

JOULVERT

Welcome

Founded 10 years ago, Joulvert has been at the forefront of electric bike manufacturing. The brand's identity has become synonymous with Burning Man, after the team first introduced The Hopman folding electric bike to the Playa in 2015. As a dedicated US brand and team, Joulvert has remained committed to designing and manufacturing market-first technologies like the silicon-sealed electrical system, nylon+steel composite motor gears, and integrated rear-racks.

Our mission remains a total commitment to building premium electric bikes to tackle the most extreme conditions in the United States, while maintaining a relationship with our community of riders so they can keep riding for years to come.

Before riding, please read this instruction manual carefully and confirm the Bison is assembled correctly. If you find anything unusual, please contact Joulvert via our website or email support@joulvert.com

Join our community, and share pictures of your own bike on instagram - @joulvert



Need servicing? Check for a location near you!



joulvert.com/pages/service-centres

If you are located in or near NYC, you can book a service at our SoHo location through this link:



joulvert.com/pages/bookservice

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Important Information

The Bison is fit for two riders. However, don't exceed the maximum weight limit of 350 lbs.

Do not put any metal objects in charging ports or battery circuits, it may cause a short circuit or start a fire.

Do not dismantle or change any parts without the authorization of the manufacturer. Any loss caused by inappropriate use, misuse or dismantling can cause dangers to the rider which the manufacturer or Joulvert is not liable for. Changing parts or dismantling the bike can affect the warranty as well. In general, if you think there might be a problem with your Bison, please contact Joulvert.

Ensure your full attention is on the road. Failure to do so can cause injuries to yourself and others. Do not use your phone when riding. Do not ride whilst intoxicated. Do not ride while taking medicines that can inhibit your performance on the bike or when you are not feeling well.

Speeding, especially on downhill roads, can be dangerous. Forcefully engaging the brakes at high speed can cause the Bison to skid and lead to a road accident. Do not apply excessive force on the front brake lever, it can cause the rider to fall forward over the handlebars and can cause severe injuries. Do not attempt

jumps, stunts, racing, competitive events, or any activity deemed as inconsistent with the intended use of the product.

Oil in the brake pads or rim's surface can inhibit the performance of the brakes drastically. This can cause accidents.

The battery's performance can be affected by its environment. Generally, a battery's discharge performance is better at a higher temperature. Battery capacity will drop by more than 1/3 when the temperature is below 32°F. Thus, the riding distance per charge will become shorter in winter or cold areas. It will return to normal/optimal when the temperature is higher than 68°F.

Do not hang anything on the handlebar during riding. Check that the display and lights are fixed to avoid failure in operation.

To protect your battery and avoid danger, do not connect the battery's positive and negative side with one another or any conductor.

Inspect/Adjust the brake calliper position each month to ensure the brake pad is not making contact with the rotor. Change the brake pad each half year or one year to keep the brake function in good condition. If riding

regularly, it is recommended to replace the brake pads every 3 months.

Make sure the front wheel is mounted to the front fork correctly and that the calliper is not in contact with the rotor.

This owners Manual is not intended as a detailed service, repair or maintenance manual.

Electric bikes can be dangerous to use. The user or consumer assumes all risk of personal injuries, damage or failure of the bicycle and all other losses and damages to themselves and others, as well as to any property arising as a result of using the bicycle.

The Bison is water-resistant. However, please do not submerge any electric components in water or deliberately direct water at it. Water entering any electric components can cause a short circuit and damage the electric components.

As with all mechanical components, the bicycle is subjected to wear and high stresses. Any form of crack, scratches or change of colouring indicates the life of the component has been reached and it should be replaced.

It is your responsibility to be aware of the laws that are applicable in the state you are riding

in. Please abide by local laws and standards for the speed limit, helmet, reflection, lighting system etc..

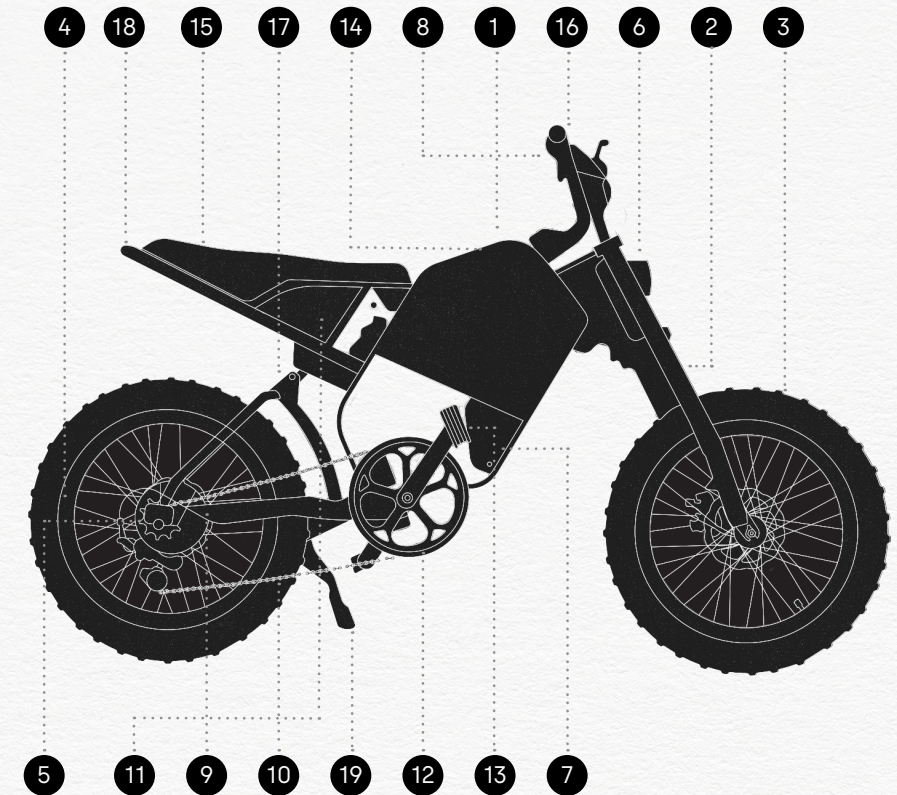
Do not dismantle your Bison by yourself. If you need to change any parts, please buy our standard parts from our website, or if the parts are not available for you, please contact Joulvert.

Your insurance policies may not provide coverage for accidents involving the use of the Bison. Please contact your provider to determine coverage.

For information regarding our warranty policy, please visit www.joulvert.com/pages/warranty.



