

# 01 Electric Bicycle Maintenance and Safety Advice

Please read the understand the following instructions to ensure the safe use of the vehicle

- Do not modify the vehicle structure and performance, such as changing the battery configuration, boosting rated voltage for the battery, altering the cables connection, increasing the headlight power, adding audio equipment, etc.
- Do not touch the charged parts such as battery port, battery interface, charger plug, etc with wet hand and conductive metal
- Do not short the wires if the fuse is not installed. Please use the specified fuse for fuse replacement
- Ensure the good electrical contact for the fuse and the slot. If not, it will heat the fuse and cause serious accident
- Do not place the inflammable, explosive objects and other dangerous items into the storage box. Low heat resistance, liquid food and sloppy rain gear can not be placed into the storage box either.
- Do not use the charger with other brands and specifications. Use the original charger for this product only.
- Do not expose the battery charger to rainy or wet conditions.
- Do not disassemble the electrical components to avoid mixing other liquid and scrap metal into the charger.
- Charge the battery in a dry and ventilation area away from inflammable and explosive items. Do not charge the charger in the outdoor environment. Do not charge the battery in the humidity or exceeded smoke and dust environment. Do not charge the battery under direct sunlight.
- Do not cover any items on the charger and battery when charging. Do not place the charger on the saddle when charging
- Please connect the output end of the charger with the battery before charging.
- Do not charge the battery for more than 10 hours. Do not use fast charging station for charging.
- Keep the electronic bicycle away from heat source, inflammable, explosive corrosive items and other dangerous goods when charging.
- Turn off the key to shut down the system completely and remove the key when charging.
- Only OTT professional technicians can perform repair and maintenance service.

## 02 Drive Safety

Please abide by the traffic rules and keep the speed under safe speed (default safe speed will be 20 km/h)

- 1 Wear a helmet

Use a full face helmet with a face shield that flips up. These give you lots of benefits including:

All around protection

Sun protection (tinted screen and the upper lip physically blocks the sun from your eyes)

Keeps you warm in the winter

## 2 Use your lights

Put lights on your bike. The more the better. Those dinky reflectors that came on your bike simply aren't good enough.

Use at least one blinking front (white) and rear (red) LED light on your ebike. Even better, put more than one of each. An additional light on your helmet is even better. Spoke lights are great too. Anything that makes you more visible at night will greatly decrease your chances of being hit by a car.

## 3 Use warning devices

Install both a bell AND a horn on your bike. Bells are for warning pedestrians and horns are for warning cars.

## 4 Ride on the proper side of the road, with traffic, not against it

This might sound obvious, but a lot of people believe it's better to ride against traffic so that you see cars coming towards you and they can't sneak up and hit you from behind.

Statistically speaking, you have a much higher chance of being hit by a car pulling out onto the road that didn't see you because he didn't check for traffic coming the WRONG way. Stick to riding with traffic and not against it.

## 5 Take the lane

On an ebike, ride in the lane if you can travel the posted speed limit of the road. Traffic in many urban areas, especially downtown and business centers, rarely surpasses 25-30 mph, and is often much less during peak hours due to stop-and-go traffic. It's much safer for you to ride in the lane with the cars so that they can see you than trying to hug the curb and getting passed by cars.

Also, when cars pull out onto the road, they check the middle of the road for other cars and often miss a bicyclist who is riding on the extreme edge of the road. Giving yourself more space between

you and the curb also provides you with room to work with should you find yourself needing to make any sudden evasive maneuvers. Lastly, it removes the chance of getting ‘doored’ by a parked car, which happens when a parallel parked car opens its door before you have a chance to move out of the way. At low speed these collisions are annoying and result in damages; at high speed on an ebike they have been known to be deadly.

#### 6 Keep your tires properly inflated

Not only does this help you improve your ebike range, but it will also give you better control should you need to react quickly to avoid a collision. Keep your tires topped off so you have the best chance to staving off a crash when milliseconds count. While you’ re at it, check your tire tread and make sure your tires aren’ t bald. Worn tires and ebikes are a bad combination due to all that extra power you’ re packing. You definitely don’ t want to lose grip with the road when you need it most (or pretty much ever, for that matter.)

