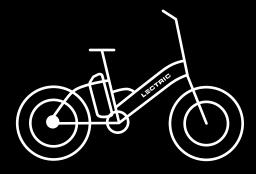


# **OWNERS MANUAL**

Lectric ONE



V 1.0 | 2024 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

Phone: (602) 715-0907

Website: lectricebikes.com

Lectric Help Center: help.lectricebikes.com

## SERIAL NUMBER

Please record your bicycle's serial number in the space below. The serial number is located on the non-drive side dropout of your bicycle. Refer to "Serial Number" on page 16 for the location of the serial number.

## **TABLE OF CONTENTS**

Important Safety Information	4	
Getting Started	14	
Assembly	28	
Features	30	
Cockpit System	35	
Preparing to Ride	46	
Your First Ride	46	
Battery Pack	48	
Moving and Storing your Lectric eBike	59	
Disposal of Your Lectric eBike	59	
Troubleshooting	60	
User Maintenance Instructions	62	
Legal	65	



Scan the QR code to read the Lectric Owner's Manual.



Scan the QR code to read the Gates Carbon Drive Owner's Manual.



Scan the QR code to read the Pinion Owner's Manual.

Find all manuals at lectricebikes.com/manual

## **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. The latest version of your manual is available at lectricebikes.com/manual

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. With an electric bike there is risk of fire or electric shock. 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 (Lectric ONE) 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.

## 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 mountain bicycle use including any kind of jumping or downhill mountain biking.

Riders should be proficient cyclists (ages 18+), riding where the tires are always on the ground, where permitted by law (not on pedestrianuse 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 or 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 bicycle 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.

## 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 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 and rear wheel reflectors.
- Riders should wear reflective clothing at night. You may want to attach additional flashing lights to your clothing or helmet.

## **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.

## Pre-Ride Safety Checklist

Lectric eBikes recommends going through each item on the pre-ride safety checklist before and after each ride. Spending time to make sure all of the bike's components are in good working order before a ride is a crucial step along the way to a safe and fun ride.

This checklist is not intended to function as a detailed service manual. Be sure to read your entire owner's manual before riding or repairing your bike. If you do not have the expertise required to perform any of these checks, Lectric eBikes recommends having your local bike shop mechanic perform a detailed safety check of your bike in regular intervals. Ensure your local mechanic is experienced and reputable.

Before each ride, inspect your eBike for damage. If damage is found, do not ride.
Verify that the front and rear axles are secure.
Check that the front and rear tire pressure is within the recommended pressure range printed on the tire sidewall.
Pull the brake levers to ensure the brakes are working properly and adjust if necessary.
Visually inspect the bike for damage or anything out of the ordinary.
Turn on the lights, especially if riding at night.
Make sure all hardware is tightened to the recommended torque specifications found in "Tightening Torque" on page 27 of the owner's manual.
Check that the seat post is inserted past the minimum insertion point. The minimum insertion point is labeled on the seat post.
Check that the seat post collar and clamp are closed and tightened to 20 N·m (labeled as Seat Rail Binder in "Tightening Torque" on page 27) or until it leaves an impression on your hand.
Check that the seat cannot be twisted out of position, and set the height to a safe position that makes it easy to mount and dismount the bike.
Wear a helmet and high visibility clothing.
NEVER exceed the maximum total weight limit of 330 lbs, (150 kg). The rear rack can hold a maximum of 30 lbs, (14 kg). The front rack can hold a maximum of 20 lbs. (9 kg). The rider maximum weight is 330 lbs (150 kg). As an example, if you have 40 lbs (18 kg) of cargo, then the maximum weight of the rider is 290 lbs (131 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.

## Signal Words, Warnings, and Caution Statements

This Manual contains many "Warnings" and "Cautions" concerning the consequences of failure to maintain or inspect your bicycle and of failure to follow safe cycling practices.

## **DANGER**

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

## **WARNING**

**⚠ WARNING! ⚠** 

The combination of the safety alert symbol and the word WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

## **ACAUTION**

The combination of the safety alert symbol and the word CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury, or is an alert against unsafe practices.