Overview of Parts



- 1. Frame
- 2. Fork
- 3. Tire
- 4. Rim
- 5. Motor

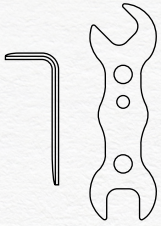
- 6. Front Light
- 7. Battery
- 8. Display
- 9. Swingarm
- 10. Chain

- 11. Controller
- 12. Crank
- 13. Pedal
- 14. Removable Panel
- 15. Saddle

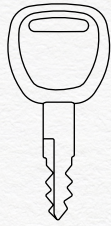
- 16. Handlebar
- 17. Rear Shock
- 18. Rear Light
- 19. Kickstand

What's in the Box

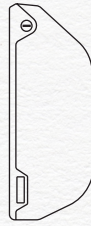
Tools



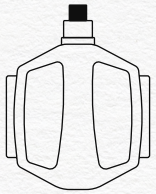
Key



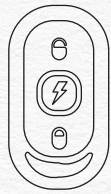
Lithium-Ion Battery



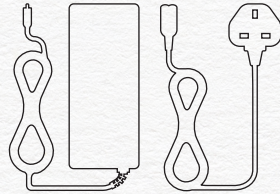
Pedals



Key Fob



Charger



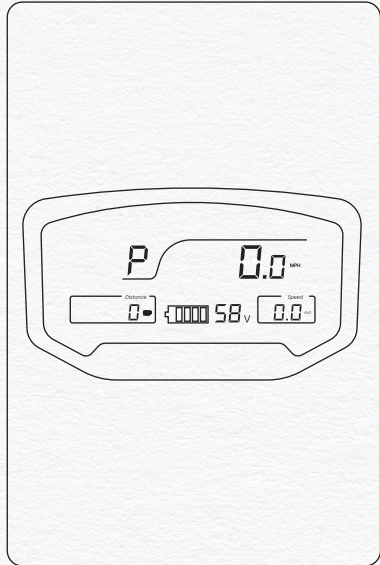
1

Assembly Instructions

Handlebar Installation

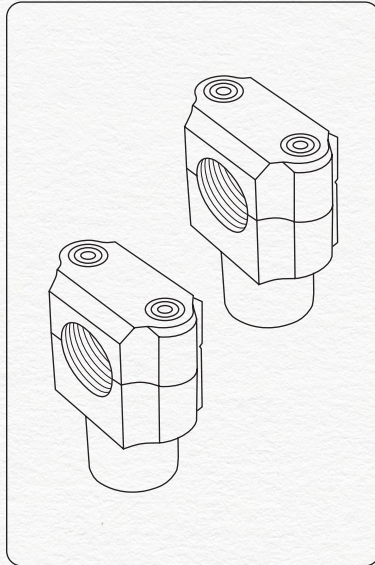
01

Mount the LCD display on the lower or higher bar of the handlebar. The rubber spacers are necessary for mounting on the higher crossbar but are not required for mounting on the lower crossbar. It is advised to keep the screws loose on the mounted LCD display until the bike is fully assembled. This assists with cable management.



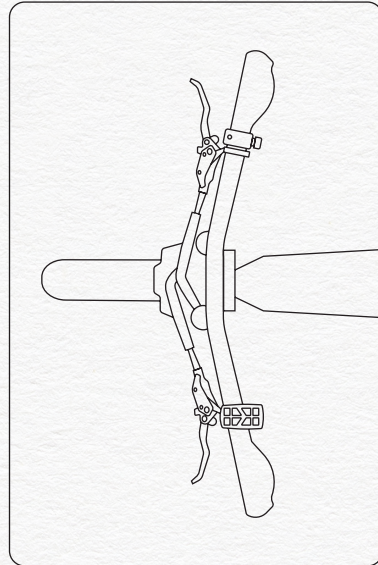
02

Unscrew the handlebar clamps on the main frame, place the handlebar into the lower mounting clamp and reposition the top bracket ensuring that the ridges on the handlebar line up with the ridges on the mounting clamp on the main frame.



03

Tighten using the tools provided until the handlebar is secured and at a satisfactory angle for your riding position.

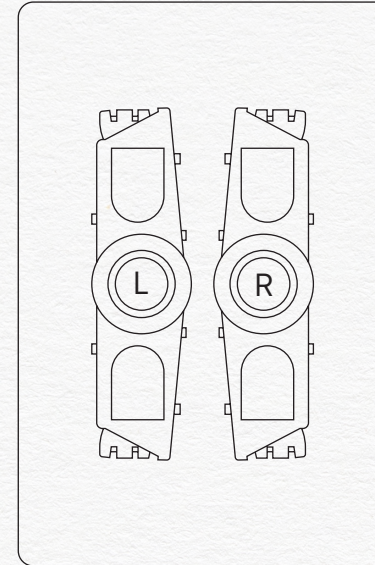


Installation of Pedals

01

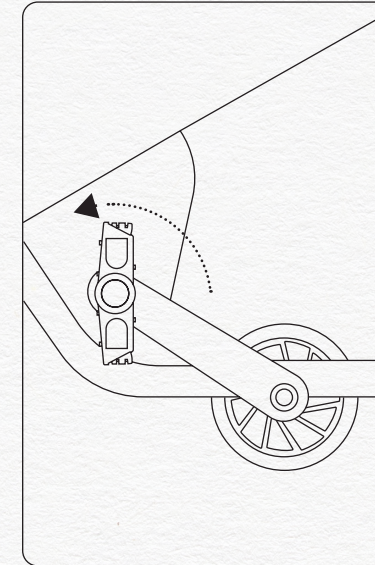
The pedals are labelled Right (R) and Left (L).

You must use the correctly labelled pedal for installation on each side as they are threaded inversely.



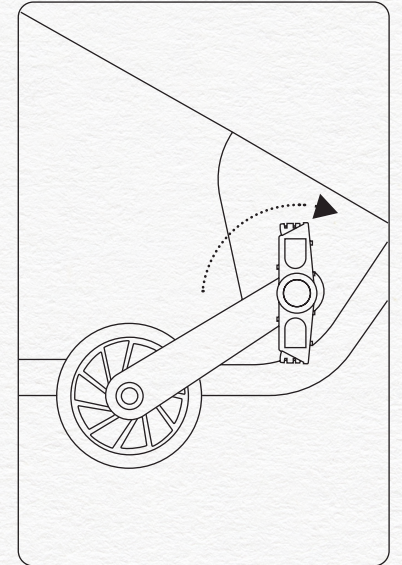
02

Screw in the Left Pedal counter-clockwise using the provided wrench and ensure it is tightened completely.



03

Screw in the Right Pedal clockwise using the provided wrench and ensure it is tightened completely.

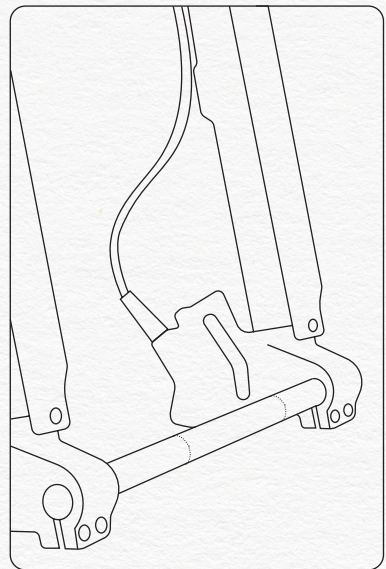


Front Wheel Assembly

01

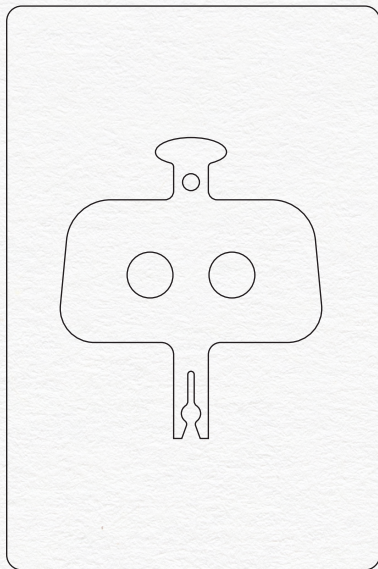
For this stage of assembly, it is advised that you work together with another individual so you can properly align the front wheel and calliper while avoiding any damage to the bike.

