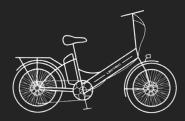


## **OWNERS MANUAL**

Lectric XPremium



V 1.3 | 2022 www.lectricebikes.com 602.715.0907





### WELCOME TO THE LECTRIC EBIKES FAMILY

Thank you for purchasing a Lectric eBike.

Please read this Owner's Manual carefully before setting up your bicycle and riding. You should become thoroughly familiar with the proper operation of your Lectric eBike, its features, capabilities, and limitations. To ensure a long, trouble-free life for your Lectric eBike, provide it with the proper care and maintenance as described in this manual. Of course, it is not practical or possible to warn you about all of the hazards associated with operating or maintaining your Lectric eBike. For this, you must use your own good judgment.

For replacement parts and accessories, you should always use Lectric eBikes approved parts. As they have been specially designed for your bicycle and manufactured to meet Lectric eBikes' demanding standards.

This manual should be considered a permanent part of your bicycle and should remain with the bicycle when it is sold.

If you need any assistance, please do not hesitate to reach out to us.

### **CONTACT INFORMATION**

Email: contact@lectricebikes.com

Website: lectricebikes.com

Phone: (602) 715-0907

Please record your bicycle's serial number in the space below. The serial number is located on the head tube of your bicycle. Refer to page 13 for the location of the serial number.

## **SERIAL NUMBER**

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## **IMPORTANT SAFETY INFORMATION**

## Read and Understand Owner's Manual Before Riding

Read this entire Owner's Manual before you take the first ride on your new eBike, and keep it for reference. This Owner's Manual contains important safety, performance, and service information.

Like any sport, bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility of that risk: you need to know and practice the rules of safe and responsible riding as well as proper use and maintenance. Proper use and maintenance of your bicycle reduces the risk of injury. If you have any questions or do not understand any aspect of using or maintaining your bike, take responsibility for your safety and consult with your local bicycle shop, or contact us for assistance.

This manual is not intended as a comprehensive use, service, repair or maintenance manual. Please see your local bicycle shop for all service, repairs, or maintenance. Your local bicycle shop may also be able to refer you to classes, clinics, or books on bicycle use, service, repair, and maintenance.

Your Lectric eBike is classified as an EPAC (Electrically Power Assisted Cycle, otherwise known as a Pedelec), and is referred to in this manual as a bicycle unless otherwise noted.

Save these instructions.

## Rider's Responsibility Regarding Regulations

It is the rider's responsibility to obey the regulations that apply to your Lectric eBike.

The regulations covering the use of your Lectric eBike vary by state, and even municipality in certain locations. You must comply with the local regulations related to the minimum age of the rider, driver's license, insurance, license plate, traffic, maximum speed regulations, and any other regulations. These regulations may change at any time.

#### Intended Use

The intended use of your Lectric eBike is to be ridden by one adult rider (age 18 and up) at an appropriate time and place for general transportation and/or recreational use. Any other use is prohibited and may result in SERIOUS INJURY or DEATH.

Your bicycle is NOT INTENDED for off-road or mountain bicycle use, or for any kind of jumping. Some of these bicycles have suspension features, but these features are designed only to add comfort, not off-road capabilities.

Riders should be proficient cyclists (ages 18+), riding on paved surfaces where the tires are always on the ground, on roadways, or dedicated bicycle-only lanes where permitted by law (not on pedestrian-use shared lanes or sidewalks). Your bicycle should not be used to tow another bicycle. For trailer towing, consult this Owner's Manual and the trailer owner's manual for towing instructions and towing compatibility.

## Safety Messages



## To prevent serious injury or death:

- · Read all safety warnings and all instructions.
- · Always ride within your limits and the limits of your Lectric eBike.
- Bicycles are only for use by persons 18 years of age and above. Riders must have the physical coordination, reaction, and mental capabilities to control a bicycle and manage traffic, in addition to managing road conditions and sudden situations with respect to the laws and instructions governing bicycle use. Persons with any mental or physical conditions that may make them susceptible to injury, impair their physical dexterity and/or impair their mental capabilities to recognize, understand, and follow safety instructions—or understand the hazards inherent to its use—should not use or be permitted to use products inappropriate for their abilities.
- · Never ride under the influence of drugs and/or alcohol.
- Consult a doctor before using the device if you have any medical condition or issue that affects your ability to safely perform physical activities, or if you:
- are or may be pregnant;
- · have heart, respiratory, back, joint, or other orthopedic conditions;
- have high blood pressure;
- · have difficulty with physical exercise; or
- have been instructed to restrict physical activity.
- Always keep small parts away from children. Some eBike accessories may present a choking hazard to small children.
- Never modify your frame or bicycle in any way. Do not sand, drill, file, or remove parts from your bicycle. Do not install incompatible components or hardware.
- Always use proper lifting techniques to prevent injury. Your eBike may be significantly heavier than a bicycle without a battery pack and a motor.
- Take responsibility for your own SAFETY. If you have any
  questions or do not understand any aspect of using or maintaining
  your bicycle, contact Lectric eBikes at contact@lectricebikes.com
  or call (602) 715-0907.

#### Helmets

- Always wear a helmet. Wearing a helmet properly may reduce the risk of a severe head injury. When riding, always wear a helmet that meets or exceeds the standards of the Consumer Product Safety Commission (CPSC). Check the manual that comes with your helmet.
- Ensure your helmet fits your head and is properly secured. If you
  attach a child's seat to the bicycle, the child must wear a properly
  fitted helmet at all times.
- Read your helmet manual to make sure it is adjusted properly according to the fitting instructions provided by the helmet manufacturer.
- A proper-fitting helmet should be comfortable and should neither rock forward/backward nor side to side.

#### Pre-Ride Safety Check

- Before each ride, inspect your eBike for damage. If damage is found, do not ride.
- Verify that the front and rear axles are secure.
- Verify that the stem and seat clamps are closed and tightened to the torque specified in the Owner's Manual p. 19.
- Verify that both the stem latch and frame latch are secure and fully closed.
- Check your chain for signs of wear.
- · Check tire pressure of both wheels.
- Pull the brake levers to ensure the brakes are working properly and adjust if necessary.
- NEVER exceed the maximum total weight limit of 330 lbs. (150 kg). The rear rack can hold a maximum of 55 lbs. (25 kg). As an example, if you have 40 lbs. (18 kg) of cargo, then the maximum weight of the rider would be 290 lbs. (130 kg)

## Follow eBike Regulations On and Off the Road

Be aware of eBike regulations in your area. Generally, the regulations
for the use of an electric bicycle are the same as those for a standard
bicycle, however, there may be local differences such as where you
can ride, minimum rider age, or required equipment and license and
registration regulations. It is your responsibility to know the local
regulations that apply to an electric bicycle and to obey them.

#### Ride at Your Own Risk and Use Common Sense

- Always keep both hands on the handlebar grips and the brake levers so they are within reach while riding.
- Do not ride distracted. Always remain alert to all riding conditions. Using the Display or other technology (including your mobile phone or music player) could distract you from riding. Only adjust the Display when stationary and in a safe start-up position.
- Never use headphones or a cell phone to talk or text when riding.
- Always ride defensively. Watch out for potential obstacles that could force you to swerve suddenly or lose control. Braking while steering may reduce your ability to control your bicycle.
- Look ahead and brake sooner. You may be moving faster on your eBike, and it may be heavier, compared to a bicycle, which means you may need to react and brake sooner when riding. Other road users may not expect you to be traveling at higher speeds. Riding faster may increase your risk of a crash.
- Stop pedaling well before approaching corners to avoid entering a corner too quickly. You should also pay particular attention to terrain conditions as you may approach obstacles faster than expected.

## **Riding in Wet Conditions**

- Use caution when riding in wet conditions as it will take longer to brake and to stop. Your tires may slip when turning. Risk of a crash is dramatically increased in wet conditions.
- Your electric bicycle can withstand light rain and small splashes, but it is not designed to be subjected to inclement weather, extremely heavy showers, or submersion in water. The electric bike's components have an IP rating of 65. Water damage is not covered under the warranty.