#### 7 Be a defensive driver

Most drivers see a bicycle and think “slowpoke” regardless of how fast the bike is actually moving. Years of seeing kids on bikes have seemed to reinforce this bicycle=slow mentality of drivers. This can be a big problem when you’ re on a fast ebike and the oncoming driver assumes he has time to make a turn in front of you. You might think that he obviously realizes your current speed means he’ ll never make it, but all he sees is a bicycle and assumes he’ s got all the time in the world.

This situation happens much more often than you may realize and you want to take electric bicycle safety seriously then have to be prepared for it. I never give a driver the benefit of the doubt and ALWAYS assume they’ ll take make a bad judgement call about when to make a turn or start slowing down. If I’ m wrong then I get left with the pleasant surprise of meeting a competent driver, and if I’ m right then I was already prepared to start braking or move out of the way.

#### 8 Watch out for drunks, seriously

Be extra careful on weekends, especially Friday and Saturday nights. This is when the drunks are out in force. As bad as drivers can be on a nice, sunny Tuesday afternoon, Friday night it can be like there is a bounty on your head and the first drunk to get you will claim the prize.

#### 9 Use a mirror

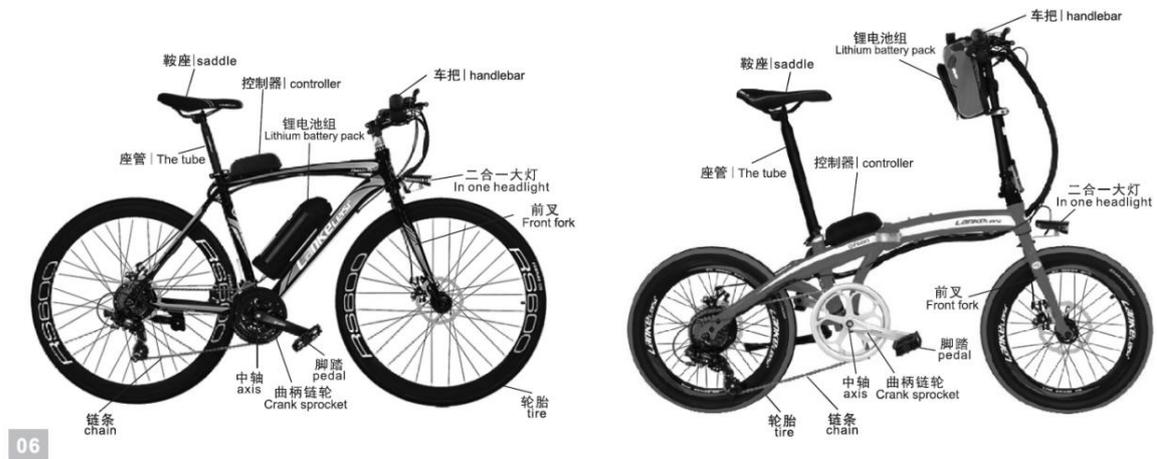
Always try to look behind you or check in your mirror before moving further out into the lane. Compact cars are getting quieter and ever more popular electric cars are nearly silent. You often have no idea a car is coming up behind you and accidentally moving out in front of one is much more common than you might guess.

