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> Oumefar Brushless Motor Controller E-Bike Testing Device User Manual

Oumefar Oumefar724h3o56rp

Oumefar Brushless Motor Controller E-Bike Testing Device User Manual

Model: Oumefar724h3o56rp | Brand: Oumefar

1. INTRODUCTION

The Oumefar Brushless Motor Controller E-Bike Testing Device is designed for efficient diagnosis of brushless motors and their controllers in electric bicycles, scooters, and electric cars. This compact and lightweight device provides quick and accurate detection of various component problems, ensuring optimal performance and safety of your electric vehicle.

Key features include high-strength construction, efficient fault detection, portability, and a self-check function for reliable operation.

Application Range



Electric Scooters



Electric Vehicles



Electric Bikes

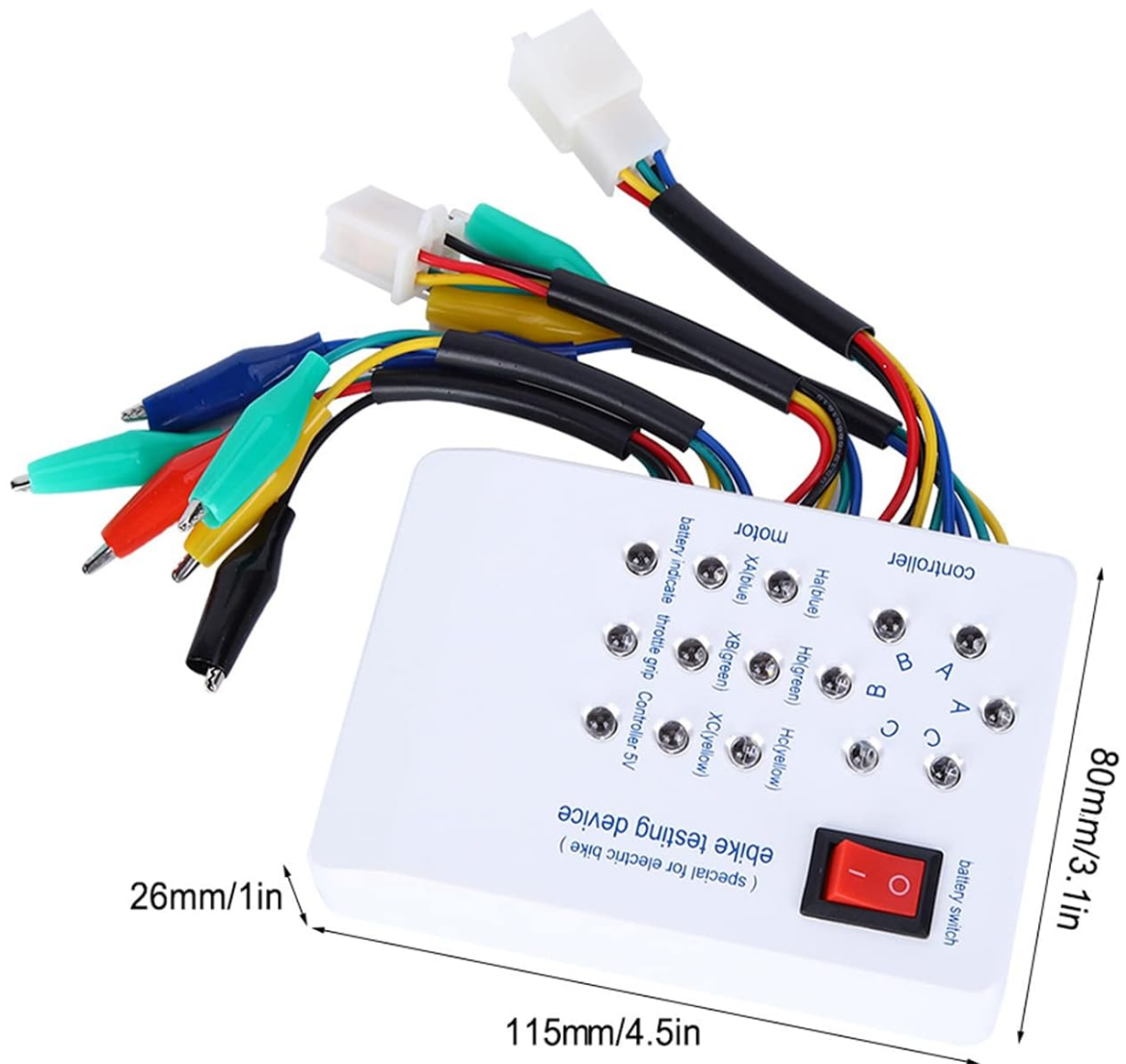
Figure 1: Application range of the Oumefar Brushless Motor Controller E-Bike Testing Device, suitable for electric scooters, electric vehicles, and electric bikes.