## **CAUTION**

The word CAUTION used without the safety alert symbol indicates a situation which, if not avoided, could result in serious damage to the bicycle or the voiding of your warranty.

## **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 ADJUSTABLE STEM and STEM RISER latches are closed and secure.

#### Class 2 label

## **A** WARNING

To prevent SERIOUS INJURY or DEATH:

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

Class 2 eBike 750W

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 750W 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.

## **On-Product Warning Tags**

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

















## **GETTING STARTED**

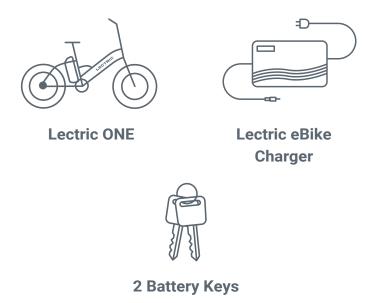
These instructions are intended to assist you in setting up and getting familiar with your new bicycle.



After you assemble 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 setup your bicycle, visit our YouTube page: Lectric eBikes, LectriceBikes.com/first-ride-videos

# Bike Diagram

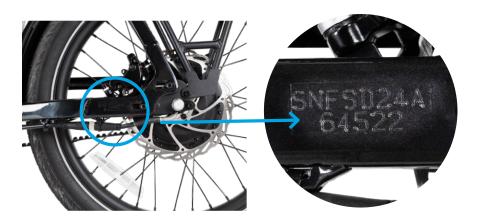




#### Serial Number

Your serial number is located on the non-drive side dropout 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: <a href="lectricebikes.com">lectricebikes.com</a> and our help center: <a href="help.lectricebikes.com">help.lectricebikes.com</a>

## **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" on page 27.
- ALWAYS insert 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 right, closed position on left);
- · 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" on page 27.





## **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" on page 27.

**Front and back adjustment:** Loosen 14mm nuts on both sides of the seat with a 14mm socket or box wrench. Make sure the clamp mechanism is clamping on the straight part of the seat 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" on page 27.



**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" on page 27.

### How to Unfold the Stem

- 1. Begin with handlebars in the folded down position.
- 2. Simply unfold the stem upward and press the latch inward until there is an audible click.
- 3. Give the latch a tug to ensure it is locked in place.



If the latch does not stay, please contact the Lectric Customer Service department for adjustment instructions.

## How to Fold the Stem

- 1. Push the red safety tab in while pulling the latch downward.
- 2. Once the latch is released the stem can be folded to the side of the bike.



### How to Unlock the Stem Lever

- 1. Push the stem safety button up, toward the LCD display.
- 2. Keep the safety button pushed, as you pull the stem lever away from the stem.

### How to Lock the Stem Lever

1. To lock, push the stem lever down until you hear an audible click. Ensure the stem lever is locked, by giving it a small tug.



## Installing and Uninstalling Battery Pack

# **⚠ WARNING! ⚠**

## To prevent serious injury or death:

- Only place battery pack on clean surfaces. Avoid getting dirt, e.g. sand or soil, in the charging port and contacts.
- **Do not charge or use battery pack if it is damaged.** Contact Lectric eBikes to order a replacement.

Your bike comes with a 48V lithium-ion battery. The bike's battery comes with a unique set of keys that are used to keep it unlocked/locked to the frame.

The battery has 2 key positions: LOCKED, and UNLOCKED. The key lock is spring-loaded and will spring back to the LOCKED position when not manually turned to UNLOCKED.



## **Charge Battery Before First Use**

Locate charging port on the side of the battery pack. Use this port to charge the battery pack on or off the bike.

You should fully charge your battery 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" on page 48 for additional information.



## How to Install the Battery

#### To Insert:

- 1. Align the battery to the tabs of the battery plate.
- 2. Slide the battery into the battery plate terminals to secure the battery into place.







## How to Remove the Battery

### To Remove:

- 1. Turn the battery key into the UNLOCKED position.
- 2. Pull the battery upwards off the battery plate.







