

Version:HJM2307



Owner's manual

Electric Bike

RADIANT

www.hjmbike.com

Welcome to the HJMBIKE family!

Thank you for your purchase of our products. We feel honored for your support and trust.

HJM team is engaged in e-bike manufacturing and innovation. We are devoted to providing cost-effective e-bikes and high-quality services. Green, healthy lifestyle is what we pursue and joyful transportation mode is what we offer.

Now, before enjoying the easy ride with your new RADIANT ebike, please read this manual carefully and follow the instructions when assembling and operating the bike.

If you have any questions after reading this manual, please refer to our website, or contact us by e-mail.

Website: www.hjmbike.com

Email: support@hjmbike.com

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Manual Use Instruction

This manual contains details of the product, assembly procedure, operation method, maintenance as well as some useful tips for users.

It is necessary to read through the manual carefully before you start to use your new ebike. You should pay the most attention to all tips, suggestions, cautions, and warnings to ensure your safety and enjoy each ride. Please always keep it for future reference even if you have read it. The ebike is expected to be your powerful partner and friend after years with your endless love and care.

The content in this manual is subject to change or withdrawal without notice. You can refer to our website for the latest version. The purpose of this manual is to inform you of the safe ways to operate the bike. However, it is impossible to promise your safety in any riding conditions and/or unexpected situations. Any risks occurred should be the responsibility of the rider.

Any other questions, please get in touch with us via our website/e-mail.

Product Overview

Components & Accessories



| NO | Accessory name | NO | Accessory name | NO | Accessory name |
|----|-----------------|----|------------------|----|--------------------|
| 1 | Saddle | 12 | Rim | 23 | Headset |
| 2 | Seat post | 13 | Hub motor | 24 | Stem |
| 3 | Seat post clamp | 14 | Chain | 25 | Throttle |
| 4 | Rear rack | 15 | Crank set | 26 | LCD display remote |
| 5 | Rear light | 16 | Pedal | 27 | Bell |
| 6 | Rear fender | 17 | Tire | 28 | LCD display |
| 7 | Brake rotor | 18 | Front brake | 29 | Shifter |
| 8 | Freewheel | 19 | Front wheel axle | 30 | Brake lever |
| 9 | Rear brake | 20 | Suspension fork | 31 | Frame |
| 10 | Rear derailleur | 21 | Front fender | 32 | Battery |
| 11 | Kickstand | 22 | Front light | 33 | Controller |



Specification

| Electronic | | Components | | | |
|--------------|--|-------------|---|-----------|---|
| Battery | 48V15Ah Li-Ion battery | Fork | Aluminum alloy hydraulic suspension front fork | Chain | KMC chain |
| Charger | 48V3A operating during 110V to 240V AC power outlets | Frame | 6061 aluminum alloy | Tires | 26"x2.35" tire |
| Hub Motor | 500W brushless gear motor | Derailleur | Shimano 7-speed | Rims | Star Circle, alloy, 36H |
| Controller | 48V18A brushless controller | Freewheel | Shimano 7-speed freewheel | Fenders | Black PVC front and rear, full coverage |
| Pedal assist | 0-5 pedal assist | Gearing | 1-7 speed | Spokes | 12-gauge stainless steel |
| Throttle | Half twist throttle | Brake | Tektro 180mm front and rear | Crank Set | 170mm forged alloy |
| Display | 48V display with switch | Brake lever | Tektro comfort grip levers with motor cutoff switch and integrated bell | Pedal | Pedal with reflectors |
| Headlight | LED 48V waterproof cable | Handlebars | Custom formed aluminum | Saddle | Velo leather comfort seat |
| Rear Light | Integrated taillight with brake indicator | Stem | SM-A191-8 | Seat Post | 27.2x350mm |
| USB Ports | / | Grips | Hand sewn grips | Kickstand | Single-leg aluminum alloy |

Assembly Instructions

NOTICE

- The following steps are only a general guide to assist the assembly process of your E-bike. It's not a complete or comprehensive manual of all aspects of assembly, maintenance, and repair.
- A person/friend is highly recommended to give you a hand in the process of e-bike assembly.
- If you are a novice in E-bike assembly, please turn to a certified bike mechanic for assembly, future maintenance and repair.
- HJM bike suggests having a certified mechanic check your E-bike before the first ride to ensure your safety and comfort even if you are experienced and skilled.
- The detailed assembly video for the e-bike is available on our website ,www.hjmbike.com.

Step 1

Unwrap the packing

Before opening the box, keep the box right side up. Check the box around carefully to make sure the package is in good condition without serious damage. HJM suggests taking out your phone and shooting the complete bike information on the side of the box. Record the whole process of opening the box, which is necessary for your after-sale service.

Open the box and take out the E-bike and other components with the help of someone else. Keep the bike stand up in a safe and steady state. Carefully remove the packaging materials protecting the bike frame and all other components. Please recycle packaging materials. Open the small box and carefully set out all contents. Prepare the tool kit ready which is contained in the box.

The following accessories are included in the package

| Outer box: | Inner box: |
|----------------------------------|------------------------|
| Half Assembled Bike | Assembly Toolkit |
| Front Wheel | Charger |
| Front Fender | Headlight |
| Keys (2 identical) on the E-bike | Pedals(left and right) |
| | Manual |

If there are any missing parts, please contact HJM BIKE.

