AVENTON

User Manual

Abound LR Electric Bicycle

Scan to watch assembly video

Scan to download Aventon App

English • Original instructions •

Thank you for purchasing the Aventon abound LR Ebike.

We take pride in bringing you a quality product that will offer years of enjoyment. Please read and fully understand this manual before assembling and riding your bike. If you have any questions after reading this manual, please refer to the Aventon Help Center, contact us via our contact us page, or give us a phone call.

We are here to help!
Aventon Help Center: https://rideaventon.zendesk.com/hc/en-us
Support link: https://rideaventon.zendesk.com/hc/en-us/requests/new
Phone: 1-866-300-3311

TABLE OF CONTENTS

USING THIS MANUAL ---- 02

GENERAL SAFETY ---- 02

CHARGER SAFETY ---- 05

SPECIFICATIONS ---- 08

EBIKE ASSEMBLY ---- 10

BATTERY CHARGING ---- 16

QUICK START GUIDE ---- 19

OPERATION INSTRUCTION ---- 29

USER MAINTENANCE AND SERVICE INSTRUCTIONS ---- 30

LIMITED WARRANTY ---- 35

LINK TO ASSEMBLY VIDEO AND ONLINE RESOURCES ---- 35

USING THIS MANUAL

This manual contains product details, equipment information, operational maintenance, and other helpful tips for owners. Read it carefully and familiarize yourself with the ebike before using it to ensure safe use and prevent accidents. This manual includes numerous warnings and cautions related to safe operation and the consequences of improper setup, operation, and maintenance.
All information in this manual should be reviewed carefully, and if you have any questions, please contact Aventon immediately.

The notes, warnings, and cautions within the manual are marked by the triangular Caution Symbol on the left side and should be treated with special care. Users should also pay particular attention to information in this manual beginning with "NOTICE".

Keep this manual, along with any other documents that came with your bike, for future reference. However, please note that all content in this manual is subject to change or withdrawal without notice. Visit Aventon's help center at https://rideaventon.zendesk.com/hc/en-us to view and download the latest version. Aventon strives to ensure the accuracy of its documentation and assumes no responsibility or liability for any errors or inaccuracies that may appear within.

Because it is impossible to anticipate every situation or condition that may occur while riding, this manual makes no representations about the safe use of bikes under all conditions. There are inherent risks associated with using any bike that cannot be predicted or avoided, and these risks are the sole responsibility of the rider.

GENERAL SAFETY

INSTRUCTIONS PERTAINING TO RISK OF FIRE or ELECTRIC SHOCK

IMPORTANT SAFETY INSTRUCTIONS

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 broken insulation, or any other signs of damage.
e. This equipment is not intended to be used at ambient temperatures less than -4°F (-20°C) or above ambient temperatures of 113°F (45°C).
f. The battery is intended to be charged when the ambient temperature is between 32°F (0°C) and 104°F (40°C). Never charge the battery when ambient temperatures are outside this range.”
g. If the battery overheats, leaks, emits a strange odor or noise, or shows changes in shape or color, immediately cut off the power and stop using the battery. Place the battery outside on a nonflammable surface, such as concrete or brick, in a well-ventilated area and stay away from it. Contact Aventon’s after-sales department or designated authorized service outlets for maintenance. If there is a fire or significant hazard, contact the fire department immediately for professional assistance.

WARNING! It is your responsibility to comply with all traffic related laws and to use proper equipment. This includes appropriate cycling attire and bike maintenance.

Observe all local bicycle traffic laws and regulations.
Observe regulations about bicycle lighting, licensing, riding on pavements/sidewalks, bike paths / trail use, helmet laws, child laws related to cycling, and special bicycle traffic laws. It is your responsibility to know and obey your local laws.

- When riding a bike, always wear a properly fitted helmet that covers the forehead. Many locations require specific safety devices. It is your responsibility to familiarize yourself with the local laws, rules, and regulations where you ride and to comply with all applicable laws, including equipping yourself and your bike as the law requires.
- Unless otherwise stated, a rider's weight and luggage should not exceed what is listed in the specifications section.
- Before you ride your bike, always check to make sure everything is working properly, correctly aligned, and torqued to spec.
- Be familiar with the controls of your bicycle, such as control pad, brakes, pedals and shifting etc..

- Keep all body parts or any obtrusive objects away from the sharp chainrings when pedaling. Failure to wear proper attire could lead to injuries.
- While riding, remember you are sharing the road or path with others. i.e. motorists, pedestrians and other cyclists.
- Always be a defensive rider. Always assume that others do not see you and expect the unexpected.
- Always be aware of your surroundings. Be alert and responsive to:
  1. Motor vehicles of all types and in all directions.
  2. Unexpected movement of obstacles.
  3. Nearby pedestrians.
  4. Children or animals in the area.
  5. Imperfections of bike paths or paved roads including potholes, uneven surfaces, loose gravel, construction, and debris.
  6. Warning, hazard and yield signs.
- Ride in designated bike lanes when available and always ride in the same direction of traffic.
- Acknowledge and stop at ALL stop signs and traffic lights.
- When coming to a complete stop, look both ways at street intersections before continuing onward.
- Use official hand signals for turning and stopping.
- Do not ride with headphones.
- Never hold onto another vehicle.
- Do not weave through traffic or make unexpected moves or turns.
- Rules that govern the right-of-way for motorists apply to cyclists. A bicyclist should always be prepared to yield.
- Do not ride while under the influence of alcohol or drugs.
- Avoid riding in bad weather when visibility is obscured, for examples at dawn, dusk, or in the dark such conditions increase the risk of accidents.

Wet Weather

It is recommended not to ride in wet weather if it is avoidable. Ride in wet weather only if necessary. An electric bike is not meant for use in heavy rain or streams. Never immerse or submerge this product in water or liquid as the electrical system may be damaged.

- In wet weather you need to take extra care when operating this bike.
- Decrease riding speed to help you control the bike in slippery conditions.
- Brake earlier since it will take longer to slow down and come to a stop than when operated in dry conditions.
- Take care to be more visible to others on the road. Wear reflective clothing and use approved safety lights.
- Road hazards are more difficult to see when wet; proceed with caution.

NIGHT RIDING

Cyclists should exercise extra caution when riding at night. Bicyclists are very difficult for motorists and pedestrians to see in the dark and in many cases, night riding can be more dangerous than day riding.

Individuals of an appropriate age who are aware of the increased risks should take extra care when riding at dawn, dusk or at night. Please note that it is important to choose suitable apparel and specialized equipment when riding in unfavorable conditions to reduce the risk of injury.

Warning! Reflectors should not worn as a substitute for required lighting. Cyclists are nearly invisible to other cyclists and motorists if the necessary lights and reflective gear are not used. If you ride at night, take all required precautions to make yourself visible through the use of lights and reflectors. Lack of adequate lighting measures may result in serious injury or death. As a moving cyclist, reflectors are designed to reflect off of car and street lights to help you become more visible and recognizable when riding.

Caution! Reflectors and their mounting brackets should be checked regularly to ensure they are clean, straight and securely mounted. Check to be sure you comply with all local laws about night riding. The following is recommended.

- It is important you take steps to enhance your visibility by wearing light-colored, reflective clothing and accessories. There are plenty of proper reflective gear options that can be worn:
  Vests, armbands, leg bands, stripes on your helmet, and blinker attached to your body and or bicycle.

- Make sure your clothing or miscellaneous items do not obstruct the visibility of your reflectors and lights.
- Make sure that your bicycle is equipped with reflectors for riding at dawn, dusk or at night.
- Always ride slowly when riding at night.

Throttle on Demand

With throttle on demand, you can throttle the bike from a complete stop. This feature is to help give you that extra push when you need it on a steep hill, when hitting multiple stop signs, etc. However, we strongly recommend to **pedal first and throttle second** to ensure proper stability and preparedness.

Assembly and Fit

Correct assembly and fit are essential elements to ensure your bicycling safety, performance, and comfort. Even if you have the experience, skill, and tools to complete these essential steps before your first ride, Aventon recommends having a certified, reputable bike mechanic to check your work.

NOTICE: If you do not have the experience, skill, and tools to complete assembly and fit, Aventon highly recommends having a certified, reputable bike mechanic complete these procedures as well as any future adjustments or tuning.

NOTICE: A critical aspect of assembling your bike is securing the front wheel and checking the tightness of the rear wheel axle nuts. Aventon bikes use bolted on, through axle or quick release wheel mounting mechanisms. These mechanisms may become loose or unsecured during shipment or over time. The torque and security of all wheel mounting hardware should be inspected upon arrival and on a regular basis. Both wheels need to be properly secured before operating your bike.

Mandatory Equipment and Use Locations

Before riding, ensure you have all required and recommended safety equipment and are following all laws pertaining to use of an electric bike in your region. For example, these laws may specify the need for mandatory equipment, use of hand signals, and where you can ride.

Changing Components or Attaching Accessories

The use of non-original components or spare parts can jeopardize the safety of your ebike, void your warranty and, in some cases, cause your ebike to not conform with laws pertaining to your bike.



The replacement of original components or installation of third-party accessories or accessories not from Aventon explicitly recommended for your bike model is at your own risk. Using aftermarket accessories or components that have not been tested by Aventon for safety and compatibility may void your warranty, create an unsafe riding condition, damage property or your bike by Aventon, or result in serious injury or death.



Pre-Ride Safety Checklist

Always complete the "Pre-Ride Safety Checklist" included in this manual before each ride, and make sure to check all hardware for correct torque during assembly. Failure to complete the "Pre-Ride Safety Checklist" and follow the recommended service and maintenance schedules for your ebike can cause component or performance failure, loss of control, serious injury, or death.

Electrical System

The electrical system powers several components on your ebike that control different operating conditions and user preferences. It is critical that you familiarize yourself with all aspects of your ebike's electrical system and check to see if it is working correctly before every ride. Some model's front and rear brake levers contain safety power cutoff switches,which disable the hub motor's assistance when applied,and both levers should be checked for correct operation. The throttle should provide smooth acceleration when gradually applied.If the throttle,brake lever cutoff switches,pedal assistance,or lighting are functioning abnormally, intermittently, or not working, please discontinue the use of your ebike immediately and contact the Aventon Support team for assistance. Specific ebike models may or may not be equipped with a throttle and/or brake lever cutoff switches.