First release the axle by unscrewing the nut and sliding it out from the front wheel.



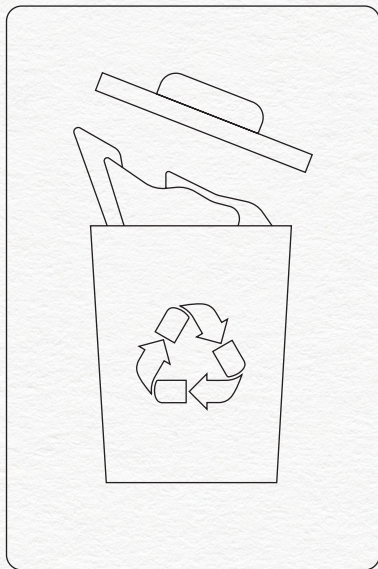
02

Release the wedge from the front calliper so that it can be aligned with the front disc brake rotor.



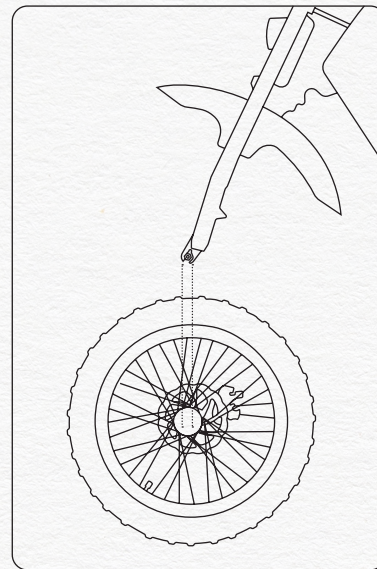
03

Remove the plastic wrapping from the tire.



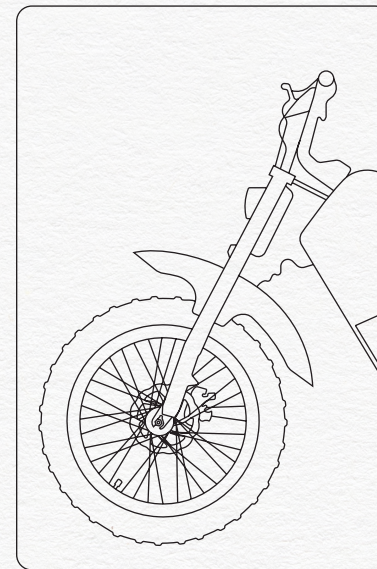
04

One person should lift the front end of the bike frame and front fork so it is suspended in the air, the second person should align the passage of the front wheel to the front fork. Carefully ensure the calliper and disc brake rotor are aligned properly during installation.



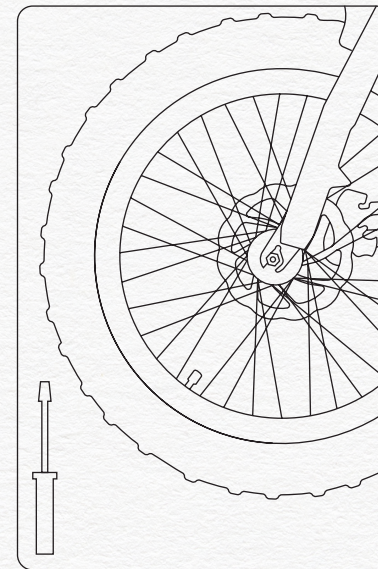
05

Once aligned the axle will be able to insert through the front wheel and front fork. It should be inserted fully until the thread is exposed.



06

Screw on the nut until it is fully tightened.



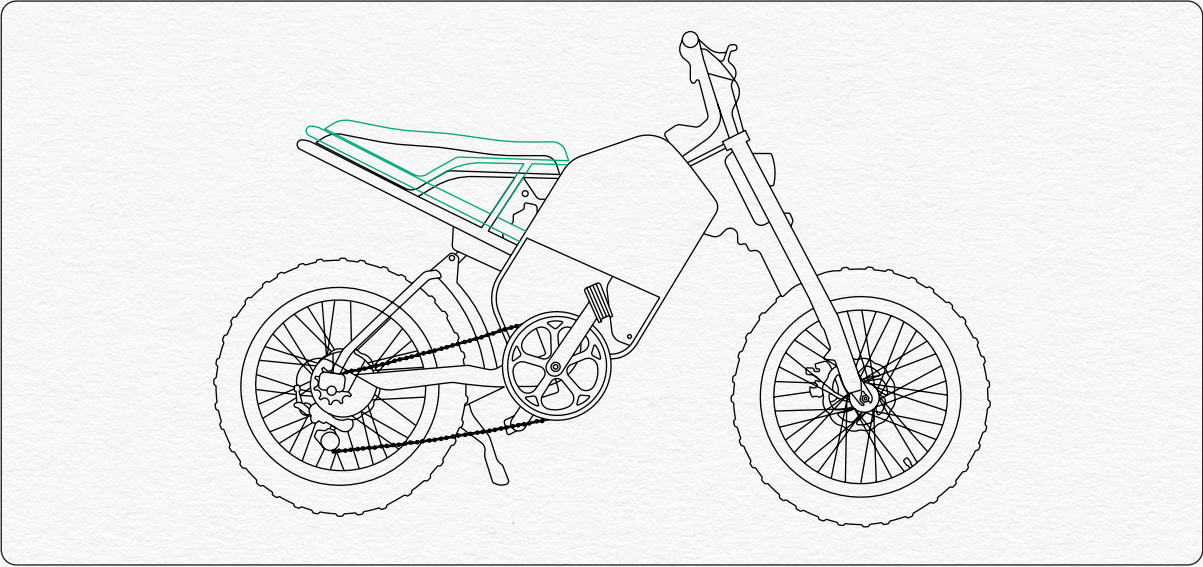
Seat Mounting (Optional)

- 01

The Bison comes with the seat mounted in the lower configuration, it can be re-mounted to the higher bracket for taller riders.
- 02

To re-mount the seat, remove the side panel and battery, to access the bolts that release the seat cushion from the frame.
- 03

Release the rear shock so you can access the seat frame bracket, unscrew and screw in the higher position before re-fixing all other components.



