

photonTM

Photon E-BIKE MTB USER MANUAL

FULLY CHARGE BATTERIES BEFORE FIRST USE

Batteries should be fully charged immediately after each use for the recommended charge times.

Li-Ion(Lithium Ion) batteries 4-5 hours (2-3 hours for Via Urbano)

HANDLING BATTERY

Use Original Charger: Always use the charger provided with bike or a charger that is specifically recommended for your electric bike. Using improper chargers can lead to potential safety hazards.

Ventilation: Charge your battery in a well-ventilated area, away from flammable materials and heat sources. Avoid charging in confined spaces or areas with poor ventilation.

Temperature: Charge the battery at room temperature (around 20-25°C or 68-77°F). Charging at extreme temperatures can affect battery performance and safety.

Supervision: Always supervise the charging process. Do not leave the battery unattended while charging.

Avoid Overcharging: Once the battery is fully charged, disconnect it from the charger. Overcharging can damage the battery and pose safety risks.

Proper Connector Alignment: Ensure proper alignment of the charging connectors to prevent sparks or arcing during connection.

Inspect Regularly: Regularly inspect the battery, charger, and charging cables for any signs of damage or wear. If you notice any issues, discontinue use and contact us for assistance.

Avoid Water Exposure: Keep the battery, charger, and charging area dry to prevent water damage.

Proper Storage: Store your battery and charger in a cool, dry place when not in use. Avoid exposing them to direct sunlight or extreme temperatures.

Authorized Repairs: In case of any damage or malfunction, do not attempt to repair the battery yourself. Contact support or an authorized service center for assistance.

By following these guidelines, you can ensure the safe and optimal performance of your lithium-ion electric battery. Please be aware that failure to adhere to these safety precautions could result in damage to the battery, personal injury, or property damage.

For any questions, concerns, or assistance regarding the charging and use of your lithium-ion electric battery, please contact our customer support team

FACTORS TO MAXIMIZE THE RANGE OF YOUR HYBRID ELECTRIC BICYCLE

Below are points that will help you to maximise the enjoyment you get from your new hybrid electric bicycle

Rider input	The more the rider pedals the further the distance traveled. Continuous riding, as opposed to frequent stopping and starting, will yield the greatest range possible
Elevation gain	The flatter the road the further the distance traveled
Weather	Cold weather can adversely affect the battery capacity
Wind	Traveling with a tailwind will increase distance traveled, traveling into a headwind will decrease distance traveled
Terrain	The smoother the terrain (roadways vs fireroads etc.) the further the distance travelled
Rider weight	The lighter the rider, resulting in less drain on the batteries, the further distance travelled
Bicycle maintenance	A properly maintained bicycle will yield the greatest range possible
Tyre pressure	Properly inflated tires have less rolling resistance and will be easier to pedal
Batteries	Properly charged and maintained batteries will yield the greatest range possible. Batteries stored in cold areas (below 50 degrees Fahrenheit / 10 degrees Celcius) will show reduced range. Batteries that have not been kept in optimum condition will show reduced tange and run time.

HELMETS SAVE LIVES!!!

- ALWAYS WEAR A PROPERLY FITTED HELMET WHEN YOU RIDE YOUR BICYCLE.
- DO NOT RIDE AT NIGHT.
- CPSC RECORDS SHOW THAT ABOUT 35% OF BICYCLE RELATED DEATHS OCCUR AFTER DARK.
- AVOID RIDING IN WET CONDITIONS.
- CPSC RECORDS SHOW THAT ABOUT 65% OF INJURIES HAPPEN TO CHILDREN UNDER 15 YEARS OF AGE.
- RIDE ONLY WITH ADULT SUPERVISION