Brakes

Ensure that the brakes and their system components are free from damage, properly secured and working correctly. When fully squeezed, both front and rear brake levers should not be touching the handlebar. Take your bike to a certified, reputable bike mechanic to have the brakes repaired if you find a problem.

Tires and Wheels

Your wheels should always spin straight and must be repaired or replaced if they wobble side to side or up and down when spinning. If your wheels become untrue or spokes loosen, which can happen with normal use, we recommend that a certified, reputable bike mechanic performs all wheel tuning and truing operations on your Aventon bike. Do not attempt to true wheels or tighten spokes unless you have adequate knowledge, tools, and experience. Ensure the tires and inner tubes are in good working condition without any visual damage and have the correct amount of air pressure. Always replace tires and inner tubes with punctures, cuts, or damage before you ride. Tires without the correct amount of air pressure can reduce performance, increase tire and component wear, and make riding your bike unsafe.

Accessories, Straps, and Hardware

Ensure all hardware is secured and all approved accessories are properly attached per the specific component manufacturer's instructions. It is good practice to look over all hardware, straps, and accessories before each ride and if you do discover something wrong or something that you are not sure about, have it checked by a certified, reputable bike mechanic.

Suspension, Handlebar, Grips, and Seat Adjustments

Before riding, ensure all these crucial components are well-prepared: If your bicycle is equipped with suspension, make sure to properly adjust it before riding. Align and secure the handlebar and handlebar stem according to your preference for enhanced control and comfort. Ensure the handlebar grips are securely in place, preventing any unintended movement during your ride. Properly align the seat and seatpost, securing the quick-release mechanism for a comfortable seating position and safety. By addressing these aspects, you'll be on your way to a safer, more comfortable biking experience.

Battery Charged, Secured, and Unplugged

Before your ride, take these crucial steps: Verify that the battery is sufficiently charged and in proper working order, ensuring that your bike performs optimally. Double-check that the battery charger is unplugged from both the outlet and the battery, and store it in a secure location to prevent potential hazards. The battery MUST be securely locked onto the frame battery mount for safe and efficient operation. Never attempt to operate the electrical system without the battery securely in place. When installing the battery into the frame, ensure a proper fit by pushing it firmly until you hear a distinct "CLICK" sound, signaling that it's securely attached and ready for your ride.

CHARGER SAFETY INFORMATION

- The charger should only be used indoors in a cool, dry, ventilated area, on a flat, stable, hard surface.
- Avoid charger contact with liquids, dirt, debris, or metal objects. DO NOT cover the charger while in use.
- Store and use the charger in a safe place away from children.
- Fully charging the battery before each use can help extend the life of the battery and reduce the chance of over-discharging.
- DO NOT charge the battery with any chargers other than the one originally supplied by Aventon Bikes or a charger designed for use with your specific bike purchased directly from Aventon Bikes.
- The charger works on 100-240V 50-60 Hz standard home AC power outlets and automatically detects and accounts for incoming voltage. DO NOT open the charger or modify voltage input.
- DO NOT yank or pull on the cables of the charger. When unplugging carefully remove both the AC and DC cables by pulling on the plastic plugs directly, and not on the cables.
- Always position the charger on a concrete or brick surface, as it may generate heat during peak charging cycles. If, at any point, the charger becomes excessively hot to the touch, emits an unusual odor, or displays any other signs of overheating, immediately cease using the charger and promptly contact Aventon Support for assistance and guidance.
- DO NOT leave your bike charging unattended.
- If the bike is stored, check the battery every month, and if necessary, use the Aventon Bike charger to charge the battery to 75%.
- If the battery overheats, leaks, emits a strange odor or noise, or shows changes in shape or color, immediately cut off the power and stop using the battery. Place the battery outside on a nonflammable surface, such as concrete or brick, in a well-ventilated area and stay away from it. Contact Aventon’s after-sales department or designated authorized service outlets for maintenance. If there is a fire or significant hazard, contact the fire department immediately for professional assistance.

Charge the battery only with the charger originally supplied with the bike from Aventon Bikes, or a charger purchased directly from Aventon Bikes, designed for use with your specific bike serial number, as approved by Aventon Bikes. Never use an aftermarket charger, which can result in damage, serious injury, or death.

Please take special care in charging your bike from Aventon Bikes in accordance with the procedures and safety information detailed in this manual. Failure to follow proper charging procedures can result in damage to your bike, the charger, or personal property, and/or cause serious injury or death.

General Operating Rules

Notice: Pay special attention to all the general operating rules below before operating your bike from Aventon.

- When riding, obey the same road laws as all other road vehicles as applicable by law in your area.
- For additional information regarding traffic/vehicles laws, contact the road traffic authority in your area.
- Ride predictably, in a straight line, and with the flow of traffic. Never ride against traffic.
- Use correct hand signals to indicate turning.
- Ride defensively; to other road users you may be hard to see.
- Concentrate on the path ahead. Avoid potholes, gravel, wet or oily roads, wet leaves, curbs, train tracks, speed bumps, drain getes, thorns, broken glass, and other obstacles, hazards, and puncture flat risks.
- Cross train tracks at a 90-degree angle or walk your bike across.
- Expect the unexpected such as opening car doors or cars backing out in front of cyclists.
- Be careful at intersections and when preparing to pass other vehicles or cyclists.
- Familiarize yourself with all the features and operations of the bike by Aventon Bikes. Practice and become proficient at shifting gears, applying the brakes, using the pedal assist system, and using the throttle in a controlled setting before riding in riskier conditions.
- Wear proper riding clothes including closed-toe shoes. If you are wearing loose pants, secure the bottom using leg clips or elastic bands to prevent them from being caught in the chain or gears. Do not use items that may restrict your hearing.
- Check your local rules and regulations before carrying cargo.
- When braking, apply the brakes evenly and smoothly. If brakes are not correctly applied, they may lock up and lead to you losing control and/or falling.
- Maintain a comfortable stopping distance from all other objects, riders, and vehicles. Safe braking distances are based on factors such as road surface and light conditions among other variables.

Safety Notes

The following safety notes provide additional information on the safe operation of your bike from Aventon and should be closely reviewed. Failure to review these notes can lead to serious injury or death.

- All users must read and understand this manual before riding their bike from Aventon Bikes. Additional manuals for components used on the bike may also be provided and should be read before installing or using those components.
- Ensure that you comprehend all instructions and safety notes/warnings.
- Ensure the bike fits you properly before your first use. You may lose control or fall if your bike is too big or too small.
- Always wear an approved bicycle helmet whenever riding a bike and ensure that all helmet manufacturer instructions are used for fit and care of your helmet. Failure to wear a helmet when riding may result in serious injury or death.
- Ensure correct setup, tightening, and torquing to recommended torque values is performed on your bike before first using it and check the setup, tightening, and condition of components and hardware regularly.
- It is your responsibility to familiarize yourself with the laws and requirements of operating this product in the area(s) where you ride.
- Ensure the handlebar grips are undamaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- Do not use this product with standard bike trailers, stands, vehicle racks, or accessories that Aventon has not tested for safety and compatibility and has verified as safe and compatible with the bike.
- Off-road riding requires close attention, specific skills, and presents variable conditions and hazards. Wear appropriate safety gear and do not ride alone in remote areas. Check local rules and regulations about whether off-road ebike riding is allowed.

- DO NOT ENGAGE IN EXTREME RIDING. This includes but is not limited to jumps, stunts, or any riding that exceeds your capabilities. Although many articles/advertisements/catalogs depict extreme riding, this is not recommended nor permitted, and you can be seriously injured or killed if you perform extreme riding.
- Bikes and bike parts have strength and integrity limitations,and extreme riding, including but not limited to jumps, stunts, etc., should not be performed as it can damage bike components and/or cause or lead to dangerous riding situations in which you may be seriously injured or killed.
- Failure to perform and confirm proper installation, compatibility, proper operation, or maintenance of any component or accessory can result in serious injury or death.
- After any incident, you must consider your bike unsafe to ride until you consult with a certified, reputable bike mechanic for a comprehensive inspection of all components, functions, and operations of the bike.
- Failure to properly charge, store, or use your battery will void the warranty and may cause a hazardous situation.
- You should check the operation of the brake motor cutoff switches before each ride. The brake system is equipped with an inhibitor that cuts off power to the electric motor whenever the brakes are squeezed. Check proper operation of brake motor cutoff switches before riding.
  Note: Not all models are equipped with cutoff switches.
- Extreme care should be taken when using the pedal assistance sensor and throttle on this product. Ensure you understand and are prepared for the pedal assistance to engage as soon as pedaling is underway.
- Users must understand the operation of the thumb switch throttle and pedal assistance sensors before using the bike and must take care to travel at speeds appropriate for the usage area, riding conditions, and user experience level. Always use the lowest assist level until you are comfortable with the bike and feel confident in controlling the power.
- Any aftermarket changes to your bike from Aventon Bikes not expressly approved by Aventon Bikes could void the warranty and create an unsafe riding experience.
- Because electric bikes are heavier and faster than normal bikes, they require extra caution and care while riding.
- Take extra care while riding in wet conditions including decreasing speed and increasing braking distances. Feet or hands can slip in wet conditions and lead to serious injury or death.
- Do not remove any reflectors.

General Warnings

Like any sport, bicycling involves risk of damage, injury, and death. By choosing to ride a bike, you assume the responsibility for that risk, so you need to know, and practice the rules of safe and responsible riding and the proper use and maintenance of this bike. Proper use and maintenance of your bike reduces risk of damage, injury, and death.

Biking and controlled substances do not mix. Never operate a bike while under the influence of alcohol, drugs, or any substance or condition that could impair motor functions, judgement, or the ability to safely operate a bike or another vehicle.

The abound LR is designed for use by persons 18 years old and older. Riders must have the physical condition, reaction time, and mental capability to ride safely and manage traffic, road conditons, and sudden situations, as well as respect the laws governing electric bike use where they ride, regardless of age. If you have an impairment or disability such as a visual impairment, hearing impairment, physical impairment, cognitive/language impairment, a seizure disorder, or any other physical condition that could impact your ability to safely operate a vehicle, consult your physician before riding any bike.

A Note for Parents and Guardians

As a parent or guardian, you are responsible for the activities and safety of your child. The abound LR is not designed for use by children under the age of 18. If you are carrying a passenger in a child safety seat, they should also be wearing a properly fitted and approved helmet.