Step 2

Install handlebar onto the stem

- 1. Straighten the handlebar stem and front fork.** Ensure the handlebar stem and front fork are in the same direction, and the four stem faceplate bolts are facing forward.
- 2. Loosen the four stem faceplate bolts** with the 4mm Allen wrench. Remove and put them aside. Notice the washer on the bolt, and don't lose it.
- 3. Place the handlebar on the stem correctly.** Put the wire harness in order, and ensure that the cables and wires are not twisted.
- 4. Center the handlebar** and adjust to the angle for your comfortable ride, then tighten the four stem faceplate bolts evenly.
- 5. Adjust the stem angle** using the 5mm Allen bolts on the side of the stem if desired. Adjust the handlebar so the grips are approximately parallel to the ground.
- 6. Locate the side of the green LCD display connector,** place the display on the handlebar and tighten the 2 screws. place the button panel on the handlebar and tighten the screw. carefully press the wiring harness, and LCD display interface directly together without twisting.
- 7. Secure to the recommended torque value.** A torque wrench is needed to evenly tighten the four stem faceplate bolts to the recommended torque value, 6 Nm. (Refer to the table of Recommended Torque Value on pages 19)



Step 3

Install the front fender and headlight

1. Place the fender.

From the front tire's front, align the front fender mounting port with the front fork arch.

2. Place the headlight.

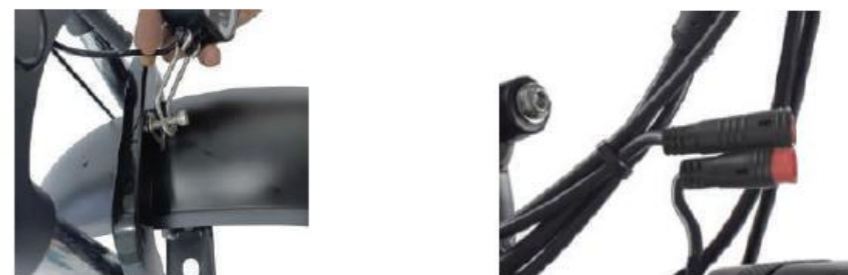
Locate the two sides of the red, two-pin headlight connector, carefully align the internal pins and notches and external arrows, then press directly together without twisting to fully seat the connection. Align the headlight port with front fender mounting port and front fork arch, as the first picture shown.

3. Attach the headlight and fender to the fork arch.

Turn the bolt and nut apart, leave the washer on the bolt. Pass the bolt through the headlight port, fender mounting port and front fork arch in turn. Then turn the nut onto the bolt end. Use a 5 mm Allen wrench at the bolt head and a 10 mm wrench on the nut at the bolt end.

4. Adjust the headlight angle to illuminate the road ahead and not blind oncoming traffic.

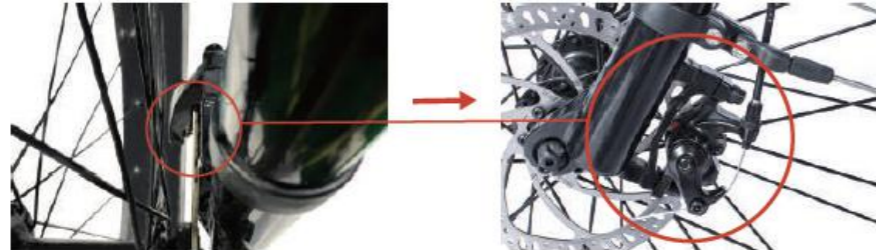
Use a 3 mm Allen wrench and 8 mm wrench to loosen the headlight angle adjustment bolt, tilt the headlight to the optimal position, and then tighten in place securely.



Step 4

Install the front wheel

- 1. Remove the front fork plate with a 10mm wrench.**
- 2. Put the e-bike on safe, flat ground.** You can use the hard foam from the carton box to put on the bottom of the fork to avoid damage caused by the friction between the front fork and the ground.
- 3. Prepare the wheels.** There are two wheels hub protections on the two sides of the wheel. please rotate and remove them.
- 4. Install the front wheel.** Lift the front of the e-bike and put the wheel in the middle of the front fork. pay attention that the brake rotor on the wheel and disc brake on front fork are on the same side. Install the front wheel axle into the front fork fluted legs and ensure the brake rotor is smoothly placed in the disc brake.



- 5. Locate the quick release lever,** which put into accessory box during shipment. Open the lever and remove the thumb nut and one cone spring(opposite to the lever). Keep the washer and other cone spring in place on the lever side.
- 6. Install the lever into the front wheel axle.** Insert from either side is ok. Next, reinstall the cone spring pointing towards the wheel hub, then thread the thumb nut onto the lever and turn tightly with lever open. Then close the lever by hand without touching the brake rotor.

7. Attach the fender bracket to the front fork.

Use a 5mm Allen wrench to loosen the bolts of the front fender bracket hose clamp and fix the hose clamp to the proper position of the front fork, make the clearance between the fender and tire evenly, be careful not to install the wire harness into the hose clamp, Ensure the fender is centered and torque all mounting bolts to the recommended torque value, 6 Nm. (Refer to the table of Recommended Torque Value on pages 19)

- 8. When properly installed,** the front wheel should be at the center of the front fork, the brake rotor should be between the brake pads in the brake caliper, and the quick-release lever should be fully secured. Ensure that the front wheel and quick release lever are properly secured before moving on to the next step.



NOTICE

- Never touch the brake rotor, especially when the wheel and/or bike is in motion, or serious injury could occur.
- Hand oils can cause squeaking and decrease brake performance; do not touch the brake rotor while inspecting, opening, or closing the quick-release lever.