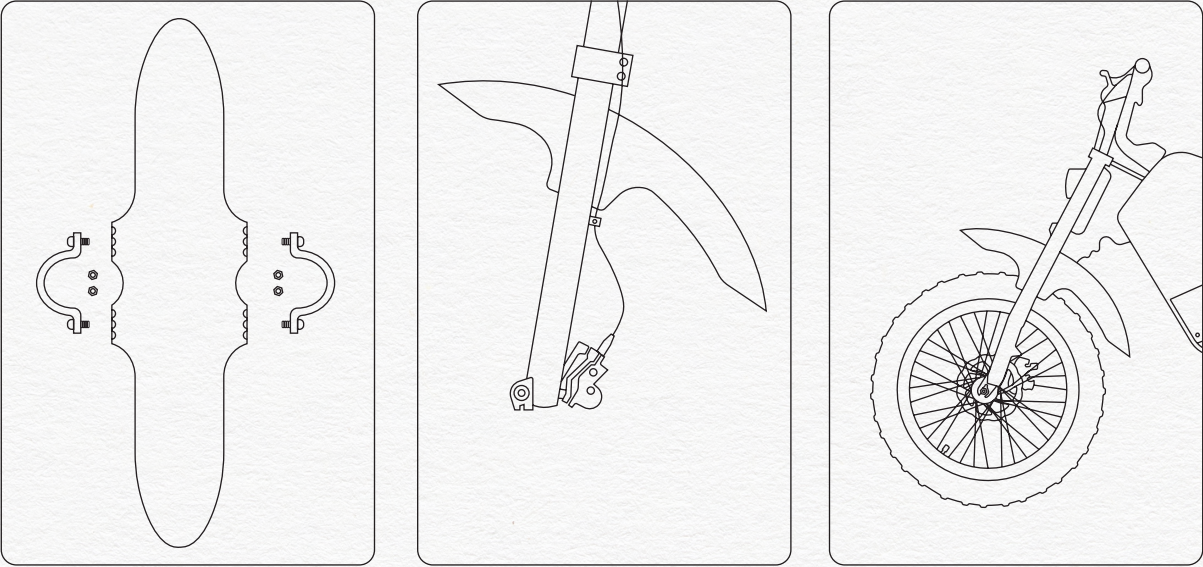
Mounting the Front Fender

- 01

Release the clamp on each side of the front fender.
- 02

Fit the front fender into position between the front fork.
- 03

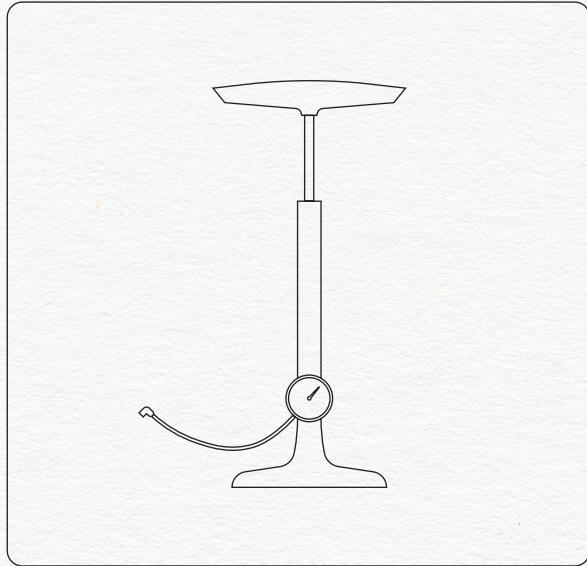
Align the nut with the thread on the inside of the fender and slide it in until it aligns with the hole. Tighten each side, ensuring that the fender is mounted in a position that it does not interfere with the front tire.



Tire Inflation + Charging

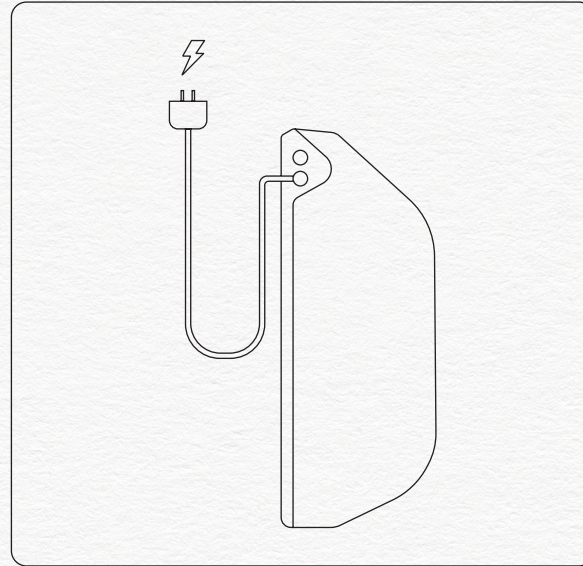
01

Before riding, check the pressure of the front and back tires. Inflate to a maximum of 30 PSI, however for riding in high temperatures it is advised to not inflate beyond 25 PSI given the expansion that occurs in the heat.



02

Before riding complete a full battery charge, i.e. one full cycle until the charging indicator light turns green signalling that the battery is fully charged.



2

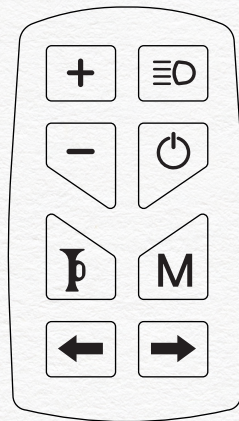
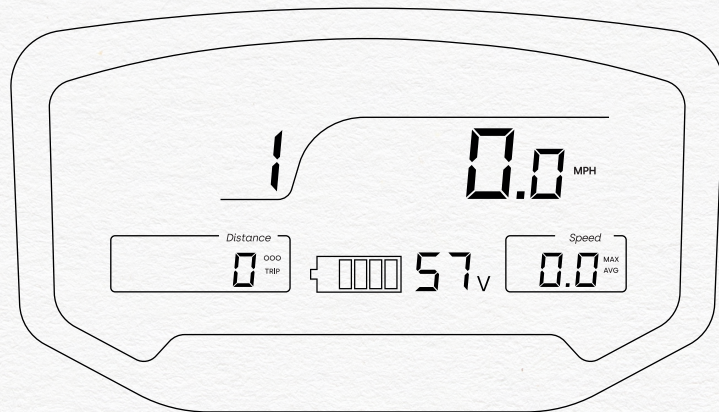
Display Instructions

Power + Riding Mode

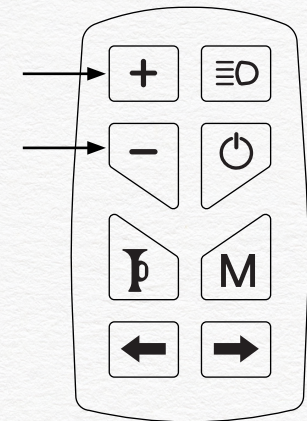
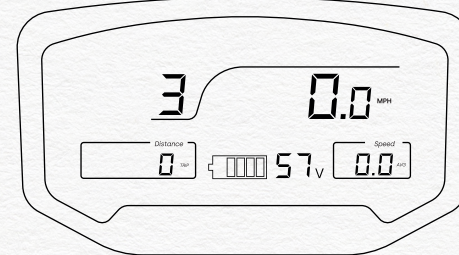
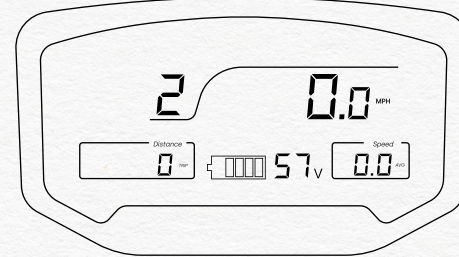
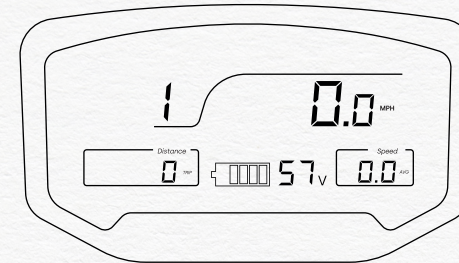
Press and hold the power button to turn on the display. Once turned on, the main interface will appear, showing the gear in "P".

