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› YIYIBYUS Sine Wave Controller 3000W 60V-72V Electric Bike Brushless Motor Sensor User Manual

YIYIBYUS Sine Wave Controller

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INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your YIYIBYUS Sine Wave Controller. Designed for 60V-72V electric bikes with brushless motors, this controller ensures efficient power delivery and motor protection. Please read these instructions carefully before use to ensure proper function and safety.

The YIYIBYUS Sine Wave Controller is engineered for high performance, featuring robust construction and advanced control algorithms. It is suitable for various electric bike applications, including electric motorcycles and other electric vehicles.

PRODUCT FEATURES

- **Waterproof and Heat Dissipation:** All screws are fixed with waterproof thermal conductive glue, enhancing both water resistance and heat dissipation for improved durability.
- **High-Efficiency Performance:** Utilizes high-quality components to optimize work efficiency, providing powerful starts and strong climbing capability with reduced motor noise.
- **Battery Protection:** Automatically adjusts current when battery voltage drops, protecting the battery, extending its lifespan, and increasing the vehicle's running distance.
- **Motor Phase Protection:** In the event of a motor phase failure, the sine wave controller will protect the motor from burning out and simultaneously safeguard the battery.

WHAT'S IN THE BOX

Upon unpacking, please verify that all components are present and undamaged.

- 1x YIYIBYUS Sine Wave Controller

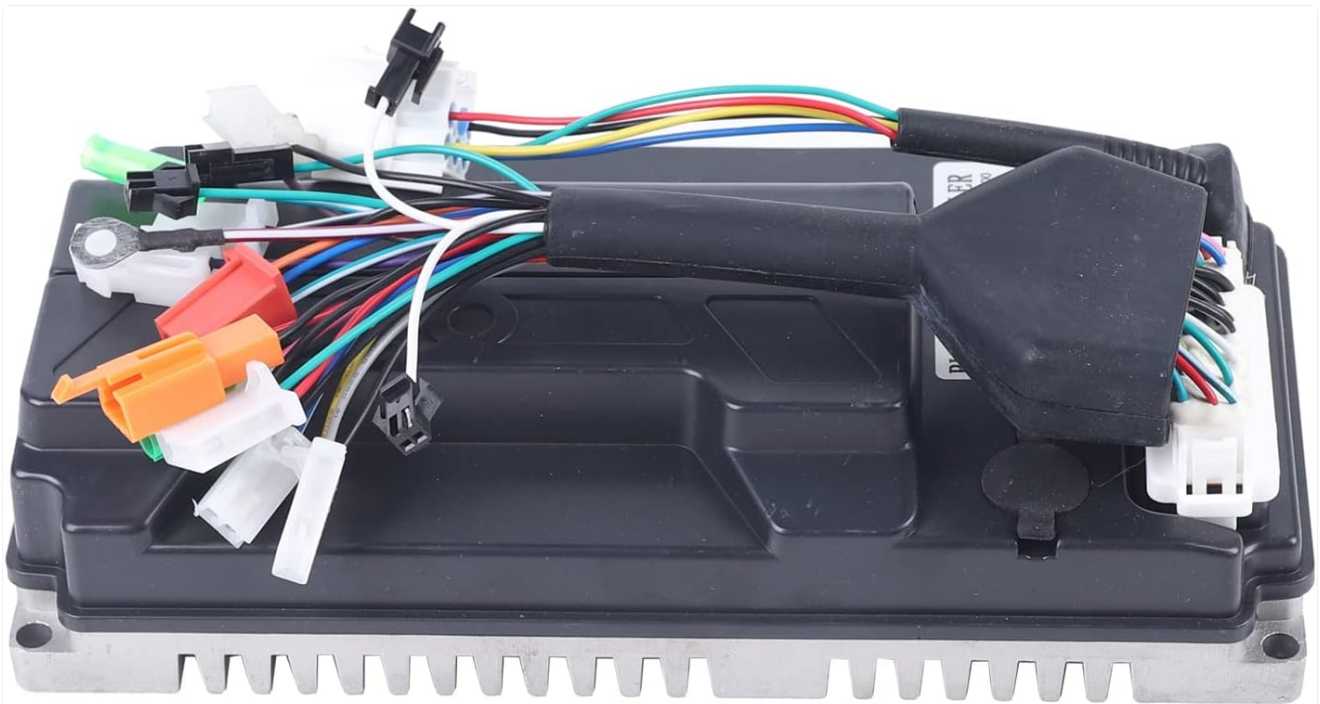


Image: The YIYBYUS Sine Wave Controller, showing its main body and numerous colored wire connectors for various functions.