### How to Remove and Insert Pedals

## **Removing Pedals**



1. Pull the spring-loaded sleeve while also pulling the pedal out from the hex slot.

## **Inserting Pedals**



1. Pull the spring-loaded sleeve and insert the pedal axle while aligning the hex pattern.



2. Be sure the sleeve retracts, and give the pedals a small tug to ensure they are locked in.

# Tightening Torque

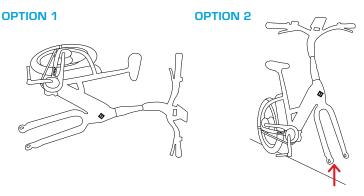
Part	Tool	Spec
Pinion lockring	8-pin lockring tool	40nm
Brake Caliper Mounting Screws	5mm Hex	10nm
Brake Lever Clamp Screws	4mm Hex	5nm
Crank Pinch Screws	4mm Hex	10nm
Crank Screws	10mm Hex	10nm
Rotor Mounting Screws	T-25 Torx	5-8nm
Dropouts	5mm Hex	15-20nm
Fender Mounting Screws	4mm Hex	5nm
Headlight Mounting Screw	5mm Hex	10nm
Headset Compression Screw	5mm Hex	~2-4 Nm
Kickstand Mounting Screw	8mm Hex	25nm
Pedals	8mm Hex	35nm
Seat Rail Binder	14mm wrench	20nm
Shifter Clamp Screw	4mm Hex	4nm
Spokes	spoke wrench 2	180-200 KGF
Stem Clamp Screw	4mm Hex	12nm
Stem Pinch Screws	6mm Hex	10nm
Stem Riser	6mm Hex	20nm
Stem QR Lever Screw	5mm Hex	15nm
Torque Arm Screw	4mm Hex	5nm
Wheel Axle Nuts	Rear: 17mm wrench	35nm

## **ASSEMBLY**

### Front Wheel Installation

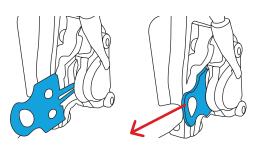
- 1. Remove thru axle from the box with the charger.
- 2. Lay bike gently on the driveside\* OR have a friend lift the bike by the handlebars to raise the front fork off the ground.

\*Be mindful to not damage the drivetrain components when laying the bike on the side.

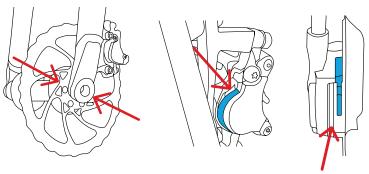


3. Remove the plastic slider from between the two front brake pads. This slider is used to prevent damage during shipping.

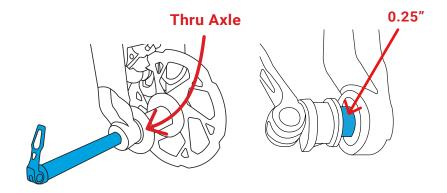
NOTE: If the plastic slider is not present this means it slid out during shipping. If this is the case, DO NOT grab the front brake lever. This can result in the brake pads coming together and the rotor will not fit between the brake pads, preventing front wheel installation.



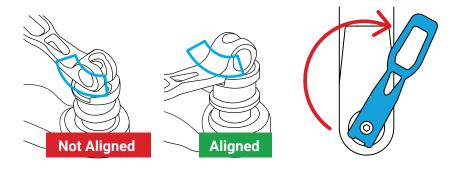
4. Install the front wheel by aligning the disc brake with the caliper brake pad slot.



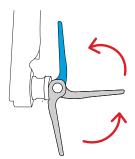
5. Slide the thru axle into the fork from the side opposite the disc brake. Push in until there is a firm stop and 0.25" gap between fork and thru axle endcap.



6. Align the quick release lever with the cutout in the thru axle endcap. Begin turning the lever clockwise, keeping the lever open and in the slot.



7. When you cannot screw the thru axle in any further, close the lever by folding it 180 degrees. There should be resistance building when the lever is closed, if there is no resistance repeat steps 5-7 again.



