

CRIDENG 5L2ICE5MG8261DA46D1G804LE

CRIDENG Electric Bike Dual Battery Parallel Module (24V-70V 30A)

Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the CRIDENG Electric Bike Dual Battery Parallel Module. This module is designed to connect two lithium battery packs to a single controller, allowing for simultaneous and balanced discharge, effectively extending the range and power of your electric bike or scooter.

2. PRODUCT FEATURES

- **Simultaneous Discharge:** Enables two lithium batteries to discharge concurrently and evenly, ensuring balanced performance and extended usage time.
- **Real-Time Voltage Detection:** Features automatic voltage detection to monitor battery levels and prevent undervoltage conditions, protecting your batteries.
- **Wide Voltage Compatibility:** Compatible with 24V, 36V, 48V, and 72V lithium battery packs, making it suitable for various electric vehicles. This specific model supports 24V-70V systems.
- **Easy Installation:** Designed for straightforward setup with most electric scooters, balance bikes, and electric bicycles.
- **Increased Current and Capacity:** By combining two batteries, the module can increase the available current and overall battery capacity.

3. SAFETY INFORMATION

Please read and understand all safety warnings before installation and use. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always disconnect power from all batteries before performing any installation or maintenance.
- Ensure all connections are secure and properly insulated to prevent short circuits.

- Do not expose the module to water, excessive moisture, or extreme temperatures.
- Verify that your battery voltage and current ratings are compatible with this module (24V-70V, 30A max).
- Seek professional assistance if you are unsure about any part of the installation process.
- Keep out of reach of children.

4. SETUP AND INSTALLATION

Follow these steps to properly install your dual battery parallel module.



Image 1: The CRIDENG Dual Battery Parallel Module, designed for 24V-70V and 30A applications.

4.1 Identifying Ports

The module features distinct input and output ports for connecting your batteries and controller.

(The dual battery pack switcher can manage both battery packs on your bike.)

Battery converter is MCU+MOS scheme, supporting UART communication



Controller power cable



Battery A



Battery B

Controller communication line

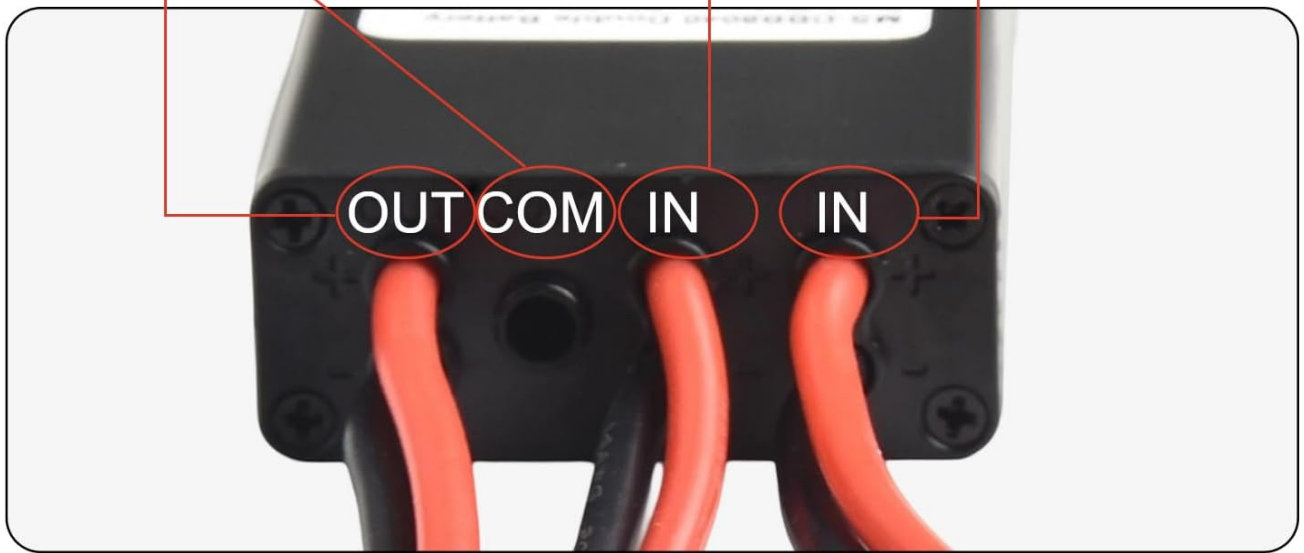


Image 2: Close-up view of the module's ports, showing 'OUT', 'COM', and two 'IN' connections.

