

USER'S MANUAL

Hybrid-Powered Bicycle

EB07



1. IMPORTANT SAFETY INFORMATION

- Do not operate this bicycle without carefully reading the manual and understanding how to operate the bicycle.
- Wear your helmet, gloves and other protective gears before riding to protect yourself from injury in case of an accident. We recommend wearing retro-reflective clothes when riding at night.
- Observe traffic rules and regulations when using this bicycle. Passengers should not be carried. When riding in rainy, snowy or slippery conditions reduce your speed and increase the distance between yourself and other vehicles.
- Your insurance policies may not provide coverage for accidents involving the use of this bicycle, to determine if coverage is provided you should contact your insurance agent.
- Charge the battery in a dry place and ensure there is sufficient ventilation. Neither the battery nor the charger should be covered during the charging process. A lot of heat can be created during the charging process and this has to be able to escape. Otherwise this could lead to a danger of overheating or a possible fire hazard. We recommend charging under supervision or with the user present. Only use the specified charger to charge the battery.
- If planning to store the battery for a long time without using it, make sure to charge it before storing. The battery is best preserved in a cool and dry environment. It also needs to be charged once a month if planning to store for several months.
- Lock then remove the key before riding. Otherwise, you may injure yourself on the protruding key, lose or damage the key, or the battery could become loose and fall out. This could result in accidents and injury.
- The bicycle should not be left out in the rain for a long time or submerged because if water enters into the controller and motor wheel, it may cause short circuit and damage the electrical components.
- Keep appropriate air pressure inside the tires, so as to avoid increasing friction when riding, as low air pressure may easily wear the tires and deform the rim.
- When riding with high speed or downhill, use the rear brake to avoid the center of gravity from moving ahead, as using the front brake may result in a shift in the center of gravity and may be dangerous.

2. GETTING TO KNOW YOUR Q3 FOLDING BICYCLE



1. Handel bar
2. Folding stem
3. Headlight
4. Disc brake
5. Front fork
6. Front wheel set
7. Cycling computer
8. Frame
9. Seat(saddle)

10. Mudguard
11. Rear wheel set
12. Battery
13. Cranks
14. Chainring
15. Seat clamp
16. Chain
17. Motor

3. IN THE CARTON

a) Folding e bike	1 piece
b) Battery with keys (depends on model)	1 set
c) Charger	1 piece
d) Reflector	2 pieces
e) User Manual	1 piece

4. HOW TO FOLD AND USE

4.1 How to fold

- 1) Adjust saddle tube and crank, loose the clamp on saddle tube, push the saddle tube to the bottom, then lock the saddle tube.
- 2) Loose the clamp tube, open folding handle, then bend the tube.
- 3) Open folding handle of frame, then bend.