#### **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.
- All components fitted to the drive unit and all other components
  of your Lectric eBike PAS system (e.g. chainring, chainring
  receptacle, pedals) must only be replaced with identical
  components or components that have been specifically approved
  by Lectric eBikes. This should help protect the motor from
  overloading.
- Always remove the battery pack from your Lectric eBike before beginning work (e.g. inspection, repair, assembly, maintenance, work on the chain, etc.), moving it with a car or on an airplane, or storing it. Battery pack removal should 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.

## 6-Speed Gear System

Your Lectric eBike comes with a Pinion C1.6i six-speed sealed weatherproof gearbox. The gearbox is located centrally at the bottom bracket of your bicycle.

While pedaling in 1st gear (this is the lowest gear), it will be easier to pedal up hills. In 6th gear (this is the highest gear), it will be easier to reach higher speeds on flat or downhill terrain.

To shift higher: To shift lower:

Press the upper button. Push the lower button away from you.



## **Pinion Smart.Shift App**

Through the Pinion Smart.Shift app the rider can adjust the shifting orientation of the shift operation to reverse higher/lower operation.

### **Throttle**

The left handlebar features a below-the-bar thumb throttle.

## To operate:

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





## **Hydraulic Disc Brakes**

Your Lectric ONE is equipped with hydraulic disc brakes.



## To prevent serious injury or death:

- ALWAYS apply right brake lever (rear wheels) 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 the brake levers do not touch the handlebars when fully applied. If either lever touches the handlebars, call Lectric eBikes to determine next steps. You will likely need your brakes bled.

#### To brake the rear wheels:

Pull right brake lever to activate rear brakes.

#### To brake the front wheel:

Pull 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.



DO NOT loosen any screw/bolt on the caliper (the bleed screw should only be loosened when changing brake fluid). Loosening screws other than the bleed screw could cause leaking and consequently loss of braking power.

# **⚠ WARNING! ⚠**

If you notice fluid leaking from any part of the brakes, stop riding at once. Have your brakes serviced at a certified reputable bike shop before riding again.

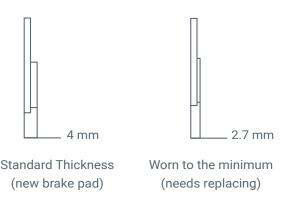
The hydraulic disc brakes on this bike use mineral oil. Only use mineral oil purchased from Lectric eBikes or Shimano for service.



Never add or mix with DOT brake fluid or any mineral oil not intended for bicycle hydraulic disc brake use.

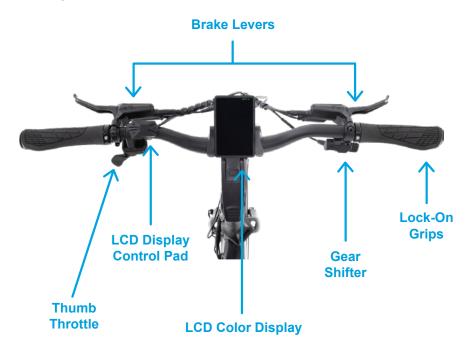
When using your new bike, the brakes will need to be bedded in. This means that braking force on the first 10-30 pulls is not as powerful as subsequent pulls and the bike will take longer to stop. Ride your bike in a safe environment away from other vehicles and stop the bike 10-30 times before riding normally.

Before riding the bicycle check the thickness of the brake pads. When the wear of the brake pads exceeds 0.8 mm, replacement of the pad is recommended. When the total thickness of the worn brake pad is less than 2.7 mm, the pads must be replaced to ensure safe riding.

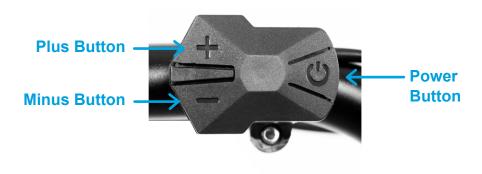


## **COCKPIT SYSTEM**

## **Cockpit Instruments**



## **Display Controls**



#### Pedal Assist Overview

#### When does the Pedal Assist activate?

Pedal Assist (PAS) functions only when you are pedaling. 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.