## Riding at Night

- Riding at night comes with more risks than riding during the day due to decreased visibility; riders are encouraged to exercise increased caution in nighttime conditions.
- Turn lights ON for safety. For increased visibility, ensure that
  the front headlight and rear taillight are turned ON and adjusted
  such that other people on the road can see them clearly. Also
  check your front, rear, and wheel reflectors.
- Riders should wear reflective clothing at night. You may want to attach additional flashing lights to your clothing or helmet.

## California Proposition 65

△ WARNING: The wires of this product contain lead. Lead compounds and other chemicals are known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

## Signal Words

**△ DANGER** Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

**WARNING** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

**△ CAUTION** Indicates a hazardous situation that, if not avoided, could result in minor or moderate

injury.

**NOTICE** Indicates information considered important, but not hazard-related (e.g. messages relating to

property damage).

## Symbol Index



Safety Alert Symbol. This symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible serious injury or death.



Safety Alert Symbol. Read, understand, and follow the warnings and instructions in this manual.

## **On-Product Warning Labels**

There are warning labels on your Lectric eBike for your protection. If a label is missing or is not legible, contact Lectric eBikes for a replacement.

#### Stem label

#### **A** WARNING

To prevent SERIOUS INJURY or DEATH, BEFORE each ride:

- Check STEM and FRAME latches are closed and secure
- Check TELESCOPING STEM and SEATPOST are inserted past the minimum insertion point inscribed on them.

  AND that the clamps on each are closed and tightened to the torque specified in the Owner's Manual.

#### Class 2 label

## **WARNING**

To prevent SERIOUS INJURY or DEATH:

- ALWAYS wear a helmet.
- Know and follow local eBike rules & regulations.

Class 2 eBike 500W Top Speed: 20mph

#### Class 3 label

## **A** WARNING

To prevent SERIOUS INJURY or DEATH:

- · ALWAYS wear a helmet.
- Know and follow local eBike rules & regulations.

Class 3 eBike 500W Top Speed: 28mph

States that recognize three classes of eBikes require a label to be placed on the bicycle denoting the class of your Lectric eBike, the motor's wattage rating, and the top speed of your Lectric eBike. Your bicycle comes as a Class 2 bicycle by default and has a label with this information posted under the carry handle, near the seat post on the bicycle.

If you change your bicycle's top speed, you must remove this label from the bicycle and replace it with a Class 3 label, detailing your Lectric eBike's class, top pedal-assisted speed, and motor wattage. The Class 3 label is located directly under the Class 2 label.

### **GETTING STARTED**

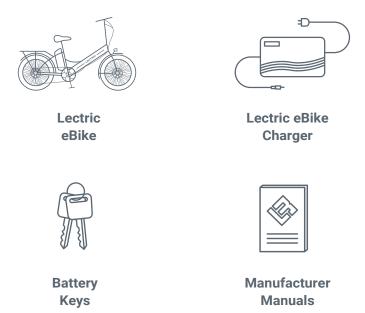
Your bicycle comes fully assembled. These instructions are intended to assist you in setting up and getting familiar with your new bicycle.



After you make your first adjustments and inspect your bicycle, we recommend seeking professional help from a reputable and certified bicycle mechanic to check your bicycle before your first ride.

Before removing the packaging material from your bicycle, remove all items from the box and make sure you have the following:

#### What's in the box:



If anything is missing or is damaged, contact Lectric eBikes immediately for assistance.

For a video about how to unfold your bicycle, visit our YouTube page: Lectric eBikes

#### Serial Number

Your serial number is located on the head tube of the bicycle as shown below. Please write it down inside the front cover of this manual.

You may be asked for your bicycle's serial number as part of a warranty request. You may also be asked to provide this number to law enforcement if your bicycle is stolen.



## Setting Up Your eBike

NOTE: This manual is not intended to be an extensive reference book about service, maintenance, and/or repairs. You can find more information on our website: lectricebikes.com

# Folding and Unfolding Folding Stem

#### To fold:

- Locate the lever and silver button on the side of the stem.
- 2. Push the side button up to release the lever.
- 3. Pull down the lever.
- Fold the handlebars in the opposite direction from the lever.
- Lower the handlebars to the side



## Folding and Unfolding Continued

### **Folding Stem**

#### To unfold:

- 1. Pull up the stem/ handlebars.
- Make sure the stem is completely set in place.
- Push the lever firmly so that it is locked in place. You should have to use enough force such that the clasp leaves an imprint in your palm.

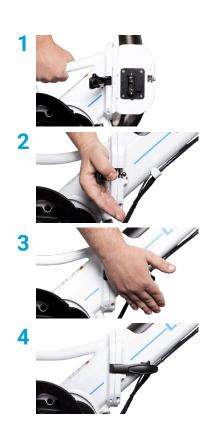
Pull on the clasp with your hand to confirm it is locked and the handlebars cannot fold.



#### Frame

#### To unfold:

- To unfold the bike frame, stand near the frame where the terminals are exposed. Grab the stem and rear end of the bike. Lift the bike slightly off the ground and swing to the closed position.
- Push down the latch firmly until it locks into position.
- The switch on the latch will click into place to confirm it is secured in place.
- Pull on the latch to confirm that the latch has locked and that the frame cannot fold.



#### Frame

#### To fold:

- To unlock the bike frame and return it to the folded position, start by sliding the switch labeled "open" to the right.
- Pull the latch while still holding the switch to the "open" position.
- 3. You may now fold the bike.







### **Pedals**

#### To unfold:

 Push each pedal down and out until you hear an audible click as they lock into position.

#### To fold:

- 2. Grasp pedal and push lightly toward bicycle.
- Continue pushing while lowering pedal into its folded position.
- 4. The pedal will click into the folded position.







## Adjust Handlebar Height

## **⚠ WARNING! ⚠**

 Always tighten fasteners to the correct torque to prevent serious injury or death. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either condition can lead to a sudden failure of the bolt and result in a crash. See Tightening Torque (p. 19).



 Always insert the telescoping stem past the minimum insertion point marked on the stem. A stem that is positioned too high can damage the bike and can cause you to lose control and crash.

Select a height that is comfortable for you. DO NOT extend past minimum insertion point. To adjust your handlebars, unlatch the clamp. Move the handlebars to the desired height and close the clamp. Re-tighten the stem clamp to the recommended torque. See Tightening Torque (p. 19).

## **Adjust Seat Height**

## **⚠ WARNING! ⚠**

 Always tighten fasteners to the correct torque to prevent serious injury or death. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either condition can lead to a sudden failure of the bolt and result in a crash. See Tightening Torque (p. 19).



 ALWAYS insert the seat post past the minimum insertion point marked on the seat post. A seat post that is positioned too high can damage the bike and can cause you to lose control and crash.

Correct seat adjustment is an important factor in getting the most performance and comfort from your bicycle. If the seat position is not comfortable for you, you may want to go to your local bicycle shop for assistance.

#### To achieve correct seat height:

- Sit on the seat;
- Place one heel on a pedal;
- Rotate the crank until the pedal with your heel on it is in the down position and the crank arm is parallel to the seat tube.

If your leg is not completely straight, your seat height needs to be adjusted. If your hips must rock for your heel to reach the pedal, the seat is too high. If your leg is bent at the knee with your heel on the pedal, the seat is too low.

## To adjust seat height:

- Loosen the seat post clamp. The open and closed positions of the seat post clamp are shown below (open position on left, closed position on right);
- Raise or lower the seat post in the seat tube;
- Check that the seat is straight before and after; and
- Re-tighten the seat post clamp to the recommended torque. See Tightening Torque (p. 19).





### **Adjust Seat Position**

## **⚠ WARNING! ⚠**

Always tighten fasteners to the correct torque to prevent serious injury or death. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either condition can lead to a sudden failure of the bolt and result in a crash. See Tightening Torque (p. 19).



**Front and back adjustment:** Loosen nuts on both sides of the saddle rails. Make sure the clamp mechanism is clamping on the straight part of the saddle rails and is not touching the curved part of the rails. Ensure that you are using the recommended torque on the clamping fastener(s). See Tightening Torque (p. 19).

