WBP-Z9

Electric Bike Speed Booster Kit
User Manual
48V 450W



Read this manual thoroughly before using, especially the safety warnings to evade risks.

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Disclaimer

Thank you for purchasing this product!

Improper operation may cause useless or even damage. We Strongly recommend you reading this manual carefully before using this product and strictly follow the prescribed operating procedures. We are not responsible for any liability reason arising from the misuse of this product, including but not limited to liability for direct or indirect loss or damage, and we do not assume any liability for unauthorized modifications for the product. We reserve the right to change product design, appearance, performance and usage requirements without prior notice to the buyer.

Please kindly note that this product is an electric assist device designed to enhance riding efficiency and noiseless running, suitable for regular bicycles and mountain bikes that are used on commuting and short journey, which doesn’t stand for replacing human power completely. Also, we suggest installing and using the device under adults’ supervision for users under 18 years old.

1. Product Features

1) Powerful Motor: This product equips chain-driven electric booster, featuring 450W brushless motor for efficiency improvement and quiet running which can convert your bicycle to electric bike and reach the maximum riding speed easily over 40%, applicable for regular bicycles and mountain bikes that are used on commuting and short journey. It transforms hill climbing be a breeze.

2) Durable & Convenient: The aluminum alloy frame enables it to be durable and stable. Also, thumb governor with 3 indicators is designed for displaying battery status to avoid stopping working caused by low battery suddenly.

3) Direction Adjustable: The flywheel clutch direction and the motor movement direction can be adjusted.

4) Easy to Be Assembled: This booster kit includes necessary components for installation, so it’s easy to assemble all the parts together for converting ordinary bicycles to electric bikes.

5) Support multiple installation methods, customers can connect the battery (48V with 15A discharge current) to work directly. Users can select battery capacities per different requirements.

2. Safety Guidelines

1. For the first time application, the new device may slip, it can be solved in a few minutes.
2. Unauthorized modifications are prohibited.
3. DO NOT immerse the motor in water for a long time.
4. DO NOT ride purely on electric power for a long time when climbing uphills. Pedal while assisting is better.
5. Wear a helmet and other riding protective qualified gears. Avoid dangerous maneuvers.
6. Please turn the speed governor slowly for the first time. Avoid sudden acceleration causing accidents such as falling.

Charging Tips:
Please charge in open areas without inflammable materials. DO NOT charge for a long time. If there is heating or other abnormal phenomenon during riding or charging, please immediately place the battery in an open and unmanned place.

3. Product Introduction

Packing list: P1



P1

Power Requirements:

Voltage: 48V
Discharge current: ≥ 15A
Power Output Port: XT60 female connector.

4. Installation Steps

4.1. Unbox and Test the Device

1. Open the battery pack and check if there is any debris or damage.

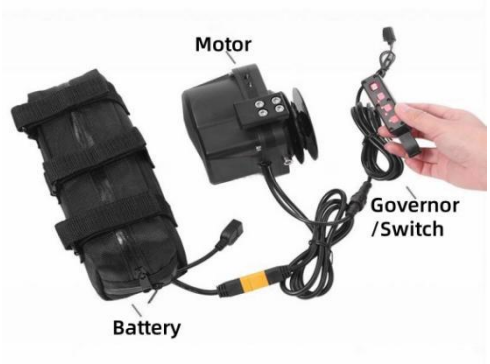
2. Connect the motor, governor and the battery plugs.(P2)

3. Check the indicator light status.

4. Slowly press the handle of governor to drive the motor and clutch.

5. Disconnect the power and the governor connectors

Note: please disconnect the power connector first.



P2

4.2. Chainring Installation

1. Paste four silicone gaskets to the back of the chainring and cover the entire circle. (P3)

Note: Make sure the silicone gaskets are aligned with the holes of the chainring.



P3

2. Remove the front wheel from the bike. Place the chainring outside the right front wheel spokes and the metal fixing plate into the spokes. Fix them with supplied screws but do not lock it tightly.(P4)



P4

3. Place the fixing plate, softly adjust the concentricity of the chainring and make it and the front wheel concentric. Turn all the screws tightly then.