2. PRODUCT OVERVIEW AND COMPONENTS

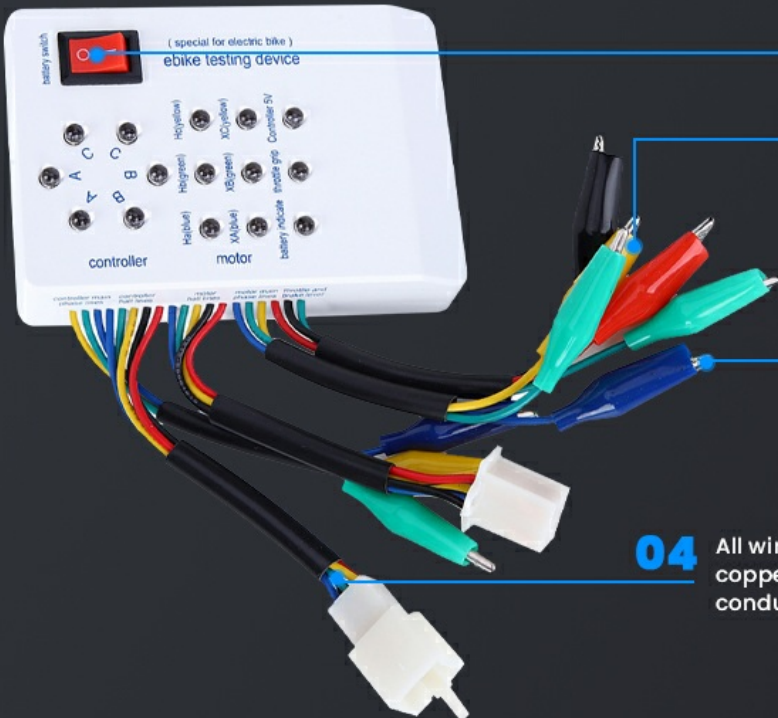
The testing device features a durable plastic shell and high-quality electronic components. It is designed for ease of use with clearly labeled connection points and indicator lights.

2.1 Main Components

- **Main Unit:** White plastic casing with control panel.
- **Battery Switch:** Red toggle switch for power control.
- **Indicator Lights:** LEDs for controller phases (A, B, C), motor phases (A, B, C), Hall signals (Ha, Hb, Hc), 5V controller output, throttle grip, and brake lever.
- **Connection Cables:** Multiple color-coded cables with alligator clips and white connectors for various test points.



Product details display



- 01** One-touch start switch (quick detection, safe and convenient)
- 02** High-quality rubber sleeve (isolation and insulation to prevent short circuit)
- 03** Strong bite force of alligator clip (firm clamping, not easy to fall off)
- 04** All wire cores are made of pure copper wire (with excellent conductivity)

3. SPECIFICATIONS

Feature	Specification
Brand	Oumefar
Model Number	Oumefar724h3o56rp
Dimensions	115mm x 80mm x 26mm (approx. 4.5in x 3.1in x 1in)
Power Source	Battery Powered (9V DC minimum operating voltage)
Color	Black
Item Weight	0.15 Kilograms (approx. 5.3 ounces)
Measurement Type	Ohmmeter, Voltmeter, Multimeter (for internal testing logic)
Material	Plastic shell and electronic components



Figure 4: Dimensions of the Oumefar Brushless Motor Controller E-Bike Testing Device.