**Seat angle adjustment:** Most people prefer a horizontal seat; but you may prefer the seat nose angled slightly up or down. Loosen the clamp bolt to allow any serrations on the clamp mechanism to disengage before changing the seat angle, and to fully re-engage the serrations before you tighten the clamp bolt to the recommended Tightening Torque (p. 19).

## Charge Battery Before First Use

Locate the charging port on the side of the battery packs. Use this port to charge when the battery packs are installed or not installed.

If you have two batteries on your bike, you should charge both. Each battery must be charged by a Lectric charger. You should fully charge your battery/ batteries before your first ride.



Fire and explosion hazards. Never leave your battery pack unattended while charging to prevent serious injury or death.

See Battery Pack section (p. 37) for additional information.

Tightening Torque	Spec
Bottom Bracket	65 Nm
Brake Caliper Mounting Bolts	7 Nm
Brake Lever Clamp Bolts	7 Nm
Crank Bolts	45 Nm
Disc Rotor Mounting Bolts	7 Nm
Fender Mounting Bolts	6 Nm
Headlight Mounting Screw	7 Nm
Headset Compression Cap	7 Nm
Headset Parts	34 Nm
Kickstand Mounting Bolts	10 Nm
Pedals	10 Nm
Rear Derailleur Cable Clamp Bolt	4 Nm
Rear Derailleur Mounting Bolt	8 Nm
Rear Rack Mounting Bolts	7 Nm
Seat Rail Binder	22 Nm
Seat Post Clamp	9 Nm
Shifter Clamp Bolt	5 Nm
Spokes	160-180 (KGF)
Stem Clamp Bolts	10 Nm
Stem Plate	7 Nm
Torque Arm Bolt	7 Nm
Wheel Axle Nuts	40 Nm

#### **FEATURES**



Never modify your frame or bicycle in any way as this could cause serious injury or death. Do not sand, drill, file, or remove parts from your bicycle. Do not install incompatible components or hardware.

#### Motor



To prevent serious injury or death:

 Do not open the drive unit yourself. The drive unit must only be repaired by qualified personnel using only original parts. This will ensure that the safety of the drive unit is maintained. Unauthorized opening of the drive unit will render warranty claims null and void. You may however need to access controller plugs inside the motors cover plate which can be seen in the figure below.





- All components fitted to the drive unit and all other components of your Lectric eBike PAS system (e.g. chainring, chainring spider, pedals) must only be replaced with identical components or components that have been specifically approved by Lectric eBikes.
- Always remove the battery packs from your Lectric eBike before beginning work (e.g. inspection, repair, assembly, maintenance, work on the chain, etc.), transporting it with a car or on an airplane, or storing it. Battery pack removal will prevent unintentional activation of your Lectric eBike.
- Do not make any modifications to your Lectric eBike or attach any other products that might increase the performance of your Lectric eBike.

Doing so will generally reduce the service life of the system and risks damaging the drive unit and the bicycle. You also run the risk of losing the guarantee and warranty claims on the bicycle you have purchased.

By handling the system improperly you are also endangering your safety and that of other road users, thus running the risk of high personal liability costs and possibly even criminal prosecution in the event of accidents that can be attributed to manipulation of the bicycle.

- Under extreme conditions, such as continuously high loads at low speed when riding up hills or carrying loads, parts of the motor can reach high temperatures.
- The motor is equipped with a temperature sensor. When the motor heats up under continuously high loads, the motor will protect itself from overheating by decreasing the amount of output power available. This will manifest itself as a drop in the motor's performance until the motor has cooled to a safe temperature.
- This eBike is equipped with a mid drive motor. Mid drive motors utilize the bicycle drive train in order to deliver power to the road. It is very important to the longevity, efficiency, and performance of the motor that you shift gears according to the situation. When starting from a stop or traveling at lower speeds, use the lower gears. When traveling at higher speeds, utilize the higher gears. It will not be possible to reach high top speeds without the appropriate gears being utilized. This is similar to the operation of a manual transmission vehicle.
- When walking the bike backward there will be resistance from the motor as the cranks and chain move. This is normal. There will also be a marginal amount of extra resistance from the motor when pedaling the bike without electric assistance.

## 7-Speed Gear System

Your Lectric eBike comes with a 7-speed freewheel. The freewheel is the cluster of sprockets on the rear wheel of your bicycle.

While pedaling in 1st gear (lowest gear using the largest sprocket), it will be easier to pedal up hills. In 7th gear (highest gear using the smallest sprocket), it will be easier to reach higher speeds on flat or downhill terrain.

#### To shift up:

Press the lower button marked with the plus (+) sign.

#### To shift down:

Push the upper lever marked with the minus (-) away from you.



Push the plus (+) button to shift up

**Only shift gears one at a time.** Meaning, only move the shifter one click and allow the chain

to move from one gear to the next before shifting again. Your bike is equipped with a shift sensor which cuts power to the motor when a shift occurs. This ensures that the motor does not accelerate the chain in the middle of a shift, potentially causing undue stress or damage to the chain or the gears.

Do not shift gears while the bike is stopped. This is because the chain needs to be moving in order for the derailleur to derail the chain from one gear to the next. If you shift while the bike is stationary, you will be between gears. When you start to throttle or pedal in this condition, you will hear some grinding noises as the bike shifts, and the torque from the motor could damage and/or cause accelerated wear to your chain or freewheel.

Mid drive motor powered ebikes will wear out chains faster than hub motor powered ebikes and non-electric bikes. Check your chain for wear every 200 miles with a chain checker tool and replace as necessary.

## **⚠ WARNING! ⚠**

- To prevent serious injury or death: This eBike uses a mid drive motor system for propulsion. When throttling this system, the front chainring will spin even though you as the user may not be pedaling. Take care to ensure that none of your clothing is caught in the chainring while it is spinning.
- Check your chain for wear every 200 miles with a chain checker tool and replace as necessary. Mid-drive motor-powered ebikes will wear out chains faster than hub motor powered ebikes and nonelectric bikes. If the chain breaks while riding the loss of resistance when pedaling could cause a loss of control and a crash.

#### **Throttle**

The right handlebar features a half-twist throttle.

#### To operate:

Check that the Pedal Assist (PAS) level is set above 0, then twist the throttle back slowly to achieve your desired speed and acceleration.

When using throttle use gear 4 or below. This will maximize the bike's acceleration and top speed while minimizing how quickly the motor heats up. Using the bike outside of this gear range will heat the motor faster, potentially causing a temporary drop in performance until motor cools. See the Motor section on p. 21 for additional information.

Continuous throttle usage will heat the motor faster, potentially causing a temporary drop in performance until motor cools.

## **Hydraulic Disc Brakes**

Your Lectric eBike is equipped with hydraulic disc brakes.



To prevent serious injury or death:

- ALWAYS apply the right brake lever (rear wheel) before and during use of the front brake.
- ALWAYS apply even pressure to both brake levers when slowing down or stopping.

If only the front brake is applied while slowing or stopping quickly, you may be ejected over the front handlebars.

Before riding, check to ensure brake levers do not touch the handlebars when fully applied. If either lever touches the handlebars, take your bicycle to an experienced bicycle mechanic for further adjustment.

#### To brake the rear wheel:

Pull the right brake lever to activate rear brake.

#### To brake the front wheel:

Pull the left brake lever to activate front brake.



Disc brake rotors will become hot during use and will stay hot for a short period after use. To prevent burns, do not touch the disc rotor right after use.

## Suspension Fork

The suspension fork will affect the handling of the bicycle, primarily when going over bumps and stopping. In some situations, it may be advantageous to lock the suspension so it is fully rigid.

Check to ensure your suspension fork is properly adjusted for the terrain and your weight. The black knob does not have a function.



#### To increase stiffness:

Turn the blue knob clockwise towards the "lock" direction indicated.

#### To reduce stiffness:

Turn the blue knob counterclockwise towards the "open" direction. indicated.

## To fully lock suspension:

Turn the knob clockwise towards the "lock" direction indicated until it cannot be turned further.

