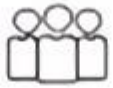
Read This Before Riding This E-Bike

	always wear a helmet when riding your ebike.
	Keep the key in a safe place. If the key is lost you will not be able to ture the bike on or replace the battery.
	Before riding your e-bike,make sure the battery is fully charged.
	Be sure to know and obey local road laws.
	Do not ride your e-bike under the influence drugs or alcohol.
	Respect pedestrians at all times.
	Do not ride in wet conditions.you may fall out of the e-bike and get injured. Wet conditions may damage electronic equipment, making warranty service unavailable.
	For safety reasons, our electric bicycles are only for adults over 18 -years old. Minors are not recommended.
	Please refer to the installation video. Install the electric bicycle correctly and check the loose screws.

FULLY CHARGE BATTERIES BEFORE FIRST USE
Please pay attention and remain vigilant to avoid fire when charging the battery.
Only charge the battery indoors in dry spaces which are not excessively hot or cold.
Ensure there is no dirt,debris,or flammable items nearby when using the charger.
The charger will automatically stop charging once the battery reaches its full capacity.

We recommend that you consult a bicycle specialist if you have doubts or concerns as to your experience or ability to properly assembly, repair,or maintain your bicycle.

Additional warning/cautions are in the assembly section of this manual

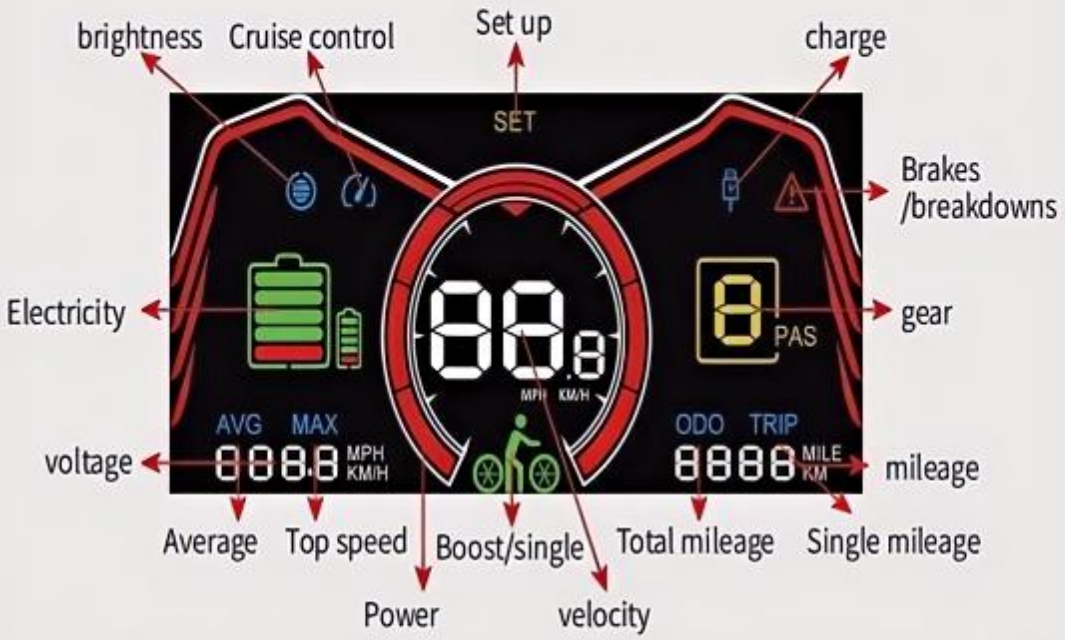
With proper care and maintenance your will provide ease of use and be fun to ride

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

FACTORS TO MAXIMIZE THE RANGE OF YOUR 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
- Terraln - the smoother the terrain(roadways vs, fireroads,etc. the further the distance traveled
- Rider Weight - the lighter the rider, resulting in less drain on the batteries,the further distance traveled
- Bicycle Maintenance - a properly maintained bicycle will yield the greatest range possible
- Tire 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 Celsius)Will show reduced range.Batteries that have not been kept in optimum condition will show reduced range and run time

Instrument introduction and operation (Screen function diagram)



Riding Mode	Electric Power Assist (5 Shifts)
	Pure Electric (5 shifts)
	Pure Human Riding
CRUISE CONTROL SYSTEM :	
Pure electric riding mode, during riding process (turn rotatable grip + long press - button for 5 seconds) to enter cruise mode (instrument display Cruise sign). Brake cancels cruise. (Cruise mode need to be used in good road conditions, with 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 assistance and speed are matched according to the selected speed grade.