#### 10 Make eye contact with other drivers, especially at intersections

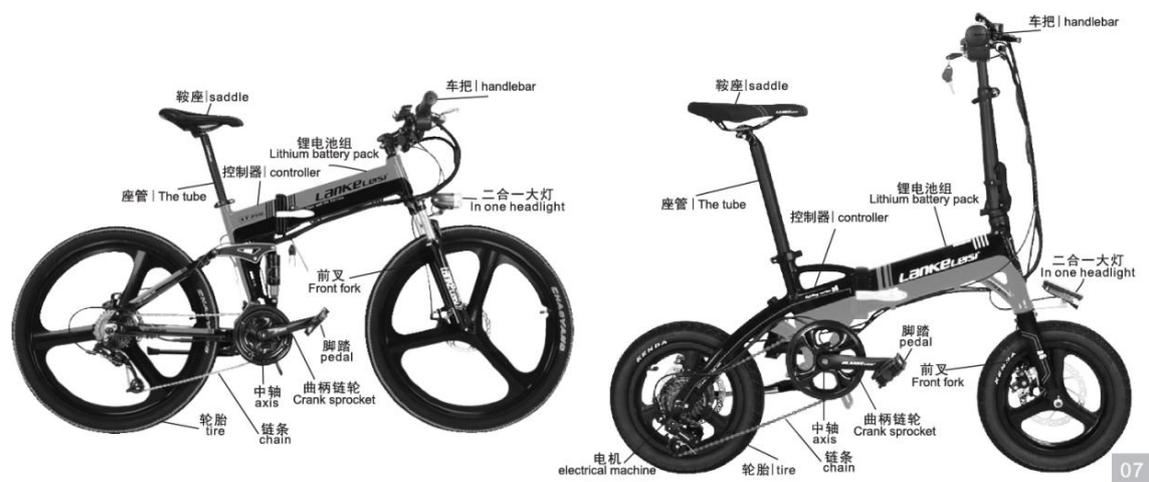
Many bicycle accidents occur at intersections simply because a cyclist wrongly assumed a driver saw him. Never assume a driver knows you are there unless you specifically make eye contact with him. Even then, keep a healthy amount of doubt – remember tip #7. Intersections are dangerous places for bicycles/ebikes so it’s vital that you do everything you can to ensure other drivers know you are there.

Riding an ebike should be a pleasurable experience. Staying safe is your best bet to keep it that way. For a great run-down of the most common ways bikes and cars meet – and how to avoid them.

### 03-1 Electric Bicycle Configuration-1

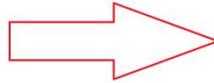


### 03-2 Electric Bicycle Configuration-2



### 03-3 Electric Bicycle Configuration-3

Key 1 to turn on/off the electric bike



Key 2 to lock/unlock the battery

unplug the cable to release the battery

### 03-4 Electric Bicycle Configuration-4



Hold the red botton to display the usage of battery

### 03-5 Electric Bicycle Configuration-5



## 03-6 Electric Bike Assembly Guide

### 1 Unpacking

Remove all the packaging from your bike. Cut the Zip Ties with scissors or wire cutters to prevent scratching of the frame and components. Inspect the bike and all the included parts to make sure there are no damaged or missing parts.

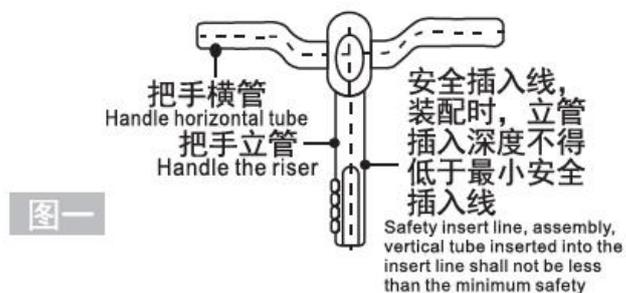


Figure 1

### 2 Assembling the handlebars (Figure 1)

Insert the handlebar into the stem until the “minimum insertion” mark is not visible.

Adjust the handlebar then insert and tighten the allen key bolts with an allen key (recommended torque is not less than 18 N.m).

### 3 Installing the saddle (Figure 2)

Loosen the seat post clamp and adjust the saddle to a proper height until the “minimum insertion” mark is not visible.

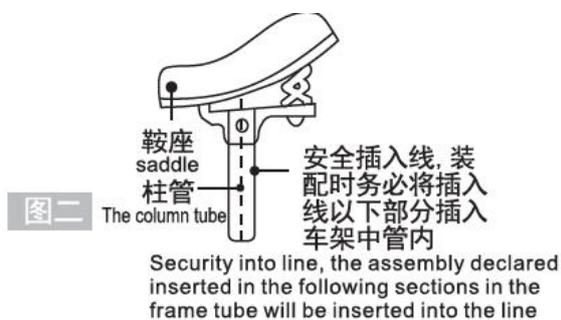


Figure 2

Ensure the saddle is aligned with frame and set at the correct angle for comfortable cycling. Tighten the allen key bolts with an allen key (recommended torque is not less than 18 N.m).