Caution! Aventon cannot be held responsible for accidents, injuries, or product malfunctions resulting from any unauthorized changes, modifications, or tampering with any part of the original specifications.

SAVE THESE INSTRUCTIONS

SPECIFICATIONS

Model Name	Aventon abound LR
Max. Load Capacity (Rack included)	440 LBS. / 200 kg
Max. Speed	20mph / 32km/h
Motor	36 V 750 W Brushless Hub
Battery	36V 19.88Ah Li-ion
Range Average Per Charge	60 Miles Average
Wheel Size	20 x 3.0" Front / Rear
Tire Pressure	Inflate to 30-50 PSI based on rider's weight and riding conditions
Max. Load for Rack	33 LBS / 15 kg (Front); 143 LBS / 65 kg (Rear)
Charger	Max. DC 42V 4.0A
Charging Time	Approx. 5-6 Hours
Water Resistance	Components: IPX6 / Bike: IPX5
Weight	89 LBS / 40.5 kg

* Range Per Charge is measured under the conditions that power is sufficient, with a 75kg load, at 86°F(30°C), 70% humidity, on a level road, and in the lowest pedal assist mode. Actual results may vary based on differences in temperature, load, wind speed, road conditions and other factors.

RIDING RANGE

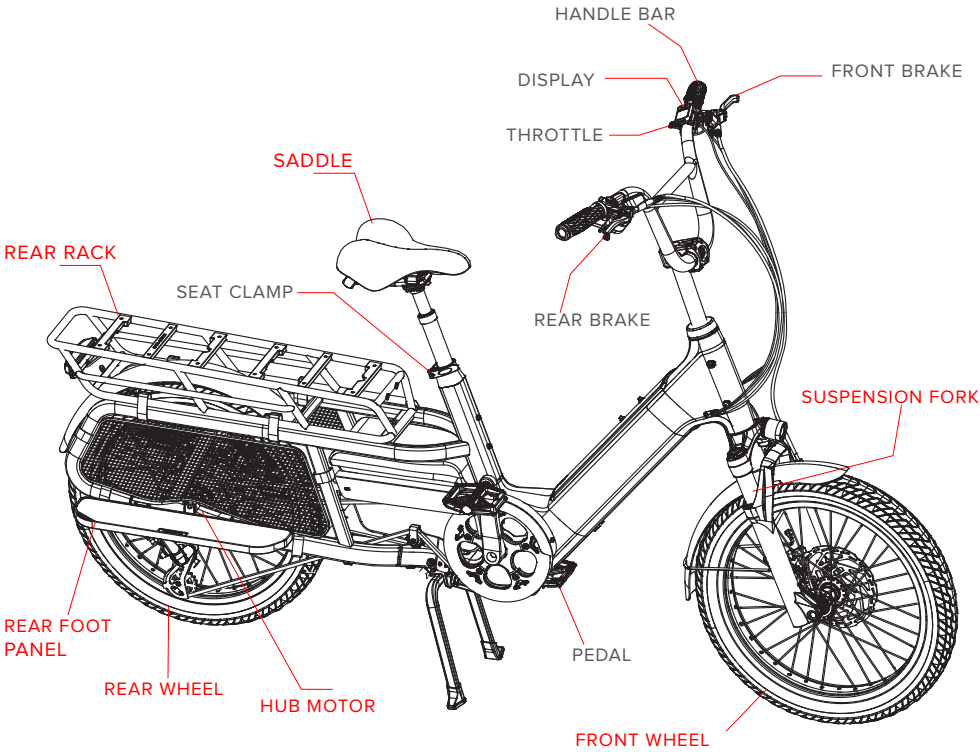
The range of your bike from Aventon Bikes is the distance the bike will travel on a single full charge of the onboard battery. The range values in this manual are estimated based on expected usage characteristics of bikes by Aventon Bikes. Some of the factors that affect range include changes in elevation, speed, payload, acceleration, number of starts and stops, ambient air temperature, tire pressure, and terrain.

We suggest that you select a lower assistance level when you first get your bike from Aventon Bikes to get to know your bike and travel routes. Once you become familiar with the range requirements of your travel routes and the capabilities of your bike, you can then adjust your riding characteristics if you desire. The following table provides general range estimates based on various factors. This table is meant to help owners to understand the factors that can contribute to decreased range. Aventon Bikes makes no claims to the range that individual users might experience in a particular use case.

Expected Range	Operating Condition(s)
56km (35 mi)	Hilly Terrain Heavy Payload Windy High Pedal Assist Level / High Throttle Use Light Pedalling
70km (44 mi)	Flat Terrain Normal Payload Not Windy Medium Pedal Assist Level / Moderate Throttle Use Light Pedalling
97km (60 mi)	Flat Terrain Normal Payload Not Windy Low Pedal Assist Level / Minimal Throttle Use Moderate to Heavy Pedalling
43km (27mi)	Pure Throttle Use

EBIKE ASSEMBLY

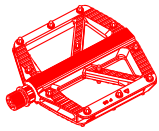
Assembled overview



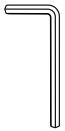
WHAT IS IN THE BOX?

1*Grease
1*Owner's manual
1*Hex key set
1*M8 Hex key
1*Charger
2*Pedals
2*Front/rear reflectors
2*Reflector mounts
1*Spare derailleur hanger
2*Rear foot panels
1* Owner's manual (Li-ion Battery Charger)
1* Hang tag
1* Stickers
1* Purpose of Incidental Items











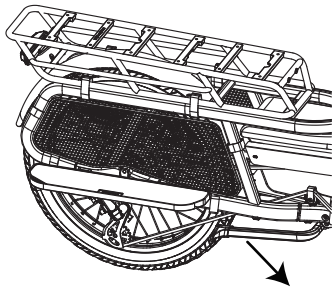


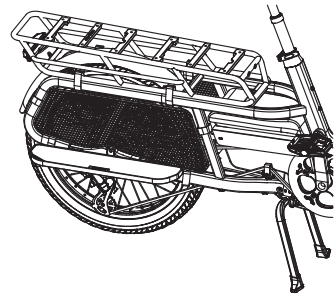
ASSEMBLY

NOTICE: The following steps are only a general guide to assist in the assembly of your ebike and are not a complete or comprehensive manual of all aspects of assembly, maintenance, and repair. Consult a certified, reputable bike mechanic to assist with assembly, repair, and maintenance of your ebike.

Step 1.
Open the bike box. With the assistance of someone who can help safely lift the heavy object, carefully remove the e-bike from the box. Next, gently take off the packaging material protecting the bike frame and components, as well as the small boxes attached to the fork, which contain the charger and accessories. Please remember to recycle the packaging materials, especially cardboard and foam, whenever possible.

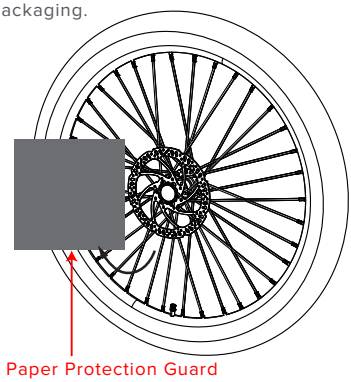
Step 2. Hold your abound LR steady while pushing down the kickstand to keep your eBike upright.



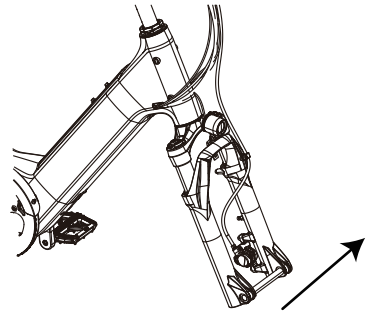


Step 3. Front wheel installation.

A. Remove the front wheel and take off the protective packaging.

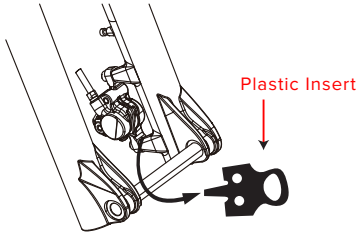


B. Remove the thru-axle guard.

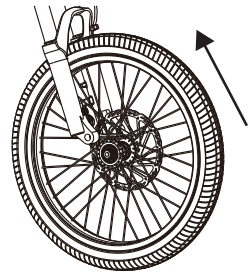


C. Remove the plastic insert from the front wheel brake caliper.

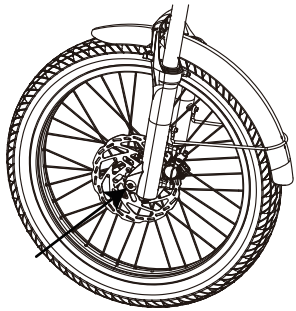
Note: Do not squeeze the brake lever before installing the front wheel.

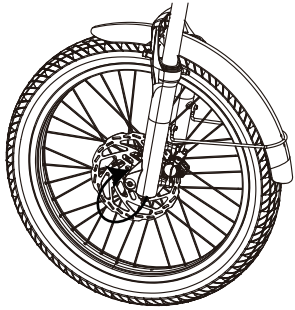


D. Position the front suspension fork onto the front wheel, ensuring the brake rotor is aligned between the brake pads of the caliper.



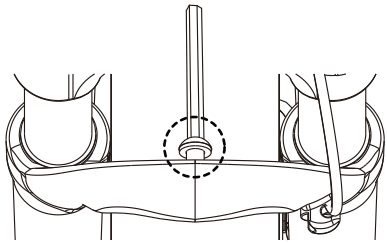
E. Insert the thru-axle into the non-drive side (left) of the fork and thread it into the nut on the drive side (right). Tighten the thru-axle counterclockwise using a 6mm hex key to secure the front wheel in place.

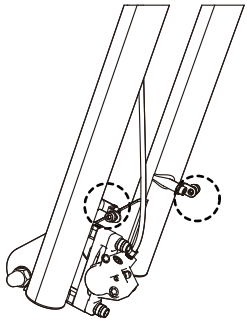




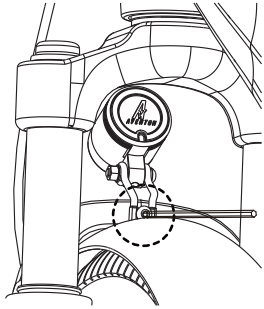
Step 4. Front Fender and Headlight Installation.