In this mode, the throttle will be inactive. Turning off the display requires you to press and hold the power button for 3 seconds.

Note: Gears will not affect the speed while using the throttle; it only affects pedal assist.

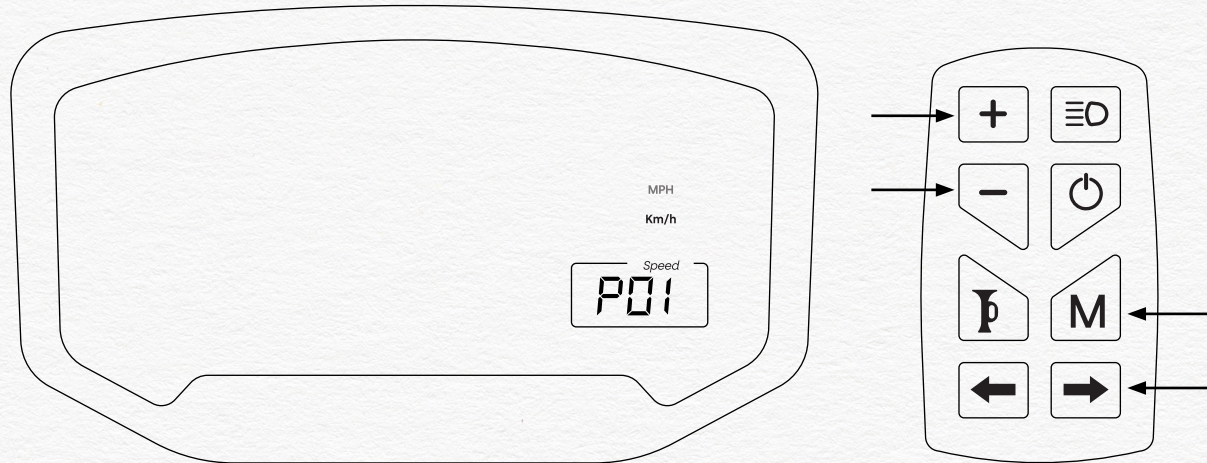


When in riding mode, you can use the + and - to switch between these 4 gears: P, 1, 2, and 3. Press the + button to release the P gear and enter the 1st gear. Press + key to increase the gear, press - key to decrease the gear.



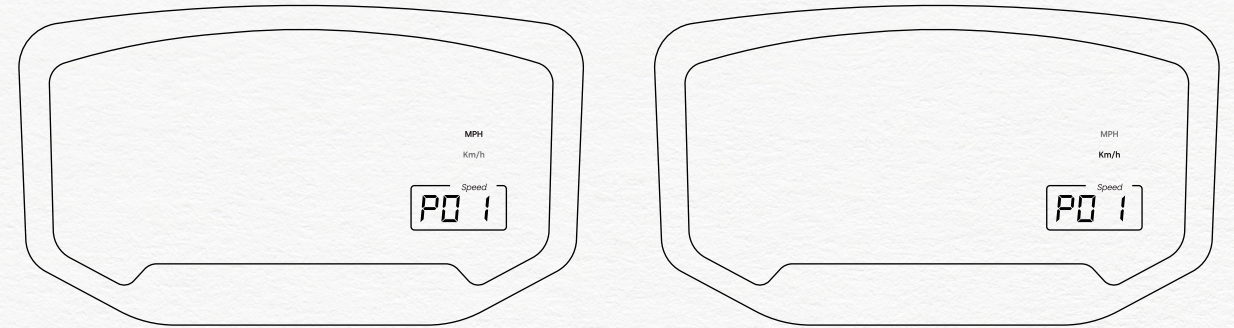
Parameter Settings

To enter in parameter mode, press and hold the M (menu) button for 3 seconds. The parameter modes range from P1-P10. Press and release the M button quickly to switch between P0 1-P10 , and use the + and – buttons to increase or decrease the parameter value. The display will automatically return to riding mode after no button is pressed for about 5 seconds.

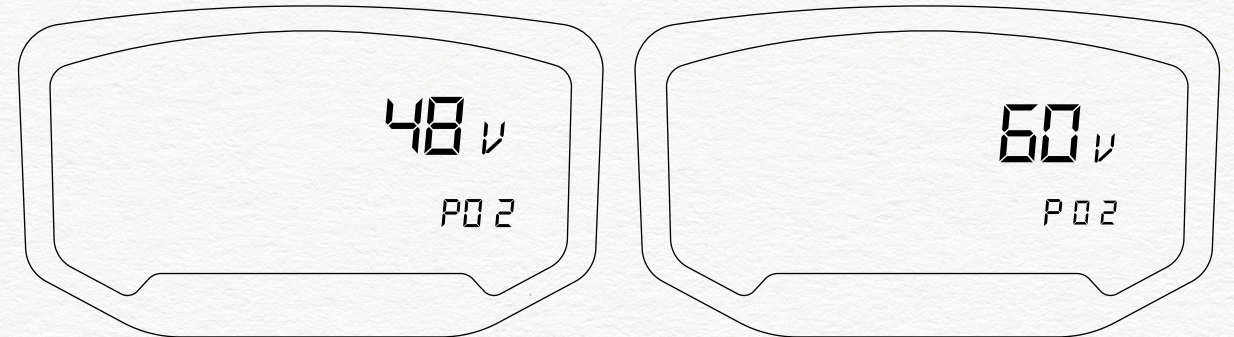


Parameter 1 + 2

P01: Allows you to set the speed unit; you can choose between km/h and mph using the + and -



P 02: Allows you to set the voltage value; you can choose between 48V , 52V, 56V, and 60V. The default voltage value will be 52V

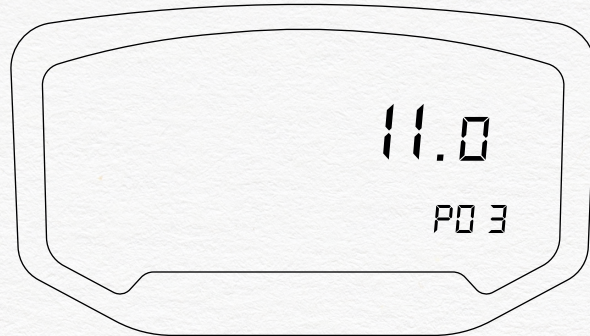


Parameter 3 + 4

P03: Allows you to set the wheel diameter value. The diameter should be set to 24 inches, but the setting ranges from 5-50 inches and can be increased or decreased in increments of .5 inches. Wheel diameter is important because if the diameter is off then it can affect accuracy of speed and range.

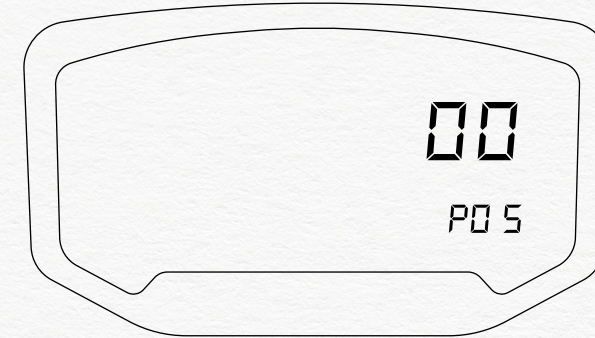
P04: Allows you to set the number of motor magnetic poles, with the default being 1.