A01.E-bike in packaging.

A02. Unpacked e-bike components.

A03. Correct stem installation direction.

A04. Remove the four bolts.

A05. Correct handlebar orientation.

A06. Attach the handlebar to the stem.

A07. Tighten the four bolts to secure the handlebar.

A08. Tighten the two bolts on both sides to secure the stem.

A09. Tighten the top bolt.

A10. Remove the fork spacer. (This spacer protects the fork from crushing and deformation during shipping and is not a part of the bicycle.)

A11. Install the first hook, then the second washer.

A12. Install the spacers and nuts on both sides of the hub axle, then tighten the nuts securely.

A13. Motor wire connection.

A14. Motor wire fixation.

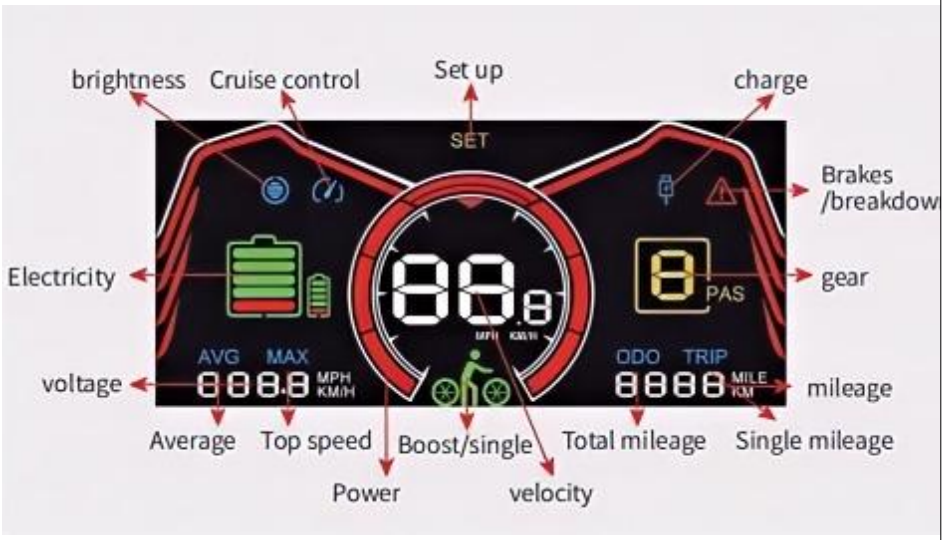
A15. Front fender.	**A16. Place the front fender in the correct position as shown.**
A17. Headlight.	**A18. Secure the headlight and front fender to the front fork using the bolts.**

A19. Headlight wiring connection: Align the arrows. The yellow wire is for the headlight.

A20. Secure the battery in the frame.

A21. Use the spanner to tighten the left pedal (marked "L") counterclockwise.

A22. Turn the spanner clockwise to secure the right (R) pedal.



A23. LCD Display: battery status, real-time speed, speed grade, and mileage traveled.

A24. Side view of the e-bike.

HOW to start

1. Lock the battery and pull off the key.
2. Turn on the battery.
3. Press and hold the “POWER ON/OFF” button until the display lights.

QUICK TIPS!

Activate Full Electric Mode (using the throttle only) when riding on flat roads. Avoid using Full Electric Mode on slopes, rough terrain, or beaches, as excessive resistance can damage the motor or controller . If the road conditions are unsuitable or too rough, switch to PAS (Pedal Assist System) mode. In PAS mode, you use your feet to pedal and assist the motor in overcoming resistance.