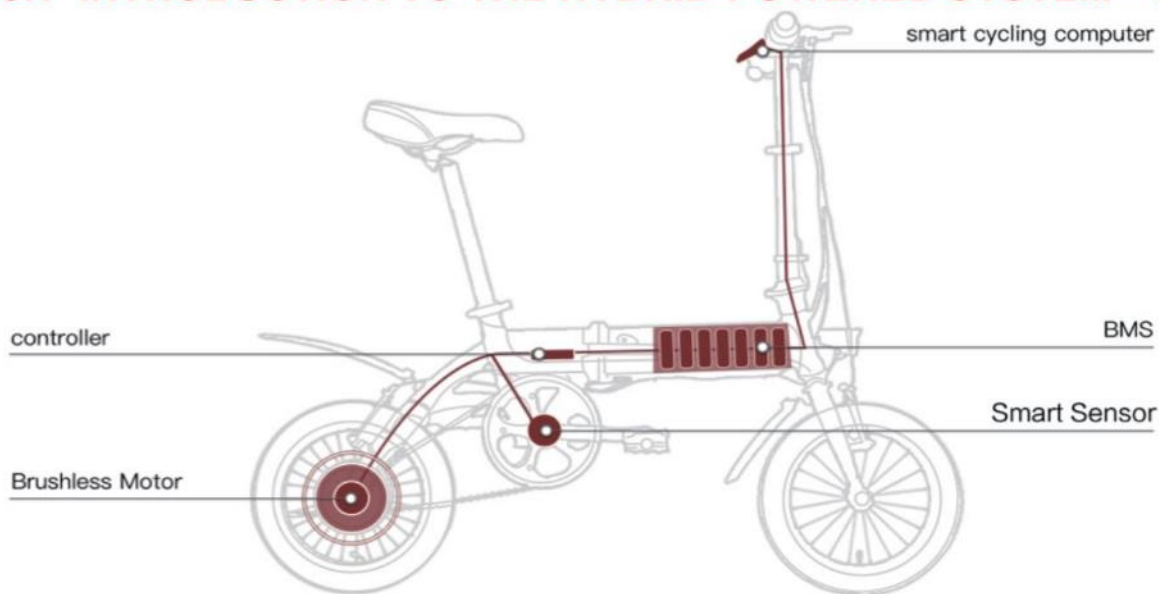


4.2 How to use

- 1) PAS mode: press M on cycling computer for 2 seconds, press + to choose 1,2,3 class, tread the pedal, then start.
- 2) Electronic mode: press M on cycling computer for 2 seconds, turn right handle, then start.
- 3) None-Assistant mode: press M on cycling computer for 2 seconds, press – to 0 class.

5. OPERATIONS AND ADJUSTMENTS

5.1 INTRODUCTION TO THE HYBRID-POWERED SYSTEM – APEX



The APEX (Advanced Pedaling EXperience) system consists of the following components:

- Smart Sensor – Sensing your pedaling rate and velocity.
- Smart Controller – Real time calculating and coordinating optimized power output.
- Battery Management System – Providing electric power to the system while balancing the power consumption and protecting the battery cells.
- BLDC Motor – Provide the power assist.
- Cycling computer – Control and display terminal.

As soon as you start pedaling, the APEX will sense your cadence (pedaling rate) and traveling velocity, and real-timely coordinate the electrical motor to provide the “just-right” power assist that match your riding conditions, making your riding much easier and comfortable. With the APEX you will no longer toil and sweat during your daily commuting, no longer concerned of overstressing yourself or be stopped by an old injury, just enjoy riding.

5.2 BATTERY AND CHARGING

5.2.1 Charging

The battery should be charged before it is used for the first time. Please only use the charger designated by us for charging; otherwise it might damage the battery, and may even lead to fire and other hazard. Warranty will be voided if a charger other than the one designated by us is used.

- 1) Check carefully whether the rated input voltage of the charger is consistent with the voltage of the power grid.
- 2) The battery can also be taken out of the bike to be charged indoors and at other appropriate places.
- 3) Connect first the output plug of the charger with the charging jack of the battery properly, and then connect the input plug of the charger to the AC power supply.
- 4) At this time, the power indicator light on the battery and the charge indicator light of the charger should light up, indicating that the charger has been connected.
- 5) Fully charge of an “empty” battery takes 3-4 hours, when the charge indicator light on the charger turns from red to green, the battery has been fully charged.
- 6) After charging, first pull out the AC power plug, and then pull out the plug connected with the battery.

Safety Concerns:

- 1) The battery should be charged in a spacious environment, staying away from high temperature, high humidity and fire, because the battery and the charger are electronic products, high temperature and humidity will corrode electronic components, resulting in some harmful gases and soot, and even a possible explosion.
- 2) The charging time should not be too long. An excessive charging time will lead to shortened life expectancy of the battery.
- 3) After the battery is fully charged, the power supply should be pulled out as soon as possible, and at the same time, the battery is disconnected from the charger.

5.2.2 Battery maintenance

- 1) You can achieve the best possible performance and lifespan of your battery by charging on a regular basis and using it within the recommended temperature range. The battery has almost no memory effect thanks to the Li-ion technology.
- 2) Leaving a fully discharged battery for a long time will lead to permanent loss of function. Please recharge an empty battery as soon as you have a chance to. If storing the battery for an extended period, we recommend to recharge at least up to $\frac{3}{4}$ (4 diodes full) at least every 30 days to avoid damage to the battery. A dead battery due to not charging the battery is not a warranty claim.
- 3) If your bicycle does not move for a 30 minutes period, the BMS

will switch the battery power off. In order to continue riding with support, you have to switch the battery on again.