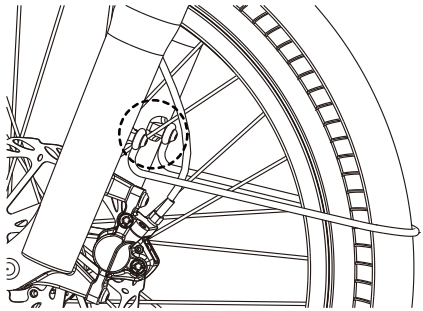
A. Use a 4mm hex key to loosen the upper bolt on the front fork, and a 4mm hex key to loosen the two bolts on the fork legs.





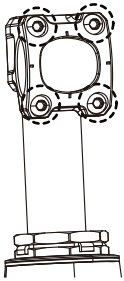
B. Align the front fender's upper bracket and the headlight with the upper bolt hole, then use the 4mm hex key to tighten the bolt. Complete installation by threading in the two fender stay bolts by hand and then using the 4mm hex key to tighten them fully.





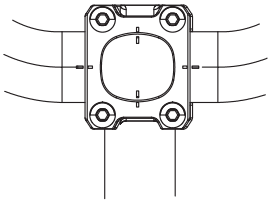
Step 5. Installing Handlebars.

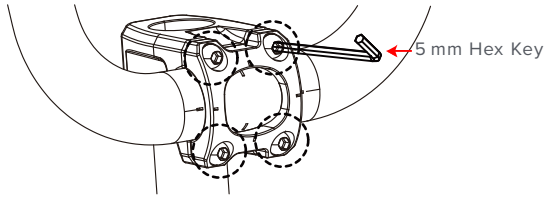
A.Use a 5mm hex key to loosen and remove the four bolts on the stem faceplate.



B. Position the handlebar in front of the stem and attach the stem faceplate. Keep the bolts snug but not fully tightened at this stage.

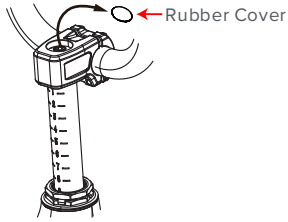
● Align the left/right scale lines of the handlebar with the upper/lower scale lines of the stem to ensure the handlebar is centered. Then, use a 5mm hex key to tighten the bolts to a torque of 8-10 Nm.

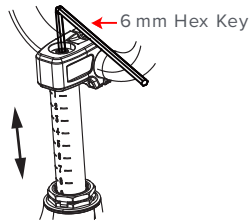


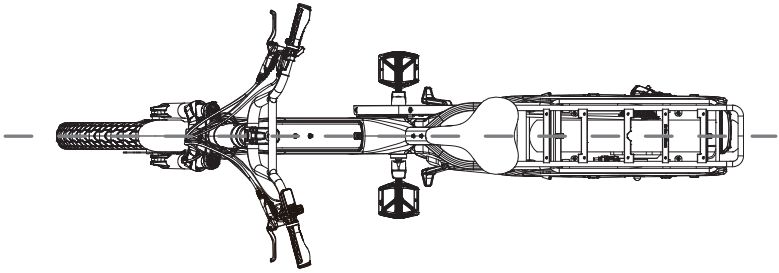


C. Adjust the handlebar height for comfort. Remove the stem rubber cover, use a 6mm hex key to loosen the riser bolt (located in the middle of the cover) by turning it counterclockwise.

● Hold the handlebar and adjust it to the desired height by moving it up or down according to the scale lines on the riser. Once adjusted, ensure the bike's handlebar is aligned with the front wheel. Tighten the riser bolt clockwise to a torque of 25-30 Nm. Do not exceed the minimum insertion line on the stem riser.



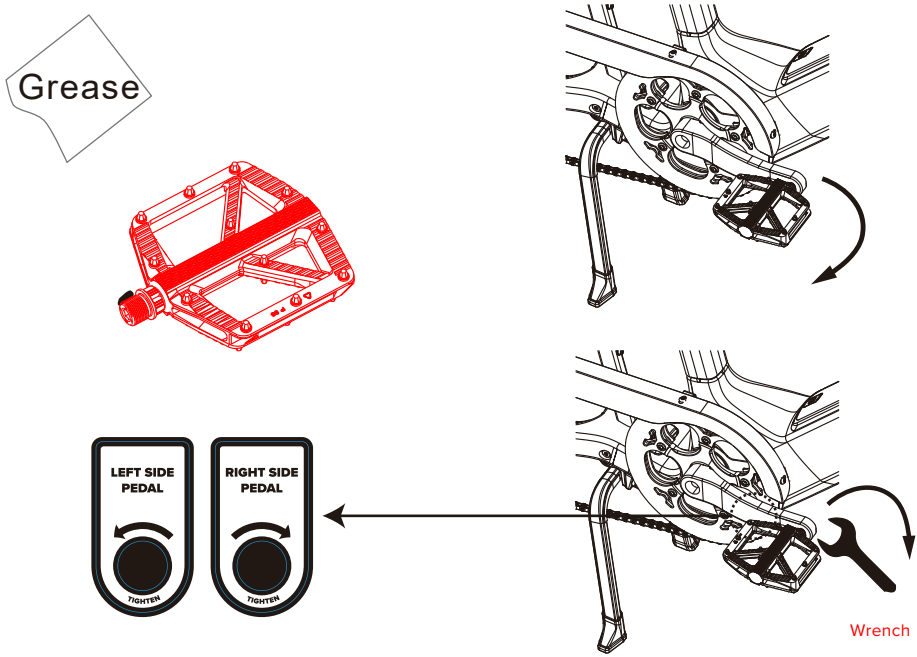




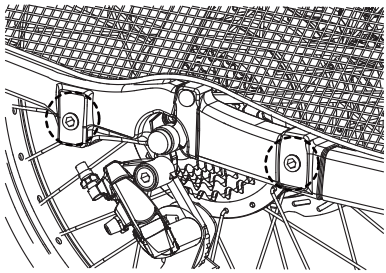
Do not adjust the height of the handlebar when the seat is in the lowest position and the end of the handlebar is in the highest position, the end of the handlebar should be symmetrically located above the surface of the seat, and the safest height should not exceed 406 mm (16 inches).

Step 6: Pedal Installation.
The right pedal (marked "R") has a standard clockwise thread. Apply grease to the threads, then thread the right pedal onto the right crank by hand. Use a 15mm open wrench to tighten it clockwise.
The left pedal (marked "L") has a counterclockwise thread. Apply grease to the threads, then thread the left pedal onto the left crank by hand. Tighten it using your wrench by rotating it counterclockwise.

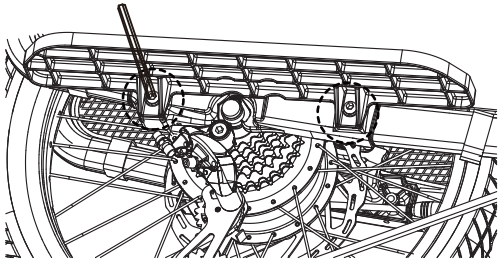
Note: Ensure each pedal is torqued to 30-35 Nm. Avoid left and right movements during installation to prevent damage to the threads.



Step 7. Rear foot panel installation.
A. Remove the 2 bolts on the frame (in the circled area).



B. Tighten the 2 bolts clockwise with the panel's brackets facing down.



C. Perform the same process on the other side.

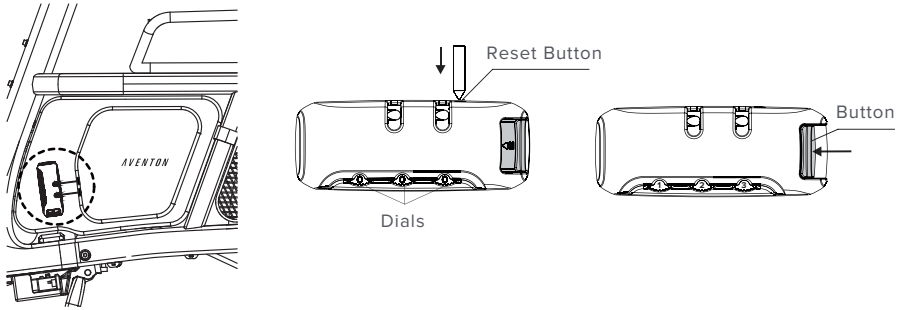
Step 8. Adjust Seat Height.
Open the quick release lever by hinging it open fully. Adjust the seatpost up or down to a comfortable height, while ensuring the seatpost is inserted into the frame past the minimum insertion point.



If needed, use the thumb nut to add tension to the clamp so there is some resistance when the lever is closed, but do not over-tighten. Close the quick release lever to secure the seat-post and check that it cannot move.

Step 9.
Check out the storage box under the rear rack. The initial password of the storage box is 0-0-0.
If you need to reset the password lock, you can follow these steps:
1. Put the dials at their original numbers 0-0-0;
2. Press down on the reset button with a tool until hear the "Click"sound;
3. Set your combination by turning the dials;
4. Pull the button towards the direction of the arrow and the reset button will return when you hear the "Click" sound. Now you have finished setting your personal combination.

Note: Please remember your personal combination by heart.



BATTERY CHARGING

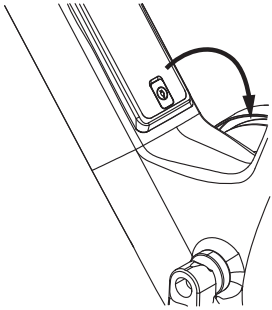
Charging Procedure

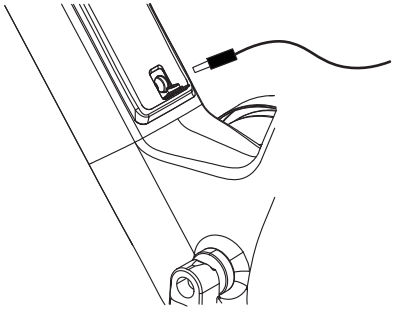
Follow these steps for charging your ebike battery from Aventon Bikes:

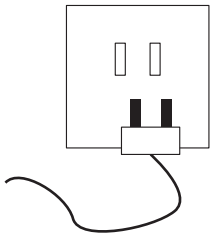
1. Ensure the battery is turned off.
2. Remove the rubber cover from the charging port.
3. Place the charger on a flat concrete or brick surface. Attach the DC output plug (round barrel connector) from the charger into the charging port of the battery.
4. Plug the charger into a power outlet: Attach the charger's input plug (100-240-volt plug) into the power outlet.The charging process will begin, indicated by the charger's LED status light turning red.
5. When the battery is fully charged (indicated by a green light on the charger), remove the charger from the outlet first, and then disconnect it from the charging port on the battery itself.