NOTE: Changing this parameter will affect the displayed speed value, please set it under the guidance of professionals



Parameter 5 + 6

P05: Allows you to set the cruise switch. 1 means the cruise control function is turned on and 0 means it's turned off. The cruise function will start 6-8 seconds after it is turned on.

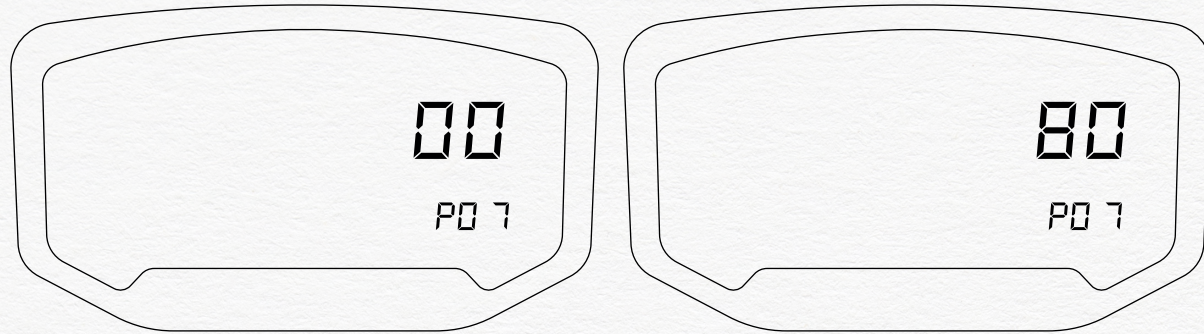


P06: Allows you to set zero start and non-zero start. This will change the ability for the throttle to engage instantly when used, rather than needing an external force for it to engage. 0 is zero start mode, and 1 is non-zero start. It will default automatically at 0.

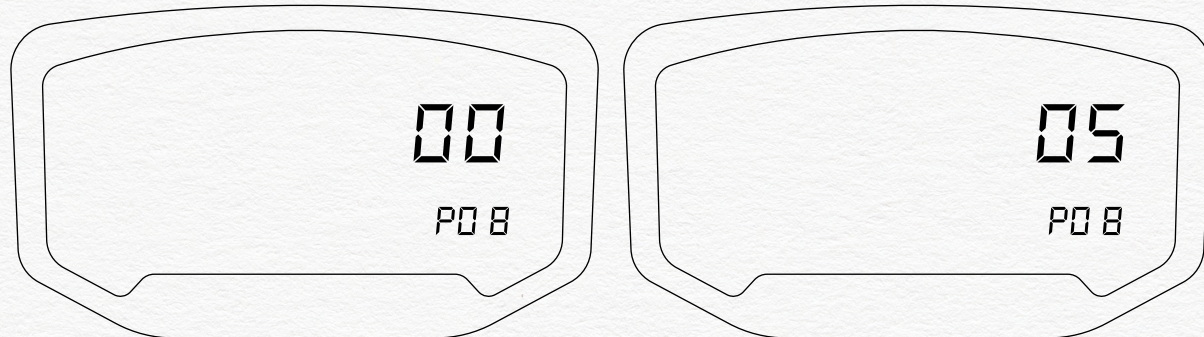


Parameter 7 + 8

P07: Allows you to set the speed ratio. The default is 00 (which is full speed), and can be changed by percentage to determine the speed limit of the bike.
EX: 50% is half of the full speed.

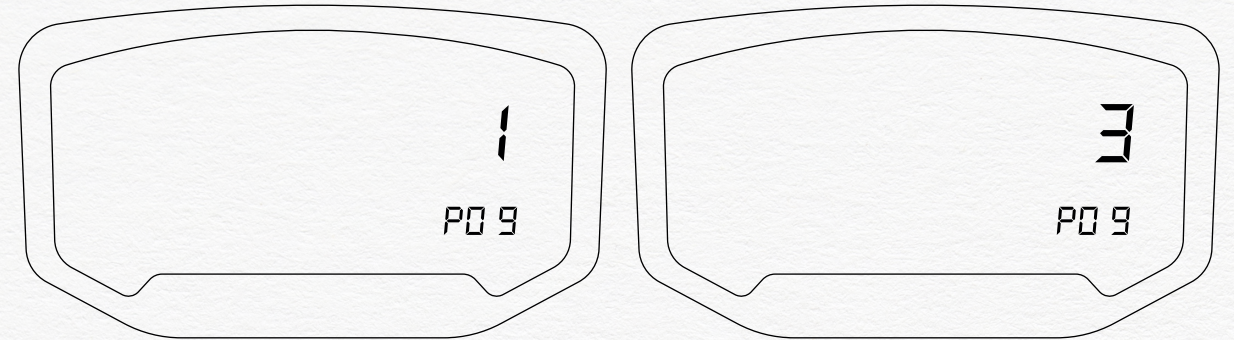


P08: Allows you to set the automatic shutdown time from 0-30 minutes. 0 means IT won't shut down, while other numbers will determine the automatic shutdown time in minutes.

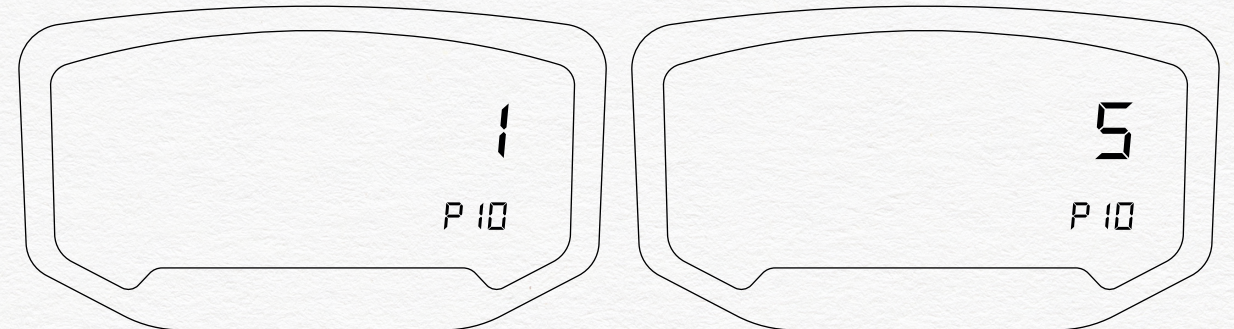


Parameter 9 + 10

P09 : Allows you to change the display brightness. The display will default at 3 and be changed from 1-3 (1 is the lowest and 3 is the brightest)

