XR31IJ091UC4M362QU8JS4193

Generic 36V 350W 15A Electric Scooter Controller User Manual

Model: XR31IJ091UC4M362QU8JS4193

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your Generic 36V 350W 15A Electric Scooter Controller. Designed for 8.5-inch electric scooters, this aluminum alloy controller ensures efficient power output and reliable performance. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. Safety Information

Important Safety Notice:
It is illegal to ride electric scooters on public roads, pavements, or cycle paths in many regions. This controller is intended only for use on private land with the owner's permission. Always check local regulations regarding electric scooter usage.

- Ensure the scooter's power is OFF before attempting any installation or maintenance.
- Disconnect the battery before working on electrical components.
- Wear appropriate safety gear, including gloves and eye protection, during installation.
- If you are unsure about any installation steps, consult a qualified technician.
- Do not expose the controller to water or extreme temperatures.

3. Product Features

- **Compatibility:** Specifically designed for 8.5-inch electric scooters, ensuring optimal performance.
- **Durable Construction:** Made from aluminum alloy, offering excellent wear resistance and long-lasting durability.
- **Lightweight Design:** Sturdy yet lightweight for easy handling and installation.
- **Easy Replacement:** Simple structure facilitates convenient maintenance and hassle-free installation.
- **Efficient Performance:** Equipped with a 36V 350W 15A motor, ensuring smooth and powerful riding.
- **Compact and Portable:** Measures 11.7 x 4.9 x 3.25 cm and weighs approximately 168.7g.

4. Specifications

Specification	Value
Product Name	36V 350W 15A Controller
Material	Aluminum Alloy
Dimensions	11.7 x 4.9 x 3.25 cm (4.72 x 2.36 x 1.18 inches)
Weight	Approx. 168.7g (6 ounces)
Voltage	DC 36V
Rated Power	350W
Current Limiting	15A
Undervoltage Protection	31V
Model Number	XR31IJ091UC4M362QU8JS4193

5. Package Contents

The package includes the following item:

- 1 x 36V 350W 15A Electric Scooter Controller

Figure 5.1: The single controller unit included in the package.

6. Setup and Installation

This section outlines the general steps for replacing an electric scooter controller. Specific wiring diagrams may vary by scooter model. Always refer to your scooter's original manual for detailed wiring instructions.

1. **Preparation:**
    - Ensure the electric scooter is turned off and the battery is disconnected.
    - Gather necessary tools (e.g., screwdrivers, wire cutters, electrical tape).
    - Identify the location of the existing controller, typically within the scooter's deck or stem.
2. **Removal of Old Controller:**
    - Carefully open the scooter's housing to access the controller.
    - Take photos of the existing wiring connections before disconnecting anything. This will serve as a reference.

- Disconnect all wires from the old controller, noting their positions and colors.
- Unmount the old controller from its housing.

3. **Installation of New Controller:**
    - Mount the new 36V 350W 15A controller in the designated space.
    - Connect the wires from the scooter to the new controller, matching them according to your reference photos and the controller's labels (if any). Common connections include:
        - Motor wires (typically three thicker wires, often green, blue, yellow).
        - Battery power wires (thicker red and black wires).
        - Hall sensor wires (thinner wires, often grouped).
        - Throttle wires.
        - Brake wires.
        - Display/light wires.
    - Ensure all connections are secure and properly insulated.
4. **Testing:**
    - Before fully reassembling the scooter, reconnect the battery.
    - Turn on the scooter and perform a basic function test (e.g., check throttle response, brake function, lights).
    - If any issues arise, immediately disconnect the battery and recheck all connections.
5. **Reassembly:**
    - Once all functions are verified, carefully close and secure the scooter's housing.