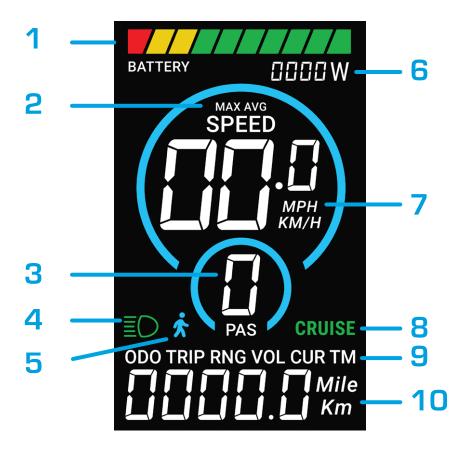
When the bicycle has not been used for 10 consecutive minutes, the display will automatically shut down. The PAS and throttle features will no longer work when the display is OFF.

# **⚠ WARNING! ⚠**

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.

# **Display Functions**



- 1 Battery level indicator bar
- 2 Maximum and Average Speed
- 3 (PAS) Level indicator
- 4 Light On/Off indicator
- 5 Walk Mode indicator

- 6 Wattage Output reading
- 7 Speedometer in MPH or KM/H
- **8** Cruise Control indicator
- Odometer, Trip, Range Voltage, Current, Trip Timer readouts
- 10 Mile and kilometer distance 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 pack.

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.



#### **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.

# 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.

# 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

#### All tests were performed with:

- · Flat ground
- · Few bumps
- · Little to no wind
- Top speed at 20 mph
- Lectric 20x2.5 in. ~30 PSI

- Few starts and stops
- · No additional cargo
- Temperature ~75°F
- Rider weight ~180 lbs.
- 14 Ah Battery

# Range Estimates Under Test Conditions

# Throttle and PAS Level

Up to 20 miles

- Pure throttle use
- Mostly PAS level 5

Up to 35 miles

- · Little use of throttle
- Mostly PAS level 3

Up to 60 miles

- · Very little use of throttle
- Mostly PAS levels 1-2

# 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 22 settings (P01-P22). You should only change the settings listed below.

# **⚠ WARNING! ⚠**

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

Setting	Function	Default	Explanation
P02	Distance Units	1	0: KM, 1: MILE.
P04	Sleep	10	0-60 Range 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	5-50 Range Used to compute speed and distance traveled.
P08	Speed Limit	32	32: Class 2, 20mph top speed 45: Class 3, 28mph top speed
P09	Throttle Zero Start	0	<ul><li>0: Throttle active from standstill.</li><li>1: Throttle active only when already moving.</li></ul>
P10	Mode Toggle	2	<ul><li>0: PAS Active, Throttle Inactive</li><li>1: PAS Inactive, Throttle Active</li><li>2: Both PAS and Throttle Active</li></ul>
P11	PAS Sensitivity	1	0-3 Range 0: maximum power delivery in 0-second 1: maximum power delivery in 1-second 2: maximum power delivery in 2-seconds 3: maximum power delivery in 3-seconds

Setting	Function	Default	Explanation
P12	Light Operation	0	0: When the lights are OFF and brake is pulled, the rear brake light activates.
			When the lights are ON the display icon will appear. When brake is pulled the brake light activates.
			1: The front and rear lights are flashing right away when bike is on. Icon on display for light is flashing ("MANUAL" not 'ON") at the same rate as front light and rear light. When brake lever is pulled the brake light activates.
P13	Walk Speed mph	0	0: 3mph 1: 3.7mph
P16	Odometer Reset	NA	Hold the plus (+) button for 5 seconds to reset odometer.
P21	Walk Mode Toggle	1	<ul><li>0: Walk Mode disabled</li><li>1: Walk Mode enabled</li></ul>
P22	Assistance Level	0	<ul><li>0: PWR speed limited in PAS 1 &amp; 2</li><li>1: PWR speed is not limited in PAS 1 &amp; 2</li><li>2: PWR speed limited in PAS 1 &amp; 2, but throttle max amperage is 24A</li></ul>

# **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.

### eBike Classes in the U.S.A.

Class	Pedal Assist Speed Limit	Throttle Speed Limit
1	20 mph	Throttle not allowed
2	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 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.