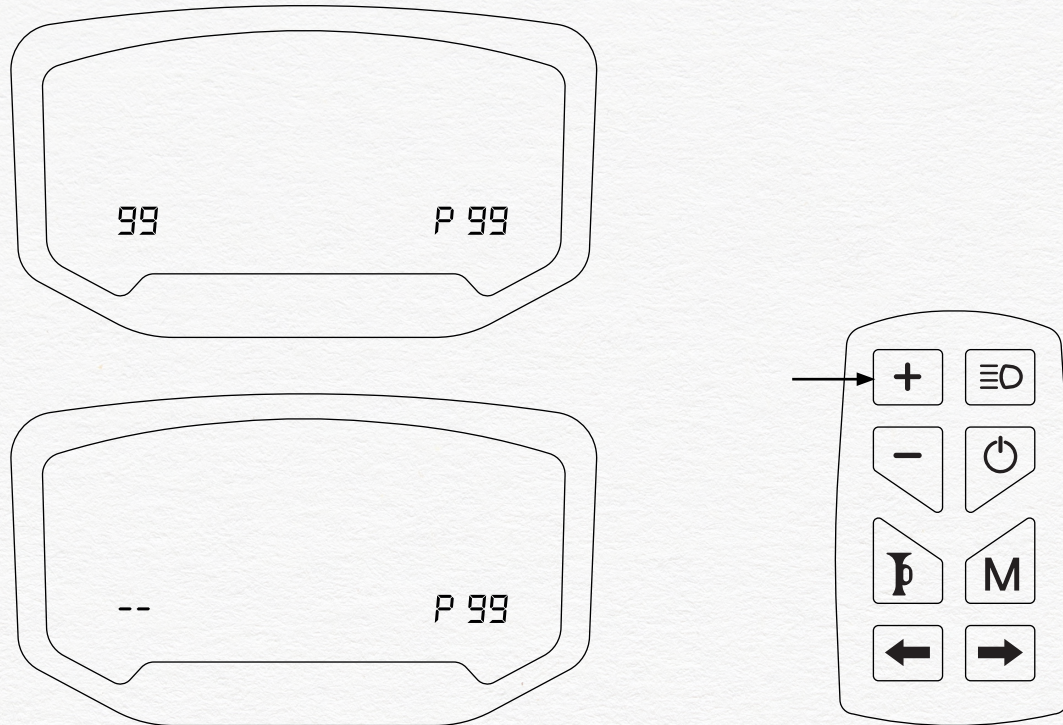


P10: Correlates to the controller output current, this setting is pre-locked by Joulvert to 25 Amps output, independent of the number selected on the display.

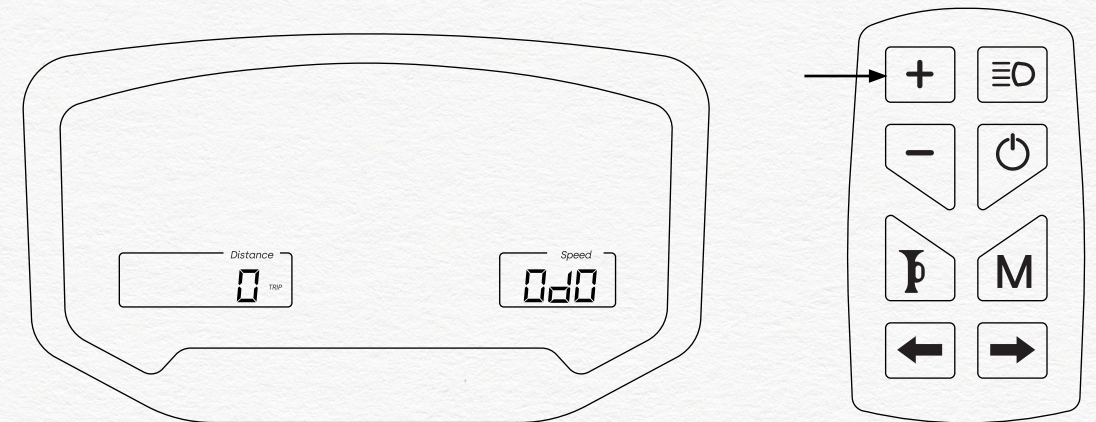


Other Settings

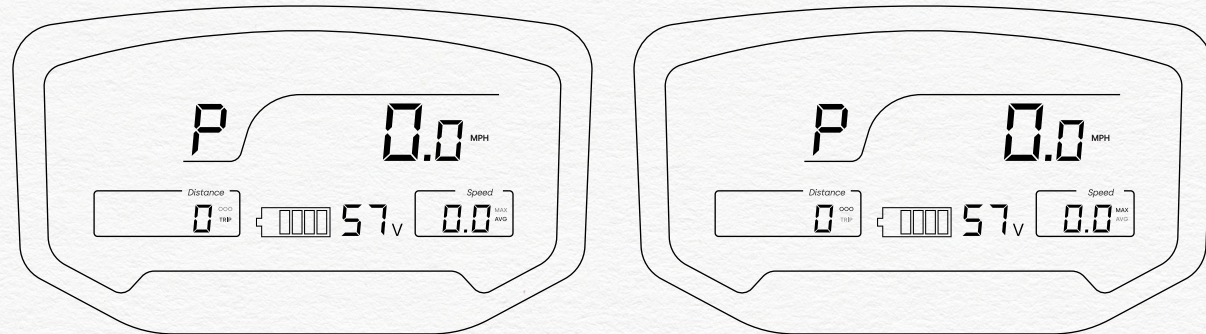
P99: Allows you to restore factory settings. In this mode, press and hold the "+" key for 3-5 seconds, wait until 99 changes to --. This means factory setting have been restored successfully and you will automatically be returned to the main interface.



0d0: Allows you to clear the total mileage. To do this, press and hold the "+" key for 3-5 seconds. The total mileage will then be cleared to 0, and it will automatically return to the main interface.



In riding mode, the green box on the left of the screen displays the total mileage and single mileage. The box on the right will display the maximum speed and average speed of riding. Each box will switch between numbers displayed once every 3 seconds.



3

Riding Instructions

Checklist Before Riding

To ensure your safety, please check your Bison as detailed below.

Wheels

- ✓ Check the tire pressure. We recommend the psi to range from 27-30; it will depend on the weight of the rider(s).
- ✓ Check the treads and make sure they are in good condition free from punctures and cracks.
- ✓ Make sure the wheels are aligned and all the nuts are tightened and secure.

Battery

- ✓ Ensure that the battery is sufficiently charged and securely locked after inserted. The key can be used to lock the battery after it is properly inserted.

Brakes

- ✓ Pull each brake lever. There should be total resistance to moving the bike once engaged.

Other

- ✓ Check the condition of handlebars, tires, cranks, pedals, saddle and other important parts. Check that all the parts are screwed/secured tightly.
- ✓ Check the front and back light to ensure both are working properly
- ✓ Check for any loose cables and connections. Also make sure there is no strain in cables when turning the handlebars
- ✓ Make sure the kickstand is secured tightly

Instructions for Use

Starting your Bike

Turn your battery on using the switch. You can then power the bike using the power button on the display controller.

Re-charge your bike no later than when there is only one bar of power left on the display.

Choose the appropriate assistance level by using the up and down buttons on your display controller. The motor will assist you once you start pedalling.

There are 4 levels of assistance. The motor can provide assistance in segments ranging from 0% to 100%.

Notes During the Ride

Frequent braking and accelerating will deplete the battery faster. Observe local speed limit laws. The motor will stop providing assistance once this speed is reached.

The motor will stop assisting when you stop pedalling. Your Bison's rated maximum load is 350 lbs including rider. Do not overload. Do not have more than 2 people on the Bison at any one point.

At the End of Each Journey

Come to a safe stop, out of the way of traffic or pedestrians.

Turn off the battery using the switch to stop the discharge while parked.