- 4) Every battery with Li-ion technology is subject to an unstoppable chemical ageing process. Provided the bicycle has been used properly, remaining capacity of 85% will remain after 500 charging cycles.
- 5) Please follow municipal regulations as to how to discard the battery appropriately, so as to avoid environmental pollution.
- 6) Recommended temperature ranges:
 - a) Charging/Discharging: 0-45 °C, 32-113 °F
 - b) Storage: <35 °C /95 °F

5.3 STARING/SHUTTING DOWN THE SYSTEM

To start the system:

- 1) Check the battery is firmly locked.
- 2) Press the silver button on top of the battery, the charge level indicator lights will light up indicating the remaining battery level.
- 3) Long press the “M” key on the cycling computer to start the system.

To shut down the system:

- 1) Long press the “M” key on the cycling computer to shut down the system.
- 2) Press the silver button on top of the battery to turn off battery power. If your bicycle does not move for a 10 minutes period, the cycling computer will automatically shut down to preserve power, in order to continue riding with support, you have to long press “M” to start the cycling computer again.

5.4 LCD DISPLAY

1. BATTERY

Displays an estimate of the battery strength that remains before requiring a recharge.

A fully charged battery (100%) will show 6 bars.

Please remember to charge your battery when it is on it's last bar. As the battery depletes, the strength of the motor will getweaker.

2. GEAR

The gear can be toggled from Gear 1 to Gear 3, by pressing on SPEED + or SPEED - .

Each gear setting will give a different level of acceleration and maxium speed.

Gear 1: Slow Accelerarion. Gear

2: Medium Acceleration. Gear

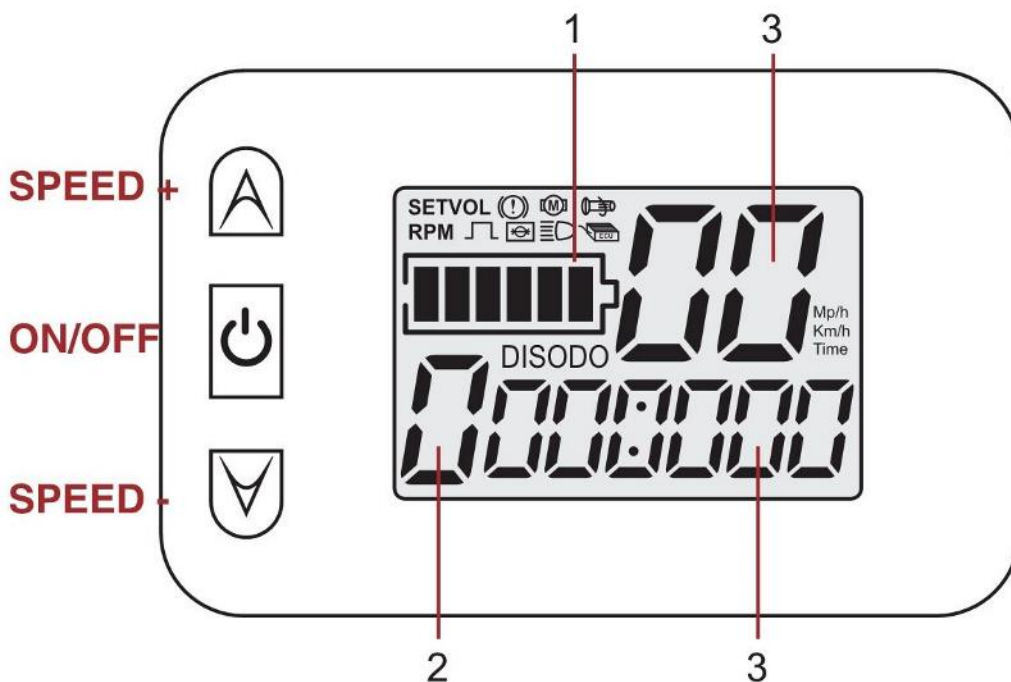
3: Fastest Acceleration.

3. DISTANCE

This serves as an ODOMETER that keeps track of the total distance accumulated on the scooter. It can also show other settings, refer to OPERATION page.

4. SPEED

This serves as a Speed Meter which will display the current speed you are travelling at, in KM/H.