## Front and Rear Lights

Your Lectric eBike comes with integrated front and rear lights.

**To turn lights ON:** Hold plus (+) button on the display control pad for about 3 seconds until the lights turn ON.

**To turn lights OFF**: Hold plus (+) button on the display control pad for about 3 seconds until the lights turn OFF.

The rear light will blink when either brake is applied



Always turn lights ON for your safety, especially when riding at night or in low visibility situations.

#### COCKPIT SYSTEM

## **Cockpit Instruments**



## **Display Controls**



#### **Overview**

#### When does the Pedal Assist activate?

Pedal Assist (PAS) functions only when you are pedaling in PAS level 1-5. If you do not pedal, the PAS will not activate. The motor output always depends on your pedaling and the PAS level you have set.

PAS automatically switches off at the maximum speed set for your Lectric eBike (up to 28 mph). When the speed falls below the maximum set speed, PAS automatically becomes available again.

You can also use your Lectric eBike as a normal bicycle without assistance at any time, either by switching the Cockpit System power button OFF, or by setting PAS to 0. If the battery needs to be charged, PAS will not function.

When the bicycle has not been used for 10 consecutive minutes, the display will automatically shut down. The PAS and throttle features will no longer work when the display is OFF.



### To prevent serious injury or death:

- Do not allow yourself to be distracted by the display. If you do not concentrate on the traffic around you, you risk being involved in a crash. If you want to change any settings other than the PAS level, always stop before changing the settings or display.
- Set the display brightness such that you can adequately see important information like speed or warning symbols. Display brightness that is incorrectly set can result in dangerous situations.
- The electrical components on the bicycle are not waterproof. The electrical components on the bike have an IP rating of 65.
- Check the display and plug. If damage is detected, do not use the display. A damaged display or cables or plugs increase the risk of a fire, explosion, and personal injury.
- Do not disassemble the display. There are no user serviceable parts inside the display. Incorrect reassembly or damage may result in fire or explosion.

## **Pedal Assist and Shifting Gears**

You should shift gears on your Lectric eBike in the same way you would shift with a normal bicycle.

By selecting the proper gear, you can increase your speed and range while applying the same amount of force. This is especially important because this bike uses a mid drive motor. It will not be possible to reach high top speeds without the appropriate gears being utilized. Using the improper gear may cause the motor to heat up faster, resulting in a drop in performance as power is limited in order to prevent overheating.

You should test the range of your Lectric eBike under different conditions and terrains before planning longer and more demanding trips. Refer to the Range Estimates section below to learn about the factors to consider when planning longer rides.

## Range Estimates

The range the bicycle can go on a single battery charge can vary significantly between riders, terrain, wind conditions, user input, and additional cargo weight. The following table shows estimates of potential ranges riders may expect in different conditions.

All tests were performed with:

Flat ground	<ul> <li>Few starts and stops</li> </ul>
• Few bumps	<ul> <li>No additional cargo</li> </ul>
• Little to no wind	• Temperature ~75°F

• Rider weight ~180 lbs.

Top speed set to 20 mph
CST BFT tires at ~30 PSI

Range Estimates: 1 Battery	Throttle and PAS Level
Up to 25 Miles	• Pure throttle use
Up to 30 Miles	• Mostly PAS level 5
Up to 50 Miles	<ul><li>Little use of throttle</li><li>Mostly PAS level 2</li></ul>
Range Estimates: 2 Batteries	Throttle and PAS Level

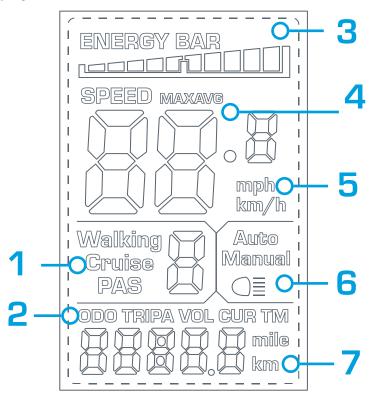
Range Estimates. 2 batteries	Tillottie and PAS Level
Up to 50 Miles	• Pure throttle use
Up to 60 Miles	• Mostly PAS level 5
Up to 100 Miles	<ul><li>Little use of throttle</li><li>Mostly PAS level 2</li></ul>

## Tips to Increase Range

To get the maximum range out of each battery charge, there are some simple things you can do:

- Ride at a lower PAS level
- Use lower PAS levels and pedal when climbing hills
- Pedal when starting from a standstill

## **Display Functions**



- Walk Mode, Cruise Control, and Pedal assist (PAS) Level Indicator
- Odometer, Trip A, Voltage, Current, Trip Timer (TM) readouts
- Battery level indicator bar
- 4. Maximum and Average Speed
- Speedometer in MPH or KM/H
- **Solution** Light On/Off Indicator
- Mile and kilometer indicators

## **Battery Level Indicator Bar**

The "Energy Bar" near the top of the display is your battery indicator and shows the estimated charge level remaining in your battery packs.

As the battery charge depletes, the remaining marks will display the approximate remaining charge in the battery pack.

The battery display will flash when there is no charge remaining.

If you are using your bike with two batteries, the battery capacity of the battery with the higher remaining level of charge will be shown on the battery level indicator bar. See How the two battery system works on p. 44 for additional information.



#### **OPERATING COCKPIT SYSTEM**

Turn the bicycle ON/OFF	Press and hold () button
Increase PAS Level	Press plus (+) button
Decrease PAS Level	Press minus (-) button
Turn lights ON/OFF	Press and hold the plus (+) button for about 3 seconds or until lights turn ON; repeat to turn OFF
Toggle Odometer, Trip A, Voltage, Current, Trip Timer (TM)	Press () button
Max Speed and Average Speed	Press and hold the plus (+) button and () button simultaneously to toggle between the speedometer, max speed and average speed

**NOTE:** The trip meter, as well as maximum and average speed will reset when the bicycle is powered OFF.

## Settings Menu

## **⚠ WARNING! ⚠**

Do not tamper with your bicycle. Tampering is defined as removing or replacing any original equipment, or modifying your bicycle in any way that may change its design and/or operation. Such changes may seriously impair the handling, stability, and other aspects of the bicycle, making it unsafe to ride. Tampering can void the warranty and render your bicycle noncompliant with the applicable laws and regulations. Lectric eBikes is not responsible for any direct, incidental, or consequential damages, including, without limitation, damages for personal injury, property damage, or economic losses due to tampering.

To change display settings, hold the plus (+) and the minus (-) buttons simultaneously to enter into the Settings Menu. Press the () button to toggle between each numbered setting. To adjust the value of each setting, click the plus (+) and the minus (-) buttons as needed

There are 21 settings (P01-P21). You should only change the settings listed on p. 31-32.

## **⚠ WARNING! ⚠**

To prevent serious injury or death, DO NOT change settings excluded from the table. Changing a setting not listed in the following table may cause your bike to stop working properly. If you need the default setting values of settings not listed, contact Lectric eBikes. DO NOT ride your bicycle until the default settings have been restored.

Setting	Function	Default	Explanation
P01	Brightness	2	Backlight display brightness. The darkest level is 1 and the brightest level is 3.
P02	Distance Units	1	0: Kilometers 1: Miles
P04	Sleep	10	LCD Display sleep timer. The default setting will turn the display OFF after it has not been used for 10 minutes.
P06	Tire Size	22	Used to compute speed and distance traveled.
P08	Speed Limit	32	Range is 32-100. The value represents the maximum operating speed of your Lectric eBike in km/h. For example, a value of 32 indicates the maximum speed will not exceed 32 km/h. Drive speed is maintained at this set value. Any value above 45 will fully unlock the bike's speed, which equates to up to 28mph. Margin of error: 3 km/h
P09	Throttle Zero Start	0	O: Throttle active from standstill.  Throttle active only when already moving.

