Sierra Folding Bike Owner's Manual





930 W. 16th St., Suite C-2 Costa Mesa, CA 92627 www.EluxBikes.com



Thanks so much for purchasing your new E-Lux Sierra and welcome to a world of new possibilities!

With your new electric bike you will be able ride farther, faster, and easier than ever before on a bicycle which equates to Fun, Fun, and more Fun! All while travelling for less than half a cent a mile - it's not only good for your wallet but it's good for the planet!

If you have any questions, suggestions, concerns, or if you just want to say "Hi!" please feel free to drop us a line at info@eluxbikes.com.

Happy Trails!

From Jerry and J.P., co-founders of Elux Electric Bikes



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Carton/Box Contents

Caution – Please use care when opening box with sharp objects to avoid cutting any bicycle parts inside.

After opening please check the box for the following contents:

- 1. Bicycle
- 2. Handlebar
- 3. Small Box Containing Battery Charger
- 4. Small Box Containing Pedals, Manual, Stem Cap, Neck Cover, Cargo Straps, and Battery Charger

Assembly

E-Lux suggests taking your electric bike to a professional bike technician for assembly. This can be done for a nominal fee at your local bike shop. If you are comfortable assembling it on your own then please refer to the directions below. You can also view our assembly video on our website at www.eluxbikes.com/assembly.

What You Will Need

- 1. Scissors
- 2. 15 mm wrench
- 3. 4/5/6 mm Allen wrench(es)
- 4. All Purpose Grease

Warning – When removing packaging and zip ties do not use box cutters or knives as you may damage paint or tires. We suggest a pair of scissors.

- 1. Carefully remove the packing from around bicycle.
- 2. Carefully cut the zip ties holding the handlebars to the frame.
- 3. Place bike upright on wheels and kickstand.
- 4. Apply a small amount of grease inside of the gooseneck tube as



- well as the threads and slider on stem of gooseneck.
- 5. Making sure that all wires and cables are facing front and not twisted; install handlebar into handlebar stem tightening the bolt on the handlebar stem using an Allen wrench.
- 6. Tilt the handlebars up, making sure they are level and centered before tightening the two additional bolts.
- 7. Pull the seat clamp handle out from the seat post to release pressure allowing you to remove the seat. Remove <u>seat post</u> and <u>apply a small bit of grease inside seat tube</u>. Then replace seat.



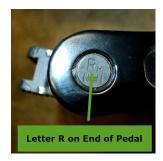
8. **Caution** – When installing pedals there are two separate pedals for the left and right sides of the bike. They have different thread



patterns and it is important to be sure each is installed on the correct side of the bike to avoid stripping the threads. The following procedure is performed so that when the bike is pedaled it tightens the pedals.

- 9. Apply small amount of grease on pedal threads.
- 10. **Right Pedal** Facing the bike from the chain side, place pedal with R on the end of its bolt on chain side of bike and tighten by turning clockwise (top of wrench turning towards the front of bike as noted in the picture below). Tighten pedal very tight.









11. **Left Pedal** – Facing the bike from the kickstand side, place remaining pedal on the kickstand side of bike and tighten by turning counter clockwise (top of wrench turning towards the front of bike as noted in the picture below.) Tighten pedal very tight.



- 12. Align seat on seat post to your comfort (typically hip height).
- 13. The recommended tire pressure for the Sierra is 20 PSI (the tire shows 30 PSI but we recommend 20).



Understanding the Display and Display Settings

1. First, turn on the battery



2. To power the bike on press the power button on the display.





3. To turn on backlight for display press the power button a second time.





4. The following pictures describe the data on the display:



















5. IMPORTANT! – <u>Holding the minus key down more than 5 seconds</u> will put the bike into walk mode. <u>The motor will turn on and the bike will move forward at 6 mph until you release the minus button or apply the brakes.</u>



6. Briefly pressing the set button will alter the data displayed at the bottom of the screen from <u>trip</u> to <u>time riding</u> and then finally to odometer.





7. Briefly pressing the plus or minus key will cycle the pedal assist mode. For more on pedal assist modes please read the section called "Understanding the Power/Throttle Control" section of the manual.

To quickly place the bike in throttle only mode cycle PAS mode to 0.