Always charge your battery in a temperature between 32 ˚F - 104˚F (0˚C-40˚C) and ensure the battery and charger are not damaged before initiating the charge.

If the battery overheats, leaks, emits a strange odor or noise, or shows changes in shape or color, immediately cut off the power and stop using the battery. Place the battery outside on a nonflammable surface, such as concrete or brick, in a well-ventilated area and stay away from it. Contact Aventon's after-sales department or designated authorized service outlets for maintenance. If there is a fire or significant hazard, contact the fire department immediately for professional assistance.







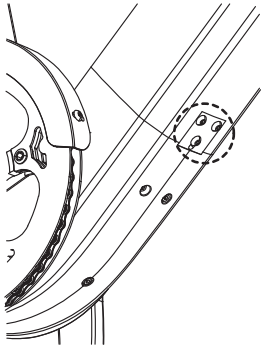
BATTERY CHARGING INFORMATION AND BEST PRACTICES

- Check the charger, charger cables, and battery for damage before beginning each charge.
- Be sure to charge in an area where it is clear and safe from any potential damage or tripping situations that can occur while it is charging. Always charge your battery in an ambient temperature between 32 ˚F - 104˚F (0˚C-40˚C).
- The battery can be charged on or off the bike.
- The battery should be recharged after each use, so it is ready to go the full range for your next ride.
- Charging the battery normally takes 5-6 hours.
- The indicator light on the charger will show a red light while the battery charges. When charging is complete, the indicator light will turn green. Ensure the light faces 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.
- Never charge a battery for more than 12 hours at a time.
- DO NOT leave a charging battery unattended.
- For turning on the bike: Hold the power button on the display until the bike powers on.
- For turning off the bike: Hold the power button on the display until the display turns off.

Failure to follow Battery Charging Information could result in unncessary wear to the charging components, battery, and or charger, and could lead to an underperforming or non-functional battery. The replacement will not be covered under warranty.

REMOVING THE BATTERY

- To remove the battery from the bike, Turn on the power button on the display panel, press the "+" and "-" buttons at the same time, select the battery lock, press the center button to unlock, and there will be an audible prompt. After the battery pops out, you can remove it for charging.
- The emergency method for removing the battery can be achieved by loosening the three bolts on the downtube that secure the terminal. First, loosen the two bolts at the bottom, and then loosen the separate bolt on the top. The battery will be released once the terminal is loose, allowing the battery to be removed.



Use caution to avoid damage to battery connector terminals, which are exposed when the battery is unlocked and removed from the frame of the bike. In the case of damage to the terminals or battery mounts, please discontinue use and contact Aventon Support immediately.

WHEN INSTALLING THE BATTERY ON THE BIKE

- DO NOT force the battery into the tray; slowly align and gently push the battery down into the tray. Then push the battery in (make sure you push hard enough) and hear the “CLICK” sound.
- Make sure there is no space between the battery and the tray, confirm battery fitment.
- Ensure the battery has been properly secured to the bike before each use by carefully pulling outwards on the battery with both hands once locked.

LONG-TERM BATTERY STORAGE

If storing your bike from Aventon Bikes for longer than 2 weeks at a time, follow the instructions below to maintain the health and longevity of your battery.

- Charge (or discharge) the battery to approximately 75%.
- Do not leave the battery attached to the bike frame. Remove it from the bike during long-term storage.
- Store the battery in a dry, climate controlled, indoor location between 32 ˚F - 104˚F (0˚C-40˚C).
- Check the battery every month, and if necessary, use the Aventon Bike charger to charge the battery to 75%.

Please follow the above instructions for storing your bike and battery from Aventon Bikes. Failure to follow proper battery storage procedures can result in a non-functional battery. Replacement will not be covered under warranty.

If the battery is physically damaged, non-functional, performing abnormally, or was dropped or involved in a crash, with or without obvious signs of damage, please discontinue use and charging and contact Aventon Bikes immediately.

DO NOT cover up the charger while it is charging. The charger air cools and needs to be on a hard, flat surface in an open space. Use the charger with the indicator lights facing upward. DO NOT use with the charger inverted, which can inhibit cooling and reduce charger lifespan.

DO NOT open the battery housing, which will void the warranty and can result in damage to the battery, property, or cause serious injury and/or death.

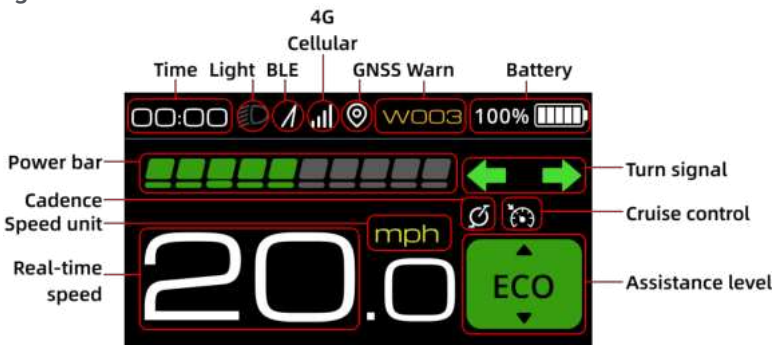
abound LR QUICK START GUIDE

GETTING STARTED

Press and hold the ⏻ button on the display control pad to turn on the bike. To turn off, press and hold the ⏻ button for 3 seconds.

Note: Please ensure that all cables are connected before turning on the eBike.

Home Page



The 4G icon on the status bar will only be displayed after the Iot service is activated within the App, and the activation page will automatically pop up after the APP connects to the bike through bluetooth when Iot service is inactive.

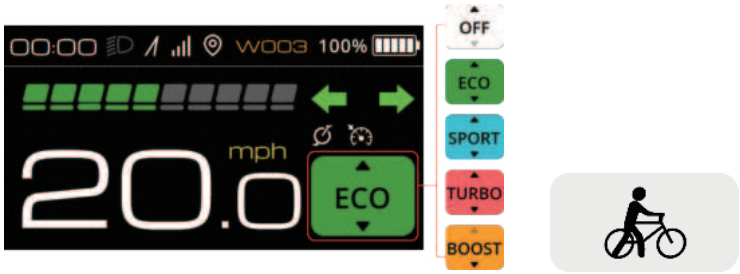
DISPLAY CONTROL PAD

1. Press the ⬅ button to turn left or the ➡ to turn right, quick press the arrow button of the same direction to turn off the turn signals.
2. Press and hold '+' three seconds to turn on the front light and taillights, press and hold three seconds to turn the lights off.



ASSISTANCE LEVEL

Use '+'/'-' to switch assistance level. Press and hold '🚶' to engage WALK mode.



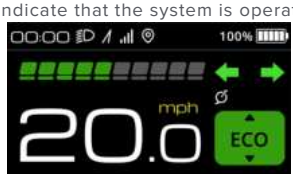
HOLD Function

1. While in any PAS mode, excluding "OFF", press and hold the "-" button to activate the walk mode function.
2. As the bike begins to move, release the "-" button and the display will show a 30 second countdown.During this time, the HOLD function has been activated which will prevent the bike from rolling backward if stopped on an incline.
3. To reengage WALK mode, press and hold the "-" button once again. If released, the HOLD function will engage and the 30 second counter will start over.
4. To deactivate the HOLD function, press the "+" button and the display will return to the home screen.



SENSOR SWITCH

While in any PAS mode, excluding "OFF", press and hold the ⬅ button to activate or deactivate the cadence sensor mode. When the cadence sensor mode is activated, an icon will appear above the assist mode label to indicate that the system is operating in pedal-assist mode based on cadence sensor.



CRUISE CONTROL

While in any PAS mode, excluding "OFF", press and hold the➡button to activate or deactivate the cruise control mode. This function can only be activated when the following conditions are met:

1. Assist mode is in ECO/SPORT/TURBO/BOOST mode.
2. The battery level is more than 15%.
3. The speed is more than 10km/h /6.2mph.

When the function is activated, an icon will appear above the assist mode label.



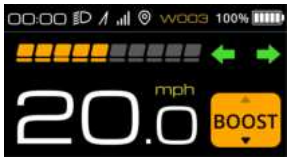
There are some ways to deactivate it.

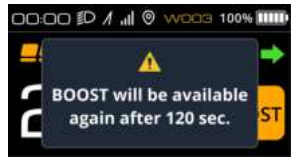
1. Hold and press the➡button for one second.
2. Brake levers with integrated motor cut-off sensor are activated.
3. Switch assist mode to OFF or WALK.
4. The bike speed is less than 8km/h.

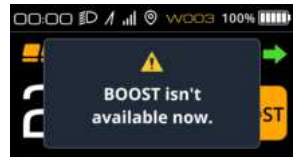
BOOST MODE

The BOOST function provides a temporary power boost for short bursts of acceleration or hill climbing. The feature operates under the following conditions:

1. BOOST can only be activated once every 5 minutes.
2. Each activation lasts for a maximum of 30 seconds, after which the function will automatically disengage.
3. In TURBO assistance level, press the “+” button, if the conditions are met, it will enter BOOST mode.
4. If the 5-minute interval is not met, the instrument will display a prompt: “BOOST will be available again after 120 sec.”
5. If other conditions are not met, such as low battery, high temperature or other faults, the instrument will display a prompt: “BOOST isn't available now.”

