

Alomejor S900

Alomejor S900 Electric Scooter Brushless Motor Controller and LCD Display Panel User Manual

Model: S900

1. PRODUCT OVERVIEW

The Alomejor S900 Electric Scooter Brushless Motor Controller and LCD Display Panel system is designed for electric scooters and bicycles. It provides efficient control for 36V/48V brushless motors with power ratings of 250W or 350W. The system includes a robust metal controller for heat dissipation and an S900 LCD display for clear operational data.



Image 1.1: Alomejor S900 Controller and LCD Display Panel. This image shows the compact design of both the motor controller and the S900 display unit, highlighting their integrated appearance.

Key Features:

- **Versatile Compatibility:** Supports 36V/48V electric scooters with 250W/350W brushless motors, featuring a 6 MOSFET design and 15A current rating.
- **LCD Display System:** S900 LCD screen offers clear status and data visibility with a backlight function for dim conditions. Designed for 22.2mm/0.9in handlebars.
- **Durable Construction:** Controller shell is made of metal, ensuring superior heat dissipation to prevent thermal overload and maintain long-term performance.
- **Easy Installation:** Features a simple plug-and-play setup between the instrument interface and controller interface.
- **Technical Specifications:** Includes 1.1-4.2V speed setting capability, low-level brake functionality, and a 1:5 supercharger ratio for enhanced performance.

2. SETUP GUIDE

2.1 Package Contents

Before installation, please verify that all components are present:

- Alomejor Brushless Motor Controller
- S900 LCD Display Panel
- Connecting Cables
- Mounting Bracket for LCD Display
- User Manual (this document)

2.2 Installation Instructions

Follow these steps to install the controller and display system:

1. **Mount the LCD Display:** Attach the S900 LCD display to your scooter's handlebars using the provided mounting bracket. Ensure it is securely fastened and positioned for optimal visibility. The display is designed to fit 22.2mm (0.9in) handlebars.



Image 2.1: LCD Display Mounted on Handlebars. This image illustrates the S900 display securely attached to a handlebar, showing its ergonomic placement for user interaction.

2. **Position the Controller:** Find a suitable location on your scooter for the brushless motor controller. The metal casing is designed for heat dissipation, so ensure it has adequate airflow.
3. **Connect Wiring:** The system uses a plug-and-play design. Carefully connect the cables from the LCD

display to the corresponding ports on the motor controller. Refer to the wiring diagram below for specific connections. Ensure all connections are firm and secure.

