

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

> [NULKOMMA](#) /

> [NULKOMMA JH4AJ6566DZHBK Brushless DC Motor Controller User Manual](#)

NULKOMMA JH4AJ6566DZHBK

NULKOMMA JH4AJ6566DZHBK Brushless DC Motor Controller User Manual

Model: JH4AJ6566DZHBK | Brand: NULKOMMA

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your NULKOMMA JH4AJ6566DZHBK Brushless DC Motor Controller. Please read this manual thoroughly before installation and operation to ensure proper function and longevity of the product.

The JH4AJ6566DZHBK is designed to provide steady speed and sensitive control for electric bicycles and scooters, managing braking and direction changes effectively. Its aluminum alloy shell ensures good heat dissipation and protects internal circuits.

2. SAFETY INFORMATION

- Always disconnect power before performing any installation, maintenance, or troubleshooting.
- Ensure all connections are secure and correctly matched according to the labels. Incorrect wiring can cause damage to the controller or other components.
- Avoid exposing the controller to water or extreme temperatures.
- Do not attempt to open or modify the controller casing, as this may void the warranty and pose safety risks.
- If you are unsure about any installation steps, consult a qualified technician.

3. PRODUCT OVERVIEW

The NULKOMMA JH4AJ6566DZHBK Brushless DC Motor Controller is a robust unit designed for reliable performance in e-bike and scooter applications. Key features include:

- Sensitive control for steady speed and responsive braking.
- Durable wires and interfaces for long-term use.
- Aluminum alloy shell for effective heat dissipation.

- Labeled interfaces for straightforward installation.



Figure 1: Controller label displaying model number, voltage (DC48V), low voltage protection (39V ±1V), maximum current (21A ±1A), and factory date.

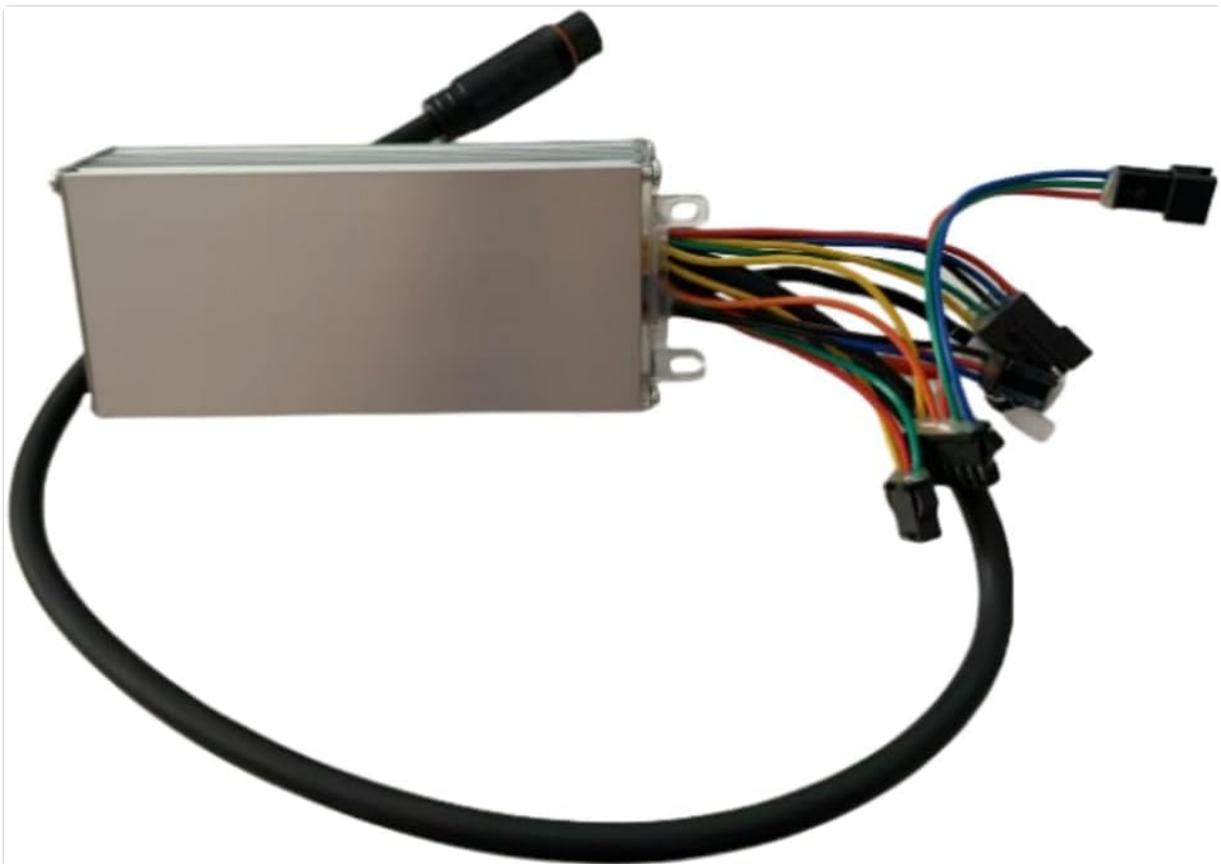


Figure 2: The NULKOMMA JH4AJ6566DZHBK controller, showcasing its compact aluminum casing and the array of multi-colored wiring harnesses for different connections.

4. SPECIFICATIONS

Parameter	Value
-----------	-------

Model Number	JH4AJ6566DZHBK
Rated Voltage	DC 48V
Maximum Current	21A \pm 1A
Low Voltage Protection	39V \pm 1V
Material	Aluminum Alloy
Item Weight	286 Grams (approx. 10.1 ounces)
Package Dimensions	9.45 x 5.91 x 1.57 inches

5. SETUP AND INSTALLATION

The controller features labeled interfaces for easy connection. Carefully identify each connector before plugging them in. Refer to the diagram and video below for guidance.

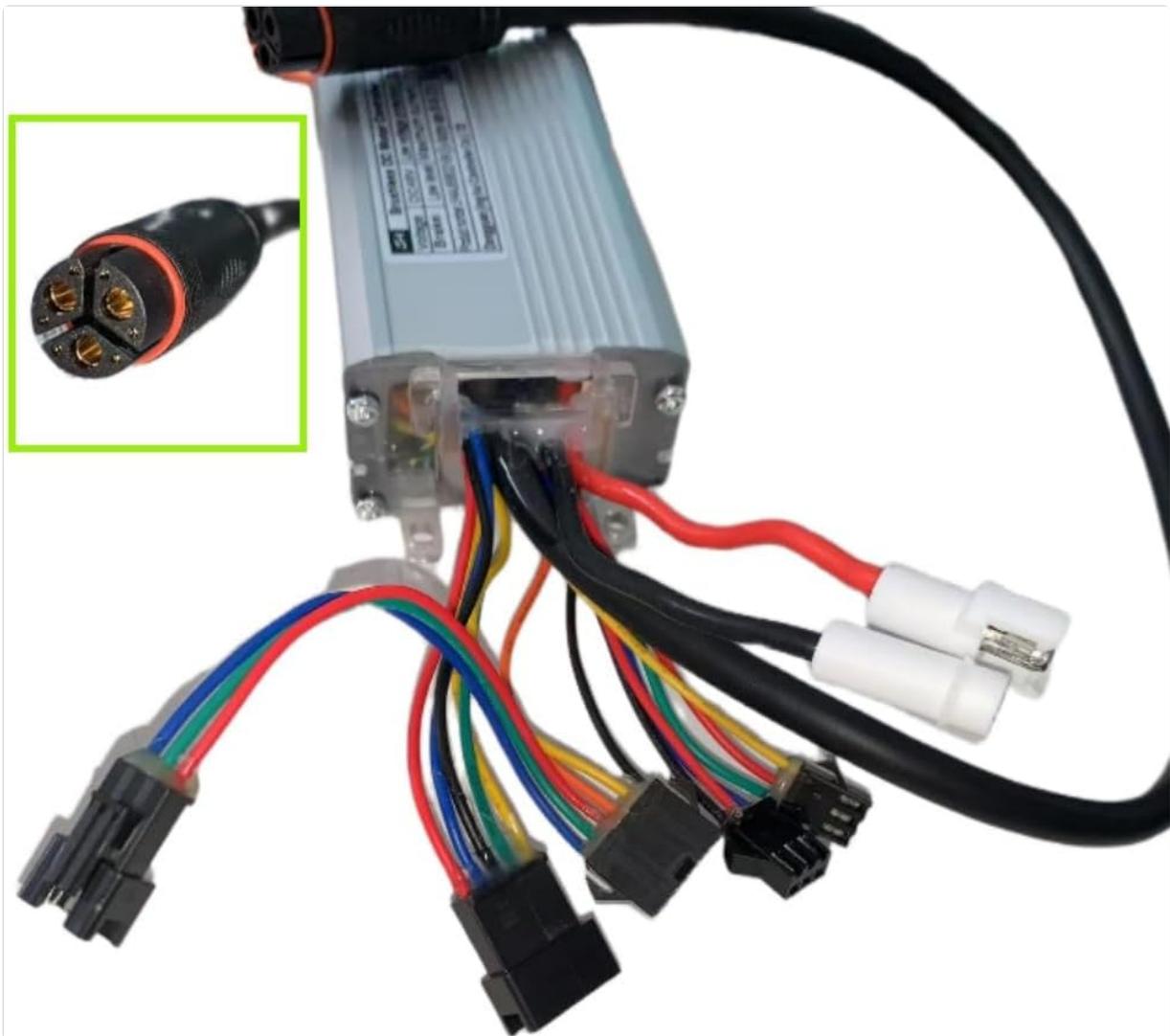


Figure 3: The controller showing its main power input connector (inset) and other signal/motor phase wire connectors. Ensure correct polarity and secure connections.

1. **Identify Connectors:** Before connecting, familiarize yourself with the various connectors extending from the controller. Each connector is typically color-coded or labeled for its specific function (e.g., motor phase wires, battery, throttle, brake, display).

2. **Motor Phase Wires:** Connect the three thick wires (usually green, blue, yellow) from the controller to the corresponding motor phase wires.
3. **Battery Connection:** Connect the main power wires (red for positive, black for negative) to your DC 48V battery pack. Ensure correct polarity to prevent damage.
4. **Throttle/Accelerator:** Connect the throttle cable to the designated connector.
5. **Brake Levers:** Connect the brake lever cables. The controller is designed to detect low-level brake signals, cutting power to the motor for safe stopping.
6. **Display/Panel:** If applicable, connect your e-bike display or control panel to the appropriate connector.
7. **Other Connections:** Connect any other auxiliary components such as pedal assist sensor (PAS), lights, or speed sensor as required by your e-bike system.
8. **Secure Connections:** Double-check all connections to ensure they are firm and properly seated. Loose connections can lead to intermittent operation or damage.

Watch the video below for a visual guide on the controller's components and connections:

Your browser does not support the video tag.

Video 1: A detailed look at the NULKOMMA JH4AJ6566DZHBK Brushless Motor Controller, demonstrating its various wire harnesses and connectors for proper installation on an e-bike or scooter.

6. OPERATING INSTRUCTIONS

Once the controller is correctly installed and all connections are secure:

1. **Power On:** Turn on the main power switch of your e-bike or scooter. The display (if connected) should illuminate.
2. **Throttle Control:** Gently twist the throttle to engage the motor. The controller will provide sensitive and steady speed control.
3. **Braking:** Apply the brake levers. The controller is designed to detect low-level brake signals, cutting power to the motor for safe stopping.
4. **Direction Changes:** The controller facilitates smooth and responsive direction changes based on your input.
5. **Monitoring:** Pay attention to any indicators on your display for battery level, speed, and error codes.

7. MAINTENANCE

- **Regular Inspection:** Periodically check all wiring and connectors for signs of wear, corrosion, or looseness.
- **Cleaning:** Keep the controller clean and free from dust, dirt, and moisture. Use a dry, soft cloth for cleaning. Do not use harsh chemicals or abrasive materials.
- **Heat Dissipation:** Ensure the controller's aluminum casing is not obstructed, allowing for proper airflow and heat dissipation.
- **Avoid Impact:** Protect the controller from physical impact or drops.

8. TROUBLESHOOTING

If you encounter issues with your controller, refer to the following common problems and solutions:

- **Motor Not Responding:**

- Check battery connection and charge level.
- Verify all motor phase wires and Hall sensor wires are securely connected.
- Inspect throttle connection and functionality.

- **Intermittent Power:**

- Ensure all connectors are tight and free from corrosion.
- Check for any damaged or frayed wires.

- **Overheating:**

- Ensure the controller is mounted in a location with adequate airflow.
- Verify the motor is not drawing excessive current (e.g., due to mechanical resistance).

- **Incorrect Speed/Braking:**

- Check throttle and brake sensor connections.
- Ensure the controller is compatible with your motor and battery specifications.

For persistent issues, contact NULKOMMA customer support.

9. WARRANTY AND SUPPORT

The NULKOMMA JH4AJ6566DZHBK Brushless DC Motor Controller comes with a **1-year warranty** from the date of purchase, covering manufacturing defects.

For technical support, warranty claims, or any questions regarding your product, please contact NULKOMMA customer service. Please have your model number (JH4AJ6566DZHBK) and purchase details ready when contacting support.

You can visit the official NULKOMMA store for more information: [NULKOMMA Store](#)