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› Acouto 52V 25A Dual Drive Electric Motor Controller Instruction Manual

Acouto Acoutofpgi9ebqt3

Acouto 52V 25A Dual Drive Electric Motor Controller Instruction Manual

Model: Acoutofpgi9ebqt3

INTRODUCTION

This manual provides essential information for the safe and efficient use of your Acouto 52V 25A Dual Drive Electric Motor Controller. Please read this manual thoroughly before installation and operation.

The Acouto 52V 25A Dual Drive Electric Motor Controller is designed for electric scooters, electric bicycles, and electric tricycles. It features an aluminum alloy shell for effective heat dissipation, provides stable speed control, and includes protective functions for enhanced safety and durability.

SAFETY INFORMATION

- Always ensure the power source is disconnected from the electric vehicle before beginning any installation or maintenance procedures.
- Do not attempt to open or modify the controller, as this may void the warranty and pose significant safety risks.
- Ensure all electrical connections are secure and properly insulated to prevent short circuits and electrical hazards.
- Operate the controller strictly within its specified voltage (52V) and current (25A) limits to prevent damage.
- Protect the controller from direct exposure to water, heavy moisture, and extreme environmental conditions.

PRODUCT OVERVIEW

The Acouto 52V 25A Dual Drive Electric Motor Controller features a robust aluminum alloy casing and multiple wiring connections for various functions within an electric vehicle system.



Image 1: Top view of the Acouto 52V 25A Dual Drive Electric Motor Controller, showing the aluminum casing and various colored wires extending from one end.

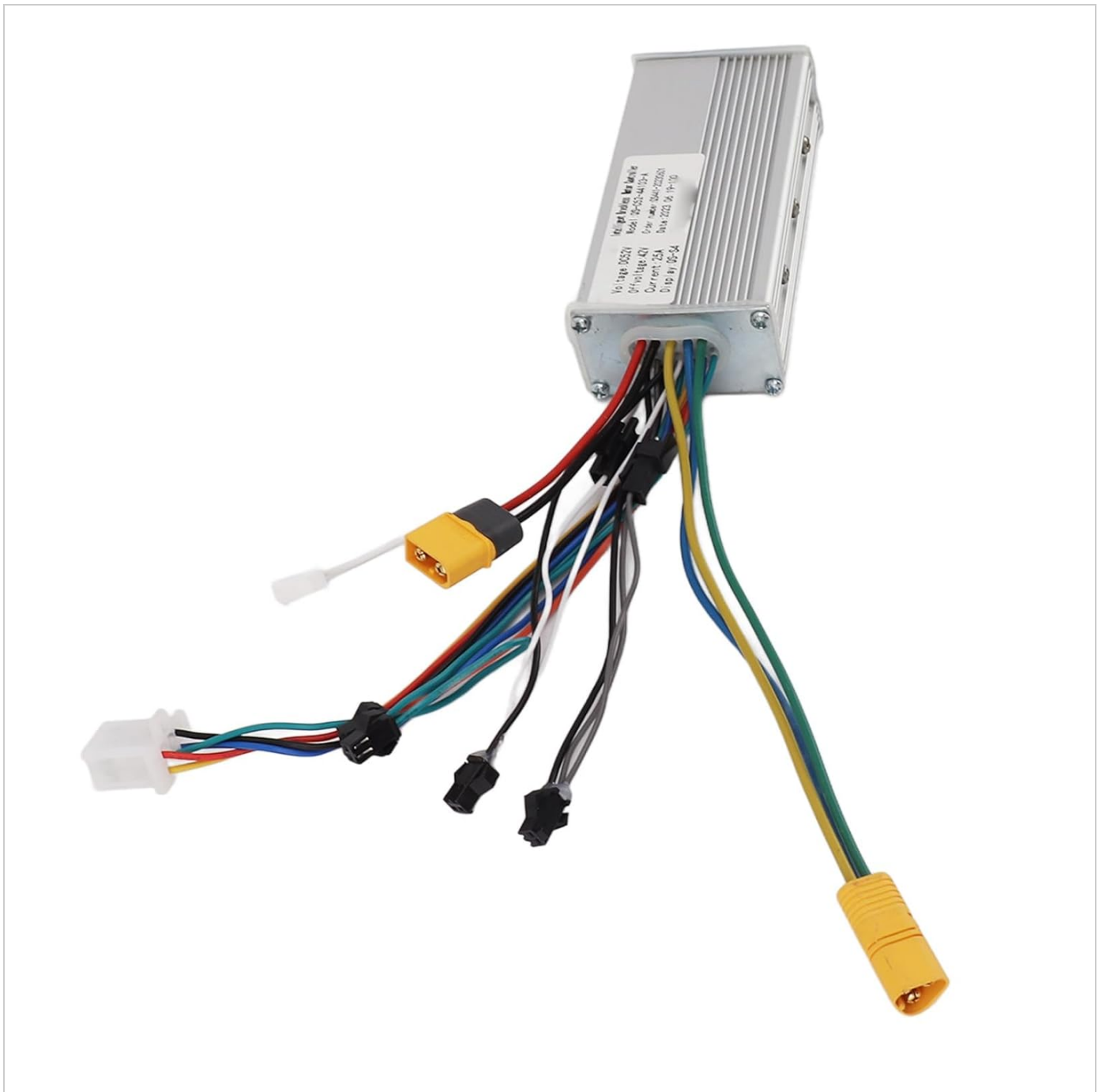


Image 2: Angled view of the controller, highlighting the different connectors and their respective wire colors for various functions.