Setting	Function	Default	Explanation
P10	Mode Toggle	2	0: PAS Active, Throttle Inactive 1: PAS Inactive, Throttle Active 2: Both PAS and Throttle Active
P16	Odometer Reset	NA	Hold the plus (+) button for 5 seconds to reset odometer.
P21	Walk Mode Toggle	0	0: Walk Mode disabled 1: Walk Mode enabled

## **Changing Top Speed**

Your Lectric eBike ships with a maximum speed set at 20 miles per hour (mph). This means it is a Class 2 electric bicycle in states that recognize three classes of eBikes. In most states that only recognize eBikes generally, the 20 mph top speed is legal for use on public roads.

Class	Pedal Assist Speed Limit	Throttle Speed Limit
1	20 mph	Throttle not allowed
2 (Default)	20 mph	20 mph
3	28 mph	20 mph

## **⚠ WARNING! ⚠**

ALWAYS check your local laws and regulations to determine if it is lawful to ride Class 3 eBikes on public roads before increasing your bicycle's top speed. Laws vary by territory, state, trail, path, and road so you will need to check the applicable regulations in each new location you ride.

#### Class 3 Label

If you increase your bicycle's top speed, you must remove the Class 2 label that displays your Lectric eBike class, top pedal assisted speed, and motor wattage. This label is posted under the carry handle, near the seat tube on the bicycle. Peel back the Class 2 label to reveal the Class 3 label located underneath the Class 2 label.

## **⚠ WARNING! ⚠**

Ride within your limits to prevent serious injury or death. Riding at higher speeds poses an increased safety risk. ALWAYS wear a helmet and obey the rules of the road.

### To increase maximum speed:

- 1. Press and hold the plus (+) and minus (-) buttons on the control pad simultaneously until the screen says "P1".
- 2. Press the  $\circlearrowleft$  button on the control pad to cycle through the settings.
- 3. Go to setting "P08" and change this value from 32 to 100.
  NOTE: This setting represents the top speed in kilometers per hour. For Class 2 performance, this speed setting must not exceed 20 mph (32 km/h). For Class 3 performance, this setting will be set at 100, indicating the bike has been completely unlocked to enable speeds of up to 28mph. Please note: The maximum achievable top speed will vary by tire inflation pressure, road conditions, total payload, battery charge level and other factors.
- 4. Press and hold the plus (+) and the minus (-) buttons on the control pad to exit the Settings Menu.
- 5. Power bicycle OFF by holding the 🖒 button to save the settings.

#### Walk Mode

Electric bicycles are heavier than bicycles. To make walking the bicycle easier, your Lectric eBike is equipped with Walk Mode, which can be toggled on or off in the settings menu. Walk Mode may be subject to local regulations. Check your local regulations to determine if allowed. The speed of walk mode will vary depending on which gear the bike is in and the terrain the bike is traversing. On flat ground, gear 7 will be the fastest, and gear 1 will be the slowest.

#### To activate:

Hold down the minus (-) button on the display control pad and the motor will engage at a speed similar to a slow walk. Walk mode is only engaged when holding down the minus (-) button.

**NOTE**: When Walk Mode is active, "Walking" will appear on the display.



ALWAYS keep wheels in contact with the ground when using Walk Mode.

#### To deactivate:

Pull either brake lever to disengage Walk Mode OR stop holding the minus (-) button on the display control pad.

#### **Cruise Control**

Cruise control on your Lectric eBike works similarly to cruise control on a car. Cruise control will maintain the speed for which the bike was traveling when engaged. For example, if you are riding at 10 mph, and the minus button is held, the bike will continue traveling at 10 mph.

#### To activate:

Hold the minus (-) button while twisting the throttle.

To cruise at low speeds, only slightly twist the throttle and hold the minus (-) button.

**NOTE**: When Cruise Control is active, "Cruise" will appear on the display.

#### To deactivate:

Pull either brake lever or start pedaling to disengage Cruise Control.

### PREPARING TO RIDE



To prevent serious injury or death:

- Before each ride, inspect your eBike to ensure the front axle, the rear axle, the handlebars, and the seat are secure.
- Check that both the stem latch and frame latch are fully closed and locked.
- Check the tire pressure of both wheels.
- Pull the brake levers to make sure your brakes are working properly and adjust them if necessary.
- NEVER exceed the maximum total weight limit of 330 lbs. (150 kg). The rear rack can hold a maximum of 55 lbs. (25 kg). As an example, if you have 40 lbs. (18 kg) of cargo, then the maximum weight of the rider would be 290 lbs. (130 kg)
- Only carry the cargo you need. More weight will drain the battery faster and affect how the bike handles.
- Ensure all components are properly secured.
- Make sure your battery is fully charged.
- Properly secure your helmet.

#### YOUR FIRST RIDE

The acceleration of your Lectric eBike may be faster than anticipated and may feel unusual at first. Before your first ride, you should use the lowest level of pedal assist (PAS 1) and become familiar with the operation of your Lectric eBike by practicing starting, stopping, cornering, and navigating obstacles in a safe environment away from other bicycles, pedestrians, and/or vehicles. You should also pay particular attention to terrain conditions as you may approach obstacles faster than expected.

The Pedal Assist may be activated as soon as you step onto the pedals and the bicycle is in motion. ALWAYS be seated on the bicycle and engage at least one brake before starting to pedal. DO NOT place one foot on a pedal then throw your other leg over the bicycle or your eBike could accelerate unexpectedly.

#### To start:

- 1. Insert the battery, lock it to the frame, and remove keys. The keys do not need to be in the lock for the battery to be operational
- 2. Hold down the  $\circlearrowleft$  button located on the left handlebar until the display comes on.
- 3. Select a Pedal Assist (PAS) level using the plus (+) and minus (-) buttons. PAS 0 provides no motor assist. PAS 1 is the lowest level of assist and PAS 5 is the highest level of assist.

## **△ WARNING! △**

## To prevent serious injury or death:

- Exercise extreme caution when using the twist throttle. When at a complete stop with the bicycle turned ON, be careful not to twist the throttle or the bicycle could accelerate and cause you to crash.
- Do not engage Walk Mode when riding or sitting on your Lectric eBike. Holding the minus (-) button will engage the motor up to a walking speed.

## To end your ride:

When the bicycle is at a complete stop, press and hold the  $\circlearrowleft$  button to turn the display OFF. This ensures the motor will not activate until the display is turned ON again and you are ready to ride.

#### **BATTERY PACK**

The term **battery pack** refers to all original Lectric eBikes battery packs. You may have purchased your bike with two battery packs, and all information in this section applies to both battery packs.

The safety of both our customers and our products is important to us. Our eBike batteries are lithium ion batteries, which have been developed and manufactured in accordance with the latest technology. We comply with or exceed the requirements of all relevant safety standards. When charged, these lithium ion batteries contain a high level of energy. If a fault occurs (which may not be detectable from the outside), in very rare cases and under unfavorable conditions, lithium ion batteries can catch fire.

Take care when using and charging your battery. Failure to follow the guidelines below could result in damage to property and/or serious injury. Contact Lectric eBikes immediately if you have any questions regarding battery safety.

Your Lectric eBike battery must not be opened, even for repairs. There is a risk your eBike battery could catch fire, e.g. due to a short circuit. This risk increases if an eBike battery that has already been opened is reused at a later point in time. Do not attempt to repair an eBike battery in the event of a fault. Have it replaced with an original Lectric eBike battery pack.

The battery is protected against deep discharge, overloading, overheating, and short-circuiting by Electronic Cell Protection (ECP). In the event of a fault, a protective circuit switches the battery pack off automatically.

## **Battery Safety**



Only use original Lectric eBike batteries for your eBike. Using other batteries can lead to injuries and pose a fire hazard. Lectric eBikes accepts no liability or warranty claims if other batteries are used.

To prevent serious injury or death:

- Do not leave your battery unattended while charging.
- When removing the battery, unplug the rubber stopper on the charging point.