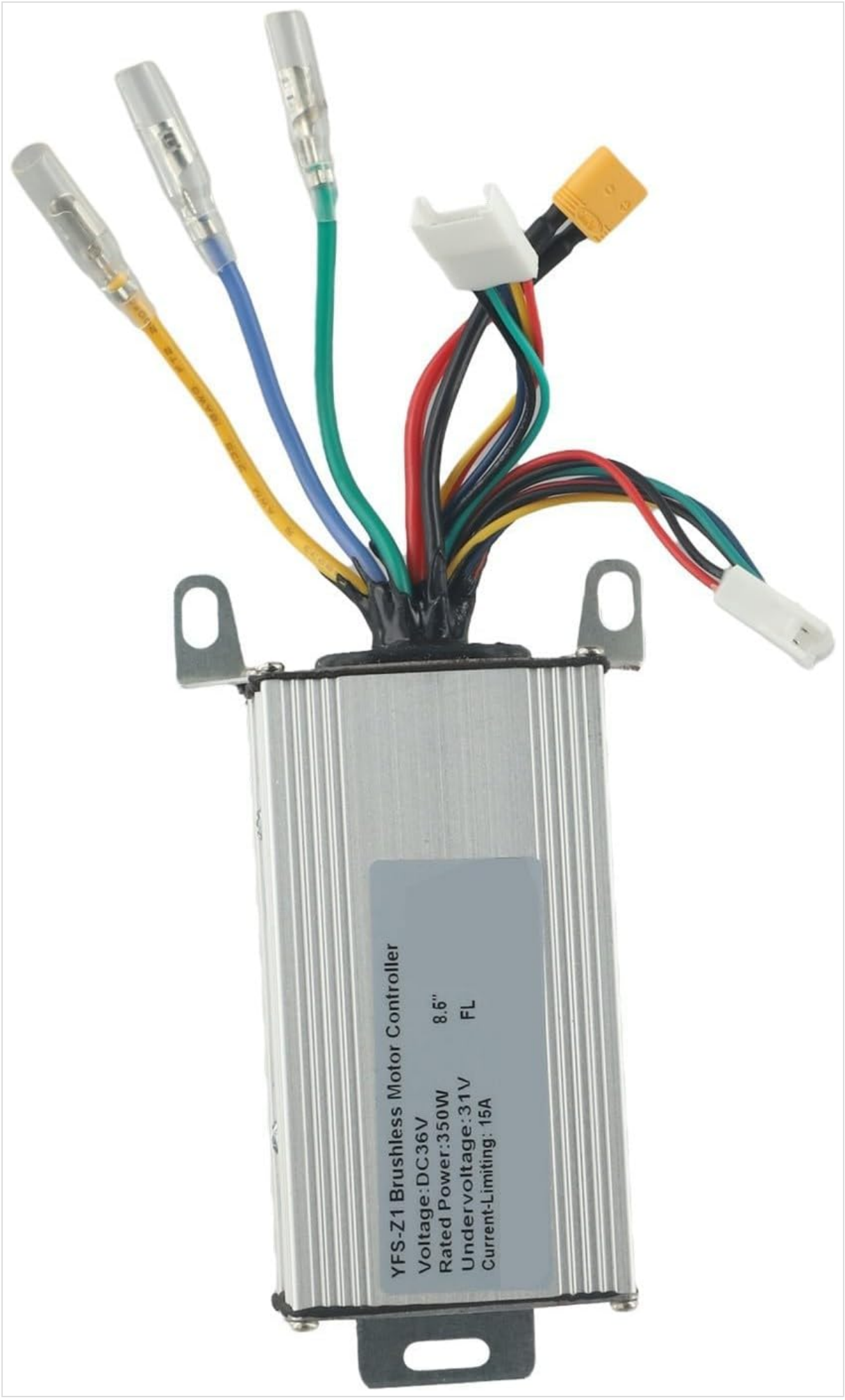

Figure 6.1: Overview of the controller with labeled specifications and wiring harness.

Figure 6.2: Detailed view of the controller's wire connections for installation reference.

7. Operating Instructions

Once the controller is correctly installed, its operation is integrated with your electric scooter's existing controls (throttle, brakes, display). The controller manages the power delivery to the motor based on your input.

- **Power On/Off:** Use your scooter's main power button to turn the system on or off.
- **Acceleration:** The controller translates throttle input into motor speed. Apply throttle smoothly for controlled acceleration.
- **Braking:** The controller works in conjunction with the scooter's braking system. Ensure brakes are functioning correctly after installation.
- **Monitoring:** If your scooter has a display, it will show information like speed, battery level, and mode, all managed by the controller.

Always operate your electric scooter responsibly and in accordance with local laws and safety guidelines.

8. Maintenance

Proper maintenance can extend the lifespan of your electric scooter controller.

- **Regular Inspection:** Periodically check the controller and its wiring for any signs of damage, loose connections, or corrosion.

- **Cleaning:** Keep the controller housing clean and free from dust, dirt, and moisture. Use a dry, soft cloth for cleaning. Do not use liquid cleaners directly on the controller.
- **Avoid Overheating:** Ensure the controller has adequate ventilation within the scooter's housing. Avoid operating the scooter in conditions that may lead to excessive heat buildup.
- **Secure Mounting:** Verify that the controller remains securely mounted to prevent vibrations and potential damage.

9. Troubleshooting

If you encounter issues with your electric scooter after controller installation, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Scooter does not power on.	Loose battery connection, faulty battery, controller not receiving power.	Check battery connections. Ensure battery is charged. Verify power wires to controller are secure.
Motor not responding to throttle.	Loose throttle connection, faulty throttle, motor wires disconnected.	Inspect throttle wiring. Check motor phase wires and Hall sensor wires.
Erratic scooter behavior.	Loose or incorrect wiring, interference.	Recheck all wiring connections for proper seating and insulation. Ensure no wires are pinched.
Controller overheating.	Overload, poor ventilation, short circuit.	Reduce load on scooter. Ensure controller housing has adequate airflow. Disconnect power and inspect for short circuits.

If problems persist after attempting these solutions, it is recommended to consult a professional electric scooter repair service.

10. Warranty and Support

Specific warranty information for this Generic product is not provided in this manual. Please refer to the retailer or manufacturer's website for details regarding warranty coverage and customer support. For technical assistance, it is recommended to contact the point of purchase or a qualified electric scooter technician.