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BAFANG 48V500W26inchDCdisplaySW102

BAFANG 48V 500W Rear Hub Motor E-Bike Conversion Kit with SW102 Display User Manual

Brand: BAFANG | Model: 48V500W26inchDCdisplaySW102

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your BAFANG 48V 500W Rear Hub Motor Electric Bicycle Conversion Kit. This kit is designed to transform a standard 26-inch wheel bicycle into an electric bicycle, offering enhanced riding comfort and efficiency. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

- Always wear a helmet and appropriate safety gear when riding.
- Ensure all connections are secure and waterproof before riding, especially in wet conditions.
- Do not modify the motor, controller, or battery system. Unauthorized modifications can lead to malfunction, injury, or void the warranty.
- Regularly inspect your e-bike for loose parts, damaged wiring, or worn components.
- Be aware of local regulations regarding e-bike usage, speed limits, and power output.
- Keep the battery away from heat sources, direct sunlight, and flammable materials.

3. PACKAGE CONTENTS

Your BAFANG 48V 500W Rear Hub Motor Conversion Kit includes the following components:

- Rear wheel with integrated 500W motor (26-inch)
- Controller
- Brake levers or brake sensors (for hydraulic brake levers)
- Thumb throttle
- Controller case
- SW102 LCD display
- Extension cable

- Pedal Assist Sensor (PAS)
- 1T4 cable (main wiring harness)
- Optional: Battery and charger (if ordered)

Complimentary Parts Details



Image: Overview of the BAFANG 48V 500W Rear Hub Motor E-Bike Conversion Kit components.

4. SETUP AND INSTALLATION

Follow these steps to install your BAFANG Rear Hub Motor Conversion Kit:

1. Prepare the Bicycle:

Remove the existing rear wheel from your bicycle. Ensure your bike's rear dropout size is 135-142mm and compatible with a cassette flywheel of ≤ 9 speeds.

2. Install Rear Hub Motor Wheel:

Carefully install the new rear wheel with the integrated BAFANG 500W hub motor into the bicycle frame's rear dropouts. Secure it firmly with the provided nuts.

3. Mount Controller:

Place the controller inside the controller case. Mount the controller case securely on your bicycle frame, typically on the downtube or seat tube, using the provided straps or mounting hardware.

4. Install Display (SW102):

Mount the SW102 LCD display on your handlebar in a position that is easily visible and accessible. Secure it with the provided bracket.

5. Install Thumb Throttle:

Attach the thumb throttle to your handlebar, usually on the left side, next to the grip.

6. Install Brake Levers/Sensors:

Replace your existing brake levers with the new brake levers that include motor cut-off sensors. If you have hydraulic brakes, install the provided brake sensors onto your existing levers. These sensors cut power to the motor when brakes are applied.

7. Install Pedal Assist Sensor (PAS):

Install the PAS sensor on your bicycle's bottom bracket area. This sensor detects your pedaling motion and activates the motor assist.

8. Connect Wiring:

Use the 1T4 cable to connect all components (motor, controller, display, throttle, brake sensors, PAS) to the

main wiring harness. Ensure all connections are tight and correctly oriented. Use zip ties to neatly secure cables along the frame.

9. Install Battery (Optional):

If you purchased a battery, mount it securely on the bicycle frame, typically on the downtube or rear rack (depending on battery type). Connect the battery to the controller.

E-BIKE DISPLAYS DETAILS

Model	 EKD01	 VD18MT	 DZ40	 SW2-M56	 DPC18
Screen	2.4" TFT-LCD Screen	1.45" IPS-TFT Screen	1.68" LED Screen	3.8" LED Screen	3.5" TFT-LCD Screen
Assist gear	3, 5, 9	3-5-9-U	5	3-5-9	3-5-9
Holder(mm)	φ22.2/25.4	φ22.2	φ22.2	φ22.2/25.4/31.8	φ31.8/25.4/22.2
Password	0000&2020	1919	No Password	1919	1919
Output Port	Type-c Port	✗	✗	✗	USB Port
Language	English, Français, Deutsch, Español, Italiano, Polski, Netherlands, čeština	English	English	English	English

Image: The SW102 Display for your BAFANG E-Bike Conversion Kit.