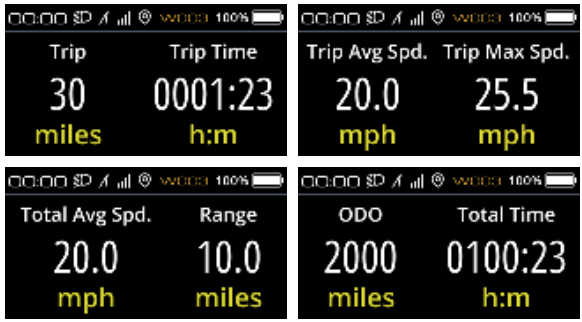






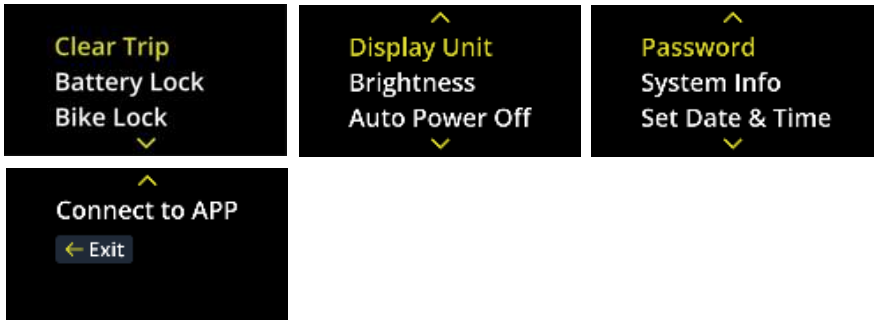
RIDING DATA PAGES

On the home screen, once powered on, short press the ⏻ and this will display the trip, average speed, range, ODO, and total time pages.



MAIN MENU

When the speed is 0, press and hold the '+' and '-' buttons to enter the main menu. The main menu includes the following ten options:
Clear Trip, Battery Lock, Bike Lock, Display Unit, Brightness, Auto Power Off, Password, System Info, Set Date & Time, and Connect to APP.



Clear Trip Option

To restart recording cycling data, use this option to clear Trip mileage,Trip time, maximum speed, and average speed.

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Clear Trip" option with a short press of the power button. The interface will briefly display the clearing screen;
2. Short press the power button again to initiate the clearing operation. This process takes about 1 second. When the "Success" prompt appears, it indicates that the clearing was successful;
3. After the "Success" prompt, the interface will automatically return to the main menu. At this point, press the ⬅ button to return to the main interface.

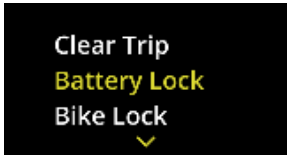


Battery Unlock Function

This function unlocks and ejects the battery from the bike.

To open the battery lock:

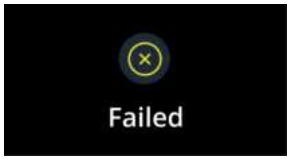
1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Battery Lock" option;
2. Short press the power button to navigate to the page. Short press the power button again to unlock the battery. The instrument interface will display a waiting state;
3. If unlocking was successful, the instrument will show the "Aventon" shutdown interface. The screen will turn off, and the battery will pop out;
4. If unlocking has failed, a "Failed" prompt will appear on the display.



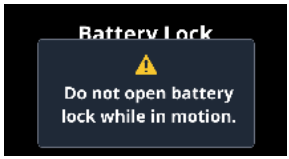








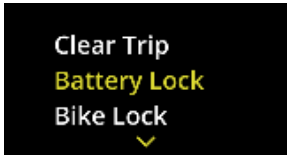
Note: The battery lock cannot be opened while riding. If you attempt to do so, the instrument will display a prompt: "Do not open battery lock while in motion." The e-bike has a protection mechanism to ensure your safety, preventing the battery lock from opening during riding.



Battery Lock Function

When the battery lock is on, simply press the battery into the battery compartment. To verify the correct installation the battery will click into place and sit flush into the frame. The error code "E140" will be present if the battery is installed incorrectly. If installed correctly, the instrument will display the following interface:

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Battery Lock" option and short press the power button to enter the page;
2. Insert the battery into the battery compartment. The icon on the interface will change to indicate the correct installation.







The battery lock can only be opened when the bike / pedals are stationary and the bike speed is zero.
Precautions for Unlocking: Since the bike may be powered off after ejection, for safety reasons, it will automatically power off before unlocking.
Security Detection: If the battery lock is detected to be open during power on, the bike will attempt to automatically close the battery lock.

Power Limited Situations

When the battery level is low (less than 5%), the bike lock is closed, or the battery lock is opened, an error will occur. The instrument panel will display a prompt indicating that charging is required. At this point, the device's protection mechanism will no longer provide motor assistance during riding.

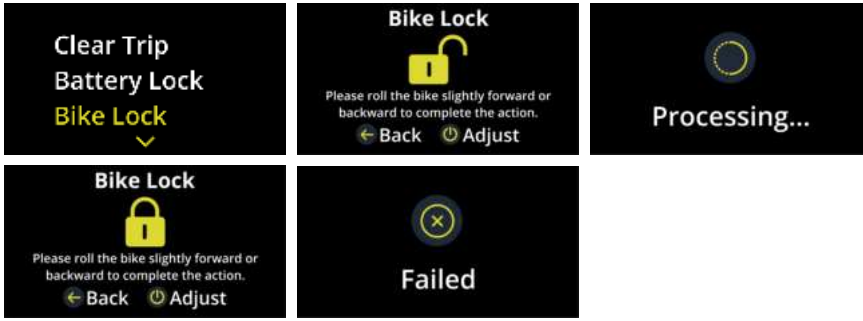


Bike Lock Actuation

To secure your e-bike when you need to park and leave, use the Bike Lock function to lock and unlock the bike.

To close the Bike Lock:

1. After the e-bike comes to a complete stop, ensure the kickstand is down (the bike can still move if the kickstand is not down);
2. Long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Bike Lock" option;
3. Short press the power button to access the Bike Lock page. Press the power button again to lock the bike. The instrument interface will display a waiting state;
4. If the Bike Lock is successfully engaged, the instrument will display the appropriate interface. If locking fails, a "Failed" prompt will appear;
5. If the instrument shows "Failed", repeat the steps. If the Bike Lock still cannot be engaged, contact after-sales service for inspection;
6. Short press the ⬅ button to return to the main menu;
7. The bike lock can also be automatically engaged if the "Lock when powered off" option is selected within the Aventon APP.

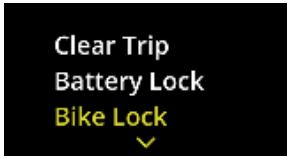


Note: The Bike Lock cannot be closed while riding. If you attempt to lock the bike while riding, the instrument will display a prompt: "Do not engage bike lock while in motion." The e-bike's protection mechanism ensures the lock cannot be engaged during riding for your safety.



To Open the Bike Lock:

1. Power on the bike by holding down the power button for 3 seconds and then long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Bike Lock" option;
2. Short press the power button to access the Bike Lock page. Short press the power button again to unlock the bike. The instrument interface will display a waiting state;
3. If the bike lock is successfully unlocked, the instrument will show the appropriate interface. Short press the ⬅ button to return to the main menu;
4. If the bike lock fails to unlock, the instrument will display a "Failed" prompt;
5. If you see the "Failed" prompt, repeat the steps. If the lock still cannot be unlocked, contact after-sales service for assistance.











The bike lock can only be closed when the bike and the pedals are stationary. The bike should be stopped with the kickstand down.

Automatic closing of the bike lock when powered off: When this feature is enabled (which can be activated through the APP), the bike lock will automatically close before power off.

Automatic opening of the bike lock when powered on: When the power-on password is enabled, the bike lock will automatically open after entering the correct password.

Display Unit Options

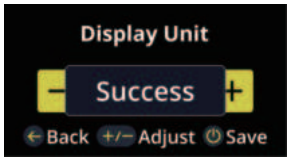
This option allows you to switch the display units for speed and mileage between metric and imperial units. The default setting from the factory is in imperial units.

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Display Unit" option;
2. In the main menu, choose "Display Unit" and short press the power button to enter the page;
3. Short press the '+' or '-' button to toggle between mph (miles per hour) and km/h (kilometers per hour);
4. Short press the power button to save the changes. Once saved, the instrument will display a "Success" prompt and automatically return to the main menu;
5. Short press ⬅ the button on this page to return to the main menu.









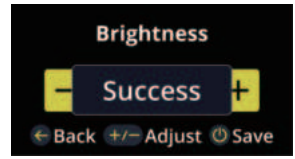
Backlight Brightness Setting Option

To adjust the instrument's screen brightness, use the backlight brightness adjustment function. The brightness level ranges from 1 (darkest) to 5 (brightest).

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Brightness" option and short press the power button to access the page;
2. Short press the '+' or '-' button to adjust the brightness level;
3. Short press the power button to save the changes. Once saved, the instrument will display a "Success" prompt and automatically return to the main menu;
4. Short press the ⬅ button on this page to return to the main menu.





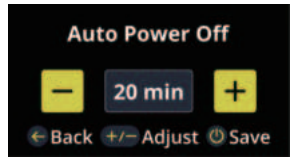


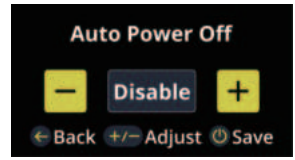
Auto Power Off Time Option

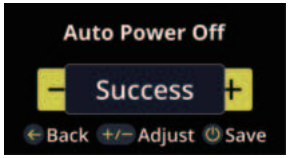
To set the e-bike's automatic shutdown time, use the Auto Power Off function. You can choose a time range from 1 to 99 minutes, or select "Disable" to turn off automatic shutdown.

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Auto Power Off" option and short press the power button to access the page;
2. Short press the '+' or '-' button to set the auto-off time or select "Disable" to turn off the auto-off function;
3. Short press the power button to save the changes. Once saved, the instrument will display a "Success" prompt and automatically return to the main menu.







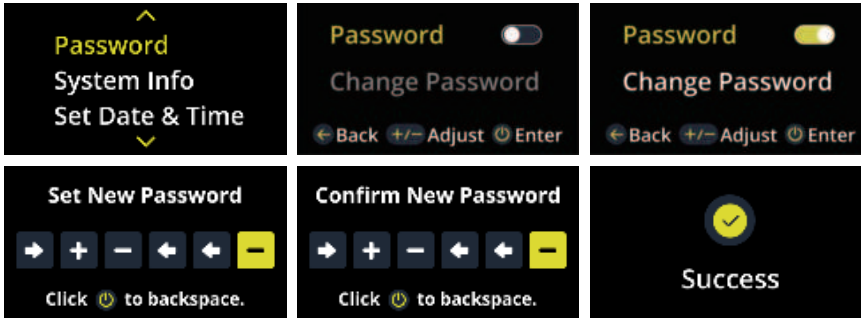


Power-on Password Setting Options

The power-on password setting allows you to enable or modify the power-on password. If enabled, you will need to enter the password each time you restart the e-bike. By default, the power-on password function is disabled.