- Battery leakage may occur under extreme usage or temperature conditions. Avoid contact with skin and eyes. Battery liquid is caustic and could cause chemical burns. If battery liquid comes in contact with skin, wash quickly with soap and water. If the liquid contacts your eyes, immediately flush eyes with water for a minimum of 15 minutes and seek medical attention.
- Always remove the battery from the bicycle when not in use and store in a secure location to prevent unauthorized use.
- Do not submerge the battery in liquid of any kind.
- Do not touch the terminals on your battery.
- Turn display OFF when not in use and before removing battery pack.
- The battery pack should not be excessively difficult to insert or to remove. Do not force the battery pack in or out of the bike frame.
- · Battery charging times may increase with battery age and usage.
- Only grab the charger by the plug and not the cable when plugging and unplugging from the wall.
- If the battery has trouble charging, stop charging and contact Lectric eBikes immediately.
- Do not puncture or crush the battery pack. Do not impact the battery pack or modify it in any way. Do not use the battery pack if it shows visible damage. The aforementioned can increase danger of fire or explosion.
- Protect the battery pack from heat (e.g., temperature >140°F), fire, and immersion in water. The aforementioned can increase danger of fire or explosion.
- Always remove the battery pack before beginning work (e.g.
  inspection, repair, assembly, maintenance, work on the chain, etc.)
  on your Lectric eBike, transporting it via car or airplane, or storing
  it. Unintentional activation of the Lectric eBike poses a risk of
  injury.
- Do not open the battery. There is a risk of short circuiting. Opening the battery voids any and all warranty claims.
- When the battery is not in use, keep it away from paper clips, coins, keys, nails, screws, or other small metal objects that could make a connection from one terminal to another. A short circuit between the battery terminals may cause burns or a fire. Short circuit damage which occurs in this instance, voids any and all warranty claims against Lectric eBikes.

- Avoid mechanical loads and exposure to high temperatures. These can damage the battery cells and cause the flammable contents to leak out.
- Do not place the charger or the battery near flammable materials.
   Ensure the battery is completely dry and placed on a fireproof surface before charging. There is a risk of fire due to the heat generated during charging.
- Your Lectric eBike battery must not be left unattended while charging.
- If used incorrectly, liquid may leak from the battery. Contact
  with this liquid should be avoided. If contact occurs, rinse off
  with water. If the liquid comes into contact with your eyes, seek
  additional medical attention. Liquid leaking from the battery may
  cause irritation or scalding.
- Batteries must not be subjected to mechanical shock. If battery is dropped or struck with another object, the battery may be damaged.
- The battery may give off fumes if it becomes damaged or is used incorrectly. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The fumes may irritate the respiratory system.
- Only charge the battery using original Lectric eBikes chargers.
   When using chargers that are not made by Lectric eBikes, the risk of fire cannot be excluded.
- Use the battery only in conjunction with your Lectric eBike. This
  is the only way in which you can protect the battery against
  dangerous overload.
- Use only original Lectric eBikes battery packs that the manufacturer has approved for your eBike. Using other batteries can lead to injuries and pose a fire hazard. Lectric eBikes accepts no liability or warranty claims if other batteries are used.
- · Keep the battery away from children.
- · Always turn display OFF before removing the battery pack.
- Always remove the key from the battery pack after each use. This
  prevents both unauthorized use of the powered features of your
  Lectric eBike and removal of the battery by unauthorized persons
  when your Lectric eBike is not in use. Failure to secure your
  bicycle from unauthorized use can result in death or serious injury
  to others.

## Charging

Locate the charge port on the side of the battery. You can charge the battery from this port while the battery is in or out of the eBike. Plugging in only one of the batteries will only charge that battery.

## **△ WARNING!** △

To prevent serious injury or death:

- Do not leave your battery unattended while charging.
- Do not connect the battery pack to the charger until it has reached an allowable charging temperature.
- Do not charge the battery with chargers other than the charger provided by Lectric eBikes.
- Only charge the battery indoors and in dry spaces which are not excessively hot or cold (within 10°F of room temperature).
- Ensure there are no flammable items, dirt or debris nearby when using the charger.
- The charger will automatically stop charging once the battery reaches its full capacity.
- The light on the charger will be red when the battery is charging and will turn green when charging has finished.
- Avoid leaving the charger plugged in when the battery is fully charged.
- Do not charge the battery if you notice the battery is damaged, excessively hot, leaking, smells, or is discolored.
- Charging the battery should take approximately 4-6 hours if the battery is mostly empty.
- Store the battery indoors in a dry space, away from heat or flame sources and out of direct sunlight.
- The charger may get hot (>165°F) when charging. Use caution and avoid touching the body of the charger.
- To reduce risk of injury, charge only batteries of your Lectric eBike. Other types of batteries may burst, causing personal injury and damage.
- Only charge Lectric eBikes approved lithium ion battery packs.
   The battery pack voltage must match the battery pack charging voltage of the charger. Otherwise, there is risk of fire and explosion.

- Do not expose the charger to rain or wet conditions. If water enters a charger, there is a risk of electric shock.
- Only use the original Lectric eBikes battery charger supplied with your eBike or one approved for your eBike by the manufacturer and purchased from a trusted source. Bypassing the battery charger or the use of a non-approved or counterfeit battery charger can lead to death or serious injury.
- Keep battery charger clean. Contamination can lead to the risk of an electric shock. Clean only with the use of a damp cloth (mild soap/water).
- Always check the charger, cable, and plug before use. Stop using the charger if you discover any damage. Do not open the charger. Damaged chargers, cables, and plugs increase the risk of electric shock.
- Do not operate the charger on an easily ignited surface (e.g. paper, textiles, etc.) or in a flammable environment. There is a risk of fire due to the charger heating up during operation.
- Take care if you touch the charger while it is charging.
   The charger can get very hot, especially when the ambient temperature is high.
- The battery may give off fumes if it becomes damaged or is used incorrectly. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. These fumes may irritate the respiratory tract.
- Batteries must not be subjected to mechanical shock. There is a risk of damage to the battery pack.
- Do not put fingers or hands into the product.
- Keep the battery charger away from children. This will ensure that children do not play with the charger.
- Persons who are not capable of safely operating the charger because of their physical, sensory, or mental limitations, or because of their lack of experience or knowledge, may only use this charger under supervision or after having been instructed by a responsible person. Otherwise, there is a risk of operating errors and injuries.
- Note the household voltage! The voltage of the power supply must correspond to the specifications given on the battery charger nameplate.

#### To Charge:

Plug the cable from the charger into the port on the side of the battery packs.

Plug the charger power cable into an electrical mains wall socket.

Use only the supplied input connection: standard AC power cord when connecting to the household electrical supply.

Plugging in one battery while both batteries are mounted to the bike will only charge the battery that is plugged in.

**Note:** The charging process is only possible when the temperature of your Lectric eBike battery is within the permitted charging temperature range.

**Note:** PAS is deactivated during the charging process.

After charging is complete and the light on the charger is green, disconnect the cable from the battery port and power cord from wall socket. If you have charged the batteries in the bicycle frame, carefully insert the plug after charging, so that no dirt or water can enter the battery ports.

## Installing and Uninstalling Battery Packs



To prevent serious injury or death:

- Only place battery packs on clean surfaces. Avoid getting dirt, e.g. sand or soil, in the charging port and contacts.
- Do not charge or use battery packs if there is damage. Contact Lectric eBikes to order a replacement
- Charging Limit: 54.6V == 2A Discharging Limit: 39V-54.6V 18A

Your bike comes with a 48V lithium ion battery and a unique set of keys that are used to lock it to the frame.

There is the option to mount a second battery (this is the auxiliary battery) behind the seat tube to increase range on your XPremium. The auxiliary battery will come with a unique set of keys.

If you have both the primary battery and the auxiliary battery, each battery must be used with its unique set of keys.

## **Primary battery:**

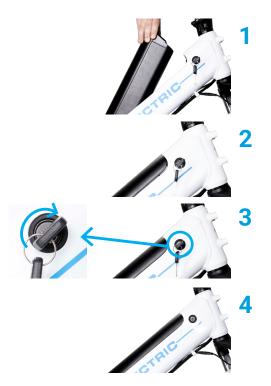


### **Auxiliary battery:**



# Installing the Batteries To install the primary battery:

- 1. Insert the bottom of the battery into the frame.
- 2. Press the top part of the battery down while the keys are in the unlocked position.
- Once the battery is flush with the frame, turn the keys clockwise to lock the battery to the frame.
- 4. The keys do not have to be in the lock cylinder in order for the battery to be operational.