Complimentary Parts Details



Image: Various accessories included in the BAFANG E-Bike Conversion Kit.



Image: Simplified diagram illustrating the easy installation process of the BAFANG E-Bike Conversion Kit.

Video: Installation guide for the Bafang Hub Motor Conversion Kit for Ebike. This video demonstrates the steps to convert a standard bicycle into an e-bike using a Bafang hub motor kit.

5. OPERATING INSTRUCTIONS

Your BAFANG e-bike conversion kit offers various operating modes:

- **Pure E-Bike Mode:** The motor provides full power without requiring pedal input. Activate via the throttle.
- **Pedal Assist Mode (PAS):** The motor assists your pedaling efforts. Adjust the assist level (usually 1-5 or 1-9) via the display.
- **Walk Assist Mode:** Provides low-speed motor assistance (e.g., 6KM/H) to help you push the bike while walking.
- **No Motor Assistance:** The bike operates as a regular pedal bicycle without motor power.

The SW102 display shows essential information such as speed, battery level, PAS level, and trip distance. Refer to the display's specific manual for detailed navigation and settings adjustments.



HUB REAR - SERIES

The Bafang HR-Series is remarkable for its high efficiency. Powerful too, these drive systems assist riders even on longer tours with up to 65Nm of torque at 500W yet they remain highly economical in battery consumption.

Image: Key features of the BAFANG 500W motor, including various riding modes.

6. MAINTENANCE

- **Cleaning:** Keep the motor, controller, and battery clean. Use a damp cloth to wipe down components. Avoid high-pressure washing directly on electrical parts.
- **Connections:** Periodically check all electrical connections for tightness and corrosion. Ensure waterproof connectors are properly sealed.
- **Battery Care:** If applicable, follow the battery manufacturer's instructions for charging, storage, and discharge. Avoid fully draining the battery and store it in a cool, dry place.
- **General Bike Maintenance:** Continue regular maintenance for your bicycle, including checking tire pressure, brake function, chain lubrication, and gear adjustments.

7. TROUBLESHOOTING

- **Motor Not Working:** Check all electrical connections, especially the battery connection and the 1T4 cable.

Ensure the display is powered on and showing no error codes. Verify the brake levers/sensors are not engaged.

- **Display Not Turning On:** Check the battery connection and ensure the battery is charged. Inspect the display cable for damage.
- **Low Power/Range:** Ensure the battery is fully charged. Check for loose connections. Verify the PAS sensor is correctly installed and functioning.
- **Error Codes:** If the display shows an error code, consult the SW102 display manual for specific meanings and troubleshooting steps.

8. SPECIFICATIONS

Feature	Specification
Brand	BAFANG
Model Name	G020
Voltage	48 Volts
Wattage	500 watts
Max Speed	Up to 38-45 KM/H
Max Torque	65 N.m
RPM	390
Efficiency	≥ 80%
Material	Aluminum
Item Weight	6 Kilograms
Wheel Size	26 inches
Rear Dropout Size	135-142mm
Cassette Flywheel Compatibility	≤9 Speeds
Brake Compatibility	Disc Brake
Display Model	SW102

EBIKE CONVERSION KIT

HUB REAR RIDING SYSTEM

BAFANG



Image: Comparison of BAFANG 48V 750W and 500W Rear Hub Motors, highlighting key specifications.

9. WARRANTY AND SUPPORT

BAFANG provides a one-year warranty for quality problems. Our local after-sales service centers offer technical support and maintenance. For any issues or inquiries, please contact our customer service team through the vendor (Greenergia) or the BAFANG official website. The battery, if ordered, would be sent separately.