Key Features:

- **Enhanced Heat Dissipation:** The aluminum alloy shell protects internal circuits from thermal overload due to its good heat dissipation function.
- **Stable Speed Control:** Provides stable speed and sensitive control of braking and direction changes.
- **Protective Functions:** Includes undervoltage protection, overcurrent protection, and stall protection to ensure the safety of the electric scooter.
- **High-Temperature Wiring:** Premium high-temperature and flame-retardant wires ensure stable and consistent performance in various conditions.
- **Versatile Application:** Suitable for electric scooters, electric bicycles, and electric tricycles.

SPECIFICATIONS

Feature	Specification
Product Material	Aluminum Alloy
Voltage	52V
Current	25A
Item Weight	301g / 10.62oz
Package Dimensions	7.09 x 3.94 x 1.57 inches
Model Number	Acoutofpgi9ebqt3
Manufacturer	Acouto

SETUP AND INSTALLATION

The controller requires specific wiring for proper function. Refer to your electric vehicle's wiring diagram for connecting to the motor, battery, throttle, and other components. The general steps are outlined below:

- 1. Disconnect Power:** Always ensure the battery is completely disconnected from the electric vehicle before beginning any installation work.
- 2. Mount the Controller:** Securely mount the controller in a location that is protected from physical damage and moisture. Ensure the mounting area allows for adequate airflow to facilitate heat dissipation.
- 3. Connect Motor Wires:** Connect the three thick motor phase wires (typically green, blue, and yellow) from the controller to the corresponding motor wires. Ensure correct color matching.
- 4. Connect Battery Wires:** Connect the main power wires (typically red for positive and black for negative) from the controller to the battery. Double-check polarity before making the final connection.
- 5. Connect Signal Wires:** Connect the throttle, brake levers, display, and any other accessory wires according to your vehicle's specific wiring scheme. These are typically thinner wires with multi-pin connectors.
- 6. Verify Connections:** Before reconnecting the battery, meticulously inspect all connections to ensure they are tight, correctly matched, and free from any potential short circuits.
- 7. Reconnect Power:** Once all connections have been thoroughly verified, safely reconnect the battery.

Note: A detailed wiring diagram specific to your electric vehicle's components is crucial for correct installation. If you are unsure about any step, consult a qualified technician.



Image 3: Close-up view of the controller's wiring harness, showing different types of connectors for various functions such as motor, battery, throttle, and sensors.

OPERATING INSTRUCTIONS

Once the controller is correctly installed and connected, its operation is typically managed through the electric vehicle's throttle and, if present, the display unit.

1. **Power On:** Turn on your electric vehicle's main power switch. The display (if equipped) should illuminate, indicating the system is active.
2. **Throttle Control:** Gently apply the throttle to initiate movement. The controller will precisely regulate power delivery to the motor based on your throttle input.
3. **Braking:** Engage the brake levers. The controller is designed to immediately cut power to the motor when brakes are applied, ensuring safe and responsive deceleration.
4. **Speed and Mode Selection:** If your vehicle features a display unit, you may be able to select different speed modes or power levels, which the controller will then manage accordingly.

The controller provides stable speed and sensitive control, enhancing your overall riding experience.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your controller.

- **Keep Clean:** Periodically clean the exterior of the controller to prevent the buildup of dust and debris, which can impede heat dissipation. Use a dry, soft cloth for cleaning.
- **Inspect Connections:** Regularly check all wire connections for tightness and any signs of wear, corrosion, or damage. Secure any loose connections immediately.
- **Avoid Overheating:** Ensure the controller is mounted in a location with adequate ventilation. Avoid operating the vehicle under extreme loads for extended periods, especially in hot weather, to prevent the controller from overheating.
- **Protect from Moisture:** While the aluminum casing offers some protection, avoid exposing the controller directly to water, heavy rain, or excessive moisture.

TROUBLESHOOTING

This section addresses common issues you might encounter with your electric motor controller and provides potential solutions.

Problem	Possible Cause	Solution
Motor not responding	Loose wire connections, low battery voltage, faulty throttle, controller error.	Check all wiring connections for security. Ensure the battery is fully charged. Test throttle functionality. Try power cycling the entire system.
Intermittent power	Loose connections, damaged wiring, intermittent short circuit.	Thoroughly inspect all wires and connectors for any signs of damage or looseness. Secure all connections.
Controller overheating	Excessive load on the motor, poor ventilation around the controller, internal fault.	Reduce the load on the electric vehicle. Ensure the controller has adequate airflow for cooling. If the problem persists, discontinue use and seek professional assistance.
Vehicle not braking	Brake sensor/switch malfunction, wiring issue to the brake cut-off.	Check brake lever connections and verify their functionality.

Warning: For complex issues or suspected internal faults, it is strongly recommended to seek assistance from a qualified technician. Do not attempt repairs if you are not experienced with electrical systems.

WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Acouto website or contact your authorized retailer. Always retain your purchase receipt as proof of purchase.

Manufacturer: Acouto

Model Number: Acoutofpgi9ebqt3

ASIN: B0DHKB3D38

For further assistance, you may visit the Acouto Store on Amazon.