**CORRECT FITTING-
MAKE SURE YOUR
HELMET COVERS YOUR
FOREHEAD.**



**INCORRECT FITTING.
FOREHEAD IS EXPOSED
AND VULNERABLE TO
SERIOUS INJURY.**





Tear off packaging



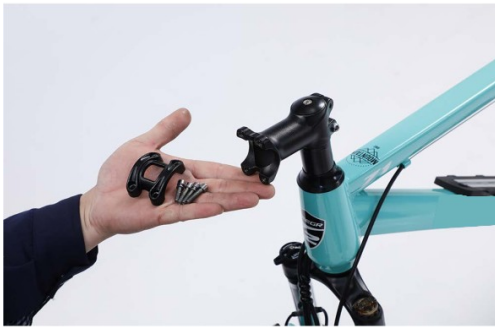
Turn stem to this direction



Rotate 180° forward



Unscrew these four screws



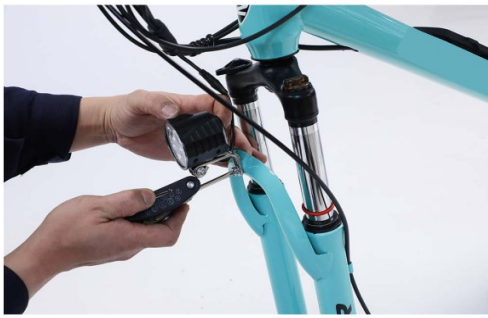
As us shown in the picture Fix the handlebar Adjust the angling to personal prefer



Tighten the four screw



Fix the headlight



Tighten the screw



Front wheel with Quick release

Find out the quick release for the front wheel



Insert the quick release into the hub



Fasten the quick release

Insert the disc into the gap of the brake and insert the quick release axle into the front hub axle and lock



Adjust the angle of handle and stem



Tighten the stem on the fork



Turn the pedals and pay attention to the pedal signs R and L



Turn spanner anti-clockwise to fix left pedal



Turn spanner clockwise to fix right pedal
put the saddle fall in the correct position of the seat post clamp and adjust to the



Take out the seat



Insert the seat



Adjust the appropriate height lock the quick release



Fix the battery



Align the battery with base and push it downward



Riding Modes:

- Electric Power Assist (5 shifts)
- Pure Electric (5 shifts)
- Pure Human riding

Using the Cruise control system:

Pure electric riding mode, during riding process (turn rotatable grip +long press - button 5 seconds) to enters cruise mode (instrument display Cruise signs). Brake cancels cruise.

(Cruise mode needs to be used in good road conditions, with a few pedestrian and vehicles on the road)

Note: For the normal use of each function, please ensure that the led panel works.

Switch on and off:

Long press power button for five seconds to turn the meter on/off, quick press power button to check solo/total mileage.

Switch Speed Grade:

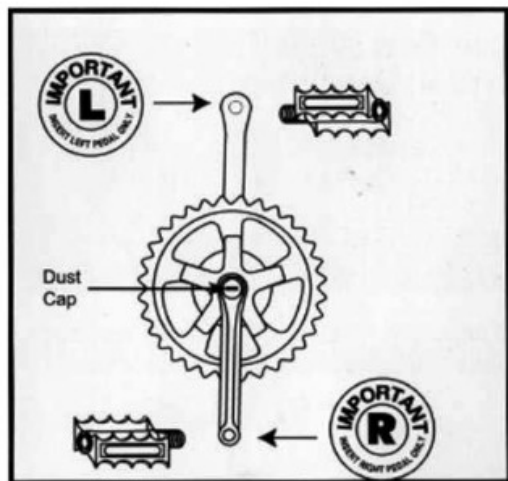
press the +/- button to switch the speed grade

0 grade instructions:

At 0 grade mode, at this time, the motor doesn't work when you turn throttle grip, and the human riding has no electric power.

Speed Grade 1 - 5 instruction:

Speed grade 1 - 5, turn the throttle grip, the motor works, and PAS starts at the same time. At this time, different assist and speed are matched according to the selected speed grade.