For your safety, please maintain and clean your Bison regularly in accordance with the instructions in this manual/on our website.

Locking + Using the Key Fob

The Key Fob that comes with the bike can be used to set an alarm and motor immobiliser while the bike is parked in public, it is always advisable to use a second lock, kryptonite for example, given the prominence of electric bike theft in the United States.

To set the alarm for the bike, ensure that the battery switch is in the "On" position but the display is switched off. Hit the "Lock" button on the key fob once to turn on the alarm and motor immobiliser.

Now if the bike is moved the alarm will ring and the motor immobiliser will switch on to partially prevent the bike from rolling.

To unlock the bike, you must hit unlock button once, then the middle electric bolt button twice until you hear a distinct dial tone. The bike is now unlocked and can be ridden as usual.

After the bike is turned on using the key fob, you should switch off the bike at the battery switch rather than the display to reset fully.

Unless setting the alarm, it is always advisable to turn the battery off at the main switch to prevent discharge while parked or stored.

Instructions for Charging

How to Use the Battery

To charge the Bison, use your key to remove the battery from its track. Next insert the supplied AC charger into the port.

Plug the charger into an outlet and observe the colour of the indicator light on the charger.

A red light indicates the battery is charging
A green light indicates the battery is fully charged.

It takes 5 hours to fully charge an empty battery. When the charging is finished unplug the electrical plug first, then unplug the charging plug connected to the Bison, in this order.

The Bison has a lithium battery. It has no memory effect, so you can charge or discharge anytime. In normal circumstances, the battery can be used for more than 2 years.

Users need to charge the battery fully 1-3 times by observing the following:

When charging is completed for the first time, continue charging for 1 hours. This will take the initial charging time to approximately 6 hours.

This allows full activation of each cell within the battery, ensuring a healthy battery.

Please repeat this for the first 3 uses of the Bison. After this, normal charging patterns are ok.

Please charge the battery in a safe place.

To protect the battery, only use the original charger. Please do not use this charger to charge other Bison batteries. If you require a secondary charger, please contact Joulvert.

The charger contains a high-voltage circuit, do not dismantle it.

Please avoid any liquid or metal filings falling into the charger. Please protect the charger from impact. Do not drop or drop objects onto it.

Do not cover the charger when it is charging. Failure to do so can cause it to overheat.

Please keep and use your charger in a dry and ventilated environment.

During charging, if the charger emits any odour or becomes excessively hot, please stop charging and contact Joulvert.

4

Maintenance + Troubleshooting

Maintenance and Troubleshooting

Maintenance of your Bison

Lubrication is an important aspect of Bison maintenance. Cassette sprockets, chain and shift pivot of fork require regular inspection, cleaning and lubrication.

Check the brake system regularly paying close attention to the thickness of the brake pads. If below 0.8mm or you notice cracks or contamination, replace promptly.

Check the fixing points/screws of every part regularly. If any parts are loose, please tighten them to the recommended torques.

Cleaning your Bison

Clean your Bison regularly with soapy water. Do not use direct streams of water. Whilst the Bison is water resistant, ensure it is dried after riding in wet conditions to avoid rust.

Do not wash your Bison with a hose or high-pressure hose. This can cause the failure of electrical components or accidents caused by damage to electronic components and circuits. Do not rinse the electrical parts of your Bison, use a damp cloth only.

Using natural detergents only, use a rag to clean the Bison's surfaces gently. Then wipe and dry the Bison with a dry cloth.

Give your Bison's cassette, chain and chainring a coat with lubricating oil periodically to ensure the smooth running of the Bison's drivetrain.

Maintenance of Battery

When the Bison is not used for extended periods of time, the health of the battery must be maintained by ensuring its stored at 80% charge and charged every 1-2 months.

Be careful, an empty battery can be self-discharged quickly. When left alone for extended periods, the battery will discharge itself irreversibly. If this happens the battery cannot be charged any more and a replacement will be required.

Clean visible oxide on the plugs metallic part, or change a plug if the plug becomes hot during charging. Extended periods of excessive heat will lead to a short circuit and damage your charger and battery.

Screwing Torque Recommendations

Handlebar and Stem: 4-5n.m
Stem and Fork: 4-5n.m
Seat and Seatpost: 18-20n.m
Seatpost and Seat Tube: 18-20n.m
Front Wheel: 20-25n.m
Rear Wheel: 30-35n.m
Crankset: 30-35n.m

Troubleshooting - for a full, up to date list, please visit our website.

Item	Fault	Check for	Ways to eliminate
Motor	The motor is not working	1. Depleted Battery 2. Controller is broken 3. Motor was too hot	1. Charge the battery 2. Contact Joulvert for replacement 3. Wait a few minutes
	The motor works intermittently	1. The connector to the motor is loose 2. Voltage of the battery is too low, the controller starts low voltage protection	1. Reconnect the motor 2. Charge the battery
	The motor is powerless	1. Voltage of the battery is too low 2. Motor is damaged	1. Charge the battery 2. Contact Joulvert
Battery	A short time of charge and discharge of the battery	1. Failing in charging due to changing voltage 2. Decline of battery capacity	1. Check the charging document and use the provided charger at the specified voltage 2. Contact Joulvert
	The battery has changed shape	1. The temperature of the charging environment is too high 2. The chargers output is too high 3. Screw attachment has penetrated the battery	1. Contact Joulvert immediately and do not use
Charger	The light on the charger is not working	1. Loose power supply of socket 2. The connector for the indicator light is loose 3. The indicator light is broken	1. Check the outlet, make sure the power is on 2. Check the connection of the charger at the mains supply, at the charging link and on the Bison
	The green light is not lit after 5 hours of charging	1. The charging voltage is too high 2. Battery is damaged 3. The indicator light of the charger is broken	1. Replace the charger 2. Replace the battery 3. Contact Joulvert for spare
	Red and green lights go off quickly when electricity is connected	1. Connection is faulty 2. Charger is electrically shorted	1. Check all connections are secure 2. Contact Joulvert for spare

Error Code	Definition
7E	Rear drive motor is stalled or it's missing a phase
6E	Battery has dropped to a low voltage; it is in under voltage protection
2E	After the system is powered on, check whether the brake is working properly. If the brake signal is less than 0.75 volts for a long time, the brake is faulty.
14E	Check whether the Hall commutation signal of the rear drive motor is faulty. Also check whether the Hall signal connector has poor contact. If this state still occurs after reconnecting the terminals, the Hall of the rear drive motor is damaged.
8E	Detects whether the throttle is out of control or the throttle signal is less than 0.75 volts. This can be the result of a loose connection or damaged throttle. The error can also occur if the customer turns the throttle before the system is working. You can resolve this by resetting the throttle.
9E	Rear drive controller failure.
30E	There is a communication failure between the display and the controller. The display cannot receive the signal from the controller and the green cable is not connected.

31E	There is a communication failure between the display and the controller. The controller cannot receive the display signal and the yellow cable is not connected.
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Battery Disposal

Batteries can contain precious metals which are a risk to the environment and human health if disposed of incorrectly. In accordance with the United States EPA, lithium ion batteries carry waste codes D001 and D003, in a recycling facility or return to us at Joulvert via our website.

DO NOT DISPOSE OF BATTERIES IN DOMESTIC WASTE.

Please inform yourself about the applicable national regulations in your country and observe local laws.



