

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

[manuals.plus](#) /

› [BAFANG](#) /

› [BAFANG BBS02 48V 750W Mid Drive Ebike Conversion Kit Instruction Manual](#)

BAFANG BBS02 48V 750W

BAFANG BBS02 48V 750W Mid Drive Ebike Conversion Kit Instruction Manual

Model: BBS02 48V 750W



1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your BAFANG BBS02 48V 750W Mid Drive Ebike Conversion Kit. Please read this manual thoroughly before attempting installation or operation to ensure proper function and safety.



Image 1.1: Overview of the BAFANG BBS02 48V 750W Mid Drive Ebike Conversion Kit components, including the motor, display, and various accessories.

2. PRODUCT OVERVIEW AND COMPONENTS

The BAFANG BBS02 48V 750W Mid Drive Ebike Conversion Kit is designed to transform a standard bicycle into an electric pedal-assist bicycle. It features a powerful mid-drive motor and comes with a comprehensive set of accessories for conversion.

Key Features:

- **Powerful and Reliable Motor:** The BBS02 750W motor delivers up to 120 N.m of torque, suitable for climbing and achieving speeds over 25mph.
- **Smooth, Controlled Starts:** The upgraded BBS02B motor features a slow start function and throttle-responsive acceleration.
- **Multiple Riding Modes:** Supports E-bike (throttle only), Pedal Assisted, and Push Assist modes.

- **Universal Compatibility:** Designed for bikes with a standard 68-73mm bottom bracket length and 34-36mm internal diameter.
- **Comprehensive Accessory Kit:** Includes motor, brake levers/sensors, thumb throttle, chainring, crank, LCD display, speed sensor, wiring harness, locknuts, wrench, and an ebike headlight.

Included Components:

- BAFANG Mid-drive motor (BBS02B 750W)
- Brake lever or hydraulic brake sensor cables (optional)
- Thumb throttle
- Chainring wheel (e.g., 44T)
- Crank arms
- LCD display (e.g., SW102)
- Speed sensor
- 1T4 wire harness
- Locknuts and wrench
- Ebike headlight (default inclusion)
- Optional Ebike Battery (not included by default)

POWERFUL MOTOR



**Torque>
100N.m**



**Max Speed
45KM/H**



**Waterproof
IP65**



**BBS:4.24kg
BBSHD:6kg**

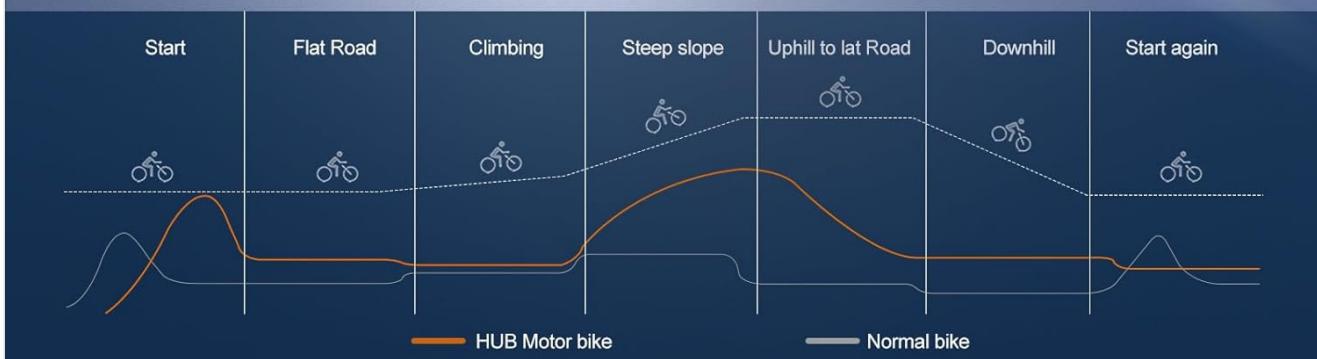
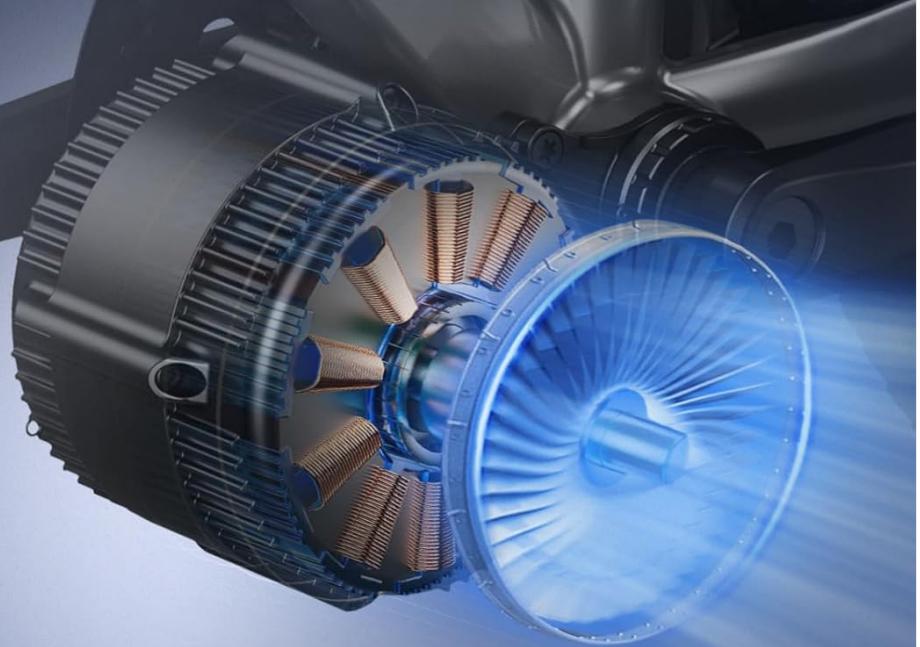