When riding in power-assisted mode, using speed shifting and climbing mode on a flat road will waste electric power and give you a sense of empty pedaling . Stick to the appropriate modes based on your riding conditions to optimize your electric biking experience.

Display settings:

Enter the settings menu: When the vehicle is started, parked, and the instrument is working normally, press and hold (+) and (-) simultaneously for 3 seconds to enter the settings interface. The setting code is displayed in the middle speed area. Short press the power key to switch the function gear value. Use the (+) and (-) keys to adjust the numerical changes. Then press and hold the (+) and (-) keys simultaneously for 3 seconds to manually save or wait for 8 seconds for automatic saving. All gears and numerical changes are reflected in the digital display area in the lower left corner. In the settings interface, if there is no operation for 8 seconds, it will automatically exit the settings.

Parameter Description:

P01 :Backlight Brightness: 0: Automatically adjust the screen through light sensing by default. 1 - 4: Manually adjust the backlight brightness from level 1 to level 4.

P02 :Mileage Unit, 0:KM;1:MILE;

P03 :Voltage Grade:24V, 36V, 48V, 60V;

P04 :Sleep Time:0, No Sleep;

Other numbers represent the sleep time, ranging from 1 to 60; unit: minutes ;

P05 :Power Assist Gear: 0, 3-Gear Mode;

1, 5-Gear Mode;

P06 : Tire Diameter:unit, inch;

Value of Tire Diameter:5.0~50 accuracy:0.1 inch

This parameter is related to the speed displayed on the instrument and needs to be input correctly. ;

P07：Number of Speed Measuring Magnetic Steels：Range：1-100；

This parameter is related to the speed displayed on the instrument and needs to be input correctly.

If it is an ordinary hub motor, directly input the number of magnetic steels.

If it is a high-speed motor, the reduction ratio also needs to be calculated. The input data = number of magnetic steels × reduction ratio

For example: The number of motor magnetic steels is 20, and the reduction ratio is 4.3: The input data is: 86 = 20 × 4.3.

P08：Speed limit: Protocol No. 2, Range 0 - 100 km/h. 100 indicates no speed limit；

The input data here represents the maximum operating speed of the vehicle: For example, if 25 is input, it means that the maximum operating speed of the vehicle will not exceed 25 km/h; the driving speed is maintained at the set value.

Error: ±0 km/h; (Both power assist and handlebar are subject to speed limit)

Note: The values here are based on kilometers. When the unit setting is changed from kilometers to miles, the speed value on the display interface will be automatically converted to the correct miles value. However, the speed limit value data set in this menu under the miles interface is not converted and is inconsistent with the actual displayed miles speed limit value.

P09：：Zero-start and non-zero-start settings，0：Zero-start；1：Non-zero-star；

P10：Drive mode setting.
0：Power-assisted drive (The amount of power assistance output is determined by the power assist gear. At this time, the handlebar is invalid).
1：Electric drive (Driven by the handlebar. At this time, the power assist gear is invalid).
2：Power-assisted drive and electric drive coexist simultaneously.

P11：Power assist sensitivity setting. Range: 1 - 24;

P12：Power assist start intensity setting. Range: 1 - 5;

P13：Power assist magnetic steel disc type setting. Three types: 5, 8, and 12 magnetic steels.

P14：Controller current limit value setting. Default: 12A. Range: 1 - 100A

P15：Controller undervoltage value.

P16 :ODO reset setting: Long press the up key for 5 seconds to reset ODO.
Restore factory settings :Long press the down key for 5 seconds to restore the factory settings.

P17 :0: Disable cruise, 1: Enable cruise; Automatic cruise is optional.

P18 :Display speed ratio adjustment range: 50% - 150%.

P19 :0 gear enable bit. 0: There is gear 0. 1: There is no gear 0.

P20 :0: Protocol No. 2 (Not adjustable).

P21 : 0:Default to turn off automatic headlights.
1: Automatically turn on the headlights through the light sensor.
If the user manually triggers the key headlight switch, the automatic headlights will be defaulted to off for this driving.

