

Haofy Haofytmipd5b9oy

Haofy Brainpower Controller 1000W, 36V/48V Brushless Motor Sine Controller User Manual

Model: Haofytmipd5b9oy

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Haofy Brainpower 1000W, 36V/48V Brushless Motor Sine Controller. Designed for electric bicycles and scooters, this controller ensures efficient and reliable performance. Please read this manual thoroughly before installation and use to ensure safe and optimal functionality.

2. SAFETY INFORMATION

- **Electrical Safety:** Always disconnect power before performing any installation, maintenance, or troubleshooting. Improper wiring can lead to electrical shock, damage to the controller, or other components.
- **Professional Installation:** Installation should ideally be performed by a qualified technician to ensure correct wiring and prevent damage.
- **Voltage Compatibility:** Ensure that the battery voltage (36V or 48V) and motor specifications are compatible with this controller (36V/48V, 1000W). Using incompatible components can cause severe damage.
- **Environmental Conditions:** Protect the controller from water, excessive moisture, and extreme temperatures. While the aluminum alloy casing aids heat dissipation, avoid enclosing it in poorly ventilated spaces.
- **Secure Connections:** All wire connections must be secure and properly insulated to prevent short circuits.

3. PRODUCT OVERVIEW

The Haofy Brainpower Controller is a high-performance brushless motor sine controller designed for electric bicycles and scooters. Its robust aluminum alloy shell with a groove design ensures reliable heat dissipation, protecting the internal circuitry from thermal overloading. This controller provides steady speed control, sensitive braking, and silent operation due to its advanced sine wave technology. The wires and interfaces are constructed for durability

and long-term reliability.

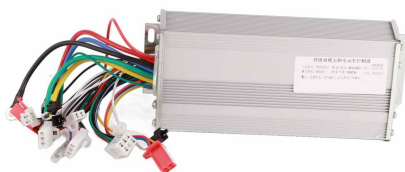


Figure 3.1: Overall view of the Haofy Brainpower Controller, showcasing its aluminum casing and numerous connection wires.

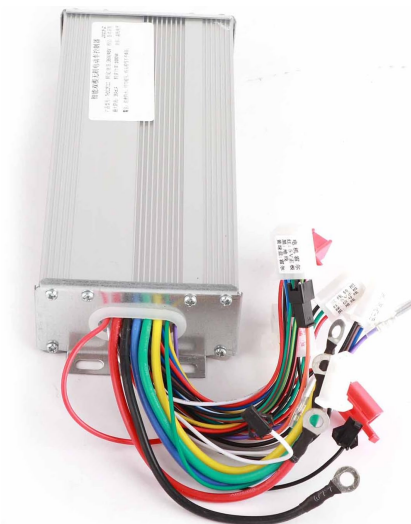


Figure 3.2: Top-down perspective, detailing the various wire connectors and the product label.



Figure 3.3: Side view illustrating the integrated mounting brackets and the heat-dissipating ribbed design of the casing.

4. SPECIFICATIONS

Material	Aluminium alloy
Working Voltage	36V / 48V
Rated Power	1000W
Current	38A
Low Voltage Protection	31V / 42V
Suitable For	Electric bicycle, scooter, etc.
Dimensions (L x W x H)	Approx. 190 x 84 x 44mm (7.5 x 3.3 x 1.7 inches)
Weight	Approx. 676g (1.49 lbs)
Model Name	Haofytmipd5b9oy

Note: This product does not include an instrument display interface and cannot be used with external display instruments.

5. SETUP AND INSTALLATION

Careful installation is crucial for the proper functioning and longevity of your controller. Follow these general guidelines:

- Preparation:** Ensure the vehicle's power is completely off and the battery is disconnected before starting installation.
- Mounting:** Securely mount the controller in a location that allows for adequate airflow and heat dissipation. Utilize the integrated mounting brackets. Avoid areas prone to direct water exposure or excessive vibration.
- Wire Identification:** The controller comes with various color-coded wires and connectors. Refer to the wiring diagram provided with your motor or vehicle for specific connections. Common connections include:
 - Power Wires:** Connect to the battery (usually thick red for positive, thick black for negative).
 - Motor Wires:** Connect to the motor (usually three thick wires for phase, and thinner Hall sensor wires).
 - Throttle Wires:** Connect to the throttle mechanism.
 - Brake Wires:** Connect to the brake levers/sensors.
 - Other Function Wires:** May include wires for speed sensor, cruise control, anti-theft, etc. Connect these according to your vehicle's specific requirements.
- Connection:** Carefully connect each wire, ensuring a firm and correct connection. Incorrect wiring can damage the controller, motor, or battery.
- Insulation:** After making connections, ensure all exposed wires and terminals are properly insulated to prevent short circuits and corrosion.
- Initial Test:** Once all connections are made, reconnect the battery and perform a low-power test to verify functionality before full operation.

6. OPERATING INSTRUCTIONS

The Haofy Brainpower Controller is designed for intuitive operation, providing smooth and efficient control over your electric vehicle.

- **Power On:** Once correctly installed and connected, turn on the main power switch of your electric bicycle or scooter. The controller will initialize.
- **Speed Control:** Use the throttle to control the motor speed. The sine controller technology ensures a consistent and steady speed output, providing a smooth acceleration and deceleration experience.
- **Braking:** The controller is designed for sensitive control of braking. When the brake levers are engaged, the controller will cut power to the motor, allowing for effective stopping.
- **Silent Operation:** Benefit from the sine controller's ability to operate seamlessly and silently, enhancing your riding experience without disruptive motor noise.
- **Direction Changes:** The controller facilitates precise control for changes in direction, contributing to a responsive and manageable ride.

7. MAINTENANCE

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

- **Keep Clean:** Periodically clean the exterior of the controller to prevent dust and debris buildup, which can hinder heat dissipation. Use a dry, soft cloth.
- **Check Connections:** Regularly inspect all wire connections for tightness and signs of corrosion or damage. Loose connections can lead to intermittent operation or component failure.
- **Heat Dissipation:** Ensure that the controller's mounting location remains clear of obstructions to allow for proper airflow and heat dissipation. Overheating can reduce the controller's lifespan.
- **Avoid Moisture:** While the casing offers some protection, avoid exposing the controller to heavy rain or direct water spray.
- **Inspect Wires:** Check wires for any cuts, abrasions, or signs of wear. Repair or replace damaged wires immediately.

8. TROUBLESHOOTING

If you encounter issues with your controller, refer to the following troubleshooting guide. For complex problems, consult a qualified technician.

- **No Power to Motor:**
 - Check battery charge level.
 - Verify all power connections (battery to controller) are secure.
 - Ensure the main power switch is on.
 - Check for blown fuses in the battery circuit (if applicable).
- **Motor Not Running or Running Erratic:**
 - Inspect motor phase wires and Hall sensor wires for correct and secure connections.
 - Check throttle connections and functionality.
 - Ensure brake cut-off switches are not engaged.
 - Verify motor compatibility with the controller's voltage and power rating.
- **Controller Overheating:**
 - Ensure the controller is mounted in a well-ventilated area.
 - Check for excessive load on the motor or vehicle.

- Verify that the motor is not drawing excessive current.

- **Unusual Noises:**

- While the sine controller is designed for silent operation, any unusual noises may indicate a loose connection or a motor issue. Inspect motor and controller connections.

9. WARRANTY INFORMATION

Specific warranty terms for the Haofy Brainpower Controller may vary depending on your region and the retailer from whom the product was purchased. Please retain your proof of purchase. For detailed warranty information, including coverage duration and claims procedures, please contact your original retailer or the manufacturer directly.

10. SUPPORT

If you require technical assistance, have questions regarding installation, or need further support for your Haofy Brainpower Controller, please contact the customer service department of your retailer. You may also visit the official Haofy website for additional resources or contact information.

Haofy Store Link: [Visit the Haofy Store on Amazon](#)