Step 5

Install the pedals

Locate the pedal axle exterior into the crank. The right pedal goes onto the crank on the right side of the bike (which is located on the rider's right side when riding).

The right pedal is threaded to tighten by turning clockwise.

Carefully thread the right pedal onto the crank on the right side of the bike a 15mm wrench. Do not cross thread or damage the threads.

The left pedal is reverse-threaded and tightens counterclockwise.

Ensure that the remaining pedal has notches on the exterior of the axle and an "L" stamp at the left end of the axle, indicating it is the left pedal. Carefully thread the pedal onto the left crank slowly by 15mm wrench. Do not cross thread or damage the threads.



Right pedal tightens
counterclockwise



Left pedal tightens
clockwise



Letters "L" and "R" on the pedal
for "left" and "right"

Step 6

Install the rear rack

1. Loosen two bolts on the two side of rear rack (position 1) , but do not to remove them at all
2. Take out the screws on the accessory box, align the frame mounting holes with mounting holes in front of the rear rack, tighten two bolts (position 2) on the two side of rear rack with 4mm Allen wrench.
3. Tighten the bolts (position 1) on the both side.
4. Locate the tail light connector, carefully press directly together without twisting.
5. Check that the four rear rack bolts are fully secured.



Step 7

Set the seat height

1. Open the quick release lever by hinging it open fully. Ensure that the seat post clamp opening is aligned with the notch at the front of the seat tube.
2. Adjust the seat post up or down to a comfortable height, while ensuring that the seat post is inserted into the frame past the minimum insertion point.
3. If needed, use the thumb nut to add tension to the clamp so there is enough resistance when the lever is in line with the clamp bolt, but do not over-tighten.
4. Close the quick release lever to secure the seat post and make sure that it does not move.

NOTICE

For most riders, the seat height should be set by placing the ball of their foot on the pedal when the pedal is at its lowest point. Their legs should be almost fully extended in this orientation, with a slight bend at the knee. The correct seat height should not allow leg strain from overextension, and the hips should not rock from side to side when pedaling.



Step 8

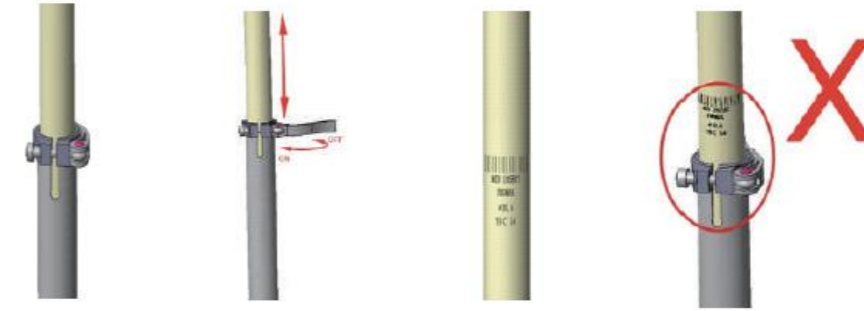
Adjusting for comfortable riding

• Adjust the seat height

1. Open the quick release lever by swinging the lever open and outwards fully .
2. Move the seat up and down by sliding the seat post in or out of the seat tube.
3. Set the desired seat height.
4. After tightening the adjustment nut (opposite the quick release lever) on the seat post quick release properly, close the quick release lever fully so it looks like the image below and the seat cannot move up, down, to the left, or right.

Ensure that the seat post and seat are both properly adjusted before riding. DO NOT raise the seat post beyond the minimum insertion marking etched onto the seat post tube (as shown below). If the seat post projects from the frame beyond these markings, the seat post and the frame may break, which could cause a rider to lose control and fall.

Ensure that the minimum insertion markings on the seat post are inside the seat tube of the frame.



• Adjust the Seat Position and Angle

To change the angle and horizontal position of the seat:

1. Use a 6 mm Allen wrench to loosen the seat adjustment bolt under the seat, be careful not to remove the whole bolt.
2. Once the bolt and clamp are adequately loose, rotate the front of the seat up or down to adjust the angle of the seat; a seat position horizontal to flat ground is desirable for most riders. Move the seat backwards or forwards within the white limit markings on the seat rail, which show the minimum and maximum horizontal movement allowed for this component.
3. While holding the seat in the desired position, use a 6 mm Allen wrench to tighten the seat adjustment bolt securely.

NOTICE

Prior to first use, be sure to tighten the seat clamp via the seat adjustment bolt properly. A loose seat clamp or seatpost adjustment bolt can cause bike/property damage, loss of control, a fall, serious injury or death. Periodically check to make sure that the seat clamp is properly tightened.



• Adjusting the Suspension Fork

The suspension fork can move up and down up to 80 mm to cushion bumps in the riding surface, which can make riding on a rough road or trail smoother and more comfortable. In addition, depending on a rider's preference, the suspension fork can be locked out as a rigid fork, which will typically yield higher pedaling efficiency.

The **lockout lever 1** located on top of the right side of the suspension fork, can be turned counterclockwise until it stops to lock out the suspension fork's motion completely. To unlock the lockout lever, turn the knob clockwise until it stops. When the lockout lever is unlocked, resistance can be adjusted by turning.

The **pre-load adjustment knob 2** is located on the top of the left side of the suspension fork. To soften the ride, reduce resistance by turning the pre-load adjustment knob counterclockwise, in the direction of the small "-" on the knob. To make the suspension stiffer when going over bumps, add resistance by turning the pre-load adjustment knob clockwise, in the direction of the small "+" on the knob.



Step 9

Check before riding

- **Check the battery to ensure it's locked**

Operate the electrical system when the battery has been adequately charged and the battery is secured to the mounting receptacle on the frame.

- **Check hardware to ensure all is tightened properly** following recommended torque values and components are secured before moving on to the next step.

NOTICE

- **Do not extend any components including the handlebar stem, seat post, or seat saddle beyond any minimum insertion marking etched into the components.**
- **Check carefully and make sure the bike is assembled securely. Otherwise, bike damage, serious injury, or even death could occur.**

Step 10

Review the remainder of the manual.

Once the bike has been assembled following the instructions above, read, understand, and follow the procedures outlined in the remainder of the manual before operating the bike.

NOTICE

If you are unsure about the assembly steps or the assembly video is not available, please contact HJM bike for help, or consult a certified local bike mechanic for assistance.

Recommended Torque Values

| Hardware Location | Hardware | Torque Required (Nm) |
|-------------------|--------------------------------------|----------------------|
| Handlebar Area | Handlebar Stem Clamp Bolts | 15 |
| Handlebar Area | Handlebar Stem Face plate Bolts | 6-8 |
| Handlebar Area | Brake Lever Clamp Bolt | 6 |
| Handlebar Area | Shifter Clamp Screw | 3 |
| Brakes | Caliper Adapter to Frame | 6-8 |
| Brakes | Caliper to Adapter | 6-8 |
| Brakes | Brake Cable to Caliper Clamp | 6-8 |
| Brakes | Brake Rotor to Hub | 7 |
| Seat post area | Seat Angle Adjustment Bolt | 18 |
| Rear Dropout Area | Rear Axle Nuts | 45 |
| Rear Dropout Area | Rear Torque Arm Bolt | 5 |
| Rear Dropout Area | Derailleur Bash Guard Mounting Bolts | 5 |
| Rear Dropout Area | Derailleur Hanger Mounting Bolt | 6 |
| Rear Dropout Area | Derailleur Mounting Bolt | 10 |

| Continued | | |
|-------------------------------|--|-----|
| Rear Dropout Area | Derailleur Cable Pinch Bolt | 6-8 |
| Rear Dropout Area | Kickstand Mounting Bolts | 8 |
| Bottom Bracket and Crank Area | Bottom Bracket and Lockring | 45 |
| Bottom Bracket and Crank Area | Crank Arm Bolt into BB spindle | 35 |
| Bottom Bracket and Crank Area | Pedal into Crank Arm | 35 |
| Bottom Bracket and Crank Area | Chainring Bolts | 10 |
| Bottom Bracket and Crank Area | Controller Mounting Bolts | 6 |
| Fenders | All Fender Mounting Bolts and Hardware | 6 |

Battery Charging

Charging will be indicated by the charge status light: Red light indicates that the battery's charging; Green light indicates that the battery's fully charged. You can also see the charging status on LCD display.

There is a USB port on the battery, which can be used to charge your phone or other electronic product.



Charging Procedure

1. Check the charger, charger cables and battery for damage before each charge.
2. Always charge in a safe place with suitable environment.(as stated below)
3. The battery can be charged both when it is located inside of the frame or when you take it out of the frame.

When battery is located inside of the frame:

- a. Turn ebike power off.
- b. Locate charging port on the left side of the frame and remove the rubber cover.
- c. Plug the charger into the charging port first; then connect it to a power outlet (AC 180V-240V, 47-G3H7).

When the battery is outside of the ebike:

- a. Use the key to unlock battery and pull it out of the frame.
- b. Place battery in a secure place and plug the charger into the charging port first; then connect it to a power outlet (AC 180V-240V, 47-G3H7).
- c. Unplug the charger from the outlet, then the charging port.
- d. After full charge, remember to put the battery back into the frame and most importantly lock it with the key.

NOTICE

When Installing the Battery into the Bike

- Do not force the battery onto the battery mount; carefully align and gently push the battery down onto the mount.
- Ensure that the battery has been properly secured to the bike before each use. Verify that the battery is in a locked position.

When Charging

- A safe place with suitable environment should be cool, dry and indoors away from direct sunlight, dirt, or debris. And it is away from potential to strip on the charging cords and possible damage to the bike, battery, or charging equipment while parked and/or charging. Always charge the battery when the surrounding temperature is between 10°C-25°C (50°F-77°F).
- Ensure that the battery and charger are not damaged before charging. If you notice anything unusual while charging or experience substantial reduction in range, please stop charging and usage of the bike.
- Charging the battery normally takes 3-7 hours. The charging time varies depending on distance traveled, riding characteristics, terrain, payload, battery age, etc.
- Remove the charger from the battery within one hour after the indicator light turns green. The charger is designed to automatically stop charging when the battery is full, but unnecessary wear of the charging components could occur if the charger is left attached to the battery and a power source for longer than 12 hours. Detach the charger within one hour, or as soon as possible, once the green light indicates a complete charge to avoid unnecessary wear of charging components.
- Never charge a battery for more than 12 hours at a time.
- Do not leave a charging battery unattended.
- The battery should be recharged after each ride so that it is ready to go full range for the next ride.

When the Battery Is Removed

- Be careful not to drop or damage the battery when lifting the battery off the frame or when it is loose from the bike.
- Do not turn the bike on if you are riding it without the battery installed, or else damage to the electrical system could occur.