To enable or set a power-on password:

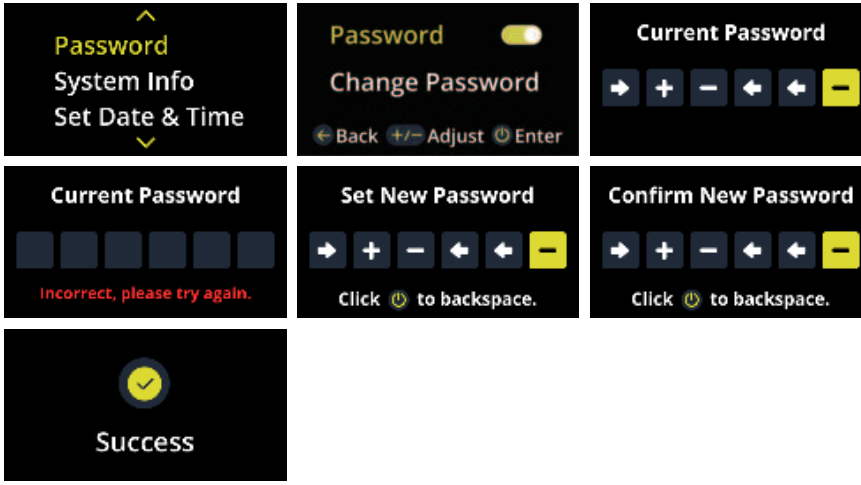
1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Password" option and short press the power button to access the password setting page;
2. Short press the '+' or '-' button to toggle between the "Password" and "Change Password" options;
3. Select "Password" and short press the power button to turn the power-on password function on or off;
4. If you enable the password function without setting a password, you will be directed to the "Set New Password" page;
5. On the "Set New Password" page, use the + / - / ⬅ / ➡ buttons to enter a new password. After entering it, you will be taken to the "Confirm New Password" page;
6. Enter the new password again on the "Confirm New Password" page. If it matches the first entry, the system will display a "Success" prompt and return to the main menu;
7. Short press the ⬅ button on this page to return to the main menu.



Change Password

To change the power-on password, follow these steps:

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Password" option and short press the power button to access the password setting page;
2. Short press the '+' or '-' button to toggle between the "Password" and "Change Password" options. When "Change Password" is selected, short press the buttons to enter the original password verification interface;
3. If you enter the wrong password, the interface will display "Incorrect, please try again." Re-enter the correct password. If the original password is correct, you will proceed to the "Set New Password" page;
4. On the "Set New Password" page, use the + / - /⬅/➡buttons to enter a new password. After entering it, you will be directed to the "Confirm New Password" page;
5. Enter the new password again on the "Confirm New Password" page. If it matches the initial entry, the system will display a "Success" prompt and return to the main menu;
6. Short press the ⬅button on this page to return to the main menu.



If the idle automatic power off is enabled, it will automatically power off if the password is not entered for a long time.

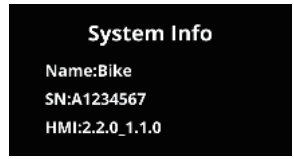
Forgot password: The Power-on password can be cleared through the APP, and the password will be automatically disable after clearing.

System Information Viewing Options

To view system information such as the bike model name, SN, and software version number, follow these steps:

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "System Info" option and short press the power button to access the system information page;
2. Short press the power button again to return to the main menu.



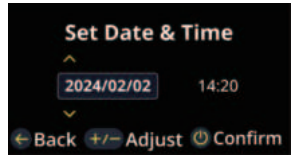


Real-Time Clock Setting Options

To manually adjust the time display, use the real-time clock setting function to set the time in the order of year-month-day-hour-minute.

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Set Date & Time" option and short press the power button to access the settings page;
2. Short press the '+' or '-' button to adjust the year. Press the power button to confirm the change and move the cursor to the month;
3. Continue adjusting the month, day, hour, and minute in sequence using the same method;
4. Short press the power button to save the changes. Once saved, the instrument will display a "Success" prompt and automatically return to the main menu;
5. Short press the ← button on this page to return to the main menu.



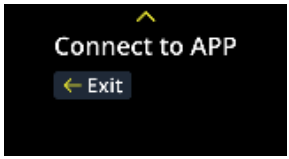




Connect To APP

To connect your phone to the e-bike using the Aventon APP via Bluetooth, follow these steps:

1. After the e-bike comes to a complete stop, long press the '+' and '-' buttons simultaneously to enter the main menu. Select the "Connect to APP" option and short press the power button to access the page;
2. Open the Aventon APP on your phone and go to the scan code binding interface. Scan the QR code displayed on the screen to establish the connection;
3. Short press the power button to return to the main menu interface;
4. Short press the ← button on this page to return to the main menu.





Abnormal detection while powered off

This feature is used to detect abnormal vibrations while the bike is powered off. When vibration is detected, an alarm sound will be emitted and an alarm message will be sent through the APP through cellular communication.

1. Sensitivity can be set from 1 to 5 through the App, and the higher the value, the higher the sensitivity.
2. To prevent the bike from constantly sending alerts and detecting abnormal situations, each mode corresponds to a fixed time interval.

Sensitivity	1	2	3	4	5
Detection time interval	30min	20min	15min	10min	5min

Note: The alarm will only sound if the "Alarm" slider is in the (on) position within the "More Settings" page within the APP.

Activate the IoT Network

Why Activate the Network?

Discover the full potential of your bike with Aventon APP network activation. Once activated, you'll enjoy advanced features:

- **Remote Control:** Power off, lock, and unlock your bike remotely.
- **Real-Time Tracking:** Always know where your bike is.
- **Theft Reporting:** Secure your bike with the ability to report it as lost.

How to Activate the Network:

1. **Download the Aventon APP:** Visit your device's app store to download.
2. **Log In and Pair Your Bike:** Open the app, log in, and pair your bike to your account.
3. **Activation Process:**
   - **Scenario 1:** After pairing, wait for a pop-up on the homepage, then tap "**Activate Now**."
   - **Scenario 2:** Go to the homepage, tap "**More Settings**," then tap "**IoT Service**" to enter the activation page.
4. **Read and Activate:** Review the terms and conditions, then tap "**Activate**" to start the process.

OPERATION INSTRUCTION

NOTICE: DO NOT perform any of the steps in the Operation section of this manual until you have read this entire manual, since there are important details related to safety in the following sections.

Read and understand all sections of this entire manual before operating the bike for the first time. There are important safety warnings throughout the manual that must be followed to prevent dangerous situations, accidents, damage to the bike, damage to property, injury, or death.

Users must follow the instructions and warnings contained in this manual for safety. Do not attempt to operate your bike from Aventon Bikes until you have adequate knowledge of its control and operation. Damage caused by failing to follow instructions is not covered under warranty and could result in serious injury or death. Contact Aventon Bikes if you have any questions about assembly or operation.

Users must become accustomed to the bike' s power control system before operating. The pedal assistance feature is also a powerful option and users should fully research and understand how to operate it before first time use. Not taking the time and care to familiarize yourself and practice the operation of the power system on your bike from Aventon Bikes can lead to damage, serious injury, or death.

Parking, Storage, and Transport

Please follow these basic parking, storage, and transport tips to ensure your bike is well cared for on and off the road.

- When pushing or carrying the bike manually, turn off the power to avoid accidental acceleration from the motor.
- Turn the power and any lights off to conserve battery.
- If applicable, ensure the battery is off before you to remove the battery and bring it with you for security or storing in a temperature-controlled location.
- Park indoors when possible. If you must park outdoors in rain or wet conditions, leave your ebike outside for only a few hours and then park it in a dry location as soon as possible to allow all of the systems to dry out. As with a regular bike, an ebike used in wet conditions needs more frequent maintenance to prevent rust, corrosion, etc. and to ensure all systems are working safely.
- In public places, your bike from Aventon Bikes must be parked in accordance with local rules and regulations.
- Locking up your bike is recommended to ensure your bike is secure and the chance of theft is reduced. Aventon Bikes makes no claims or recommendations on the proper lock hardware or procedures to secure your bike, but we do recommend you take appropriate precautions to keep your bike safe from theft.
- Do not park, store, or transport your bike from Aventon Bikes on a vehicle rack not designed for the bike's size and weight.
- Use a vehicle rack compatible with the width of the tires used on your bike. Some racks may not accommodate all tire widths.
- When carrying your bike on a vehicle rack for transport, unlock and remove the battery.This will reduce the weight of the bike, make lifting and loading easier, and allow you to protect the battery by transporting it in the cab of a vehicle.
- Avoid transporting bikes from Aventon Bikes on a vehicle rack during rain, as this may cause water damage to the electrical components. Contact Aventon Bikes Product Support if you have questions about preventative measures.
- Bike vibration detection will be performed even when the bike is powered off. If the bike is in transportation, it will remain in a vibrating environment. To avoid false detection in this situation, enable transportation mode within the Aventon APP. Vibration detection will no longer be performed and it will automatically disable after the next startup.

USER MAINTENANCE AND SERVICE INSTRUCTIONS

Basic Bike Care

If you do not have the experience, skill, or tools to complete maintenance and/or adjustments on your bike, Aventon Bikes strongly recommends having a certified, reputable bike mechanic maintain, tune, and ensure the bike is safe to ride.

Recommended Service Intervals

Regular inspection and maintenance are key to ensure Aventon Bikes function as intended, and to reduce wear and tear on their systems. Recommended service intervals are meant to be used as guidelines. Real world wear and tear, and the need for service, will vary with conditions of use. We generally recommend inspections, service, and necessary replacements be performed at the time or mileage interval that comes first in the following table.