Image 2.1: Visual representation of the motor's performance characteristics, such as torque, maximum speed, and waterproof rating.

3. COMPATIBILITY GUIDE

Before installation, it is crucial to verify that your bicycle frame is compatible with the BAFANG BBS02 mid-drive motor kit. Incorrect fitment can lead to damage or unsafe operation.

Bottom Bracket Requirements:

- **Inner Diameter:** Between 33.5mm and 36mm.
- **Length:** 68mm to 73mm.

HOW DO I KNOW IF THIS MOTOR KIT FIT MY BIKE OR NOT?



Coaster Bike

1

Inner Diameter:
Between 33.5-36MM



2

Bottom Bracket Length:
68-73MM



3

Make sure the sprocket will not
hit chain stay of your bike

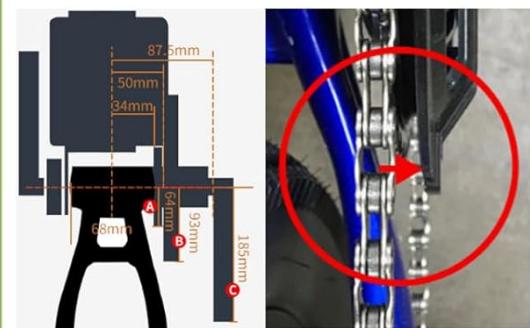


Image 3.1: Instructions for checking bottom bracket inner diameter and length, and ensuring chainring clearance.

Unsuitable Bicycle Types:

The BAFANG BBS02 motor is not compatible with all bicycle types. Avoid installation on:

- Bicycles with belt drive chainrings.
- Coaster brake bicycles.
- Bicycles with bottom brackets outside the specified dimensions (e.g., less than 68mm or greater than 73mm).
- Bicycles where the sprocket will hit the chain stay.



Image 3.2: Examples of incompatible bicycle configurations for the BAFANG BBS motor.

Battery Compatibility (Optional):

If you are purchasing an optional battery, ensure it fits your bike frame. Templates for checking fitment are often available in product documentation.



Image 3.3: Guide for checking downtube battery compatibility.



Image 3.4: Guide for checking rear rack battery compatibility.

4. INSTALLATION

The BAFANG BBS02 kit is designed for relatively straightforward installation. An installation video and detailed instruction manual are typically provided to assist with the process. Basic mechanical skills and tools are required.