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 PAS speed from 20mph to 28mph:

- 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.
- Go to setting "P08" and change this value from 32 to 45.
   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 Settings Menu.
- 5. Power bicycle OFF by holding the () button to save the settings.

#### Cruise Control

Cruise control on your Lectric ONE works similarly to cruise control on a car. Cruise control can only be engaged when using the throttle.

#### To activate cruise control:

Throttle to your desired cruise speed then hold the minus button.

To cruise at low speeds, only slightly push the throttle and hold the minus (-) button. The minimum speed cruise control can be set to is 8mph.

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

#### To deactivate cruise control:

Pull either brake lever to disengage Cruise Control.

# 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.



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

#### Walk Mode

Electric bicycles are heavier than bicycles. To make walking the bicycle easier, your 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.

#### To activate:

In PAS 1-5, hold down the minus (-) button on the display control pad and the motor will engage at a speed similar to a slow walk.

**NOTE**: When Walk Mode is active, "Walking" will appear on the display. Walk mode speed can be adjusted with P13.



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

#### To deactivate:

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

#### PREPARING TO RIDE

# **⚠ WARNING! ⚠**

To prevent serious injury or death, go through the "Pre-Ride Safety Checklist" on page 8 of your Owner's Manual before each ride.

#### 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. Refer to "Pre-Ride Safety Checklist" on page 8 before you go on your first ride.

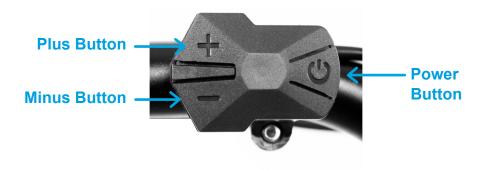
#### How to Start Your Ride

1. Hold down the  $\circlearrowleft$  button located on the left handlebar until the display comes on.

NOTE: The first time you use your bike you will have to wake the battery by pressing the button on top of the battery shown in the photo. NOTE: The Battery is "ON" indefinitely until it reaches 41V. The battery is turned "OFF" by pressing and holding the button.



2. 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.





To prevent serious injury or death:

- Exercise extreme caution when using the thumb throttle. When at a complete stop with the bicycle turned ON, be careful not to engage the thumb 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. Release (-) button to stop walk mode or grab either brake lever to also disengage walk mode.

#### How 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.

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 which 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.
- Always charge your battery in temperatures between 32°F 113°F (0°C – 45°C).

- For an optimum service life, operate your Lectric eBike battery at temperatures between 32° F -104° F (0°C-40°C).
- 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, moving 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.
- 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 bicycle.

# **⚠ 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 (within 10°F of room 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 4-7 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) when the charger is unplugged from both the wall and the bike.
- 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.
- Batteries must not be subjected to mechanical shock. There is a risk of damage to the battery pack.
- 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.
- Damage to your ebike's electrical system caused in any manner, including water intrusion, can lead to battery failure, electrical system malfunction, or electrical fire and consequent property damage, injury, or death. Follow all recommendations to minimize

- chance of water damage. If you have any questions, contact Lectric eBikes.
- Keep the rubber plug inserted into the battery any time the battery is in the bike to prevent water ingress.

# **CAUTION**

To reduce the risk of fire, connect only to a circuit provided with 10 amperes maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70. Never use extension cords with your Lectric eBikes charger provided with the purchase of your ebike, after sales service, or warranty charging devices.

# **⚠ WARNING! ⚠**

Using a damaged battery or charger can create additional bike damage or a fire hazard. Stop using your battery and charger and contact Lectric eBikes immediately if any of the following occur: (1) Your charger's flexible power cord or output cable or any of the electrical cables on your bike is frayed, has broken insulation, or any other signs of damage, (2) Your battery or charger is physically damaged, non-functional, or performing abnormally, (3) Your battery or charger experienced a significant impact from a fall or crash, with or without obvious signs of damage, or (4) Your charger becomes too hot to touch (it's designed to get warm with normal use), gives off an odor, or shows other signs of overheating. Store any damaged battery or charger in a safe location and, as soon as possible, recycle or otherwise dispose of it according to local rules. Contact Lectric eBikes if you have any questions or to purchase a compatible replacement battery or charger.