### 4 Adjusting front brake

Brake levers: Unthread the adjusting barrel on the brake lever a few turns, then align the slots in the adjusting barrel, the jam nut and the brake lever. Insert the cable nipple on the brake cable into the hole in the lever. Insert the cable into the slot on the adjusting barrel and then thread the adjusting barrel back up to the lever.

#### Caliper Brakes (Figure 3) :

Squeeze both brake arms so the brake pads are against the sidewall of the rim. Then tighten the nut in the clamp to hold the brakes in position. Loosen the nut on the brake pad and then align the brake pad so it runs parallel to the sidewall of the rim but allow 1.5 -3 mm gap so the brake does not rub against the rim.

图三



Figure 3

图四



Figure 4

Linear Pull/ “V” Brakes (Figure 4): Hold each arm so the brake pads can be adjusted to align with the sidewall of the rim. Then hold both arms in position and insert lower end of the cable lead unit into the pivoted metal stirrup. Loosen the nut on the brake pad and then align the brake pad so it runs parallel to the sidewall of the rim, but allow 1.5 -3 mm gap so the brake does not rub against the rim.

### 5 Adjusting the rear brake

The brake is adjustable with the adjusting nut. Spin out the nut anticlockwise to tighten the brake and vice versa.

## 6 Adjusting the chain

Locate the derailleur screw. Insert the screwdriver counterclockwise to decrease the tension of the chain. Turn the screw clockwise to tighten the chain around the teeth of the rear sprocket. Lift the release lever of your mountain bike brakes to disconnect the correlating cable. Raise the quick-release lever located in the middle of your rear wheel. Slide the wheel axle backward in the rear dropouts to increase the tension of the chain. Push the wheel axle forward in the rear dropouts to decrease the chain tension. Lower the quick-release lever after adjusting your chain tension.

## 7 Installing/Removing front wheel

Turn the bike over so that it sits on the saddle and handlebars. Remove the small plastic rod from between the fork ends.

Your bicycle will come with either a nudded front wheel or a front wheel with a quick release mechanism (Figure 5).



**Figure 5**

Quick Release Front Wheel:

Unscrew the lock nut from the quick release skewer, remove the outer spring and slide the skewer through the axle so the quick release handle is on the left hand side of the bike. Re-install the spring and lock nut back on to the skewer and place the wheel into the fork slots ensuring the wheel is centred.

Always adjust the Quick release clamp with the lever in the open position, and by turning the nut (not the lever). Close the quick release lever.

Nudded Front Wheel:

Place the front wheel in the front fork drop out slots and ensure the wheel fits correctly. Ensure that the fork dropout sits in between the lock washer and the cone nut as shown to the left. If your bicycle has tabbed lock washers, ensure that the locking tabs are correctly mounted into the holes in the forks. Then fully tighten both nuts and ensure the wheel sits straight in the forks.

## Important Notice:

Warning the stan direction is wrong for package and safety reason. Please only rotate stan for 180 degree. DO NOT rotate the front wheel fork. Please make sure the front wheel is installed in the correct direction, otherwise serious accident can happen !!!



Wrong Direction: Front wheel will trip the flat pedal

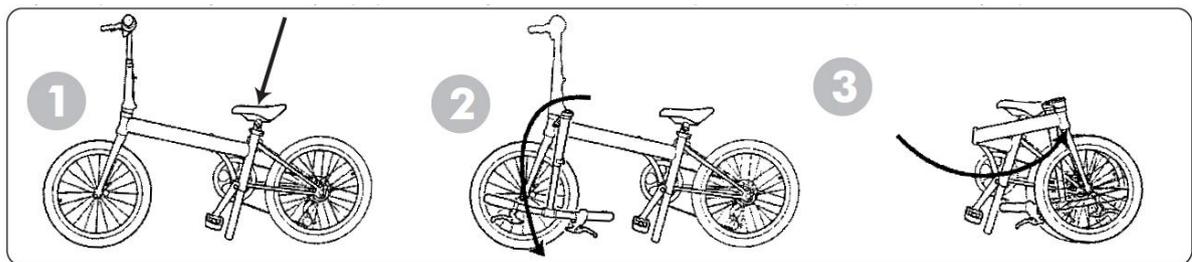
Open the controller cover plate and unplug the cables connected to the motor. Turn the bike over so that it sits on the saddle and handlebars (do not damage the handlebar, hood and other electronics parts). Unscrew the rear nut and rear brake positioning nut counterclockwise and open the chain joint. Now the rear wheel can be removed.