Interval	Inspect	Service	Replace
Weekly, 160-321 km (100-200 mi)	- Check hardware for proper torque. - Check drivetrain for proper alignment and function (including chain, cassette,chainring, and derailleur). - Check wheel trueness and for quiet wheel operation (without spoke or noise). - Check condition of frame for any damage	- Clean frame by wiping frame down with damp cloth. - Use barrel adjuster (s) to tension the derailleur cable if needed.	- Replace any components confirmed by Aventon Bikes Product Support or a certified, reputable bike mechanic to be damaged beyond repair or broken.
Monthly, 402-1207 km (250-750 mi)	- Check brake pad alignment, and operation, bleed brake as needed. - Inspect shift function, adjust as needed. - Check chain stretch. - Check shifter cable for corrosion or fraying. - Check spoke tension. - Check accessory mounting (rack mounting bolts, fender hardware, and alignment).	- Clean and lubricate drivetrain. - Check crankset and pedal torque. - Clean shift cable. - True and tension wheels if any loose spokes are discovered. - Grease thru-axle/s if necessary.	- Replace shift cable if necessary. - Replace brake pads if necessary.
Every 6 Months, 1207-2011 km (750-1250 mi)	- Inspect drivetrain (chain, chainring, cassette, and derailleur). - Inspect all cables and housings.	- Standard tune-up by certified, reputable bike mechanic is recommended. - Grease bottom bracket.	- Replace brake pads. - Replace tires if necessary. - Replace cables and housings if necessary.

Pre-Ride Safety Checklist

Notice: Before every ride, and after every 25-45 miles (40-72 km), we advise following the pre-ride safety checklist.

Safety Check	Basic Steps
1. Brakes	Ensure front and rear brakes work properly. Check brake pads for wear and ensure they are not overworn. Ensure brake pads are correctly positioned in relation to the rotors. Ensure the brakes are correctly adjusted, and display no obvious wear. Ensure brake levers are lubricated and tightly secured to the handlebar if applicable. Test that the brake levers are firm and that the brakes are functioning properly.
2. Wheels and Tires	Ensure tires are inflated within the recommended limits posted on the tire sidewalls and hold air. Ensure tires have good tread, have no bulges or excessive wear, and are free from any other damage. Ensure rims run true and have no obvious wobbles, dents, or kinks. Ensure all wheel spokes are tight and not broken. Check axle nuts to ensure they are tight.
3. Steering	Ensure the handlebar and stem are correctly adjusted, tightened and allow proper steering. Perform a handlebar twist test to ensure the stem clamp bolt security. Ensure the handlebar is set correctly in relation to the fork and the direction of travel.
4. Chain	Ensure the chain is clean, oiled, and runs smoothly. Extra care is required in wet, salty/otherwise corrosive, or dusty conditions.
5. Bearings	Ensure all bearings are lubricated, run freely, and display no excess movement, grinding, or rattling. Check headset, wheel bearings, pedal bearings, and bottom bracket bearings.
6. Cranks and Pedals	Ensure pedals are securely tightened to the cranks. Ensure the cranks are securely tightened and are not bent.
7. Derailleur and Mechanical Cables	Check that the derailleur is adjutsted and functioning properly. Ensure shifter and brake levers are attached to the handlebar securely. Ensure the shifter cable is properly lubricated.
8. Frame, Fork, and Seat	Check that the frame and fork are not bent or broken. If either frame or fork are bent or broken, discontinue riding until the parts are replaced and properly installed. Check that the seat is adjusted properly, and seatpost quick release lever is securely tightened.
9. Motor Drive Assembly and Throttle	Ensure the hub motor is spinning smoothly and motor bearings are in good working order. Ensure the power cable running to the motor undamaged and secure. Make sure the hub motor axle bolts are secured and the axle, axle bolts, and torque washers are in place.
10. Battery	Ensure battery is charged before use. Ensure there is no damage to battery. Lock battery to frame and ensure that it is secured. Charge and store bike and battery in a dry location, between 32 ˚F - 104˚F (0˚C-40˚C). If exposed to moisture, let the bike dry completely before using again.
11. Electrical Cables	Look over connectors to make sure they are fully seated and free from debris or moisture. Check cables and cable housing for obvious signs of damage. Ensure headlight, taillight, and brake light, if applicable, are functioning, adjusted properly, and unobstructed.
12. Accessories	Ensure all reflectors are properly fitted and not obscured. Ensure all other fittings on bike are properly secured and functioning. Inspect helmet and other safety gear for signs of damage. Ensure rider is wearing a helmet and other required riding safety gear. Ensure mounting hardware is properly secured if fitted with a front rack, rear rack, basket, etc. Ensure the taillight and taillight power wire are properly secured if fitted with rear rack. Ensure the fender mounting hardware is properly secured if fitted with fenders. Ensure there are no cracks or holes in fenders. If installed, ensure the optional rear wheel lock is secured in the unlocked position and the key is removed before every ride.
13. Bolt Check	Check all bolts for proper torque specifications.

After covering a distance of 50-100 miles (80-160 kilometers), your cables may have stretched, your spokes may have loosened, and bolted connections could potentially become loose. To maintain the optimal performance and safety of your Aventon Bike, it's crucial to schedule a tune-up with a certified and reputable bike mechanic following this initial break-in period. The specific mileage range for this tune-up may vary based on factors such as total weight, riding habits, and terrain conditions. Consistent inspections and tune-ups are vital to ensure that your bike continues to provide a safe and enjoyable riding experience.

Tire Information

Aventon uses tires that are designed for durability and safety for regular cycling activities and to be checked before each use for proper inflation and condition. Proper inflation, care, and timely replacement will help to ensure that your bike's operational characteristics will be maintained, and unsafe conditions avoided. Aventon Bikes recommends always staying within the air pressure range recommended in the specifications section of this manual.

It is critically important that proper air pressure is always maintained in pneumatic tires. Do not underinflate or overinflate your tires. Low pressure may result in loss of control, and overinflated tires may burst. Failure to always maintain the air pressure rating indicated on pneumatic tires may result in tire and/or wheel failure.

Inflate your tires from a regulated air source with an available pressure gauge. Inflating your tires from an unregulated air source could overinflate them, resulting in a burst tire.
Even tires equipped with built-in flat-preventative tire liners, like those that come with bikes by Aventon Bikes, can and do get flats from punctures, pinches, impact, and other causes. When tire wear becomes evident or a flat tire is discovered, you must replace the tires and/or tubes before operating the bike or injury to operators and/or damage to your bike could occur.

When changing a tire or tube, ensure that all air pressure has been removed from the inner tube prior to removing the tire from the rim. Failure to remove all air pressure from the inner tube could result in serious injury.

Using aftermarket tires or inner tubes, not provided by Aventon Bikes may void your warranty, create an unsafe riding condition, or damage to your bike by Aventon Bikes. If required by law, ensure replacement aftermarket tires have suffcient reflective sidewall striping.
For more information on tire or tube replacement procedures, or questions about tire inflation, contact Aventon Bikes Product Support.
Link: https://rideaventon.zendesk.com/hc/en-us/requests/new or Call: 1-866-300-3311

Shifter and Derailleur

On the right side of the handlebar, next to the brake lever, you can see two levers with 8-1 gears. Those are the shifter levers. By pressing those levers, you can make the chain move to different gears to change your riding experience. The derailleur and shifter requires regular maintenance.

Warning Detection

Your bike from Aventon Bikes is equipped with a warning detection system integrated into the display and the controller. In the case of an electronic control system fault, a warning code should display. The following warning codes are the most common and can aid in troubleshooting. If your bike has a warning code displayed at any time, it is recommended that you cease operation and contact Aventon Bikes immediately.

Warning Code	Definition
01	Throttle Malfunction
02	Motor overheat protection
03	Controller overheat protection
04	Low temperature charging protection
05	High temperature charging protection
06	Low temperature battery operation protection
07	High temperature battery operation protection
08	Motor lock protection
09	Current software not up to date
101	GPS hardware module disconnect
102	G-sensor chip ID mismatch
103	G-sensor hardware module disconnect
104	RTC fault
105	ECU battery not detected
106	ECU battery charge fault
107	Part change
108	Bike lock failed
109	Bike unlock failed
120	Storage fault
121	Bluetooth hardware module disconnect
122	SIM card not detected
123	Cellular hardware module disconnect
124	Some configurations are not configured

Error Detection

Your bike from Aventon Bikes is equipped with an error detection system integrated into the display and the controller. In the case of an electronic control system fault, an error code should display. The following error codes are the most common and can aid in troubleshooting. If your bike has an error code displayed at any time, it is recommended that you cease operation and contact Aventon Bikes immediately.

Error Code	Definition
21	Motor phase current error
23	Motor phase error
24	Motor hall error
25	Electric brake fault
28	Low voltage protection
29	Over voltage protection
30	Controller communication failure
31	Battery communication failure
33	ECU communication failure
34	Power-on password initialization failure
41	Controller fault
42	Motor fault
43	Battery fault
44	Torque sensor fault
45	Speed sensor fault
46	Head light fault
47	Rear light fault
48	Turn light fault
140	Battery lock failed
141	Battery unlock failed
142	Battery unlock while riding
145	Bike locked while riding
146	Internal communication failure
178	Security verification expired
179	Security verification failed

Additional Information on Wear

Components of an electric bike are subject to higher wear compared to bikes without electric assist. This is because electric bikes can travel at higher average speeds than regular bicycles and are heavier. Increased wear is not a defect in the product and is not covered by the warranty. Typical components affected include the tires, brake pads and rotors, suspension forks, spokes, wheels, and the battery.

When a component exceeds its expected useful life, it can lead to unexpected loss of function, posing a risk of serious injuries or even death. It is crucial to closely monitor wear characteristics, including cracks, scratches, or any changes in color or component performance, as these signs may indicate that the component's useful life has been exceeded. If you notice such wear, replace the affected components immediately. If you are unsure about how to perform regular maintenance, it is highly recommended to seek assistance from a certified and reputable bike mechanic.

LIMITED WARRANTY

For detailed warranty terms and conditions, please visit our official warranty policy page at https://www.aventon.com/pages/warranty

LINK TO ASSEMBLY VIDEO AND ONLINE RESOURCES

"Please visit Aventon's Help Center at https://rideaventon.zendesk.com/hc/en-us to access the official Assembly Video in the Ebike Technical Assistance section.

We are here to assist you! If you have any questions, you can get in touch through the Aventon Bikes Help Center at https://rideaventon.zendesk.com/hc/en-us/requests/new or by calling Aventon Bikes Product Support at 1-866-300-3311."