Port Name	Connect with
OUT	Controller
COM	Communication interface (customized function)
IN-A	Battery A
IN-B	Battery B

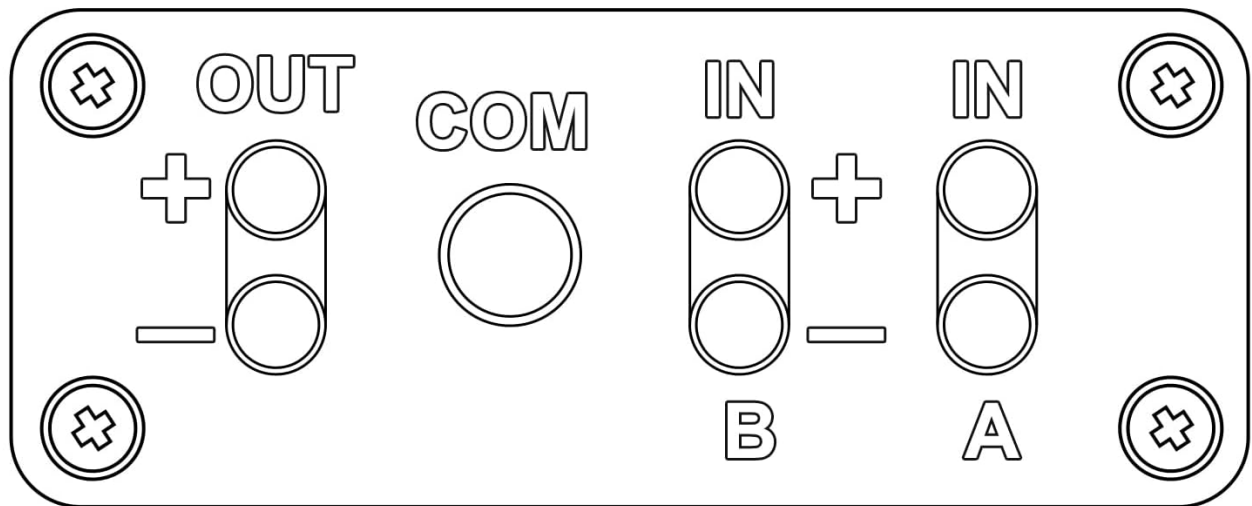


Image 3: A table detailing the function of each port on the dual battery module.

- **OUT:** Connects to the electric bike/scooter controller.
- **COM:** Communication interface (customized function, consult your controller manual if applicable).
- **IN-A:** Connects to Battery A.
- **IN-B:** Connects to Battery B.

4.2 Wiring Diagram

Refer to the diagram below for the correct wiring sequence.