4.3. Motor Installation

1. Wrap the supplied soft rubber pad to the middle of the fork on the right side of the front wheel, fix the fixing bracket to the outside of it. Then install the screws but do not turn it tightly.(P5)



P5

2. Adjust the motor position and install it to the frame.(P6)



P6

3. Adjust the motor position, ensure the flywheel of the motor and the

chainring are on the same plane.(P7)



P7

4.4. Chain Installation

1. Pass the chain through the flywheel and chainring, and connect it with a velcro fastener.(P8)



P8

2. Adjust the fixing bracket and chain.(P9)



P9

3. Turn the wheel and ensure that the wheel and motor can rotate normally. Tighten the fixing bracket screws.(P10)



P10

4.5. Governor Installation

1. Select a fixing gasket. (The short one is applicable for the handlebar, the long one used for the handle)

2. Insert and fix one end of fixing gasket into the inner hole with screws.(P11)



P11

3. Place the governor on the handlebar/handle and adjust directions, turn the

other end with screws to the outer hole of governor tightly.(P12)



P12

4. Disconnect the magnetic switch from the magnet. Fix the magnetic switch on the cut-off point of the brake. Fix the magnet on the brake handle close to the magnetic switch. The installation steps on both sides are the same.(P13)



P13

5. Connect the governor and the motor speed control connectors.

4.6. **Fix the battery** (Reference only)

5.2AH Battery Installation: Fix the self-adhesive tapes for batteries on the handlebar and the longitudinal beam respectively. Connect the battery plug and the motor power plug. (P14)



P14

4.7. Wires Connecting

1. Connect the wires of the motor and thumb governor and tighten the screws.(P15)



P15

2. Connect the power interface of the motor and the battery.(P16)



P16

3. Bind the wires neatly with straps.

4.8. Testing

Connect the governor and battery plugs. Lift the handlebars to take the front wheel off the ground, gently turn the thumb governor and check whether the booster is working.

Note: Make sure the chain is at the right site. Re-adjust the motor position if the chain falls off. Only after idling without any problem can you ride on the road.



P17

5. Functions

5.1.Thumb Governor



P18

Thumb Governor: Press it to accelerate.
Power On/Off Switch: Long press to turn on/off.
Gear +: Press to shift up (Gear range:0-5, max: 5).
Gear -: Press to shift down
Release Gear: Press the thumb governor or brake's magnetic induction switch. It will release the gear when detected disconnection.
LED Indicator: Indicate the battery power.
Brake&Power Off: Fix the magnetic switch and magnet on the left and right handlebar of the brake respectively for check the brake and release the gear.

5.2.Battery & Charging Tips

Charging: Use the original charger to connect to the battery charging port. The red light on indicates that it is charging(P19), and the green light on indicates fully charged or disconnected.(P20)





P19 P20

Notes:

1. Connect the charger to the battery before plugging into the power.
2. Avoid long-term unused and discharged.
3. Store in dry, ventilated areas.
4. Proper use and maintenance can lengthen the battery life span.

Battery Specifications:

Capacity	9AH	5.2AH
Voltage	48V	48V
Endurance	55-60 km（with assist booster kit) 40-45 km(purely on electric power)	35-40 km（with assist booster kit） 25-30 km(purely on electric power)
Charging Time	3-4 hours	2-3 hours

Compatible Power Supplies:

Voltage: 48V
Discharge Current: ≥15A
Capacity: ≥5AH (adjust based on needs)
Port: XT60 female connector

6. Maintenance

Note: Ensure the power is off before maintenance.

6.1.Regular Maintenance

1. Open the cover and change the grease of it after using for one year/ driving for 3,000 km.
2. Remove the screws and add diesel or lubricant(liquid) to the motor. Shake it and pour the waste oil out.
3. Apply new grease(about 30ml) to the motor. Turn the screws tightly and close the cover.



P21

6.2.Battery Maintenance:

1. Maintain 50% charge when long-term unused, charge and discharge every 2-3 months.
2. DO NOT store in low temperature ≤0°C for a long time.
3. DO NOT store in high temperature environments. DO NOT burn it on fire for explosion risks.

6.3.Charger Inspection:

Check the charger plug, wires and housing to ensure there is no damage regularly.

7. After-Sales Service

1. Within 7 days from the date of receipt, if any damage is found during the pre-installation test, the consumer can return the product under the premise that the packaging and the appearance is complete.
2. After 7 days from the date of receipt, for the non-human-induced damage, the warranty period is six months for the product and three months for the battery.
3. For the human-induced damage , please contact the official after-sales service of Dongguan WBP Technology Co., Ltd.
4. After-sales E-mail：wbp_service@163.com
5. Welcome to visit our company official website：www.wbptech.com

Out of warranty:

1. Human-induced damage and collisions.
2. Force majeure factor damage.
3. Water ingress damage.
4. Disassemble and DIY the kit without authorization.
5. Unauthorized modification of components.
6. No valid purchase certificate for the product, and the user information cannot be verified.
7. Damage caused by improper packaging when returning.
8. Any damage caused by improper using, maintaining or adjusting in accordance with the user manual.
9. Failure and damage not due to design, manufacturing, quality and other problems of the product.