 **Braking**

 **Motor fault**

 **Handle fault**

 **Wheel diameter**

 **Headlight**

 **CPU fault**

5.4.1 Operating Principles

Operation

- Hold the ON/OFF Button for 2 seconds to turn the scooter OFF or ON.
- Pressing the ON/OFF Button for 0.5 seconds will show different display settings:

DIS: Current mileage accumulated.

Can be reset by holding the (SPEED+) button.

ODO: Total accumulated mileage since riding the scooter.

This can not be reset.

VOL: Displays the current battery voltage.

RPM: Displays the motor speed.

TIME: Shows how long the scooter has been turned on for.

Hold the SPEED+ and SPEED- buttons for 2 seconds to enter mode setup; After finishing setting, Hold the SPEED+ and SPEED- buttons for 2 seconds to quit.

5.5 SADDLE POSITION

A properly adjusted saddle can minimize discomfort on the bike and make your pedaling more efficient. Take some time to get the correct saddle position as it will improve your overall riding experience.

Saddles can be adjusted in three ways: saddle height, fore/aft position and tilt. To adjust you simply loosen the bolt/clamp, adjust and re-tighten.

5.5.1 Saddle Height

The saddle height controls the leverage for your pedaling. Too low and it puts stress on your knees, too high and you may rub the saddle excessively. There are a number of ways to get the right saddle height. A good way of doing it is to sit on the bike with both feet on the pedals – get a friend to help, use a trainer or lean against a wall. Place your pedals in the 6 o'clock and 12 o'clock position. Your bottom leg should be fully extended when the heel is placed on

the lower pedal. If it's bent you need to raise the saddle. If you have to rock your hips to reach or simply can't reach, then lower the saddle. You can also tell if the saddle is too high if you find you are sitting on the narrow front part of the saddle.

Safety Concerns:

The seat post has a MAX marked line (that is, the safety line), this is the MAX height that you can raise the saddle. In any cases of adjustment, the MAX marked line should always be below the seat post clamp. Serious injury may be caused to the rider if the saddle height is raised beyond the MAX line.

5.5.2 Saddle Fore/Aft Position

The fore/aft position of the saddle will determine how your body is balanced which will also dictate how comfortable and effective you are on the bike. One way of positioning the saddle is to put it 2 to 2.5 inches behind the centerline of the bottom bracket axle or spindle.

5.5.3 Saddle Tilt

The saddle tilt is also important. If the nose is tilted down too much it will slide you onto the narrower part of the saddle, movement which then tends to be countered in the hands, putting strain on your arms and shoulders. If it's tilted up too much you'll feel it in your genital area. The general rule is to set the saddle parallel to the ground however some women prefer a slight down-tilt (particularly if they use saddles designed for men) and men a slight up tilt, but this should be very small. Whatever position you want to try, test it out for a week or so, change it again slightly and try it again until it's just right.

5.6 BRAKING SYSTEM

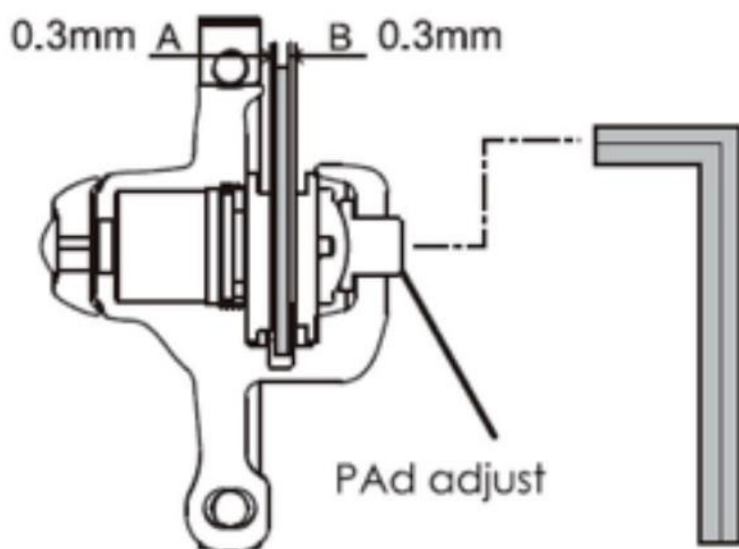
The braking system is an accessory necessary for each bike and is key to riding safety. The braking system includes brake levers, brake assemblies and a brake cable.