8. Pressing the set and plus key at the same time for 5 seconds will turn on the USB port. The USB indicator will appear. To turn off either press set and plus at the same time for five seconds or turn the display off and then on again. <u>USB port is located on bottom of display.</u>





9. There are two indicators for power. One has black bars and indicates power being consumed/used. It will vary with terrain/load on the system. The other is a system power mode indicator. The indicator is a small check box next to eco, normal, or power. Directions for changing the mode are in the next section. Use eco mode for longer trips to save battery. Use Power mode for higher performance and hill climbing.





10. Holding the set key down for 5 seconds will place the display into the first of 5 setting modes. Use the plus and minus keys to adjust the settings in each mode. Briefly pressing the set key again will cycle to the next setting mode.





11. Set Mode 0 – Allows you to select system power mode using plus and minus keys.



12. Set Mode 1 – Allows you to reset the trip odometer by <u>briefly</u> pressing minus key. <u>WARNING!</u> <u>Holding minus key for 5 seconds</u> will put bike into walk mode and bike will begin moving at 6mph unless you are holding the brake lever.



13. Set Mode 2 – Indicates bike top speed.





14. Set Mode 3 – Indicates wheel size. The Sierra should be set at 24 inches.



15. Set Mode 4 – Allows you to change the from MPH to KPH using plus and minus keys.





16. Hold set button down for 5 seconds to return to operating mode.



17. In operating mode the volt indicator will display 54 volts when the battery is fully charged. At 42 volts you will be out of power.





Folding Your Sierra

Your new E-Lux Sierra has three folding features that minimize the space required to store and travel with your bike. The body folds in half, the pedals fold in and the handlebars fold down. Below are instructions and pictures for each of the three folds.

1. To fold the pedals in, push the pedal in towards the bike and then turn the pedal to left.







2. To fold the Sierra body, lift the safety lever above the latch and then pull the latch out (towards you). Now the body of the bike is ready to fold.



The bike folds in half as pictured below as pictured below.







3. To fold the handlebars, pull the safety latch down and gently pull the handlebars down to the right side of the bike.







Battery Care and Charging

Your E-Lux Bike comes with a 48 Volt 11amp hour lithium battery and charger. Please be aware of the following:

- 1. Only use the charger provided with your battery. Using a different charger may result in overheating, fire, or an explosion damaging your battery and everything around it.
- 2. You should recharge your battery after each use or when the battery indicator on the battery or display indicates that the battery charge is low.







- 3. Battery may be charged while attached to bike or separately. The battery may be removed by turning the key to the unlocked position and sliding the battery out.
- 4. To charge the battery plug the charger into the wall outlet <u>first</u> and then into the port located on the side of the battery.







5. Continue charging until the red light turns green indicating a full charge or the display shows the battery is full. (Aprox. 4-6 hours.)



- 6. Then first remove the charger power plug from the wall followed by the battery side plug.
- 7. To avoid shortening its lifespan <u>always recharge your battery</u> <u>before it becomes completely discharged</u>. Completely discharging the battery reduces the number of recharge cycles and reduces it's capacity. It can also ruin the battery. It is ok to charge the battery after every ride.



- 8. Never store the battery in a discharged state.
- 9. If you need to store your battery for an extended time, charge it fully, store it in a cool dry place, and recharge every three months.
- 10. Do not subject the battery to high temperatures or leave the battery in direct sunlight for extended periods of time.
- 11. Do not place the battery near fire or corrosive substances.
- 12. Do not immerse the battery in water or other liquids.
- 13. Do not open or alter the battery or battery charger.
- 14.If you experience any unusual odors or sounds coming from your charger or battery unplug it immediately and contact support@eluxbikes.com.

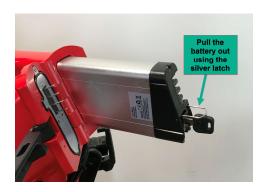
Battery Removal

They keys to your battery are attached to the handlebars. To remove the battery, fold the bike in half as shown above under "Folding Your Sierra". Once you have the bike folded in half, insert the key as shown below and unlock the battery.





After the battery is unlocked, simply pull the battery out using the silver removal latch.



Battery Life

Under normal use your battery is designed to undergo 800 charging and discharging cycles. After much use its charge holding capacity will decrease and eventually not hold enough charge even for shorter trips. At this point you should contact E-Lux Bikes or your dealer to order a new battery.