Charger Safety Information

- The charger should only be used indoors in a cool, dry, and ventilated area on a flat, stable, hard surface.
- Always charge your battery when the surrounding temperature is between 10°C-25°C (50°F-77°F).
- Avoid contact between the charger and any liquids, dirt, debris, or metal objects.
- Do not cover the charger while in use.
- Store and use the charger in a safe place away from children and away from potential damages caused by falling.
- Fully charge the battery before each use to ensure that it is ready to perform to its best ability every ride, to extend the life of the battery, and to reduce the chance of over-discharging the battery.
- Do not charge the battery with any chargers other than the one originally supplied by the HJM Bikes or a charger designed for your specific bike and purchased directly from HJM Bikes.
- The charger works on 180V-240V, 47-G3H7 standard home AC power outlets and automatically detects and accounts for incoming voltage. Do not open the charger or modify voltage input.
- Do not yank or pull on the cables of the charger. When unplugging, carefully remove both the AC and DC cables by pulling on the plastic plugs directly, not pulling on the cables.
- The charger is designed to get hot when operating. If the charger gets too hot to touch, you notice a strange smell, or any other indicator of overheating, discontinue charging immediately and contact HJM Bikes Product Support.

Long-Term Battery Storage

If you intend to store your bike for more than two weeks at a time, follow the instructions below to maintain the health and longevity of your battery.

- Charge (or discharge) the battery to approximately 75% charged.
- Power off the battery and leave it locked to the frame. Alternatively, you can unlock and remove the battery from the frame for storage.
- Store the battery in a dry, climate-controlled, indoor location where the temperature is between 10°C-25°C (50°F-77°F).
- Check on the battery every month, and if necessary, use the charger originally supplied with the bike to charge the battery to 75% charged.
- If you have not used the ebike for a long time, please remember to charge the ebike every three months. Remember discharge before charging. If you have not charge the ebike regularly, the battery will be damaged quickly.

Operation

NOTICE

- Read and understand all sections of this entire manual before operating the bike for the first time. There are important safety warnings throughout the whole manual that **MUST** be followed to prevent dangerous situations, accidents, damage to the bike, damage to property, injury, or death.
- Users must follow the instructions and warnings in this manual for safety reasons. Do not attempt to operate your bike until you have adequate knowledge about controlling and operating the bike. Damage caused by failing to follow instructions is not covered with warranty and could result in dangerous situations, accidents, injury to you and others, damage to the bike/property, injury, or death.
- Users must become accustomed to the bike's power control system before operating. The twist power assist mechanism allows full power to be activated from a stop, and inexperienced users should take extra care when first applying the twist power assist. The pedal assistance feature is also a powerful option, and users should thoroughly research and understand how to operate it before first use. Not familiarizing yourself or practicing the operation of the power system on your bike can lead to damage, serious injury, or death.

Handlebar Features

1. LCD Display Remote
2. Bell
3. LCD Display
4. Shifter
5. Throttle
6. Brake lever

Refer to the LCD Display instructions on how to perform various operations with these buttons.



LCD Display Function Overview

The LCD display offers a variety of features to suit your riding needs, including:

1. Four buttons for convenient operation
2. Power-on password function
3. Metric/imperial unit selection switch
4. Speed display: real-time speed (SPEED), maximum speed (MAX), average speed (AVG)
5. Five levels of pedal assist control: gears 0-4
6. Six-level battery indicator with low voltage warning and battery management system (BMS) information display
7. Headlight indicator (requires controller support)
8. Mileage display: trip mileage (TRIP), total mileage (ODO)
9. Trip time display
10. UART/CAN communication interface
11. 6km/h power-assisted walking function
12. Fault code indication



The LCD display is equipped with five buttons on the corresponding operating unit:

- Power on/off
- Function
- [+]Key
- [-]Key



Routine Operation

1. Power on/off

Long press(2 seconds) to power on/off the display. If there is no operation on the instrument for 5 minutes (speed is 0), it will automatically power off.

2. PAS level selection

Press / to switch PAS level of electric bicycle. There are a total of 5 modes: 0/1/2/3/4. By default, when the instrument is powered on, it starts in mode 1. When the display shows 0, it indicates no assist mode is selected.

3. Display interface switching

When the display is powered on, short press to switch between trip mileage (TRIP), trip time (TRIP TIME), average speed (AVG), maximum speed (MAX), total mileage (ODO).



4. Power-assisted walking mode

Press and hold for 2 seconds to activate the power-assisted walking mode. The electric bicycle will travel at a fixed speed of 6 km/h and the display shows . Release to exit the power-assisted walking mode.

The Power-assisted walking mode can only be used when pushing the electric bicycle, please do not use it while riding.

5. Light on/off

Long press **+** for 1 second to turn on the headlight (requires controller support), and the display will show the headlight indicator icon lighting up. Long pressing **+** again for 1 second will turn off the headlights, and the headlight indicator icon will go off.

6. Battery level display

The Battery level is shown as 5 bars. When the battery level reaches the low voltage warning value, only a flashing battery frame icon is displayed, reminding the user to charge immediately.

7. Error code display

The display can alert the whole vehicle failure. When the controller detects the failure, the controller transmits the display information, and the interface displays the failure code. The interface is shown as follows:



NOTICE

When the error code appears on the display, please troubleshoot the problem in time, the electric bicycle will not be able to drive normally after the problem occurs.