5.6.1 Brake Lever Operations

Left Brake Lever:	Front Brake
Right Brake Lever:	Rear Brake

The brakes are already adjusted by professional technicians before exiting the factory. In normal conditions, the brakes should fully engage before the lever is fully pulled back to the handle bar. But as you ride your bicycle daily the brake pads do wear and become thinner, when braking power decreases, adjust the pads closer to the rotor. Be sure to keep an eye on them and adjust when necessary.

5.6.2 Adjustments of the mechanical disc brake



The proper clearance between the disc-rotor and both pads should be equal in 0.3mm, if only adjust on side may cause the braking fail.

To adjust the outer side clearance:

- 1) Loosen the 2 positioning bolts shown below.
- 2) Move the caliper slightly from side to side.
- 3) Tighten the 2 positioning bolts.



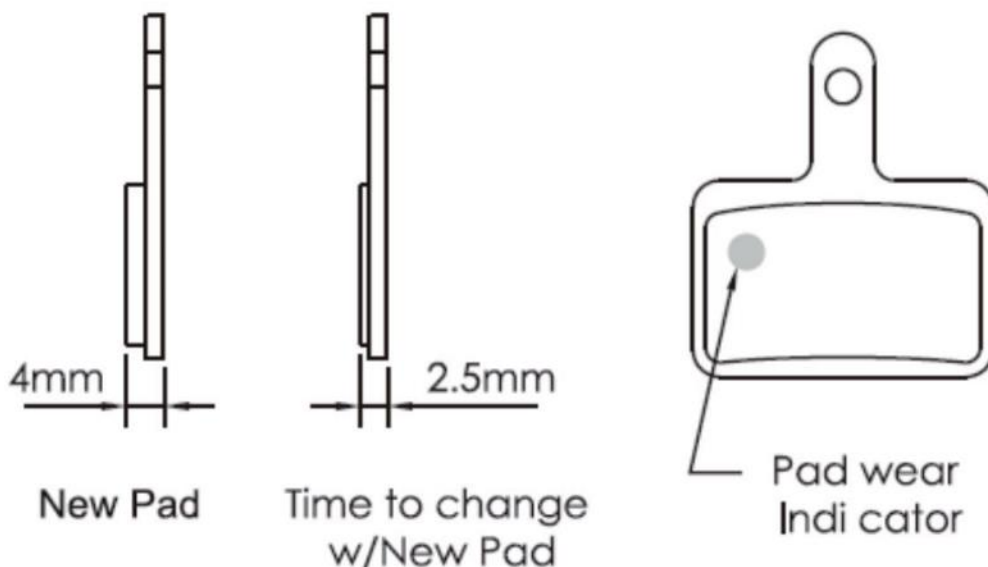
To adjust the inner side clearance:

- 1) Adjust the bolt shown below.
- 2) Turn it clockwise to move the pad toward the rotor.
- 3) Turn it clockwise to move the pad away from the rotor.



Safety Concerns: Brakes

- 1) Do not compensate the pad wear by adjusting the cable tension.
- 2) Pad should be replaced when total thickness is less than 2.5mm.
- 3) The pads and rotor must be kept clean and free from oil or grease based contamination.
- 4) If you're ever unsure about your work, have it checked by a professional bike mechanic.



6. USE AND MAINTENANCE

6.1 INTENDED USE

This e-bike is intended for transporting one person at a time. Fit your bicycle with suitable equipment if you would like to transport luggage. Ensure that you do not exceed the maximum permissible load (rider + luggage) of 240 lb (110 kg).

The manufacturer and dealer do not assume any liability for activities above and beyond the intended use. This particularly applies for not adhering to safety advice and damage resulting from this, for instance: off-road use, carrying excess weight or making improper repairs to defects.

The e-bike is not generally designed to withstand extreme stress, such as riding down steps or over jumps.