General Steps (Consult provided video/manual for details):

1. Remove existing crankset, bottom bracket, and pedals.
2. Install the BAFANG mid-drive motor into the bottom bracket shell.
3. Secure the motor with the provided locknuts and mounting plate.
4. Install the chainring and crank arms.
5. Mount the LCD display on the handlebars.
6. Install the thumb throttle and brake levers/sensors.
7. Attach the speed sensor to the rear wheel and frame.
8. Connect all components using the 1T4 wire harness and other cables. Ensure all connections are secure and waterproof.
9. Install the ebike headlight.
10. If using an optional battery, mount it securely and connect it to the motor system.



Image 4.1: Visual representation of the complete packing list for the conversion kit.

Brake Lever or Sensor:

The kit typically includes brake levers with integrated motor cut-off switches. If your bike uses hydraulic brakes or shift-integrated brake handles, you may need to request brake sensors instead of levers.

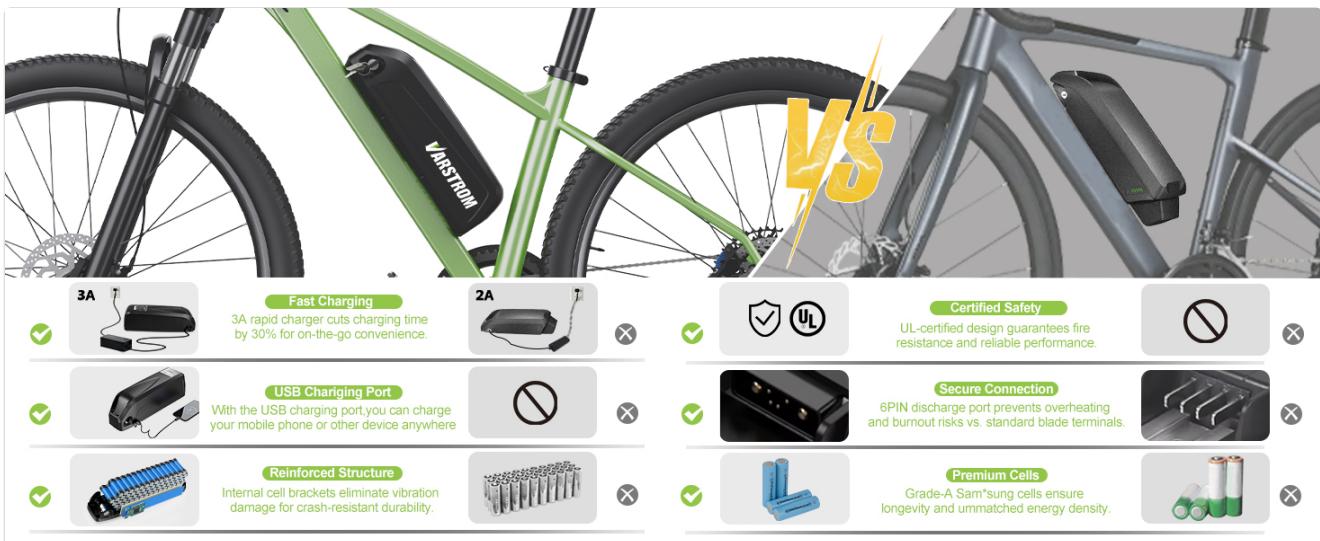


Image 4.2: Guide for choosing between brake levers and brake sensors based on your bicycle's brake system.

5. OPERATING INSTRUCTIONS

Once installed, the BAFANG BBS02 kit offers various modes to enhance your cycling experience.

Riding Modes:

- **E-bike Mode (Throttle Only):** Provides motor power without pedaling, controlled by the thumb throttle.
- **Pedal Assisted Bicycle Mode:** The motor provides assistance as you pedal. The level of assistance can be adjusted via the LCD display.
- **Push Assist Mode:** Provides low-speed motor assistance for walking the bike.

WHY CHOOSE US?

NEW UPGRADED BBS02B MOTOR

Slow Start Function

Speed Changes Based on Throttle Pressure

Speed Limit Applies To

Quieter Ride Experience

Stable Current Output

Stronger Power Burst

Communication Battery Compatible

Smooth Torque Feeling

Enhanced Function Stability

Reduced After-Sales Issues

Old version

No Slow Start Function

Same Speed

Speed Limit Applies To Pedal Assist Mode

Image 5.1: Features of the upgraded BBS02B motor, highlighting smooth starts and adjustable speed limits.