Please refer to the table below for a detailed definition of the error code:

| Error Code | Definition | Troubleshooting |
|------------|--|---|
| 04 | Throttle doesn't turn back to zero position | Check if the throttle return to zero position |
| 05 | Throttle failure | Check throttle |
| 07 | Overvoltage protection | Check the voltage of the battery |
| 08 | Failure of motor's hall signal wire | Check the motor |
| 09 | Failure of motor's phase wire | Check the motor |
| 11 | Failure of the controller's temperature sensor | Check the controller |
| 12 | Failure of the current sensor | Check the controller |
| 13 | Failure of the temperature of the battery | Check the battery |
| 14 | Failure of the temperature of the motor | Check the motor |
| 21 | Failure of the speed sensor | Check the position of the speed sensor |
| 22 | Failure of the BMS communication | Check the battery |
| 30 | Communication failure | Check the connector of the controller |

Precautions

Pay attention to all the general operating when using the products and do not plug and unplug the display while it is powered on.

- ◆ Avoid bumping the display as much as possible.
- ◆ Please do not change the parameter settings at will, otherwise normal riding cannot be guaranteed.
- ◆ If display does not work properly, please contact our customer service as soon as possible.
- ◆ There may be differences between the physical products and this manual due to normal upgrade. Please refer to the physical products.

Cautions and Warnings

General Operating Rules

- When riding, obey the laws applicable in your area as any other vehicles.
- For additional information regarding traffic/vehicles laws, contact the road traffic authority in your area.
- Try to predict the unexpected such as opening car doors or cars backing out of driveways.
- Be careful at intersections when preparing to pass other vehicles or other cyclists.
- Familiarize yourself with all features and operations of the bike by HJMBIKE. Practice and become proficient at shifting gears, applying brakes, using power assist system, and using twist power assist in a controlled setting before riding in riskier conditions.
- Check your local rules and regulations before carrying cargo.
- When braking, apply the rear brake first, then the front brake.
- Maintain a comfortable stopping distance from all other objects, riders, and vehicles. Safe braking distances vary based on factors such as road surface and lighting conditions.

Safety Warnings

- All users must read and understand this manual before riding their bike. Additional manuals for individual components should also be reviewed before installing or using those components.
- Ensure that you comprehend all instructions and safety notes/warnings.
- Ensure that the bike fits you properly before first use. You may lose control or fall if your bike is too big or too small.
- Always wear an approved bicycle helmet when riding a bike . Failure to wear a helmet when riding may result in serious injury or death.
- Ensure that the handlebar grips are undamaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- Off-road riding requires close attention and specific skills because there are potential conditions that could cause hazards. Wear appropriate safety gear and do not ride alone in remote areas. Check local rules and regulations about whether off-road ebike riding is allowed.
- Do not engage in extreme riding. This includes but is not limited to jumps, stunts, or any behaviors that exceed your capabilities. Although many articles/advertisements/catalog depict extreme riding as admirable, it is not recommended nor permitted, and you can be seriously injured or killed if you perform extreme riding. Bikes and their components have strength limitations, and extreme riding, including but not limited to jumps, stunts, etc., should not be performed as it can damage your bike's components and/or cause or lead to dangerous riding situations in which you may be seriously injured or killed.
- Failure to perform and confirm proper installation, compatibility, proper operation, or maintenance of any component or accessory can result in serious injury or death.
- After any incident, you must consider your bike unsafe to ride until you consult with a certified bike mechanic for a comprehensive inspection for all components, functions, and operations of the bike.

- Always use the lowest assist level until you are comfortable with the bike and feel confident in controlling the power.
- Any aftermarket changes to your bike that are not approved could void the warranty and create an unsafe riding experience.
- Take extra care while riding in wet conditions. You should slow down and increase braking distances. Feet or hands slip more easily in wet conditions and could lead to serious injury or death.

NOTICE

The throttle is very sensitive, when you turn on the ebike system, and you are not riding, please be careful not to touch the throttle, which may cause you fall forward and cause injury or death.

Parking, Storage, and Transport

Please follow these basic parking, storage, and transportation tips to ensure that your bike is well taken care of both on and off the road.

- When pushing or carrying the bike manually, turn off the power to avoid accidental acceleration from the motor.
- Turn the power and any lights off to conserve battery.
- Ensure that the battery is locked to the frame when the power is off, or use the key to remove the battery and bring it with you for safety reasons.
- Park indoors when possible. If you must park outdoors in rain or wet conditions, you should leave your ebike outside for only a few hours and then park it in a dry location as soon as possible to allow the entire system to dry out. Compared to a regular bike, an ebike used in wet conditions needs more frequent maintenance to prevent rust and corrosion to make sure that all systems are working safely.

- Locking up your bike is recommended so that your bike is secure and the chance of theft is reduced. We do recommend you to take appropriate precautions to keep your bike safe from theft.
- Do not park, store, or transport your bike on a rack not designed for the bike's size and weight.
- Use a rack compatible with the width of tires of your bike. Some racks may not accommodate all tire widths.
- Avoid transporting ebikes on a vehicle rack during rain, as this may cause water damage to the electrical components.

Wet Weather

Joyrider is a waterproof ebike, but never immerse or submerge this product in water or any other liquid as the electrical system may be damaged.

- In wet weather you need to take extra care when operating this bike.
- Decrease riding speed to help you control the bike in slippery conditions.
- Brake earlier since it will take brakes longer to slow down than when operated in dry conditions.
- Be more visible to others on the road. Wear reflective clothing and use approved safety lights.
- Road hazards are more difficult to see when wet; proceed with caution.

Night Riding

It is not recommended to ride at night. Ride at night only when it is necessary.