6.2 BEFORE THE FIRST RIDE

- 1) Please fully charge the battery before the first use.
- 2) Please ensure that your bicycle is ready for use and is adjusted to fit your body, including:
 - a) Setting the position and fixture of the seat and handlebar
 - b) Checking the assembly and settings of the brakes
 - c) Securing the wheels into the frame and fork
 - d) Checking the tire pressure
 - e) Checking that battery is properly secured
- 3) Ensure that you know which lever operates which brake (right/left).
- 4) Before you switch the system on, ensure that the battery is securely locked to the frame.
- 5) The effectiveness of brakes can be different in wet conditions or on slippery surfaces. Please take into account the possibility of longer braking distances and slippery surfaces when riding.
- 6) Practice operating and riding your bicycle in a quiet and safe place.
- 7) Ensure that the wheels are securely fastened in the frame and fork. Check that the wheels and thru axles as well as all important nuts and bolts are secure.
- 8) Push the wheels forward with the brakes pulled. The back brake should completely prevent the back wheel from moving, while the front brake should lift the back wheel off the ground with its braking effect. The bicycle's steering should not rattle under braking or exhibit any play.

- 9) Check the air pressure in the tires. You will find instructions as to the correct tire pressures on the sides of the tires. Please adhere to the required minimum and maximum pressure. As a general rule of thumb, e.g. on a ride, you can check the tire pressure as follows: If you place your thumb on a pumped up tire, you should not be able to significantly change its shape by applying pressure.
- 10) Check the tires and rims. Scan them for any damage, cracks or deformations, as well as embedded particles, e.g. shards of glass or sharp stones.
- 11) If you should find any cuts, rips or holes in the tires, please refrain from riding. First have your bicycle checked over by qualified bicycle mechanics or contact our service team.

6.3 BEFORE EACH RIDE

Before each ride, please check that:

- 1) The brakes are working safely and are properly secured.
- 2) The tires are free of foreign objects and damage, and the wheels run true.
- 3) The battery is properly secured.
- 4) The tires have sufficient pressure and tread depth.
- 5) All bolts and nuts are tight.
- 6) Check that all quick releases are still correctly secured.
- 7) The frame and fork are not damaged.
- 8) The handlebar and stem are correctly and securely fastened as well as set up in the correct position.
- 9) The seat post and seat are secure and in the correct position. Try turning the seat or tipping it upwards or downwards. It should not move.

6.4 REGULAR CLEANING

- 1) Remove the battery box from the e-bike before carrying out regular cleaning.
- 2) Avoid use water spray to clean the e-bike, as the electrical and electronic systems may get wet, resulting in malfunction of the bicycle or personal injury.
- 3) Delicately wipe any dirty painted or plastic parts with a soft, damp cloth and a neutral cleaning solution. Carefully dry the parts with a soft, dry cloth.
- 4) Clean the battery contacts with a dry damp cloth.
- 5) DO NOT grease or use a greasy cloth to wipe down the electrical connectors, brake pads, wheels, tires or plastic parts.

6.5 REGULAR CHECKS (EVERY 1-2 MONTHS)

- 1) Check that the handlebar attachment and saddle post are correctly inserted and tightened.
- 2) Check that the wheel hub mounting and quick-release are correctly tightened.
- 3) Check that the wheel rims are not cracked and that no spokes are loose or broken.
- 4) Check that the tires have sufficient thread depth and not punctured.
- 5) Check that the tires are correctly inflated.
- 6) Check that the battery contacts are not dirty or oxidized.
- 7) Check that the batteries are sufficiently charged.
- 8) Check that the front and rear brakes brake effectively.
- 9) Check that the cables are sufficiently greased, and that the brake pads are in good condition.
- 10) Check that frame welds are in good condition and are free from corrosion or oxidation.

7. TECHNICAL INFORMATION

Model	EB07
FRAME	Iron
SIZE	Unfold: 47.24 x 21.65 x 38.19 (in) /1200x 550 x 970 (mm) Fold: 25.2 x 13.39 x 23.62 (in) /640*340*600(mm)
WEIGHT	34.18 lb (15.5 Kg) with battery
MAX LOAD	220 lb (100 Kg)
POWER ASSIST MODE	3 Level Pedelec, Startup/Walk Assist Mode/ Manpower model
MOTOR	36V 250W DC Brushless Motor
BATTERY	36V 7.5Ah Li-ion Battery
MAX SPEED	25 Km/h
BRAKES	Mechanical 140mm Disc Brakes