LCD Display Usage:

The LCD display provides essential information and allows you to control various settings of your ebike system.

- Power On/Off:** Typically a long press of the power button.
- Assist Level Adjustment:** Use the up/down buttons to change pedal assist levels.
- Information Display:** View speed, distance, battery level, and other metrics.
- Settings:** Access advanced settings like wheel size, speed limit, and backlight brightness.

PACKING LIST



Image 5.2: Features and benefits of various smart digital displays.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your BAFANG mid-drive kit.

- Keep Clean:** Regularly clean the motor and electrical connections to prevent dirt and debris buildup.
- Check Connections:** Periodically inspect all electrical connections for tightness and signs of wear or corrosion. The wiring is IP65 waterproof, but proper sealing is still important.
- Lubrication:** Ensure the bicycle chain and other moving parts are properly lubricated.
- Battery Care:** Follow the battery manufacturer's instructions for charging, storage, and temperature guidelines. Avoid fully discharging the battery.
- Professional Inspection:** Consider periodic inspections by a qualified ebike technician.

OPTIONAL SPROCKET(CHAINWHEEL)



Image 6.1: Overview of the IP65 waterproof wiring system.

7. TROUBLESHOOTING

If you encounter issues with your BAFANG mid-drive kit, refer to the following general troubleshooting tips. For complex problems, contact customer support.

- **No Power/Motor Not Responding:**

- Check battery connection and charge level.
- Ensure all electrical cables are securely connected.
- Verify the display is powered on and showing no error codes.

- **Motor Cuts Out:**

- Check brake levers/sensors; ensure they are not engaged.
- Inspect for loose connections.
- Monitor motor temperature; overheating can cause cut-off.

- **Inconsistent Pedal Assist:**

- Check speed sensor alignment and ensure it's clean.
- Verify pedal assist level on the display.

- **Display Not Working:**

- Check power cable to the display.
- Ensure battery is charged and connected.

If problems persist, contact the BAFANG service center for technical support.

8. SPECIFICATIONS

Motor Specifications (BBS02B 750W):

- **Voltage:** 48V
- **Wattage:** 750W
- **Max Torque:** Up to 120 N.m
- **Max Speed:** Approximately 45 km/h (28 mph)
- **Waterproof Rating:** IP65
- **Net Motor Weight:** Approximately 4.24 kg
- **Bracket Bottom Length:** 68mm (compatible with 68-73mm)
- **Material:** Aluminum

DIFFERENCE OF BBS AND HD MOTOR



Motor model	M315 MM G340.500.C	M315 MM G340.750.C	M615 MM G320.1000.C
Power	500W	750W	1000W
Voltage	48V	48V	48V52V
Controller current	18A	24A	30A
Efficiency	>80%	>50%	>80%
Max torque	100 N.m	120 N.m	160 N.m
Maximum speed	40.5km/h	47.5km/h	53km/h
Net motor weight	About 4.24kg	About 4.24kg	About 6.0kg
Bracket bottom length	68mm	68mm	68/100/120mm



Please note that the 750W has been changed to the CAN protocol version, the connector is different and incompatible with the previous one.

Image 8.1: Comparison of BAFANG BBS and HD motor specifications.

Display Specifications (Example SW102):

- **Model Name:** SW102 Small Stealthy Ebike Display
- **Screen Size:** 1.5 inch IPS
- **PAS Level:** 3/5/9
- **Holder (mm):** 22.2
- **Navigation:** Not available
- **Speed Limit:** 0-99km/h
- **USB Charger:** Not available

6 Key Benefits for BAFANG Mid Motor



Image 8.2: Detailed display specifications for various BAFANG models.

Battery Specifications (Optional, various models):

Various battery options are available, typically 48V or 52V, with capacities ranging from 13Ah to 20Ah. Key features often include:

- **BMS Max Protection Current:** 30A
- **Cycle Life:** 1000 times
- **Charging Time:** 6-7 hours
- **Protection Features:** Overcharge, overdischarge, overcurrent, short circuit, overtemperature protection.