4. SETUP AND CONNECTIONS

Before use, ensure a 9V battery is installed in the battery compartment located on the underside of the device. Observe polarity when installing the battery.

4.1 Connecting for Testing

The device uses color-coded cables and connectors to interface with the brushless motor and controller. Refer to the labels on the device for correct connections.

1. **Controller Connections:** Connect the three main phase wires (A, B, C) from the controller to the corresponding inputs on the testing device using the alligator clips.
2. **Motor Connections:** Connect the three main phase wires (A, B, C) from the motor to the corresponding inputs on the testing device. Also, connect the Hall sensor wires (Ha, Hb, Hc) and the 5V power supply from the motor to the designated points.

3. **Throttle and Brake:** Connect the throttle grip and brake lever wires to their respective inputs on the tester to check their functionality.
4. **Battery:** Ensure the device is powered by a 9V battery.



Figure 5: Example of the testing device connected to an e-bike system for diagnostic purposes.

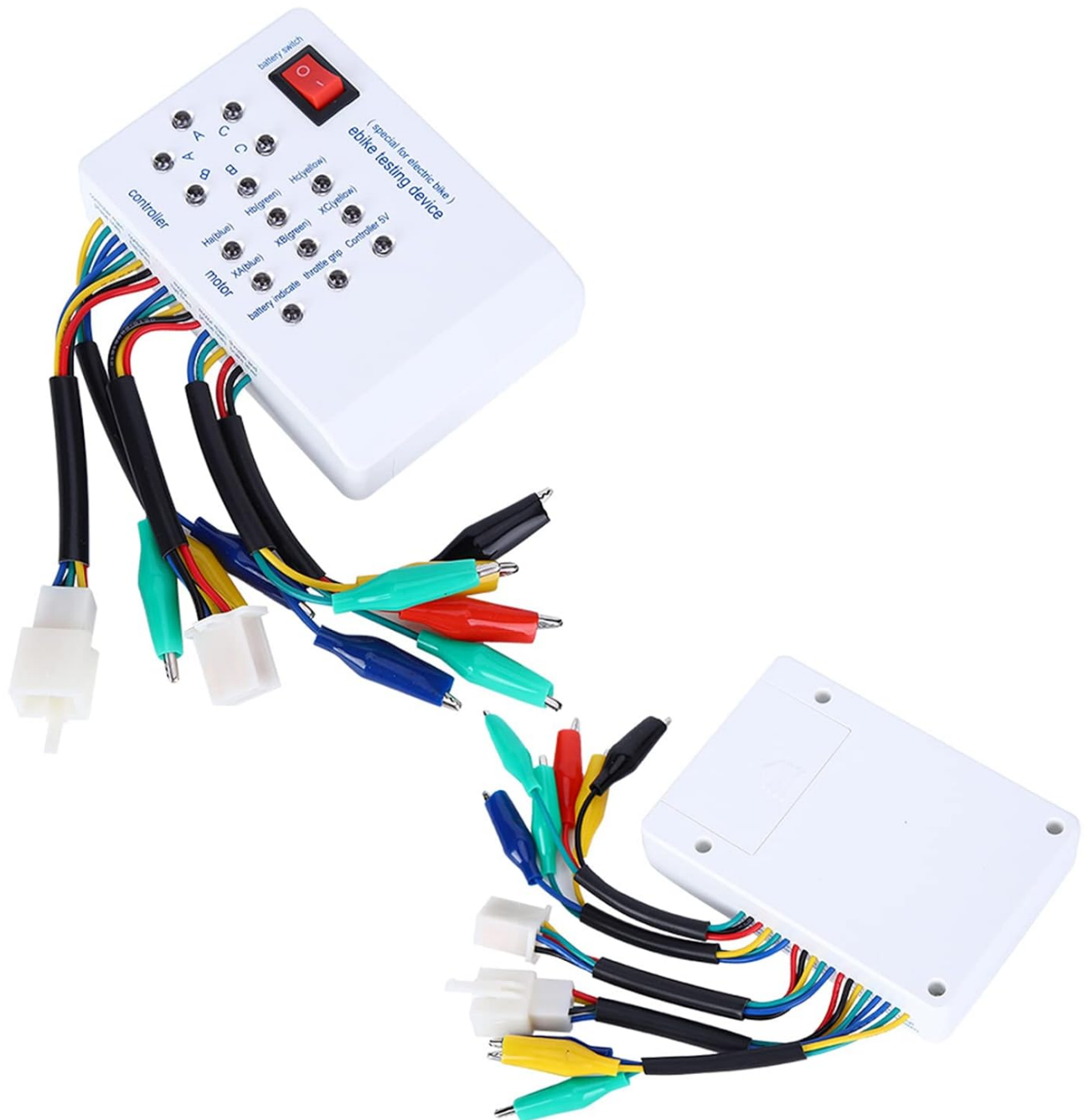


Figure 6: Detailed view of the connection labels on the device for accurate wiring.

5. OPERATING INSTRUCTIONS

The device allows for quick detection of various issues within brushless motor systems.

5.1 Powering On and Self-Check

After making all necessary connections, switch the red 'battery switch' to the ON position. The device will perform a self-check. If all internal components are functioning correctly, the indicator lights will respond as expected during the self-check sequence.

5.2 Diagnostic Procedures

The device can detect the following component problems:

- **Brushless Controller:** Checks the functionality of the electronic speed controller.

- **Brushless Motor:** Detects issues with motor Hall sensors and motor windings.
- **Phase Angle:** Verifies the 120° or 60° phase angle of the brushless motor and controller.
- **Throttle and Brake Handle:** Tests the operational status of the throttle and brake input signals.
- **Wiring:** Assists in identifying correct wiring configurations between the brushless motor and controller (supports 36 connection methods).