#### To uninstall:

To unlock the battery and remove it from the frame, follow the steps listed above in reverse order.

### To install the auxiliary battery:

- Move the battery pack so that it is almost aligned with the mount top to bottom.
- 2. Slide the battery onto the mount.
- The battery has been successfully mounted when you hear it lock into position.
- The keys do not have to be in the lock cylinder in order for the battery to be operational.





When unlocking and removing your battery pack from the frame, take care that it does not fall to impact the ground. If your battery impacts the ground and is damaged, discontinue use and contact Lectric eBikes immediately.

## How the two battery system works

Your eBike is equipped with a battery isolator that will automatically switch between two batteries when two are attached. The switching device will switch to whichever battery has the higher voltage, within a certain tolerance (1-2%). For example, if you have the primary battery on the bike at 75% charge, and you load the auxiliary battery at 100% charge, the bike will use ~25% charge from the auxiliary battery until both batteries are at around 75% charge. Then it will start switching back and forth between both batteries draining them at approximately the same rate.

## **△ WARNING! △**

- Never ride without the primary battery installed. If the primary battery mounting point is not covered, and water comes in contact with the terminals, this could cause a short circuit and in turn a fire.
- Never ride without the auxiliary battery installed. If the auxiliary battery mounting point is not covered, and water comes in contact with the terminals, this could cause a short circuit and in turn a fire.

## **Storing**

### **Charging Battery Pack Before and During Storage**

When the battery pack will not be used for weeks or months, remove it from the eBike and store the battery pack at about 60% charge as indicated by the Energy Bar on the display. At about 60% charge, the battery will degrade less, compared to higher charge levels.

Every 2-3 months check the battery charge level and recharge to 60%, if necessary.

**Note:** If the battery is stored with no charge for an extended period of time, it may be damaged despite the low self-discharge and may reduce the battery capacity.

For optimum service life for your battery pack, charge the battery pack to 100% a few hours before you plan to ride. For example, if you ride the bicycle and the charge level falls to 50% but you plan to use the bicycle again in a few days, wait until the day before you plan to use it again to charge it to 100%.



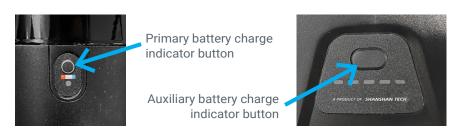
DO NOT charge battery unattended or leave battery connected to charger overnight.

Leaving the battery permanently connected to the charger is not recommended.

As the battery pack ages, capacity will diminish and the battery pack will eventually need to be replaced. A significantly reduced operating period after charging indicates that the battery pack is worn out and must be replaced. You may replace it yourself by purchasing a replacement battery pack from Lectric eBikes.

## **Battery Sleep Mode**

When the bike has not been powered on for 48 hours, the battery pack(s) will enter sleep mode. Sleep mode minimizes self-discharge and maximizes the life of the battery. In sleep mode, the battery will not supply power to the bike and you will not be able to turn on the display. To deactivate sleep mode, push the charge indicator button found on the battery pack(s). The charge level indicator on the battery pack will illuminate when you press the charge level indicator button. Once sleep mode is deactivated, your battery will be able to supply power to the bike once again.



## Storage Conditions

If possible, store the battery pack in a dry, well-ventilated place. Protect it from moisture and water.

Always store your Lectric eBike battery pack in a location that:

- Is in a room with a smoke alarm;
- · Is away from combustible or easily flammable objects; and
- · Is away from heat sources.

For an optimum service life, store your Lectric eBike battery at

temperatures between **50°** F and **68°** F. Never store it at temperatures below **14°** F or above **140°** F.

Make sure the maximum storage temperature is not exceeded. Do not leave the battery in your car during the summer, for example, and store it away from direct sunlight.

**NOTE:** Leaving the battery installed on the bicycle for long-term storage is not recommended.

## **Operation Conditions**

This equipment is not intended to be used at ambient temperatures less than -20°C (-4°F) or above ambient temperatures of 55°C (131°F).

## **Troubleshooting**

If you have any questions at all regarding the basic troubleshooting below, reach out to Lectric eBikes customer support by email at contact@lectricebikes.com, or call (602) 715-0907.

Issue	Most Common Solutions
Charging indicator lights do not illuminate.	<ol> <li>Check that the cord is connected to the charger.</li> <li>Check power availability at the main plug location.</li> <li>If the battery does not charge, unplug and contact Lectric eBikes.         Do not attempt to repair cord or charger.     </li> </ol>
Charging indicator light is always red.	Battery pack may be defective. Contact Lectric eBikes customer support for assistance.

## **Battery Recycling**

When your battery is no longer usable, dispose of your battery according to state and federal regulations. State regulations regarding battery disposal vary so it is important you find out and follow the rules in your state.

Lithium Ion batteries cannot be put in with standard garbage bins.

#### STORING YOUR LECTRIC EBIKE

Please observe storage temperatures for your Lectric eBike. Protect the Drive Unit, Cockpit System, and Battery Pack against extreme temperatures (e.g. from intense sunlight without adequate ventilation). Extreme temperatures can cause the components (especially the battery) to be damaged.

## TRANSPORTING YOUR LECTRIC EBIKE



To prevent serious injury or death:

- Always remove the battery pack before transporting your Lectric eBike on a bicycle rack mounted on your vehicle.
- Always use a bicycle rack that is compatible with your Lectric eBike. Check your bicycle rack manual to be sure your rack has sufficient capacity. Overloading a bicycle rack could cause the rack to fail and your eBike to be damaged.
- Never attempt to use a roof-mounted bicycle rack. ONLY use hitch-mounted racks.
- Always use proper lifting techniques when lifting your Lectric eBike. Electric bicycles are generally heavier than bicycles.

## **DISPOSAL OF YOUR LECTRIC EBIKE**

When your Lectric eBike is no longer usable, dispose of your eBike according to state and federal regulations. The motor, display, battery, speed sensor, accessories, and packaging should be disposed of in accordance with these regulations. State regulations regarding electronics disposal vary, so it is important you abide by the rules in your state.

**NOTE:** Do not dispose of eBikes and their components with household waste.

#### TROUBLESHOOTING

If you have any questions at all regarding the basic troubleshooting below, reach out to Lectric eBikes customer support by email at contact@lectricebikes.com, or call (602) 715-0907.

#### Issue

#### **Most Common Solutions**

#### Bicycle will not turn ON.

- Charge the battery until the light on the charger turns from red to green.
   This may take up to 8 hours.
- 2. Follow the cable coming from the display down to the quick plug. You may need to unravel some of the plastic wrapping to access it. With a quick pull (do not twist), unplug the quick plug, inspect both sides of the plug, and reconnect by lining up the arrows on both ends. After checking the quick plug, press and hold the 'b button on the display control pad to turn on.

## Pedal assist or throttle do not work.

- Check that the PAS level is set between 1-5.
- 2. To test if PAS is working, do not operate throttle.
- 3. To test if the throttle is working, do not pedal.
- 4. Check all quick plugs.

#### **Error Codes**

The components of your Lectric eBike are continuously monitored automatically. If a fault is detected, the corresponding error code will appear on the display.

<b>Error Code</b>	Meaning	<b>Most Common Solution</b>
E004	Throttle Fault	Check throttle cable
E006	Battery Undervoltage	Charge battery
E007	Battery Overvoltage	Let battery cool down for 10 minutes and restart
E008	Speed Sensor Reception Fault	Check controller connections
E009	Motor Fault	Check controller connections
E010	Motor Temperature Fault	Turn bike off and let sit for 10 minutes
E011	Motor Temperature Sensor Fault	Check controller connections
E021	Speed Sensor Fault	Check the distance between speed sensor and magnet
E030	Communication Failure	Check controller connections

## **MAINTENANCE**

You should have your bicycle maintained at regular service intervals at your local bicycle shop.



To prevent serious injury or death:

 NEVER open any of the components, including the battery, display, motor, or PAS sensor. Service should only be performed by a bicycle repair shop.