BATTERY SPECIFICATION

48V 13Ah		48V 17.5Ah		48V 19.2Ah		48V 20Ah	
Battery Model	Shark Battery 48V 13Ah	Shark Battery 48V 17.5Ah		G80 Shark Battery 48V 19.2Ah		G80 Shark Battery 48V 20Ah	
Battery Cell	18650 2600mAh	L*/G Sam*/sung 18650 3500mAh		L*/G 21700 4800mah		L*/G 21700 5000mAh	
BMS Max Protection Current	30A	30A		30A		30A	
USB Port	✓	✓		✓		✓	
Weight	4.25kg	4.045kg		4.95kg		4.7kg	
Cycle Life	1000 times	1000 times		1000 times		1000 times	
Battery Charger	✓	✓		✓		✓	
48V 20Ah		52V 20Ah		48V 17.5Ah			
Battery Model	VoltzX Battery 48V 20Ah	YingWu Battery 52V 20Ah		Rear Rack Battery 48V 17.5Ah			
Battery Cell	Sam*/sung 21700 5000mAh	Sam*/sung 21700 5000mAh		18650 2600mah			
BMS Max Protection Current	30A	30A		30A		30A	
USB Port	✓ USB/TYPE-C	✗		✓			
Weight	5.2kg	5kg		6kg			
Cycle Life	1000 times	1000 times		1000 times			
Battery Charger	✓	✓		✓			

Image 8.3: Detailed battery specifications for various BAFANG models.

9. WARRANTY AND SUPPORT

BAFANG provides customer support and warranty services for its products.

- Warranty:** One month return service. For quality problems within one year, the North American after-sales service center provides technical support and maintenance.
- Service Center:** Local warehouses and service centers are available in US/UK/CA/EU for technical support and maintenance.

For any quality issues or technical assistance, please contact the BAFANG North American service center.

CERTIFICATE OF COMPLIANCE

Certificate Number MH64904
Report Reference MH64904-20210330
Date 2021-March-31

Issued to: Bafang Electric (Suzhou) Co Ltd
9 HESHUN RD
LOUFENG TOWN
INDUSTRIAL PARK
SUZHOUJIANGSU 215122 CN

This is to certify that
representative samples of

BATTERIES FOR USE IN LIGHT ELECTRIC VEHICLES
Model(s): BT F22.960.C.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

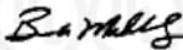
Standard(s) for Safety: ANSI/CAN/UL/ULC 2271 - Batteries for Use In Light Electric
Vehicle (LEV) Applications

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's
Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

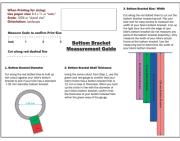
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>.



Image 9.1: Certificate of Compliance for BAFANG products.

Related Documents - BBS02 48V 750W

	<p>Bafang Bottom Bracket Measurement Guide for BBS02/BBSHD E-bike Mid-Drives</p> <p>Download and print this Bafang measurement guide to accurately determine your bicycle's bottom bracket diameter, shell thickness, and width. Essential for ensuring proper fitment of Bafang BBS02 (750W) and BBSHD (1000W) mid-drive motors. Includes printable template and instructions.</p>
	<p>Bafang BBS Mid Drive Electric Bike Conversion Kit User Manual</p> <p>Comprehensive user manual for the Bafang BBS mid-drive electric bike conversion kit, covering installation, operation, maintenance, and troubleshooting for BBS01, BBS02, and BBSHD models. Includes detailed steps, safety information, and problem-solving advice.</p>
	<p>Bafang Mid-Drive Ebike Programming Guide: Enhance Performance</p> <p>Learn how to reprogram your Bafang mid-drive ebike system for improved usability and performance. This comprehensive guide covers necessary hardware, software, configuration tool instructions, and detailed explanations of all settings for Bafang BBS02 and BBSHD motors.</p>
	<p>BAFANG BBS01/BBS02 Mid-Drive E-bike Motor Installation Manual eMax eBikes</p> <p>Comprehensive installation manual for the BAFANG BBS01 and BBS02 mid-drive electric bike motor kits. Includes technical specifications, assembly steps, wiring diagrams, and warranty information from eMax eBikes.</p>
	<p>BAFANG BBS01/BBS02 Mid-Drive Electric Bike Conversion Kit Installation Manual</p> <p>Detailed installation guide for BAFANG BBS01 and BBS02 mid-drive electric bike conversion kits. Covers system overview, technical specifications, step-by-step assembly, component connections, and warranty information for e-bike DIY enthusiasts.</p>



