with solar panel exposure or wiring.

#### · Parts Are Difficult to Assemble or Fit:

- Ensure you are using the correct parts for the specific step as indicated in the manual.
- Some parts may require gentle force to snap into place. Avoid excessive force to prevent breakage.
- If a gearbox feels too tight, double-check the assembly of internal components to ensure no parts are misaligned or causing friction.

#### Robot Movement is Erratic or Weak:

- · Confirm the solar panel is receiving adequate sunlight.
- · Check for any obstructions or friction points in the robot's moving parts (wheels, legs, gears).
- Ensure the robot is on a smooth, flat surface if designed for land movement.

#### 5. Specifications

Feature	Detail
Product Dimensions	11 x 2 x 7 inches
Item Weight	15.2 ounces
ASIN	B0D9679LMN
Manufacturer Recommended Age	3 years and up (Note: STEM complexity is suitable for ages 8-13)
Manufacturer	WATUDOU
Power Source	Solar powered (can also be battery tested)
Material	High-quality, non-toxic ABS plastic

# 6. Warranty and Support

## **6.1 Warranty Information**

Specific warranty details are not provided in this manual. For information regarding product warranty, please refer to the product packaging or contact the seller directly.

#### **6.2 Customer Support**

For any questions, concerns, or assistance with assembly or operation, please contact WATUDOU customer support through the retailer's platform where the product was purchased. Provide your product model number (B0D9679LMN) and a detailed description of your inquiry for prompt assistance.

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This manual is for informational purposes only. Product specifications are subject to change without notice.