Before Your First Ride....

There are a few things you will need to know before your first ride. Follow these quick steps and you will be on the road in no time....

1. Adjust the Seat – Pull the seat clamp handle out from the seat post to release pressure allowing you to raise or lower the seat. After seat is at desired level turn handle until clamp is tight and then push clamp in towards seat post to lock.



- 1. **Helmet** E-Lux suggests that you always wear a helmet when operating your electric bike and the federal government says that it is the law that you wear one. Please be sure to wear a quality helmet and follow the manufacturer's directions for fit and use.
- 2. **Safety Check** Please perform a routine safety check of your entire electric bike before each ride. Look for any loose nuts or bolts. Check that the brakes are operating properly. Be sure the tires are at 40-45 psi and have no cracks or other excessive wear



before riding.

- 3. **Safe Location** your new E-Lux bike is a powerful machine. It is important to choose a safe area to familiarize yourself and become comfortable with all of its functions, features, and performance. Choose an area away from other bikes, cars, or people. Only move from this area after you have completed the suggestions in step 6 "Understanding Power/Throttle Control."
- 4. **Understand the Power/Throttle Control** Your E-Lux bike can be used in 3 modes. Pedal only, throttle only, and pedal assist. You can use the power button on the top left of the display to turn on and off the power to the bike.
 - A. When the **power is turned off** the bike is in **pedal only mode** and operates as a standard bicycle.



B. When the power is turned on the assist level will be at 1. Press the "-" key to set PAS to 0. The bike is now in *throttle only mode*. You can pedal the bike like a standard bicycle or push the throttle down to bring the bike from zero power to full power. Be sure you are on the bike as it will move when you depress the



throttle. You can stop the motor by releasing the throttle or applying the brake.



C. When PAS is set from 1 to 5 the bike is in **pedal assist mode.** Use the "+" and "-" keys to adjust the PAS level. As you pedal the motor will assist you as you ride. E-Lux suggests starting at a lower setting of 1 – 3 until you are used to this feature.



- D. When in Pedal Assist Mode the throttle will override the pedal assist speed limit.
- E. <u>Caution!</u> Your E-Lux bike is a powerful machine. When starting in pedal assist mode



with the power level at 5 the bicycle will accelerate from a stop to full power quickly. Do not ride the bike with pedal assist at level 5 until you have ridden the bike several times at power level below 3 in a safe area as described above and are completely comfortable. It is safest to gently depress the brakes while turning with pedal assist on.

Stopping the Motor

- A. The left and right brake levers have a built-in feature that will stop the electric motor any time they are squeezed.
- B. In throttle only mode releasing the throttle will stop the motor as well.
- C. While in pedal assist mode stop pedaling and release the throttle or squeeze the brake handle to stop the motor.
- D. If you keep pedaling after the brake lever is released the assist will start the motor again.



5. **Pedal Assist Mode Speeds** – Following are <u>approximate speeds</u> on a flat surface in the corresponding pedal assist modes:



Setting 1 - 6 mph

Setting 2 - 10 mph

Setting 3 - 13 mph

Setting 4 - 17 mph

Setting 5 - 20 mph

Brakes

Your E-Lux Bike is equipped with front and rear disc brakes.

1. Pulling the left brake lever in will apply brakes to the front wheel. Pulling the right lever in will apply brakes to the rear wheel.



- 2. Be aware that using too much front brake force can cause the front tire to lock or slide. Too much pressure on the front brake can also cause the rider to to be thrown over the front hadlebars.
- 3. Always apply pressure to the front brake grdually and use both front and rear brakes at the same time.



- 4. Occasionally the disc brakes may make a slight scraping sound although they are not being applied. This is normal and is no cause for alarm.
- 5. When depressing the brake lever the rider should feel a good bit of pressure pushing back and the brake lever should not touch the handlebar. If the lever feels easy to depress or touches the handle bar then the brakes should be adjusted by a qualified bicycle technician before riding.
- 6. Be sure to slow down when turning and <u>always depress the</u> <u>brakes slightly when turning while using the pedal assist.</u>

Gears

Your E-Lux bike is equipped with a 7 speed Shimano Gear System. The shifter is located on the right-hand side of the handlebars. Lower gear numbers are used for climbing hills and slower speeds. Upper gears are used for flatter surfaces and faster speeds. Be sure you are pedaling while changing gears. To shift gears up from 1 to 7 depress the shift button. To shift gears down from 7 to 1 push the shift handle away from the rider...