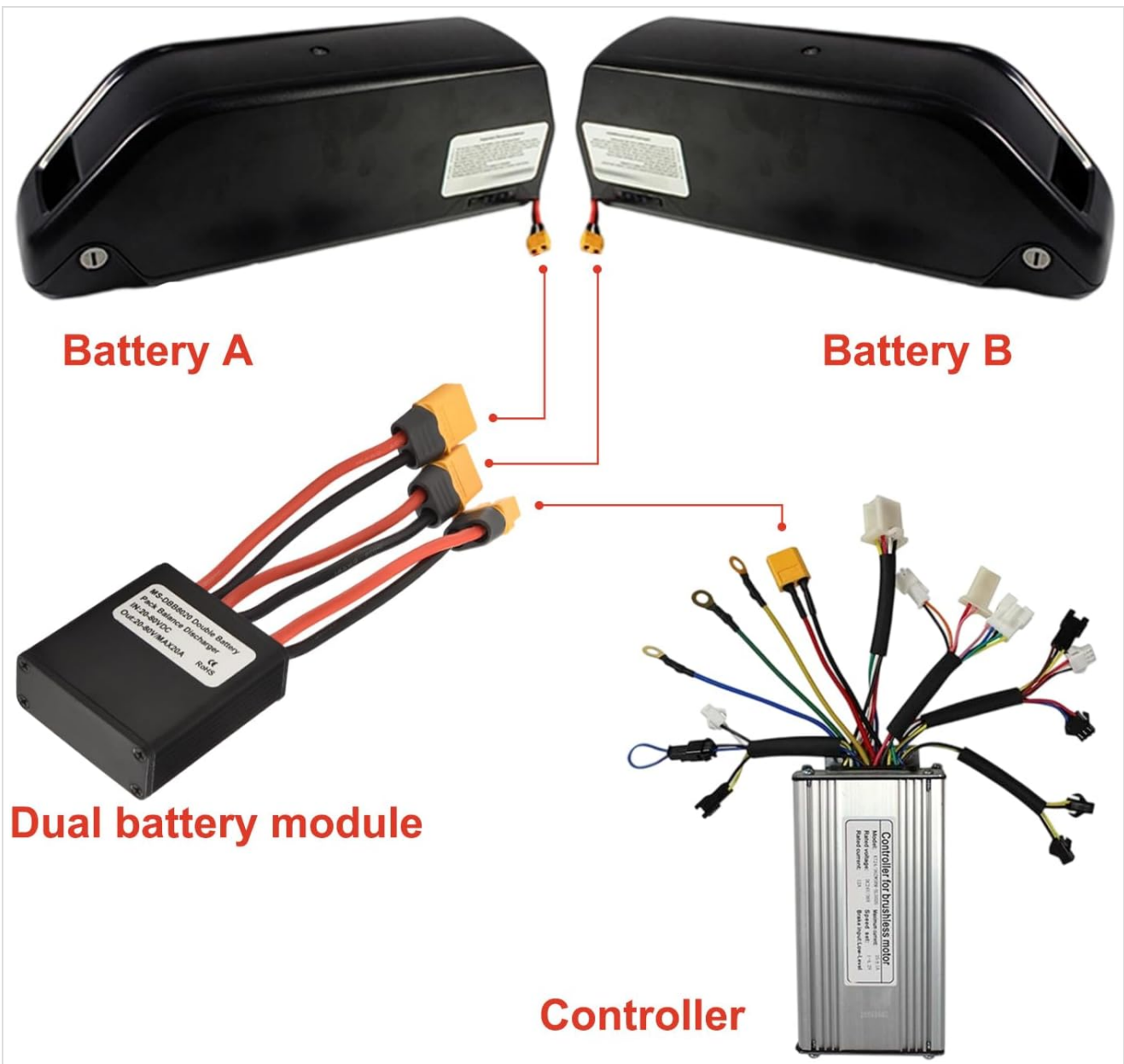


Image 4: Comprehensive wiring diagram illustrating the connection of two batteries and a controller to the dual battery module.

1. Ensure both Battery A and Battery B are fully disconnected from any power source and the controller.
2. Connect Battery A to the **IN-A** port of the dual battery module.
3. Connect Battery B to the **IN-B** port of the dual battery module.
4. Connect the electric bike/scooter controller to the **OUT** port of the dual battery module.
5. If your system utilizes the communication interface, connect the controller's communication line to the **COM** port.
6. Double-check all connections for security and correct polarity before powering on.

5. OPERATING INSTRUCTIONS

Once installed, the module operates automatically to manage power from both batteries.

- The module will draw power from both connected batteries simultaneously, ensuring a balanced discharge.
- It continuously monitors the voltage of both batteries to prevent over-discharge and maintain optimal performance.
- The module is designed to provide a stable and consistent power supply to your controller.

Applicable

24V-70V 30A

Dual Battery Parallel Connector

- ✔ Can increase current
- ✔ Can increase battery capacity
- ✔ Discharge at the same time
- ✔ Providing lasting power



Image 5: The dual battery parallel module is suitable for various electric vehicles, including scooters, balance bikes, and electric bicycles.

6. MAINTENANCE

The CRIDENG Dual Battery Parallel Module requires minimal maintenance.

- Periodically inspect all connections to ensure they remain tight and free from corrosion.
- Keep the module clean and free from dust and debris. Use a dry cloth for cleaning.
- Avoid exposing the module to harsh chemicals or solvents.
- If the module is not in use for an extended period, store it in a dry, cool place.

7. TROUBLESHOOTING

If you encounter issues with your dual battery parallel module, consider the following:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No power to controller	Loose connections Discharged batteries Incorrect wiring	Check all cable connections. Ensure both batteries are charged. Verify wiring according to Section 4.2.
Uneven battery discharge	Faulty battery Module malfunction	Test individual batteries. Contact CRIDENG support if batteries are confirmed functional.
Module overheating	Overload (current exceeds 30A) Poor ventilation	Ensure total current draw does not exceed 30A. Relocate module to a well-ventilated area.

If problems persist after troubleshooting, please contact CRIDENG customer support.

8. SPECIFICATIONS

- **Model Number:** 5L2ICE5MG8261DA46D1G804LE
- **Voltage Compatibility:** 24V-70V DC (supports 24V, 36V, 48V, 72V lithium battery packs)
- **Maximum Current:** 30A
- **Product Dimensions:** 3.54 x 1.57 x 0.39 inches (90 x 40 x 10 mm)
- **Item Weight:** 4.3 ounces (122 grams)
- **Manufacturer:** CRIDENG

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact CRIDENG customer service directly. Ensure you have your model number (5L2ICE5MG8261DA46D1G804LE) available when seeking support.