- Always remove the battery pack before performing any bicycle inspection, maintenance, or repair.
- If you suspect that something is loose, do not ride your bicycle.
   All nuts, bolts, and screws require the proper tightening force.
   Too little force and the fastener may not hold securely. Too much force and the fastener can strip threads, stretch, deform, or break.
   Either way, incorrect tightening force can result in component failure, which can cause you to lose control and crash. Take your bicycle to a bicycle repair shop for service.
- Do not paint any components of your Lectric eBike as they may cause premature failure of the component.
- Do not submerge your Lectric eBike or its components in water or use a pressure washer to clean.

## Caring for Your eBike

Always observe the operating and storage temperatures of your Lectric eBike and its components. Protect motor, display, and battery pack against extreme temperatures (e.g. from intense sunlight without adequate ventilation). Extreme temperatures can damage components (especially the battery pack).

Please have your Lectric eBike serviced at least once a year.

## **△ WARNING! △**

Do not tamper with your bicycle. Tampering is defined as removing or replacing any original equipment or modifying your bicycle in any way that may change its design and/or operation. Such changes may seriously impair the handling, stability, and other aspects of the bicycle, making it unsafe to ride. Tampering can void your warranty and render your bicycle noncompliant with the applicable laws and regulations. Lectric eBikes is not responsible for any direct, incidental, or consequential damages. This includes, without limitation, damages for personal injury, property damage or economic losses due to tampering.

To ensure safety, quality, and reliability, use only original parts or Lectric eBikes authorized replacements for repair and replacement.

## Tune-Ups

## 100 Mile Tune-Up

After 100 miles, or 5 full battery charge cycles, have the following services performed at a bicycle shop:

 All hardware should be adjusted to the specified Tightening Torque (p. 19). If any hardware is damaged, it may need to be replaced by a bicycle mechanic.

## Every time you ride

- Inflate tires to pressure within recommended range printed on tire sidewalls.
- Lubricate chain.
- · Check your brake pads for signs of wear. Replace if necessary.

## Monthly (or about every 250-500 miles)

- Check chain for wear with chain checker tool and replace if necessary.
- Check that all hardware is tightened to the torque specifications listed in the Tightening Torque (p. 19) section of this manual.
- Clean the bicycle with low residue cleaner and dry completely.
   Lubricate after cleaning where necessary.
- Check spoke tension and adjust if necessary. See Tightening Torque (p. 19).

## Quarterly (or about every 750-1500 miles)

- · Check all items on the monthly service list above.
- Check tire tread for excessive wear. Replace if necessary.
- Check electrical connectors and cable housings are secured away from moving parts and are free from damage. Replace if necessary.

### Cleaning



Do not submerge your Lectric eBike or its components in water, or use a pressure washer to clean.

Clean your Lectric eBike carefully with a soft, damp cloth (using only mild soap and water). Rinse with water. The electrical components on your Lectric eBike are IP 65 rated.

#### **LEGAL**

## Warranty

LECTRIC EBIKES WARRANTS TO THE ORIGINAL REGISTERED PURCHASER THAT LECTRIC eBIKES SHALL BE FREE FROM ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE.

DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES: THE ORIGINAL REGISTERED PURCHASER OF THIS BIKE, SUBSEQUENT OWNERS AND ALL OTHER INTENDED AND UNINTENDED USERS OF THIS BIKE, SHALL NOT BE ENTITLED TO RECOVER FROM LECTRIC eBIKES ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The warranty is non-transferable and only applies to the original owner. This warranty gives you specific rights and purchasers may also have other rights, which may vary from state to state. Damage caused by failing to follow instructions in the manual, acts of God, accident, misuse, neglect, abuse, commercial use, alterations, modification, improper assembly, installation of parts or accessories not originally intended or compatible with the Lectric eBike as sold, operator error, water damage, extreme riding, stunt riding, or improper follow-up maintenance is not covered under this warranty. Warranty parts will only be shipped within the continental United States and Canada.

Parts covered by the warranty: frame, forks, stem, handlebars, headset, seat post, saddle, brakes (excluding brake pads), lights, bottom bracket, crank set, pedals, rims, wheel hub, freewheel, cassette, derailleur, shifter, motor, throttle, controller, wiring harness, display (excluding damage due to water), kickstand, reflectors, and

hardware. The battery warranty does not include damage from power surges, use of 3rd party charger, improper maintenance or other such misuse, normal wear, or water damage (including rust).

Accessories sold on lectricebikes.com are not covered under warranty.

Stolen bikes are not covered under warranty.

Necessary precautions must be taken to ensure the bike and battery are not exposed to severe weather conditions. Exposure to very wet, hot, or cold conditions may void the warranty.

Lectric eBikes will replace any parts deemed to have been damaged during shipping. Shipping damage must be reported to Lectric eBikes within 14 days of shipment arrival. This applies to all products, including bikes and accessories.

You will NOT be refunded as compensation for your time or efforts replacing damaged parts.

Replacement parts will not be sent until photographic evidence has been provided to Lectric eBikes. Lectric eBikes may request additional documentation (such as video) to assist with accurately diagnosing the problem and processing the warranty claim.

Most warranty parts are fulfilled 1-10 business days after the request is put into our system by a customer service representative. Warranty parts are sent using USPS First Class, FedEx Express, or FedEx Ground, depending on the size of the part. Warranty parts will not be expedited.

Items including the chain, tires, wheels, rims, tubes, battery handle, brake rotors, brake pads, cables and housings, grips, and spokes are considered wear items. These items wear down with normal use and are not covered under warranty. You are responsible for replacing and maintaining these wear items.

Any unauthorized alterations or repairs are not covered and may void this warranty.

For warranty services, please contact Lectric eBikes' online support by email at contact@lectricebikes.com. Bikes or parts returned without proper documentation may result in delayed service or denied warranty coverage. Warranty return shipping costs along with duties and taxes are the responsibility of the claimant. All unauthorized returns will be refused.

Note that your insurance policies may not provide coverage for accidents involving Lectric eBikes. To determine if coverage is provided, you should contact your insurance company or agent. Damage as a result of an accident is not covered under this warranty, and Lectric eBikes is not responsible for repair or replacement of damaged bikes or parts.

Lectric eBikes reserves the right to change its warranty at any time and without notice.

Any action, lawsuit or other proceeding, under this warranty or otherwise related to the bike must be commenced within ninety (90) days after expiration of the one-year warranty period.

THIS WARRANTY GIVES THE ORIGINAL REGISTERED PURCHASER SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

#### Bike Performance Disclaimer

The bikes listed range and top speed are estimates (not guarantees) of expected performance. Performance will vary with rider weight, cargo weight, rider/cargo shape (both contribute to drag), terrain, tire pressure, brake adjustment, throttle vs PAS usage, pedal power, battery charge level, ambient temperature, and wind conditions. Under certain conditions it is possible to get ranges and top speeds that are different from the listed estimates.

## **Liability Disclaimer**

Riding any kind of bicycle comes with inherent risks and dangers that cannot be predicted or avoided. These dangers could result in a serious accident, injury, or death of the rider. It is the sole responsibility of the rider to become properly educated and prepared to ride safely. Once in possession of the bike, Lectric eBikes strongly encourages and recommends that all customers have a certified and reputable bicycle mechanic complete a full inspection of each component on the bicycle to ensure it is safe for operation. Lectric

eBikes makes no claims or guarantees that the brakes, battery, frame, motor, motor controller, display, electrical cables, electrical cable housings, fasteners, grips, fork, stem, shifters, headset, seat post, seat post clamp, handlebar stem clamp, saddle, wheel hubs, handlebars, spokes, rims, tires, tubes, derailleur, freewheel, cassette, throttle, kickstand, lights, reflectors, hardware, bottom bracket, or any other part or accessory, will be properly secured and adjusted upon arrival. Before every ride, fully inspect your bicycle to ensure everything is secured and adjusted properly. Under no circumstances is Lectric eBikes responsible for any damage resulting from damaged, defective, or improperly secured parts. This includes, but is not limited to, damage to personal property, personal injury, or death.

#### **FCC**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment should be installed and operated with a minimum distance of 5 mm between the device and the user or bystanders.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.