When looking at the sprocket on the rear hub you will notice that when the shifter is in 1st position the chain is on the largest sprocket.



When the shifter is in the 7th position the sprocket should be on the smallest sprocket.



Occasionally the shifter gear number and sprocket locations may not match. If this happens then the derailleur needs an adjustment. Adjustments can and should be done by a qualified bicycle technician.



Tires

- 1. Before each ride always inspect your tires for cracks or wear. If any issues are found always address before riding.
- 2. Check tire pressure with a quality tire gauge and be sure the pressure is between 35-40 psi.
- 3. If tire will no longer hold air then the tube will need to be replaced.

Repairing the Rear Tire

Your E-Lux Electric Bike has a powerful electric motor that is located in the rear hub of the bicycle. If removal of the rear tire is necessary you must first disconnect the power cable that runs to the hub. This can be done by pulling both ends of the cable opposite directions at the connector. Please see photo below for location. You will need to cut the ties holding the cable to the frame. When putting the tire back on the connector has an arrow on each plug that has to be aligned as you plug it in. If you do not have a bike stand, put the bike on its side on soft carpet and remove the tire. Do not put the bike upside down as it will damage the throttle and display on the handle bars.





Appearance and Care

- 1. When Cleaning is needed always use automobile tar and bug remover or WD-40 and wipe off with cloth. Do not get oil on the disk brakes.
- 2. Avoid spraying water directly on your E-Lux Bike to prevent electrical issues and corrosion.
- 3. Avoid storing your E-Lux Bicycle in direct sunlight as well as areas that are damp or wet.

Commonly Asked Questions

Do I need a driver's license to ride my E-Lux Bike? No because it is considered a bicycle. Federal and most State laws require that you wear a helmet.

How far can I travel on one charge? Many variables affect the range you can travel such as wind, terrain, etc. On average you can travel at least 20 miles. Up to 30+ if you help by pedaling and slow down to 15 mph.

How much does it cost to charge the battery? Again there are many variables but a general estimate is about 5 cents a charge.

What is the cost per mile to ride my E-Lux Bike? – Using the averages above it costs about a half a penny per mile! That works out to about 1200 MPG! All while reducing your carbon foot print every time you use your bike instead of your car!

What is the lifespan of my battery? Your E-Lux battery is a lithium battery and can be recharged about 1000 times. Most batteries will last 5 to 7 years.



Technical Assistance

For technical assistance, warranty assistance or replacement parts please contact support@eluxbikes.com.

Error Code Definitions

Error Codes	Definition
0	OK
1	Current Abnormality
2	Throttle Abnormality
3	Motor Abnormality
4	Motor Speed Sensor Abnormality
5	Brake Abnormality
6	Low Voltage



7	Motor Stop
8	Controller Communication Abnormality
9	Panel Communication Abnormality

Important! Read Before Riding!

- 1. Electric bikes can be dangerous to use. The user or consumer assumes all risk of personal injuries, damage, or failure of the bicycle or system and all losses or damages to himself, others, and property arising as a result of using this bicycle.
- 2. Always wear a helmet.
- 3. E-Lux bikes are designed for one passenger only. Do not operate bicycle with more than one passanger on board.
- 4. Do not open the battey or battery charger. If you notice anything unusual while charging please unplug the charger and contact E-Lux.
- 5. This manual is not intended as a detailed user, service, repair or maintenance manual. Please seek assistance from a qualified technician for service, repairs or maintenance.
- 6. Your insurance policy may not cover accidents involving the use of this bicycle. Please contact your insurance company or agent to insure proper coverage.
- 7. WARNING: As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injuries to the rider. Any form of



crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

One Year Limited Warranty

ELUX, LLC("ELUX") warrants that all new ELUX Electric Bikes ("Bicycle") and components therein are warranted to the original retail purchaser ("Purchaser") against manufacturing defects in materials and/or workmanship for a period of one (1) year from the date of original retail purchase.