SPECIFICATIONS

Brand	YIYBYUS
Model Name	Sine Wave Controller
Wattage	3000 watts
Voltage Range	60V-72V
Material	Plastic, Metal
Color	Black
Dimensions	8.82 x 4.41 x 1.97 inches (22.4 x 11.2 x 5 cm)
Specific Uses	Electric motorcycles and electric vehicles
Power Source	Battery
GTIN (UPC)	724443885764

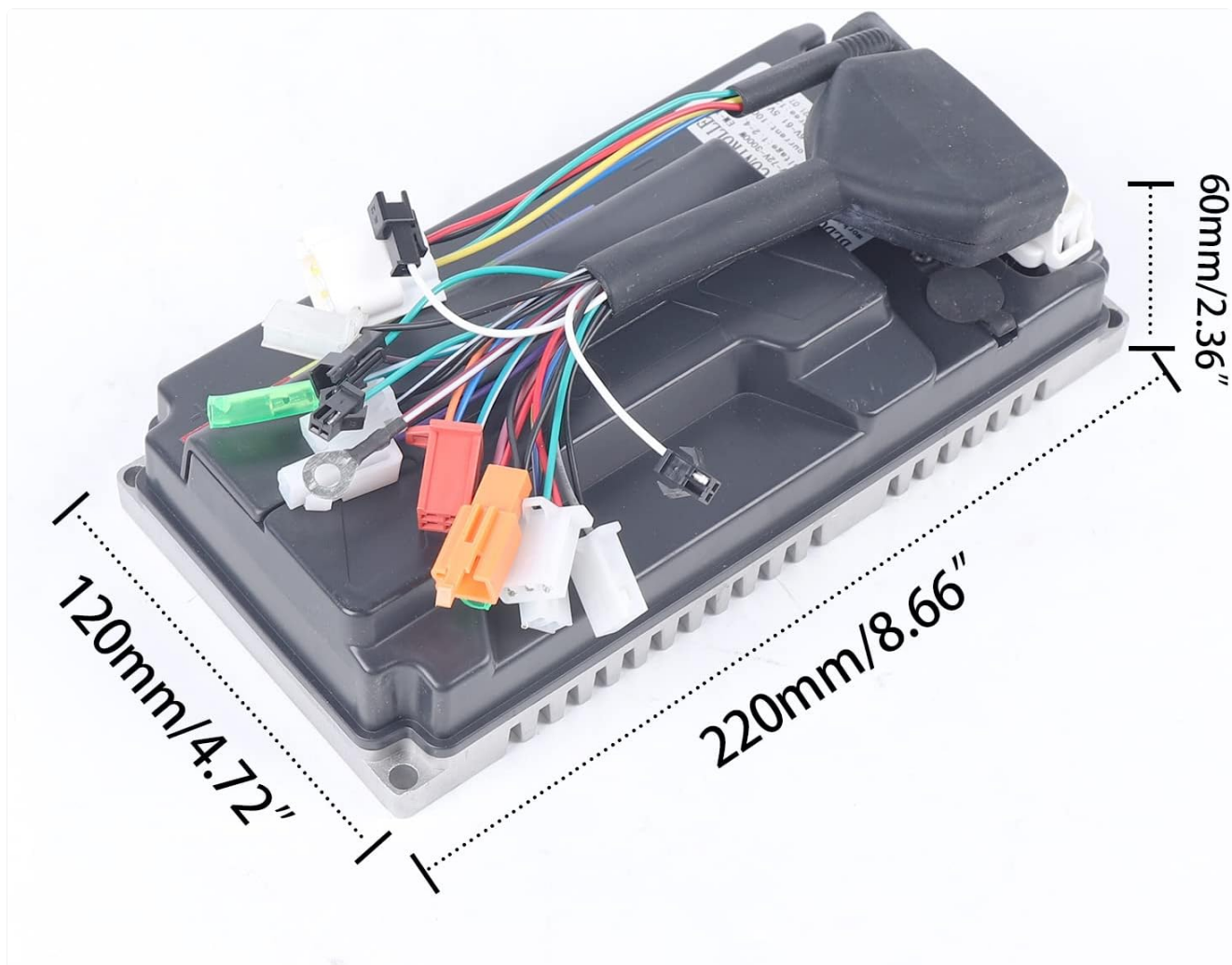


Image: The YIYIBYUS Sine Wave Controller with measurements indicating its length (220mm/8.66"), width (120mm/4.72"), and height (60mm/2.36").

SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of the controller. If you are unsure about any steps, consult a qualified technician.

1. **Safety First:** Ensure the electric bike's power is completely off and the battery is disconnected before beginning installation.
2. **Mounting:** Securely mount the controller in a location that is protected from direct impact and excessive moisture, allowing for adequate airflow for cooling.
3. **Wiring Connections:** Carefully connect all wires according to the provided wiring diagram. Pay close attention to polarity and ensure all connections are firm and insulated.
4. **Motor Hall Sensor:** Connect the motor Hall sensor wires to the corresponding port on the controller.
5. **Power Supply:** Connect the main power wires from the battery to the controller, ensuring correct voltage (60V-72V).
6. **Accessory Connections:** Connect throttle, brake levers, display, and other accessories as required by your electric bike's configuration.
7. **Initial Check:** Before fully powering on, double-check all connections for correctness and security.

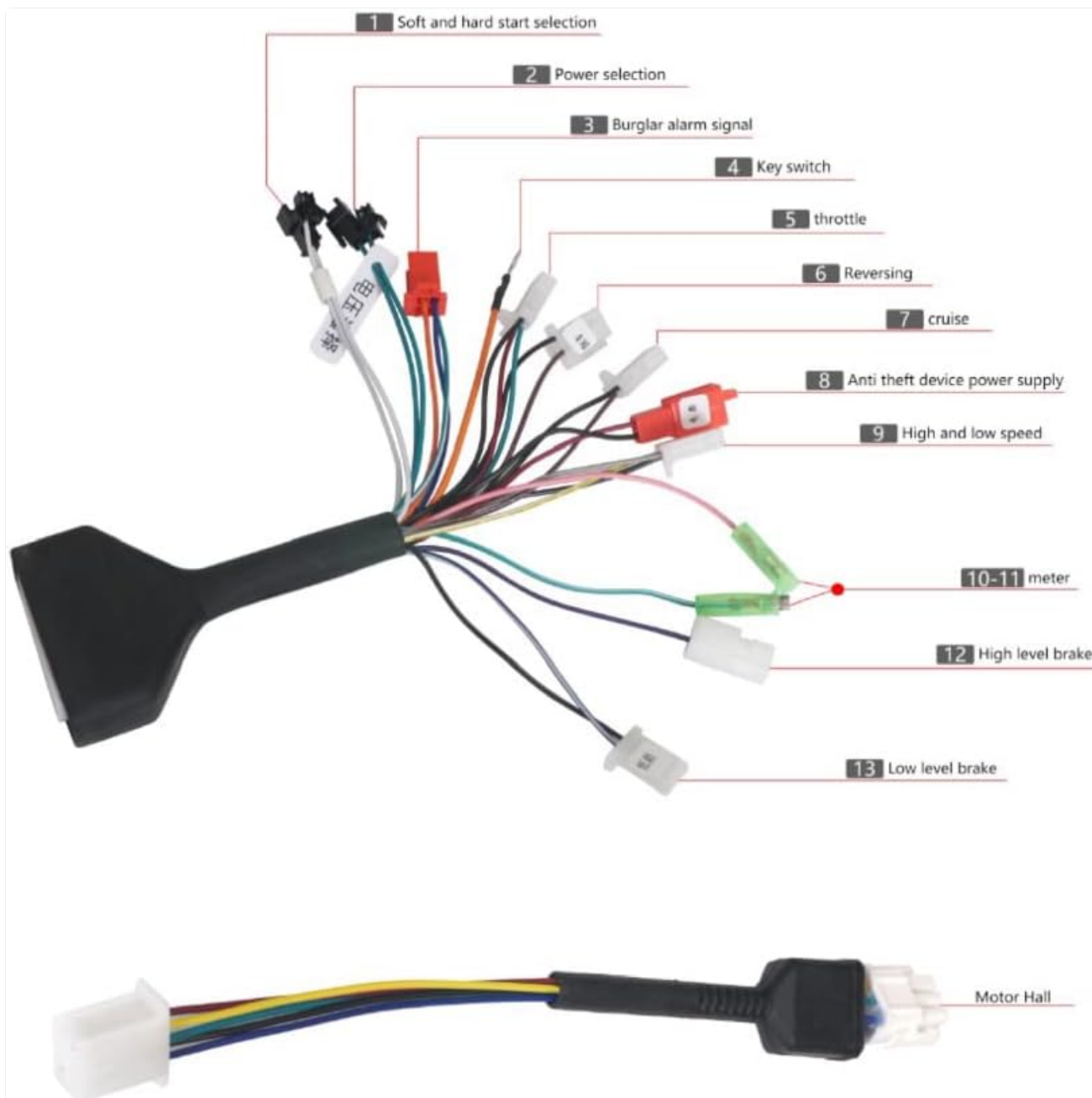


Image: A detailed wiring diagram illustrating the various connections on the sine wave controller, including soft/hard start, power selection, burglar alarm, key switch, throttle, reversing, cruise, anti-theft, high/low speed, meter, high-level brake, low-level brake, and motor Hall sensor.

OPERATING INSTRUCTIONS

Once installed, the controller manages the power delivery to your electric bike's motor.

1. **Power On:** Turn on the electric bike's main power switch. The controller will perform a self-check.
2. **Throttle Control:** Use the throttle to control the motor's speed. The sine wave output ensures smooth and quiet acceleration.
3. **Braking:** Engage the brake levers to activate the motor cut-off function, which stops power to the motor for safe deceleration.
4. **Speed Modes:** If your bike is equipped with high/low speed selection, use the corresponding switch to adjust the maximum speed output.
5. **Cruise Function:** If available, activate the cruise control feature for maintaining a constant speed without continuous throttle input.

6. **Battery Monitoring:** Regularly monitor your battery level via the bike's display. The controller's battery protection feature will reduce current as voltage drops to extend range.

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 cloth.
- **Inspect Connections:** Annually, or if issues arise, inspect all wire connections for corrosion, looseness, or damage. Ensure waterproof seals are intact.
- **Avoid Overheating:** Ensure the controller is not covered or obstructed during operation to allow for proper cooling.
- **Water Exposure:** While waterproof, avoid submerging the controller or exposing it to high-pressure water jets.

TROUBLESHOOTING

If you encounter issues, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Motor not starting or intermittent power.	Loose wiring connection, faulty Hall sensor, low battery voltage.	Check all wire connections, especially the motor Hall sensor and main power. Ensure battery is adequately charged.
Motor runs but with reduced power or unusual noise.	Motor phase issue, incorrect speed setting, controller overheating.	Verify motor phase connections. Check for obstructions around the controller. Ensure the correct speed mode is selected.
Controller not responding.	No power supply, faulty key switch, internal controller fault.	Confirm battery is connected and charged. Test the key switch. If issues persist, contact support.

If troubleshooting does not resolve the issue, please contact customer support for further assistance.

WARRANTY AND SUPPORT

The YIYIBYUS Sine Wave Controller comes with a limited warranty of 90 days from the date of purchase. This warranty covers manufacturing defects under normal use conditions.

For warranty claims, technical support, or any questions regarding your product, please contact YIYIBYUS customer service. Provide your purchase details and a clear description of the issue to expedite assistance.

Contact Information: Refer to your purchase documentation or the retailer's website for the most current customer support contact details.