# **Battery Charging Information**

- Check the charger, charger cables, and battery for damage before beginning each charge.
- Always charge in a safe area that is cool\*, dry, indoors, away from direct sunlight, dirt, or debris, in a clear area away from potential to trip on the charging cords, or for damage to occur to the bike, battery, or charging equipment while parked and/or charging.
   \*Always charge your battery in temperatures between 32°F 113°F (0°C 45°C).
- The battery can be charged on or off the bike. To remove the battery see instructions "Installing and Uninstalling Battery Pack" on page 23.
- The battery should be recharged after each use, so it is ready to go the full range per charge next ride. There is no memory effect, so charging the battery after short rides will not cause damage.
- Charging the battery normally takes 4-7 hours. In rare cases, it may take longer to allow the battery management system to balance the battery, particularly when the bike is new or after long periods of storage.
- The charge indicator light will show red while the battery charges.
   When charging is complete, the charging indicator light will turn green. Ensure the lights face upward when charging.
- Remove the charger from the battery within one hour of the green light indicating a complete charge. The charger is designed to automatically stop charging when the battery is full, but unnecessary wear of the charging components could occur if the charger is left attached to the battery and a power source for longer than 12 hours. Detach the charger as soon as possible once the green light indicates a complete charge to avoid unnecessary wear of charging components.
- Never charge a battery for more than 12 hours at a time.
- Do not leave a charging battery unattended.

# **Charger Manufacturer**

- Charger made by: Wuxi Sans Electric Co., Ltd.
- Charger Model: SSLC109V55

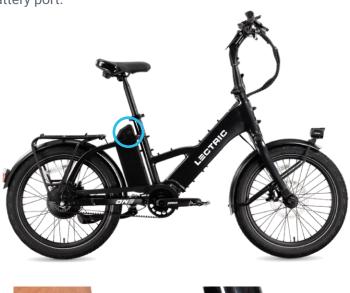
#### To Charge:

- 1. Plug the cable from the charger into the port on the side of the battery pack.
- 2. Plug the charger power cable into an electrical mains wall socket.

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

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

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 battery in the bicycle frame, carefully insert the rubber plug after charging so that no dirt or water can enter the battery port.





# Moving and Storage Instructions

#### **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.

# 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, operate your Lectric eBike battery at temperatures between **32° F -104° F** (0°C-40°C).

Make sure the maximum operating 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.

# **⚠ WARNING! ⚠**

Failure to follow Battery Charging & Storage Best Practices could result in unnecessary wear to the charging components, battery, and or charger, and could lead to an underperforming or non-functional battery. Charging components, battery, and or charger replacements will not be covered under warranty.

# **Troubleshooting the Battery**

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.	Check that the cord is connected to the charger.
	Check power availability at the main plug location.
	<ol> <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.

#### MOVING AND 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.



To prevent serious injury or death:

- Always remove the battery pack before moving 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 to 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. Press the sleep/wake button on top of battery. Then press and hold the  $\circlearrowleft$  button to turn ON.
- 3. 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.

Error Code	Meaning	<b>Most Common Solution</b>
E003	PAS Sensor Fault	Check PAS quick plug
E006	Battery Undervoltage	Fully charge battery
E007	Motor Fault	Check motor quick plug
E008	Throttle Fault	Check throttle quick plug
E009	Controller Fault	Check controller connections
E010	Display Communication Reception Failure	Check display quick plug
E011	Display Communication Send Failure	Check display quick plug

#### **USER MAINTENANCE INSTRUCTIONS**

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.

# Tune-Ups

# 100 Mile Tune-Up

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

- Check that your brakes are functioning correctly and adjust if necessary.
- All hardware should be adjusted to the specified "Tightening Torque" on page 27. If any hardware is damaged, it may need to be replaced by a bicycle mechanic.