CONVERSION KIT
User Manual
Mid Drive Electric Bike Kit
BBS Bafang Mid Drive
BBS01, BBS02, BBSHD

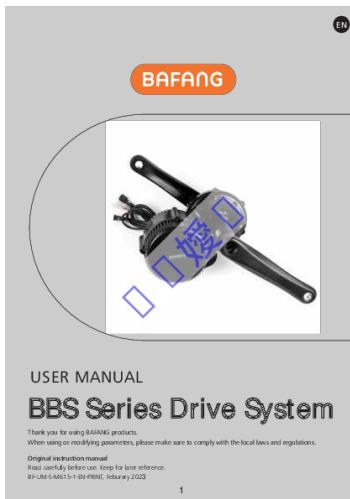
English

Please read through and understand before beginning your conversion.

[Bafang Mid Drive Electric Bike Conversion Kit User Manual](#)

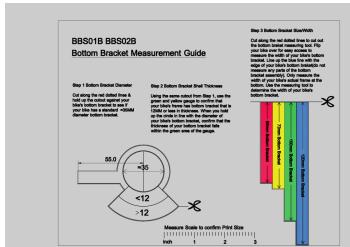
This user manual provides comprehensive instructions for installing the Bafang Mid Drive electric bike conversion kit, covering models BBS01, BBS02, and BBSHD. It details safety guidelines, component checks, step-by-step installation, battery operation, charging, maintenance, and troubleshooting.

Documents - BAFANG – BBS02 48V 750W



[Bafang BBS Series Drive System User Manual](#)

Comprehensive user manual for the Bafang BBS Series Drive System, covering installation, operation, maintenance, and troubleshooting for e-bike conversion kits.
lang:en score:34 filesize: 2.47 M page_count: 18 document date: 2024-01-30



[\[pdf\] User Manual](#)

Installation Manual BAFANG BBS02 48V 750W BB100mm Mid Drive Kit with Battery Optional 8Fun Bicycle Motor LCD Display Chainring Electric Brushless Bike para Bicicleta Sports Outdoors C1XBKRa6RCL m media amazon images |||
ACCOLMILE ACCOLMILE ACCOLMILE ACCOLMILE ACCOLMILE ACCOLMILE
ACCOLMILE ACCOLMILE ACCOLMILE ACCOLMILE ...
lang:en score:25 filesize: 4.67 M page_count: 9 document date: 2022-11-01

[Bafang Programming - Learn how to improve your Bafang mid-drive ebike](#)

EDRIVENET

Bafang Programming – Learn how to improve your Bafang mid-drive ebike

Reprogramming your Bafang mid-drive system can improve the usability and performance of your ebike. The stock settings out of the factory are often not the best settings. You will find that for example, the first pedal-assist setting is way too powerful, or that the speed limits are too low. By reprogramming your mid-drive system, you can improve your system's performance settings with my custom .ini file. You can also learn about the settings and reprogram the system to your liking!

Disclaimer: Reprogramming your Bafang system is not without risk. If you change the wrong settings and you don't exactly know what you are doing, damage can be done to your ebike. You can also void your warranty if you do not follow the instructions. I am not responsible if you understand what they mean and what the risks are. I am not responsible for any damage that might occur.

Necessary hardware and software:

To reprogram your Bafang mid-drive system, you will need a programming tool. You can purchase this cable with the right tool: <https://click-accessories.com/304099>

You will also need to install a driver and the Bafang configuration tool: <https://click-accessories.com/304099>

Bafang configuration tool:

<https://click-accessories.com/304099>

USB Drivers:

Windows 10 USB Driver: <https://click-accessories.com/304099>

Windows 7/8/8.1 USB Driver: <https://click-accessories.com/304099>

[Bafang Mid-Drive Ebike Programming Guide: Enhance Performance](#)

Learn how to reprogram your Bafang mid-drive ebike system for improved usability and performance. This comprehensive guide covers necessary hardware, software, configuration tool instructions, and detailed explanations of all settings for Bafang BBS02 and BBSHD motors.

lang:en score:22 filesize: 1.68 M page_count: 118 document date: 2021-02-21