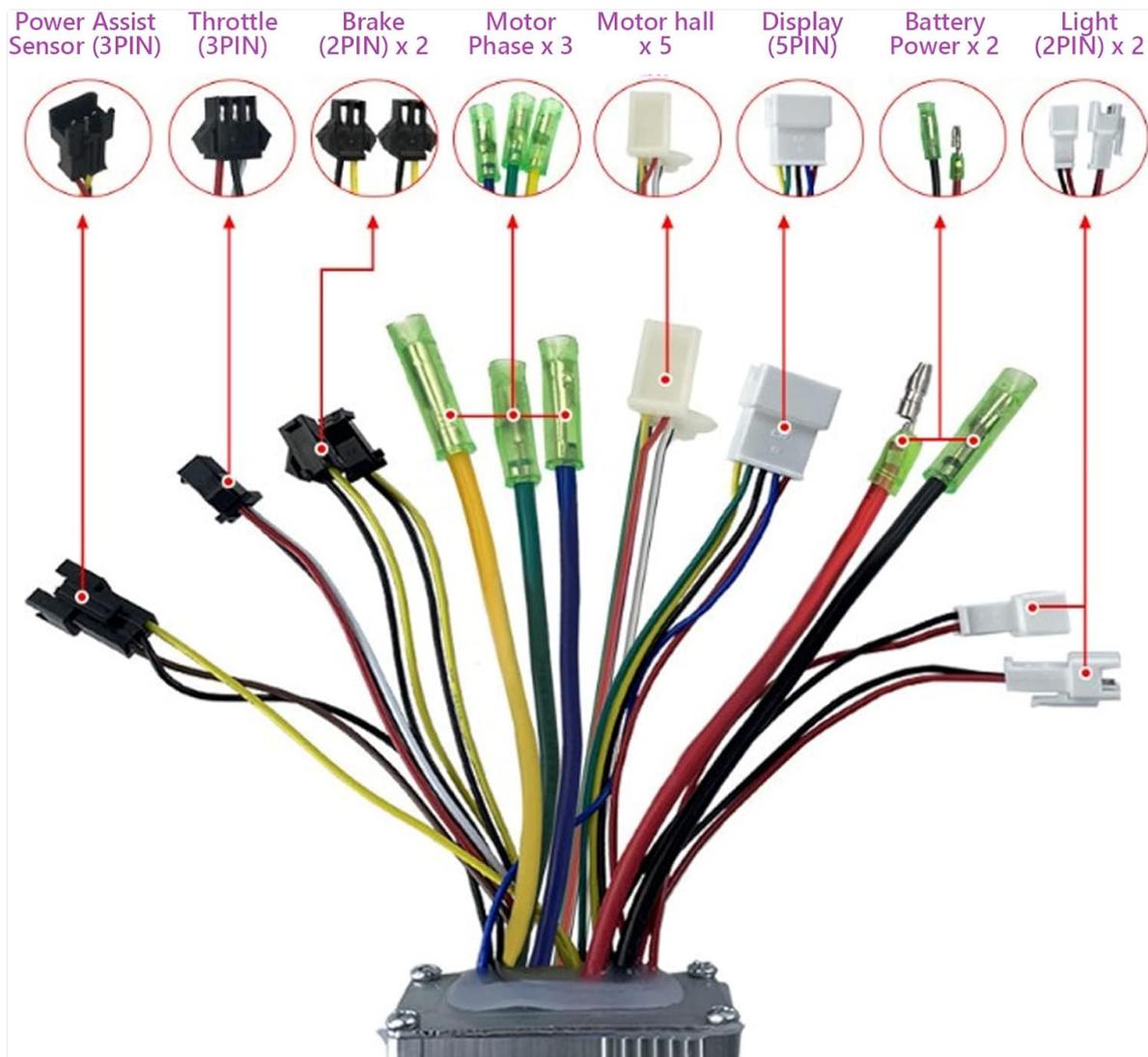


Image 2.2: Controller Wiring Diagram. This diagram provides a clear visual guide for connecting the various components to the motor controller, including the power assist sensor, throttle, brake, motor phase, motor hall, display, battery power, and lights.

- 4. Connect Motor and Battery:** Connect the motor phase wires and motor hall wires from your scooter's motor to the controller. Then, connect the battery power cables to the controller. Double-check polarity before making the final battery connection.
- 5. Secure Cables:** Use cable ties or other fasteners to neatly secure all cables, preventing them from interfering with moving parts or getting damaged.

3. OPERATING INSTRUCTIONS

3.1 Powering On/Off

To power on the system, press and hold the power button on the S900 LCD display. To power off, press and hold the power button again until the display turns off.

3.2 LCD Display Functions (S900)

The S900 LCD display provides real-time information about your scooter's status:

- Controller shell adopts groove design with good heat dissipation function to protect internal circuit
- LCD display can clearly display the status and data
- Backlight allows you to see the screen clearly in the dim environment



Image 3.1: S900 LCD Display Interface. This close-up shows the various indicators on the S900 display, including current speed, total distance (ODO), trip distance, battery charge level, and error codes.

- **Speed:** Displays current riding speed.
- **ODO (Odometer):** Shows total accumulated distance.
- **Trip:** Displays distance for the current ride.
- **Battery Level:** Indicates remaining battery charge.
- **Mode:** Shows the current power assist mode (e.g., ECO).
- **PAS (Power Assist System) Level:** Indicates the level of motor assistance.
- **Error Codes:** Displays numerical codes if a system error occurs. Refer to the troubleshooting section for details.

3.3 Adjusting Settings

Use the buttons on the S900 display to navigate through settings and adjust parameters such as speed limits and power assist levels. Consult the detailed display manual (if provided separately) for advanced programming options. The speed setting capability ranges from 1.1V to 4.2V.

4. MAINTENANCE

4.1 Controller Care

- Keep the controller clean and free from excessive dust or debris.
- Ensure the controller's metal casing is not obstructed, allowing for proper heat dissipation.
- Avoid exposing the controller to direct water spray or prolonged heavy rain.

4.2 Display Care

- Clean the LCD screen with a soft, damp cloth. Avoid abrasive cleaners.
- Protect the display from direct sunlight for extended periods to prevent screen degradation.
- Ensure the display's mounting is secure to prevent vibrations or accidental detachment.

5. TROUBLESHOOTING

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

5.1 Common Issues and Solutions

- **Display Not Turning On:**
Check battery connections to the controller. Ensure the battery is charged. Verify the display cable is securely connected to the controller.
- **Motor Not Responding:**
Check all motor phase and hall sensor connections. Ensure the throttle is correctly connected and functioning. Verify the PAS sensor connection if using pedal assist.
- **Error Code on Display:**
The S900 display may show numerical error codes. These codes typically indicate specific system faults (e.g., motor hall sensor error, controller overcurrent). Consult a more detailed technical guide or contact support with the specific error code for diagnosis.
- **Inconsistent Power/Speed:**
Check for loose wiring connections. Ensure the battery voltage is within the supported range (36V/48V). Verify that the motor wattage (250W/350W) matches the controller's specifications.

If troubleshooting steps do not resolve the issue, please contact customer support.

6. SPECIFICATIONS

Detailed technical specifications for the Alomejor S900 system:



Image 6.1: Controller Dimensions. This image provides a clear view of the motor controller with its physical dimensions labeled for reference during installation.

Feature	Specification
Model Number	S900
Controller Voltage	DC 36V / 48V
Current Rating	15A
Motor Compatibility	250W / 350W Brushless Motors
MOSFET Design	6 MOSFET
Display Type	S900 LCD Panel
Display Handlebar Mount	22.2mm / 0.9in
Speed Setting	1.1-4.2V
Brake Functionality	Low-level Brake
Supercharger Ratio	1:5
Controller Dimensions	Approx. 83 x 53 x 31 mm (3.3 x 2.1 x 1.2 inches)
Item Weight	Approx. 1.18 pounds

7. WARRANTY AND SUPPORT

7.1 Product Warranty

This product is covered by the manufacturer's standard warranty. Please refer to the warranty information provided at the time of purchase or visit the official Alomejor website for details regarding warranty terms and conditions.

7.2 Customer Support

For technical assistance, troubleshooting, or warranty claims, please contact Alomejor customer support through the retailer where the product was purchased or via the contact information available on the official Alomejor brand website.