Terms of Limited Warranty

This warranty becomes effective on the date of original retail purchase. This warranty is not meant to suggest or imply that the Bicycle cannot be broken or will last forever. It does mean that the Bicycle is covered subject to the terms of the warranty. This warranty applies only to the original Purchaser of a Bicycle and is not transferable to subsequent owners or any other party. This warranty is void if the Bicycle is subjected to abuse, neglect, improper repair, improper maintenance, alteration, modification, an accident or other abnormal, excessive, or improper use, at the sole discretion of ELUX. During the duration of this warranty, ELUX, at their cost, will either repair the Bicycle or Bicycle component(s), or at ELUX' sole discretion, will replace any defective Bicycle or component(s) with the same or equivalent component(s). The foregoing warranties are in lieu of and exclude all other warranties not expressly set forth herein, whether express or implied by operation of law or otherwise, including, but not limited to any warranties of merchantability or fitness for a particular purpose. In no event shall ELUX be liable for:



incidental, consequential or punitive damages arising from use or unavailability of the Bicycle or component(s) in any manner, including, without limitation, damages for personal injury, property damage, or economic losses, whether based on contract, warranty, negligence, product liability, or any other theory. ELUX' liability hereunder is expressly limited to the repair or replacement of Bicycle or component(s), or at ELUX' sole discretion, to the net amount paid by the original retail purchaser.

If the original retail Purchaser elects to repair a defective Bicycle or component(s) himself or use the services of someone other than ELUX (or its designee) to repair the Bicycle, or if Purchaser uses a replacement part not authorized by ELUX, ELUX will not be liable for any damage, failure or loss caused by the use of such unauthorized service or parts. If the Purchaser has a valid warranty claim as set forth in the Procedures and Terms and Conditions (the "PTC"), this limited warranty includes the cost of shipment or transportation of the Bicycle or Bicycle component(s) to or from ELUX in accordance with the PTC. If the Purchaser does not have a valid warranty claim as set forth in the PTC, this limited warranty does not include such shipment or transportation costs.

Exclusions:

This warranty does not cover:

- normal wear and tear;
- damage or failure from abuse, neglect, misuse, or accident;
- damage from stunt riding, ramp jumping, acrobatics, or similar activities or any activity that is not consistent with the intended use of the Bicycle;



- damages resulting from failure to follow Instructions for Use and Warnings as provided in the Owner's Manual for the Bicycle;
- damages resulting from improper charging of the battery pack or use of any charger not supplied by ELUX;
- installation of any parts, accessories, or electrical component(s) not originally intended for or compatible with the Bicycle as sold, or any modification of the frame or any component(s) originally supplied; tires, brake pads, chains, lights, motors, battery packs, displays, or vehicle controllers that have been opened for any purpose whatsoever, other than by ELUX or its authorized agents. All warranties are void if the Bicycle is used for any purpose other than the reasonable intended use of the Bicycle.

Procedures:

Warranty work must be performed by ELUX or an authorized agent of ELUX. Proof of purchase must be provided. To qualify for warranty services, a Warranty Product Return Authorization Number ("WPRAN") must be obtained by the original retail purchaser from ELUX. The original retail Purchaser must contact an ELUX representative to discuss the problem with the Bicycle and to obtain a WPRAN. Upon issuance of a WPRAN, the Bicycle or Bicycle component(s) must be returned to ELUX at its designated location for warranty work. The original retail Purchaser is responsible for the return of the Bicycle, undamaged in transit, to ELUX for warranty work and for the costs associated with shipping and insuring the Bicycle and component(s) when returning them. If ELUX' authorized qualified technicians determine a warranty claim is valid and conforms with this warranty, ELUX will repair or replace component(s) or replace the entire Bicycle at ELUX' cost, including materials and labor. For valid warranty claims hereunder, ELUX will reimburse the original retail Purchaser for shipping and insurance costs incurred as a result of returning



the Bicycle to ELUX for warranty work at standard ground shipping rates, and ELUX will pay for shipping costs to return the Bicycle to the original retail Purchaser.

Consumer Rights:

This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, so some of the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in effect.



Recording Your E-Lux Bike Information

Model: E-Lux Electric Beach Cruiser

Serial Number: Color: _____ Date of Purchase:_____ Dealer's Name:_____ Dealer's Ph#:_____ Dealer's Email:



Notes: