Voilamart EBV-48V1000WFN

Voilamart 26" 48V 1000W Front Wheel E-Bike Conversion Kit User Manual

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Voilamart 26-inch 48V 1000W Front Wheel Electric Bicycle Conversion Kit. This kit is designed to transform a standard bicycle into an electric bicycle, offering pedal assistance and throttle control. Please read this manual thoroughly before installation and use to ensure safe and optimal performance.



Image: A person riding a mountain bike equipped with the Voilamart brushless gearless motor kit on the front wheel, suitable for city commuting.

Safety Information

- Always wear a helmet and appropriate safety gear when riding your electric bicycle.
- Ensure all connections are secure and waterproof before riding, especially in wet conditions.
- Regularly inspect your bicycle's brakes, tires, and all kit components for wear or damage.
- Do not operate the kit if any components are damaged or malfunctioning.
- Be aware of local regulations regarding e-bike power and speed limits. This kit is restricted to 750W and 24mph (38km/h) by default for road-legal use.
- Keep hands and clothing clear of moving parts, especially the motor wheel.
- A 48 Volt electrokinetic cell battery with a nominal capacity not less than 11.6Ah is required and must be purchased separately. Ensure the battery is compatible and installed safely.

Package Contents

Your Voilamart E-Bike Conversion Kit includes the following components:

- 48V 1000W Ebike 100mm Dropout Front Hub Motor Wheel with 26 x 1.95 inch Tub & Tire
- Ebike SM Plug Controller and controller frame bag
- Electric Bicycle Twist Throttle and Brake Lever (one pair)
- 8 Magnet Pedal Assist Crank Sensor (PAS)
- Cable Ties & Plastic Coil
- Instruction Manual

Note: Battery is NOT included and must be purchased separately.

Setup and Installation

Follow these steps carefully to install your e-bike conversion kit. Professional installation is recommended if you are unfamiliar with bicycle mechanics or electrical wiring.

1. Prepare Your Bicycle

- Ensure your bicycle's front fork dropout width is 100mm. Refer to the size information diagram for details.
- Remove your existing front wheel.
- It is highly recommended to install torque arms on both sides of the front fork to prevent axle rotation due to the motor's power. Torque arms are not included and should be purchased separately.



Image: Detailed measurements for the 26-inch front wheel and motor hub, including front dropout of 100mm.

2. Install the Motor Wheel

- Carefully insert the new motor wheel into the front fork dropouts.
- Secure the axle nuts firmly. If using torque arms, install them according to their instructions before tightening the axle nuts.

3. Install Handlebar Components

- Remove your existing brake levers and grips.
- Install the new brake levers and twist throttle onto the handlebars. Ensure they are positioned comfortably and securely.
- The brake levers are designed to cut off power to the motor when engaged, enhancing safety.

4. Install Pedal Assist Sensor (PAS)

- Attach the 8-magnet pedal assist crank sensor to your bicycle's bottom bracket area, ensuring the magnet disc is close to the sensor.
- Proper alignment is crucial for the PAS system to function correctly.

5. Mount Controller and Wiring

- Place the controller inside the provided controller frame bag.
- Mount the controller bag securely to your bicycle frame.
- Route all cables (motor, throttle, brake levers, PAS, battery) to the controller. Use the provided cable ties and plastic coil to organize and protect the wiring.
- Refer to the wiring diagram for correct connections.



Image: An example installation diagram showing the placement of various kit components on a bicycle frame.



Image: A detailed wiring diagram for connecting the motor, controller, battery, and control components.

6. Connect Battery

- Connect your 48V battery (not included) to the controller. Ensure the polarity is correct.
- Secure the battery to your bicycle frame.

Operating Instructions

Once installed, your Voilamart E-Bike Conversion Kit offers two primary modes of operation: Pedal Assist System (PAS) and Twist Throttle.

1. Power On/Off

- Turn on your battery's power switch (if applicable).
- The twist throttle typically includes a power button or a key switch to activate the system.

2. Pedal Assist System (PAS)

- With PAS activated, the motor will provide assistance as you pedal. The level of assistance may vary based on pedaling intensity or pre-set levels (if available on your specific controller/display).
- This system allows you to enjoy cycling with reduced effort, especially on inclines or long distances.