## 03-5 Folding and Unfolding Instructions

1 Loosen the seat post clamp and push the the saddle down to the end and adjust the left crank to 9 o' clock direction (Figure 6).

2 Move the frame safety hook to the open position. Open the frame latch lever. Fold the frame in half by swinging the front half of the frame back until the two wheels are parallel. Snap the folding pedals into position by pushing the pedal body inwards and rotating downwards (Figure 6).

3 The unfolding process will be the inverse process for step 1 and step 2.



**Figure 6**

## 04 Charging Instructions and Important Notice

Please charge the battery when you have finished your ride or the battery is exhausted. You can either take off the battery for charging or charge the electric bicycle directly without taking off the battery.

1 Charging when taking off the battery

1-1 Do not charge the battery in the case of inversion

1-2 Connect the charger to the battery

1-3 Connect the power plug of the charger to an appropriate AC outlet socket. The red LED indicator will illuminate to show that the charger is operating correctly. When the battery is fully charged the LED will turn from red to green

## 2 Charging the electric bicycle directly without taking off the battery

2-1 Turn off the key to shut down the system completely and remove the key when charging

2-2 Connect the charger to the battery

2-3 Connect the power plug of the charger to an appropriate AC outlet socket. The red LED indicator will illuminate to show that the charger is operating correctly. When the battery is fully charged the LED will turn from red to green

## 3 Charging time

Please note: when charging the battery for the first time, please charge for 10 hours to ensure that the battery is fully charged and conditioned.

The battery will take 3 to 8 hours to fully charge depending on much charge was left in the battery before you began charging the battery.

## 4 Important notice

Do not charge a lithium battery unsupervised inside a house or building

Do not take off the battery when charging in progress

Do not wash your electric bicycle with the battery charger connected to the battery whilst charging to prevent the possibility of electric shocks.

Do not submerge the battery in water

When charging is complete, please disconnect the power supply plug from the main before disconnecting the charger from the battery

Do not allow the battery to go flat. It is best to charge it every day

# 05 Troubleshooting

The following are some simple roadside assist tips for electrical problems:

No power (controller lights off). Check the battery is charging and charged, check the battery fuse, check connections, check the key switch. If none of the above it may be your control unit or display depending on the model.

No power (lights on). This means your battery is probably fine and it is likely to be a connector or fuse. Check the return on your e-brakes, check connections to your motor, then connections to your interface (display/throttle) and sensors.

Power cut-out. Check e-brake return, check battery contacts and if black check lock in tolerance, check connections. Before seeking help try to notice exactly when the cut-out occurs, i.e. on a long hill, on a short steep hill, how many miles from last charge, after a bump, immediately after stopping or slowing. This could be an issue with the motor.

Battery not charging. Check the charging fuse, check the charger fuse, check the power supply. Turn off other appliances on the same power board, don't use long extension cables.

Battery cuts out, particularly under load. Check any fuses and connectors, check wiring between battery and motor. This could be an issue with the battery.

Motor noise. Roll backwards to see if the same noise occurs, cycle without power to see if the same noise is still there; check connections especially if you have removed a component recently. Check for sources of friction behind the brake pads and around the wheel.

Motor resistance. Ensure motor wheel is mounted correctly, check brakes are disengaging and set up correctly, check for sources of friction, disengage power and see if resistance persists, roll the bike backwards with the power on – you may have a sticky/rusty brake or hub especially if you've driven through flood water (not advised).