Pedals & Crank Set

Look for the letters "R" for right, and "L" for left, stamped on each pedal spindle. Start threading each pedal by hand to avoid stripping the threads. Tighten with a 15mm narrow open ended wrench. Note that the right hand pedal attaches to the chainwheel side crank arm with a right-hand (clockwise) thread. The left pedal attaches to the other crank arm and has a left-hand (counter-clockwise) thread. It is very important that you check the crank set for correct adjustment and tightness before riding your bicycle. New cranks may become loose with initial use, refer to pages 107-109 for proper crank set adjustment and maintenance. Once the pedals have been installed, remove the dust caps from the center of each crank arm. Tighten the spindle nuts securely (approx. 350 in. lbs.) with a 14mm socket wrench or an 8mm Allen wrench, depending on style, then replace the dust caps.



Attachment of an incorrect pedal into a crank arm can strip pedal threads and cause irreparable damage. Before your first ride, please check to insure your pedals are attached correctly.

Seat Post Clamp -Quick Release

Many IZIP and eZip bicycle models use quick release (QR) levers to facilitate common tasks such as front wheel removal and seat height adjustment. When properly adjusted, quick release levers are both safe and convenient, but you must understand and apply the correct technique to adjust them properly before riding your bicycle to prevent serious injury or death from a fall

Quick release levers use a cam action to clamp the wheel or other components in place. Because of their adjustable nature, it is critical that you understand how they work, how to use them properly, and how much force you need to apply to secure them.

Warning: The full force of the cam action is needed to clamp the wheel securely. Holding the nut with one hand and turning the lever like a wing nut is NOT a safe or effective way to close a quick release and will not clamp the wheel or other components safely.

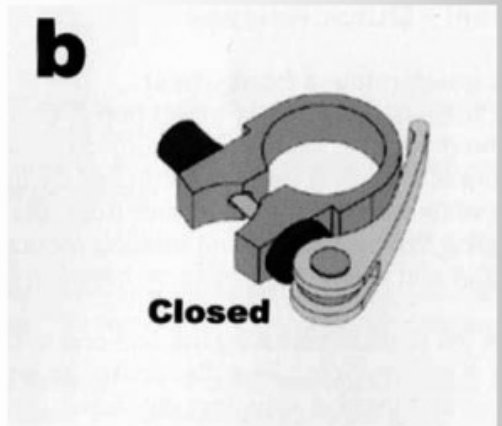
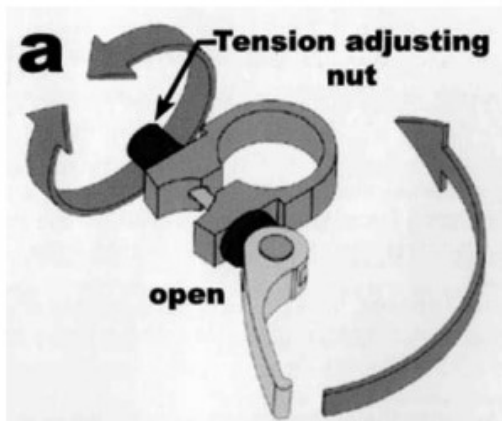
QUICKRELEASEUSAGE

Riding with an improperly adjusted wheel quick release can allow the wheel to wobble or fall off the bicycle ,which can cause serious injury or death.therefore,it is essential that you :

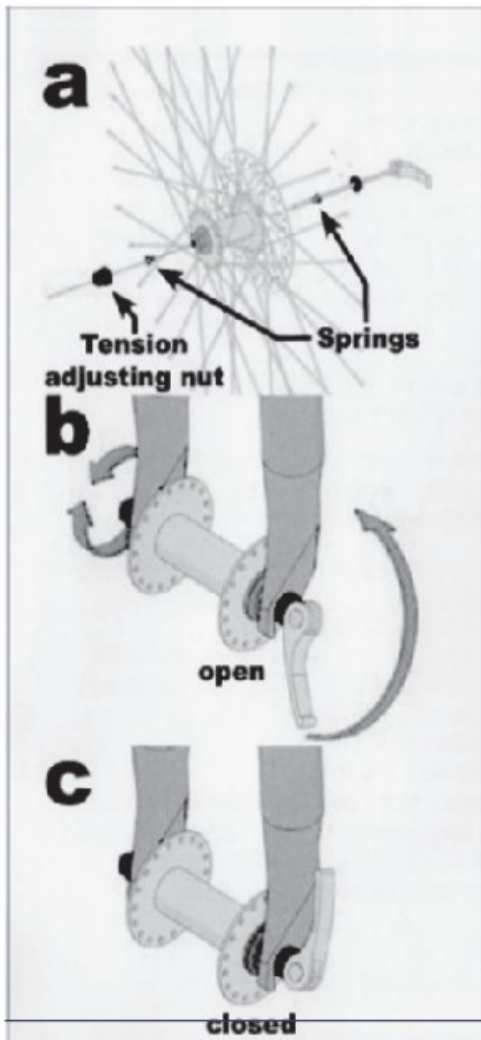
- 1.Ask your dealer or a local bike shop to help you make sure you know how to install and remove your wheels safely.
- 2.Understand and apply the correct technique for clamping your wheel in place with a quick release.
- 3.Each time, before you ride the bike, check that the wheel is securely clamped

Adjusting a quick release seatpost clamp

In a seatpost quick release system,the seatpost is clamped in place by the force of the quick release cam pushing against one side of the clamp and pulling the tension adjusting nut,by way of the skewer ,against the other.the amount of clamping force is controlled by the tension adjusting nut .Turning the tension adjusting nut clockwise while keeping the cam lever from rotating increases clamping force;turning itcounterclockwise while keeping the cam lever from rotating reduces mping force.less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force



1. With the quick release clamp in the OPEN position, insert the seatpost, with saddle attached, into the bicycle's seat tube.
2. Swing the quick release lever into the CLOSED position
3. Grab the saddle with both hands and attempt to rotate it (and thus rotate the seatpost in the seat tube).
4. You If are able to force the seatpost out of alignment with the frame, the seatpost clamp needs to be adjusted. Holding the quick release lever in the OPEN position with one hand, tighten the tension adjusting nut with your other hand about 1/2 turn clockwise
5. Attempt to swing the lever into the CLOSED position. If the lever cannot be pushed all the way to the LOSED position (figure b), return the lever to the OPEN position, then turn the tension adjusting nut counterclockwise one-quarter turn and try tightening the lever again. Repeat steps 3, 4 & 5 until proper quick release tension is achieved



Wa Rnin G: securely clamping the wheel takes considerable force. If you can fully close the quick release without wrapping your fingers around the fork blade for leverage, and the lever does not leave a clear imprint in the palm of your hand, the tension is insufficient. o pen the lever; turn the tension adjusting nut clockwise a quarter turn; then try again.

6. If the lever cannot be pushed all the way to a position parallel to the fork blade, return the lever to the OPEN position. Then turn the tension adjusting nut counterclockwise one-quarter tum and try tightening the lever again.

7. Re-engage the brake to restore correct brake pad-to-rim clearance; spin the wheel to make sure that it is centered in the frame and clears the brake pads; then squeeze the brake lever and make sure that the brakes are operating correctly.



Frame Sizing Guide

Approximate Rider Leg Length

61-69cm / 24-27 inches

66-76cm/26-30inches

71-79cm/28-31 inches

76-84cm /30-33 inches

79-86cm /31-34 inches

81-89cm /32-35 inches

86-94cm /34-37 inches

Suggested Frame Size for
Racing/touring Bicycle

50cm / 19.5 inches

55cm / 21.5 inches

57cm/ 22.5 inches

60cm / 23.5 inches

63cm / 25 inches

Suggested frame Size for
Mountain, Hybrid, Comfort, or
Cruiser Bicycle

37cm / 14.5 inches

43cm / 17 inches

45cm / 18 inches

50cm / 19.5 inches

52cm / 20.5 inches

53-56cm / 21-22 inches

58-60cm / 23-23.5 inches

Tips: Full Electric Mode (i.e. using throttle only) is for flat roads. Do not use Full Electric Mode on slopes or rough roads or beaches, otherwise excessive resistance will cause the motor or controller damage. If the road condition is unsuitable or too rough, please use PAS (Pedal Assist System) mode. PAS is when you use your feet to pedal in order to help the motor overcome resistance.

The power assisted mode match with the gear shift to achieve the riding experience of labor-saving and power saving.

In the setting of power assist riding, on few slopes and good road conditions, it is recommended to match with variable gears, 7-6 high-speed gears, with the best power-saving effect and speed ratio.

In case of large slope road conditions, gear 4-7 is adopted, which can be easily and effortlessly climb the slope.

Riding with power assisted mode, if use speed shifting and climbing mode on flat road will waste electric power and accompany with the feeling of empty treading.

Maintenance and use skills of electric bicycle.

The maintenance methods of electric bicycle under different use conditions mainly include the following points.

1. Influence of temperature.

Temperature has an impact of the use of lithium batteries. Generally speaking, the impact on the use of lithium batteries at room temperature is not significant, but when the temperature is higher than 40°C or lower than -10°C, this discharge capacity of lithium batteries will change. For example, if the temperature is below 0°C in winter, the effect will be affected. When the battery is fully charged, the driving mileage will be shortened, because under this condition, the battery capacity can only be released by 60% - 70%. Therefore, driving mileage when the battery is fully charged in winter will be much less than in the summer.

Maintenance method:

A. When the temperature is low in winter, the battery should be placed indoors, and the charging should also be carried out indoors. After the battery is fully charged, the charging time should be extended for another two hours.

B. In summer, avoid the sun exposure of batteries. Avoid charging the battery at high temperature. Avoid charging the battery immediately after use in high temperature. Do not charge for too long. The battery needs to be charged for another one or two hours after the red indicator turns green.

2. Use on different road conditions

E-bike is not suitable for driving on the road with bad or steep conditions. If there are many uphill on the way, we will find that the mileage of charging once will be much less than on the flat road. When starting, uphill, loading or driving against the wind, please use the motor drive combined with human pedal to ensure the working life of the your battery and motor to be longer.

3. Avoid exposure to the sun and rain.

Although the electric bike has a good waterproof performance, it can still ride in rainy and snowy weather, but when passing through water puddles and ponding and other roads, pay attention to the wading height, which shall not be higher than the motor, so as to prevent the motor from damage caused by water inflow. Do not use a high-pressure water gun to wash the electric bicycle, so as to avoid damage caused by water entering the electronic parts and accessories.

4. Try to restrict frequent braking

Frequent braking is bound to be accompanied by frequent start-up, which will lead to frequent and large current discharge and power cut-off of the battery, which has a certain impact on its life. Countermeasures: Pay attention to safety when driving, drive at a proper speed, and try to avoid frequent braking.

Troubleshooting Guide

How can I check that the battery power is working?

Please ensure the battery is charged. Turn on the instrument on the handle bar by pressing the power button Hit the plus button 5 times to keep the bike in full power mode Then lift the rear Tyre or slightly bend the bike on its stand so the Tyre is not touching the ground Then turn the wrist throttle and the wheel should spin

Why is the wheel not freely moving?

Please check if you are in the right gear and also check if the brakes are not too tight rubbing the discs. Both the wheels should turn freely, lift them up independently and give it a spin to check.

How to verify if the battery is fully charged?

Examine the light indicators on the Battery. If only the red light (1) is illuminated and the other three indicators are not green, the battery is not fully charged. If only the red light (1) is illuminated and the other three indicators are green, the battery is fully charged.

Why am I experiencing sparking when connecting the charger to the battery?

The charger retains a very small amount of residual current in its capacitors, which can lead to a momentary discharge when inserting it into the battery. This phenomenon is safe and transient, dissipating rapidly. While not a consistent occurrence, it is a typical behavior observed with all electric batteries. There is no cause for concern, as this behavior is completely normal.