- Wear reflective and light-colored clothing.
- Slow down and take familiar routes with street lighting, if possible.
- Ensure that tire wall, pedal, and other reflectors are properly installed, positioned, clean, and unobstructed.
- Use a properly functioning lighting set comprised of a white front lamp and red rear lamp.

Note for Parents and Guardians

As a parent or guardian, you are responsible for the activities and safety of your child. The ebike is not designed for use by children. If you are carrying a passenger in a child safety seat, they must also be wearing a properly fitted and approved helmet.

Components Notice

Carrying Loads

Total maximum payload: 135kg(298lb), includes the weight of the rider as well as cargo, passengers and riding tools.

Optional rear rack maximum payload: 25 kg (55 lb)

Optional front rack maximum payload: 15 kg (33 lb)

You **MUST** hold onto the bike when loading passengers or cargoes. The kickstand is not designed to be used for loading passengers or cargoes. Do not assume the bike is stable and balanced when using the kickstand. Always hold onto the bike when passengers or cargo are being loaded.

Never leave the bike unattended with a child on the bike. Ensure that the child is taken with you when you look away or walk away from the bike, otherwise the bike could tip over and cause serious injury or death.

Carrying Cargo

Carrying a cargo load involves additional risks, which requires special attention and care. Braking, acceleration, and balancing are all significantly affected by the cargo loaded on the ebike. To safely operate your ebike while carrying cargoes, you must get used to the differences in braking, steering, balance, etc that come with the extra weight.

- Ensure that your loads are properly secured and check periodically that nothing loosens or at risks of interfering with any moving components, or touching or dragging on the ground.
- Hills that are normally easy to climb and descend without cargo can become challenging and dangerous once cargo is loaded onto the bike, as the extra weight affects steering, braking, balancing as well as the amount of power it takes to go uphill.
- With the user's ability to safely operate the ebike. Serious injury or death can occur if the user's ability to safely operate the ebike is compromised by the cargoes or passengers on board.

Electrical System

The electrical system of your ebike offers various levels of power assistance for different operating conditions and users' preferences. It is critical that you familiarize yourself with all aspects of your ebike's electrical system and check if everything is working correctly before each ride. The front and rear brake levers contain motor cutoff switches. They disable the hub motor's assistance. Both levers should be checked if they are working correctly. When choosing higher power assist level, hub motor should provide smooth, gradual acceleration of engine's power. Should the power assist, lighting or motor levels function abnormally, intermittently, or not work at all, please stop the using your ebike immediately and contact our support team for assistance.

Brake System

Do not use the front brake by itself. Apply the rear brake first, and then the front brake. Ensure that brakes function normally and all components of the braking system are properly secured without any damage. When you fully squeeze the brake levers, ensure that neither the front nor the rear brake lever touches the handlebars. Add tension to the brake cables or take your bike to a certified bike mechanic to have the brakes repaired when you face any problems.

Derailleur

Because the derailleur is easy to damage, after assembling the ebike, first check whether the protection of derailleur is bent, if you find the protection of derailleur is bent, you can take it perpendicular to the ground by hand.

Tires and Wheels

Your wheels should always spin straight and must be repaired or replaced if they wobble from side to side or up and down when spinning. If your wheels are loosened, which could happen after use, we recommend having a certified bike mechanic to tune the wheels of your ebike. Do not attempt to tune wheels or tighten spokes unless you have adequate knowledge, tools, and experience. Ensure the tires and inner tubes to be in good working condition with the correct amount of air pressure as indicated on the tire sidewall and without any visual damage. Always replace tires and inner tubes if they have punctures, cuts, or damages before your rides. Tires without the correct amount of air pressure could reduce performance, cause tires to wear faster, and make riding your bike dangerous.

Suspension, Handlebar, Grips

The suspension fork should be properly adjusted for your weight and terrain. Make sure that the handlebar and the handlebar stem are properly aligned, fitted to the user, and secured to their corresponding, recommended torque values. Handlebar grips should not move easily at the ends of the handlebar. Loose, worn, or damaged handlebar grips should be replaced before rides.

Quick releases, Accessories, Straps, and Hardware

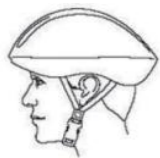
Quick release levers are for securing the seat post and the front wheel to the bike. They allow the user to remove the front wheel and to adjust the seatposts without tools. Since quick release levers could be loosened during transportation, or accidentally between or during rides, it is important that you regularly check to ensure these components to be properly secured.

Ensure all hardware to be secured and all approved accessories to be properly attached following the instructions of specific component's manufacturer. It is always helpful to look over all hardware, straps, and accessories before each ride and, if you discover something wrong or find something you are unsure of, have it checked by a certified bicycle mechanic.

Before using the ebike, always check to ensure all levers, quick releases, and latches are properly secured and undamaged.

Changing Components or Attaching Accessories

The use of non-original components or spare parts can jeopardize the safety of your ebike, void your warranty and, in some cases, cause your ebike to not conform with laws pertaining to operating your ebike.



Helmets

We recommend riders wear a properly fitted helmet that covers the forehead when riding a bike. Child passengers also should wear a properly fitted helmet.

Maintenance

Basic Bike Care

To ensure safe riding conditions, you must maintain your bike properly. Follow these basic guidelines and see a certified bike mechanic at regular basis to ensure your bike is safe for use and comfortable to ride.