3. Twist Throttle

- The twist throttle allows you to control the motor's power directly, similar to a motorcycle.
- Twist the throttle gently to accelerate. Release it to decelerate.
- The twist throttle also features a battery level display, allowing you to monitor your battery charge.
- Exercise caution when using the throttle, especially from a standstill or on loose surfaces.

4. Brake Levers

- The included brake levers are equipped with safety cut-off switches. When either brake lever is engaged, power to the motor is immediately cut, ensuring safe stopping.



Image: A person enjoying outdoor riding on an e-bike equipped with the Voilamart conversion kit.



Image: An e-bike with the Voilamart kit used for commuting in an urban environment.

Maintenance

Regular maintenance ensures the longevity and safe operation of your e-bike conversion kit.

- **Cleanliness:** Keep the motor, controller, and all electrical connections clean and free from dirt and moisture. Use a damp cloth for cleaning; avoid high-pressure washing.
- **Cable Inspection:** Periodically check all cables and connectors for signs of wear, fraying, or damage. Ensure connections are tight and secure.
- **Tire Pressure:** Maintain correct tire pressure as specified on your tire sidewall.
- **Brakes:** Regularly inspect brake pads and cables for wear. Ensure brake levers activate the motor cut-off switch correctly.

- **Axle Nuts & Torque Arms:** Check that the front wheel axle nuts are securely tightened. If using torque arms, ensure they are properly installed and fastened.
- **Battery Care:** Follow the manufacturer's instructions for your specific battery regarding charging, storage, and maintenance.

Troubleshooting

This section addresses common issues you might encounter with your e-bike conversion kit.

Problem	Possible Cause	Solution
Motor not engaging / No power	Battery low or disconnected; Controller not powered; Loose wiring; Brake levers engaged.	Check battery charge and connection. Ensure controller is powered on. Inspect all wiring for secure connections. Release brake levers.
PAS not working	PAS sensor misaligned or damaged; Loose connection.	Check PAS sensor alignment and ensure it's close to the magnet disc. Inspect PAS wiring connection to the controller.
Throttle not working	Throttle connection loose or damaged; Brake levers engaged.	Check throttle wiring connection. Ensure brake levers are not engaged.
Motor makes unusual noise	Loose components; Internal motor issue.	Check for any loose parts on the wheel or motor. If noise persists, discontinue use and contact customer support.
Intermittent power	Loose electrical connections; Faulty controller or sensor.	Inspect all wiring and connections for tightness. If problem persists, contact customer support.

Specifications

Key technical specifications for the Voilamart 26" 48V 1000W Front Wheel E-Bike Conversion Kit:

Feature	Specification
Wheel Type	Front Wheel
Motor Type	Brushless Gearless Motor
Power	1000W / 48V (Restricted to 750W / 48V for road-legal use)
Compatible Disc Diameter	160mm (6 bolts 44mm type)
Front Dropout	100mm
Spokes	Steel, 12Gx2.6mm
Max Speed	28 mph (45 km/h) or 24 mph (38 km/h) restricted
Max Load Capacity	440 lbs (200 kg)
Package Weight	Approx. 25.9 lbs (11.16 kg)
Certification	CE, EN15194 approved

Feature	Specification
Max Torque	42 N.M
Max Rotating Speed	550 rpm
Wheel Size	26 Inches
Rim Width	0.75 Inches
Material	Aluminum
Model Name	EBK-26I48V1KWN
Part Number	EBV-48V1000WFN



Image: Internal view of the 1000W brushless gearless motor, showing its robust construction.



Image: A visual summary of the 1000W kit's key specifications.

Warranty Information

The Voilamart Electric Bicycle Wheel Kit comes with a**6 Months Warranty** provided by Voilamart. This warranty covers manufacturing defects under normal use. Please retain your proof of purchase for any warranty claims. For specific terms and conditions, refer to the warranty documentation included with your product or contact Voilamart customer support.

Customer Support

If you have any questions, require technical assistance, or need to report an issue with your Voilamart E-Bike Conversion Kit, please contact Voilamart customer support through the retailer where you purchased the product or visit the official Voilamart website for contact information.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

Why does my Voilamart 48V 1000W Front Wheel E-Bike Conversion Kit throttle fail to respond on the first twist and then jump to full power on the second twist?

Based on your description of the Voilamart 48V 1000W Front Wheel E-Bike Conversion Kit, the behavior where the first twist does nothing and the second twist jumps to full power suggests a faulty throttle...

Read full answer