# Monthly (or about every 250-500 miles)

- Inflate tires to pressure within recommended range printed on tire sidewalls.
- Check that all hardware is tightened to the torque specifications listed in the "Tightening Torque" on page 27 section of this manual.
- Check your brake pads for signs of wear. Replace if necessary.
- Check spoke tension and adjust if necessary. See "Tightening Torque" on page 27.

# 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.
- · Service the Pinion gearbox after 6,000 miles.

# **⚠ 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.

# 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 DELIVERY.

DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES: THE ORIGINAL REGISTERED PURCHASER OF THIS BIKE. SUBSEOUENT 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
- 2. 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 complies with radio frequency exposure limits set forth by the FCC for an uncontrolled environment.

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.

# WARNING - When using this product, basic precautions should always be followed, including the following:

- A) Read all the instructions before using the product.
- B) To reduce the risk of injury, close supervision is necessary when the product is used near children.
- C) Do not put fingers or hands into the product.
- D) Do not use this product if the flexible power cord or output cable is frayed, has broke insulation, or any other signs of damage.
- E) For and off board charging system provided with a field wiring terminal or leads, the installation instructions shall state that the installation is intended to use copper wires only.
- F) For and off board charging system, when a pressure terminal connector, or the fastening hardware, are not provided on the unit as shipped. The instruction manual shall indicate which pressure terminal or component terminal assemblies are for use with the unit.
- G) With reference to (f), the terminal assembly packages and the instruction manual shall include information identifying the wire size and the manufacturer's name, trade name, or other descriptive marking by which the organization responsible for the product is identified
- H) When a pressure terminal connector provided on an off board charging system, for a field installed conductor requires the use of other than an ordinary tool for securing the conductor, identification of the tool for securing the conductor, identification of the tool and any required instructions for using the tool shall be included in the installation instructions.
- I) The instruction manual for a unit where the abnormal test is terminated by operation of the intended branch circuit over current protective device, shall include the word "CAUTION" and the following or equivalent: "To reduce the risk of fire, connect only to a circuit provided with \_\_\_\_\_ amperes maximum brand circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70" The blank space is to be filled in with the applicable ampere rating of branch circuit overcurrent protection.

# AVERTISSEMENT- Lors de l'utilisation de ce produit, il convient toujours de respecter des précautions élémentaires, notamment les suivantes:

- A) Lire toutes les directives avant d'utiliser le produit.
- B) Pour limiter les risques de blessure, exercer une surveillance étroite si le produit est utilisé à proximité d'enfants.
- C) Ne pas introduire les doigts ou les mains dans le produit.
- D) Ne pas utiliser ce produit si le cordon d'alimentation souple ou les cábles de sortie sont effilochés, si l'isolant est abîmé ou s'il y a d'autres signes de dommages.
- E) Lorsqu'un système de charge externe est fourni avec une borne pour connexion à pied d'œuvre ou des fils de raccordement, les directives d'installation préciseront que l'installation prévoit uniquement l'utilisation de fils de cuivre.
- F) Avec un système de charge externe, lorsque l'unité n'est pas livrée avec une borne de raccordement à pression ou le matériel de fixation, le manuel d'ultilisation devra indiquer quels assemblages de bornes à pression ou de bornes de composant doivent être utilisés avec l'unitié.
- G) En référence au point f), les boîtiers d'assemblage des bornes et le manuel d'utilisation doivent comprendre des renseignements indiquant la taille des fils et la raison sociale du fabricant, la marque de commerce ou toute autre inscription descriptive permettant d'identifier l'entreprise responsable de la fabrication de produit.
- H) Lorsqu'une borne de raccordement à pression fournie sur un système de charge externe pour un conducteur installé sur place nécessite d'utiliser un outil inhabituel pour fixer le conducteur, les directives d'installation préciseront la nature de l'outil et les instructions pour l'utiliser.
- I) Le Manuel d'utilisation d'une unité dans laquelle l'essai anormal se termine en utilisant le circuit de dérivation prévu plutôt que le dispositif de protection actuel devra comprendre le terme << ATTENTION >> et la formule suivante ou un équivalent : << Afin de limiter le risque d'incendie, raccorder uniquement à un circuit équipé d'un dispositif de protection contre les.