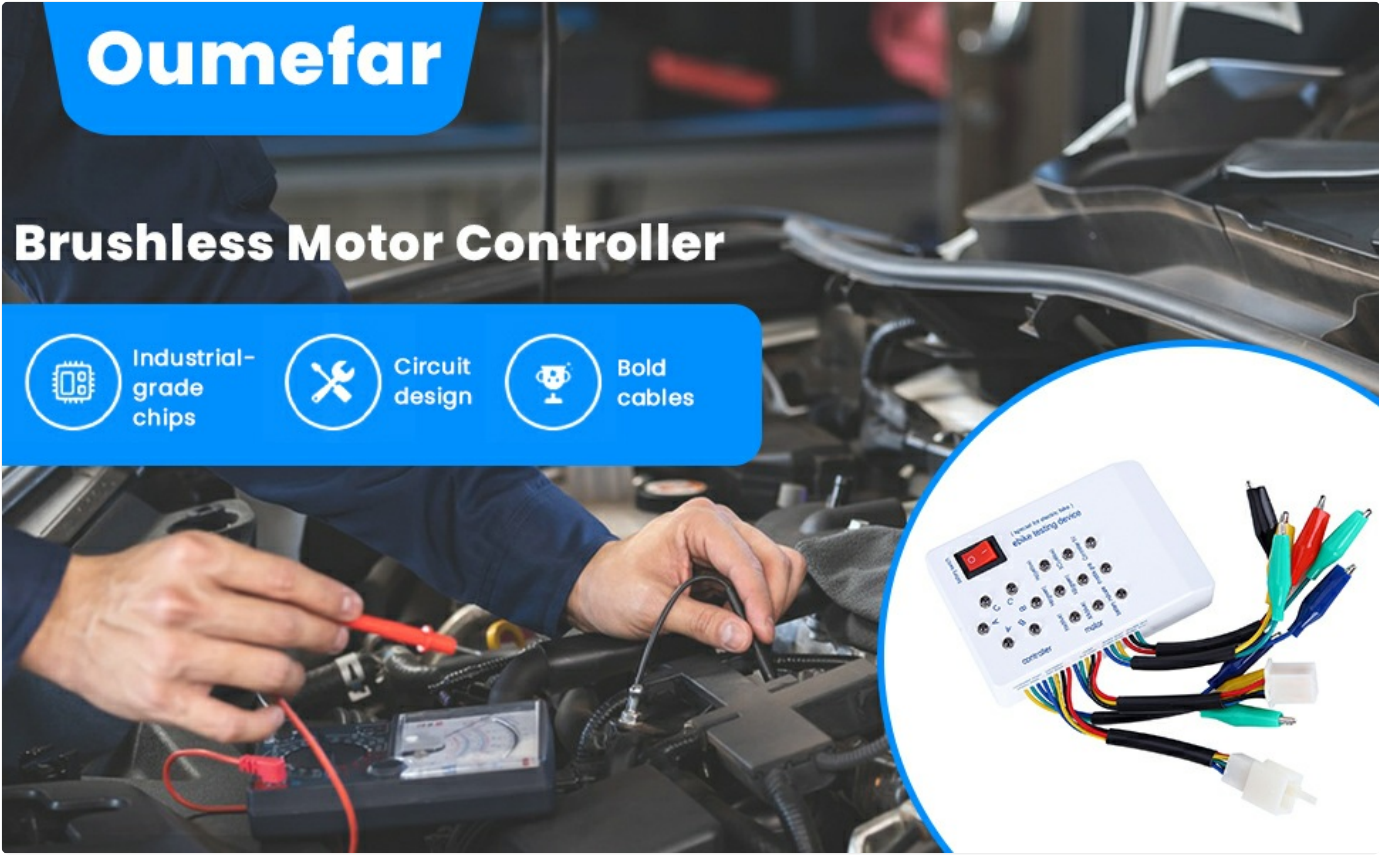


Figure 7: Overview of component problems detectable by the device.

6. MAINTENANCE

To ensure the longevity and accurate performance of your Oumefar Brushless Motor Controller E-Bike Testing Device, follow these maintenance guidelines:

- **Cleaning:** Wipe the device with a soft, dry cloth. Avoid using abrasive cleaners or solvents that could damage the plastic casing or electronic components.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures. Remove the 9V battery if the device will not be used for an extended period to prevent battery leakage.
- **Handling:** Handle the device with care to avoid physical impact or dropping, which could damage internal circuitry.
- **Cable Inspection:** Periodically inspect the connection cables and alligator clips for any signs of wear, fraying, or damage. Replace damaged cables to ensure safe and accurate testing.

7. TROUBLESHOOTING

If you encounter issues while using the Oumefar Brushless Motor Controller E-Bike Testing Device, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed 9V battery.	Check battery polarity and replace with a fresh 9V battery.
No indicator lights illuminate during testing.	Incorrect or loose connections to the motor/controller.	Verify all connections are secure and match the labels on the device. Ensure the motor/controller is powered.
Inaccurate or inconsistent readings.	Damaged test leads or poor contact.	Inspect test leads for damage. Ensure alligator clips make firm contact with terminals.
Device does not work with mid-drive motors.	Compatibility limitation.	This device is primarily designed for hub motors and standard brushless controllers. It may not be compatible with all specialized mid-drive motor systems.
Connector does not match existing wiring.	Non-standard connectors on the e-bike/scooter.	The device uses common connectors and alligator clips. If your system has unique connectors (e.g., Higo), adapters may be required, or direct connection to individual wires might be necessary with caution.

If the problem persists after attempting these solutions, please contact customer support.

8. WARRANTY INFORMATION

Oumefar products are manufactured to high-quality standards. This product is covered by a limited warranty against defects in materials and workmanship for a period specified at the time of purchase. Please retain your proof of purchase for warranty claims. The warranty does not cover damage caused by misuse, accident, unauthorized modification, or normal wear and tear.

9. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Oumefar customer support through the retailer where the product was purchased or visit the official Oumefar website for contact information.

We are committed to providing reliable products and support to our customers.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question