NOTES: **If your e-bike is working well, we do not recommend that you change the settings. Changing the settings may cause your e-bike to stop working properly. If your e-bike does not work properly after changing the settings, please return to the default settings. The Company may change the defaults during production without notice. If you need any assistance，please contact us.**

Error Code Display:

When a fault occurs in the electronic control system of the electric vehicle, the fault light comes on and the fault code is displayed at the speed position.

06 Under-voltage Fault (Battery Discharge)

07 Motor Fault (①The plug of the motor wire is loose;②The motor is damaged)

08 Throttle Fault (①The throttle is not in the original position before startup;②The plug is loose;③The throttle is damaged)

09 Controller Fault (The controller is damaged)

10 Communication Receiving Fault (①Check the plug condition;②The controller is damaged;③The instrument power lock is damaged;④Short circuit of other 5V devices at the controller end causes the controller to crash)

11 Communication Sending Fault (①Check the plug condition; ②The instrument is damaged; ③The controller is damaged)

Troubleshooting

If your bike is not operating normally,there are some simple steps that can be taken to remedy the situation quickly. There may or may not be an error code that pops up on the screen depending on the issue.Solutions to common problems, as well as error code meanings,can be found below.If you have any questions at all regarding the basic troubleshooting below reach out to Cleytro Bikes customer support.

Symptoms	Possible Causes	Most Common Solutions
The bike does not work	1.Battery not fully installed into frame mount receptacle 2.Battery switch turn off 3.Insufficient battery power 4.Faulty connections 5.Imporper turn on sequence 6.Brakes are applied 7.Blown discharge fuse	1.Install battery correctly work 2. Turn on the battery switch 3. Charge the battery 4. Clean and repair connectors 5. Turn on bike with proper sequence 6. Disengage brakes 6. Brakes are applied 7. Replace discharge fuse 7.Blown discharge fuse
Irregular acceleration and/or reduced top speed	1.Insufficient battery power 2.loose or damaged throttle	1.Charge or replace battery 2.Replace throttle
The motor does not respond	1.Loose wiring 2.Loose or damaged throttle	1.Repair and or reconnect 2.Tighten or replace

When the e-bike is powered on	1.Loose or damaged motor plug wire. 2.Damaged motor.	1.Secure replace 2. Repair or replace
Reduced Range	1.Low tire pressure. 2.Low or faulty batteries. 3.Excessive gradient, headwinds, braking or heavy loads. 4. Batteries discharged for a long time without customer support If range deciine persists. regular charging.aged, damaged or unbalanced.	1.Adjust tire pressure. 2.Check connections or charge battery. 3.Assist with pedals or adjust route. 4.Balance the battery and please contactcustomer support If range deciine persists. regular charging.aged, damaged or unbalanced.
Strange noises from wheels or motor	1.Loose or damaged wheel spokes or rims. 2.Loose or damaged motor wiring.	1.Tighten,repair or replace. 2.Reconnect or replace motor.

NOTES: If the brakes are applied while starting, the E005 may also appear, but it will disappear after a few seconds. It disappears after a few seconds, which is normal and does not cause any effects.

Maintenance and use skills of electric bicycle

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

1. Influence of temperature

Temperature has an impact on 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℃ or lower than -10℃, the discharge capacity of lithium batteries will change. For example, if the temperature is below 0℃ 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, the driving mileage when the battery is fully charged in winter will be much less than in 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 sun exposure of batteries. Avoid charging the battery at high temperatures. Avoid charging the battery immediately after use in high temperatures. 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

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

3. Avoid exposure to the sun and rain

Although the electric bicycle has good waterproof performance, it can still be ridden in rainy and snowy weather, but when passing through water puddles and wallows, pay attention to the wading height, which shall not be higher than the motor, so as to prevent 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. Frequent braking is bound to be accompanied by frequent start-ups

Which will lead to frequent 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.

5. Remember to regularly maintain electric bicycles

Regularly check and tighten all key screws, add lubricating oil, keep them clean, and avoid rusting, and try to avoid exposure to sunlight and rain.