1. Keep the ebike clean after each ride.
2. Forbidden to immerse the ebike in any liquid.
3. Check the paint on the frame, if the paint has slightly scratched, use paint to prevent the frame from rusting every month.
4. Check all moving parts every month, make sure the bolts and quick releases are tightened.
5. It is recommended to charge the battery after each ride, and if you don't use the ebike for a long time, remember to charge the battery every three months and store in a dry and cool place.
6. Check the dual flashing switch is in perfect working order every month.
7. Check that the wiring and connectors are secure and not damaged every month.
8. Check the suspension effect of the front fork every month, if have any problem, please find help from bike mechanic or www.hjmbike.com.
9. If the "Tread Wear Indicator"(T.W.I.) mark on the tire is worn, please replace the tire at once.



10. Check the brake system by a bike mechanic every year(according to your riding conditions).
11. Disc rotors and pads must be kept clean and free from oil/grease based contamination.
12. If the disc rotor is cracked or deformed, please replace it at once.
13. Disc pads should be replaced when total thickness is less than 2.5mm.
14. On a flat road, clean and lubricate chain every 310 miles(500 km); on a rough road, clean and lubricate chain every 93 miles(150 km).
15. Keep the freewheel clean and lubricate it regularly.
16. If the protection of derailleur is damaged, please replace it at once to prevent damage to the derailleur.

| First Ride | Before Each Ride |
|--|---|
| Make sure the bolts and nuts of the e-bike components are tighten. In particular, check the self-assembled parts to ensure that the bolts and quick release have been tightened. | Make sure the bolts and quick release have been tightened. Especially the quick release of front wheel and seat post, and bolts of pedal. |
| Make sure the brakes are in perfect working order. | Keep the E-bike clean. |
| Make sure the wires on the e-bike are plugged in securely and not loosened in transit. | Make sure the battery is above 80% and securely locked in the E-bike. |
| Make sure the handlebar can be turned to the left and right easily and flexibility. | Make sure the handlebar can be turned to the left and right easily and flexibility. |
| Switch the e-bike system on by pressing "i" button for about 2 seconds, see the manual for details. | Check if the brake pads need to be replaced, and the brake system is in perfect working order. |
| Make sure the battery is securely locked in the e-bike. | Make sure the tires are fully inflated. |
| Adjust the suspension fork, seat height and seat angle for you most comfortable riding. | Check the chain for proper alignment and function. |

NOTICE

Your cables, spokes, and chain will stretch after an initial break-in period of 80-160 km (50-100 mi), and bolted connections could loosen. Always have a certified bike mechanic perform a tune-up on your bike after your initial break-in period of 80-160 km (50-100 mi) (depending on riding conditions such as total weight, riding characteristics, and terrain). Regular inspections and tune-ups are particularly important for ensuring that your bike remains safe and comfortable to ride.

Troubleshooting

| Symptoms | Possible Causes | Most Common Solutions |
|--|---|--|
| The bike does not work | <ol style="list-style-type: none"> 1. Insufficient battery power 2. Faulty connections 3. Battery not fully seated in tray 4. Improper turn on sequence 5. Brakes are applied | <ol style="list-style-type: none"> 1. Charge the battery 2. Clean and repair connectors 3. Install battery correctly 4. Turn on bike with proper sequence 5. Disengage brakes |
| Irregular acceleration and/or reduced top speed | <ol style="list-style-type: none"> 1. Insufficient battery power 2. Loose or damaged twist power assist 3. Misaligned or damaged magnet ring | <ol style="list-style-type: none"> 1. Charge or replace battery 2. Replace twist power assist 3. Align or replace magnet ring |
| The motor does not respond when the bike is powered on | <ol style="list-style-type: none"> 1. Loose wiring 2. Loose or damaged twist power assist 3. Loose or damaged motor plug wire 4. Damaged motor | <ol style="list-style-type: none"> 1. Repair and or reconnect 2. Tighten or replace 3. Secure or replace 4. Repair or replace |
| Reduced range | <ol style="list-style-type: none"> 1. Low tire pressure 2. Low or faulty battery 3. Riding up steep hills, headwind, and /or heavy payload 4. Battery discharged for long period of time without regular charges, aged, damaged, or unbalanced 5. Brakes rubbing | <ol style="list-style-type: none"> 1. Adjust tire pressure 2. Check connections or charge battery 3. Assist with pedals or adjust route 4. Balance the battery; contact Tech Support if range decline persists 5. Adjust the brakes |

| | | |
|-------------------------------------|--|---|
| The battery will not charge | <ol style="list-style-type: none"> 1. Charger not well connected 2. Charger damaged 3. Battery damaged 4. Wiring damaged | <ol style="list-style-type: none"> 1. Adjust the connections 2. Replace 3. Replace 4. Repair or replace |
| Wheel or motor makes strange noises | <ol style="list-style-type: none"> 1. Loose or damaged wheel spokes or rim 2. Loose or damaged motor wiring | <ol style="list-style-type: none"> 1. Tighten, repair, or replace 2. Reconnect or replace motor. |

Error code Detection

Your bike is equipped with an error detection system integrated into the display and controller. In the case of an electronic control system fault, an error code should display. If your bike has an error code displayed at any time, it is recommended that you cease operation and contact HJMBIKE immediately.

Assembly instruction support

You can find all of our assembly instruction videos on official HJMBIKE website as well as the official HJMBIKE YouTube channel.

If you have any questions, please contact HJMBIKE Technical Support Team at support@hjmbike.com or submit the contact form at www.hjmbike.com.

Please refer to www.hjmbike.com for detailed after-sale policies and more helpful information.



Let's start the ride with HJM!

Contact us

Email: support@hjmbike.com

Website: www.hjmbike.com

