



# **BUFFALO**

Enclosed is important information regarding your new eBike from Big Game Bikes.

Please, take your time review the contents of this pack.



I am here to help if you have any questions.



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## Important notes

When you receive your bike, please check all the parts and accessories are complete and do not throw away any packaging, if possible. This is so you can store, transport or ship your eBike safely.

eBike are heavy and can be cumbersome. Putting your eBike together is easy but get some help from a friend if you need to.

This pack contains important safety warnings, battery care and maintenance information. We are always updating our product information so please periodically check our website for further information - https://biggamebikes.com/bgb-ebike-important-information/

Carefully read these documents BEFORE using the bike. Make a note of your bicycle serial number. This is normally located near the headset or the bottom crank.

We cannot accept any responsibility for damage, injury or death caused by improper use of the eBike.

If you notice your bicycle is damaged, worn or broken, stop using the bicycle immediately and seek professional advice before using your bicycle again





## General Warnings

You must ALWAYS abide by the laws of the area in which you are riding.

As with any sport, care and attention are required at all times to ensure you have a safe and enjoyable experience. Cycling 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 the risk of damage, injury, and death.

Never ride under the influence of any substance! Never operate a bike while under the influence of alcohol, drugs, or any substance or condition that could impair motor functions, judgment, or the ability to safely operate a bike or another vehicle.

You must be over the age of 18 to operate a Big Game Bikes eBike. Riders must have the physical and mental capacity as well as reaction time to ride safely. A Note for Parents and Guardians. As a parent or guardian, you are responsible for the activities and safety of your child. Big Game Bikes eBikes are not designed for use by children or anyone under the age of 18 years old.

When the useful life of a component is surpassed it can cause an unexpected loss of function, which can result in serious injuries or even death. Therefore, pay attention to wear characteristics such as cracks, scratches, or changes in the colour or operation of components, which could indicate useful life has been exceeded. Worn components should be replaced immediately. Always consult a certified, reputable bike mechanic if you have ANY doubts or concerns.

It is not recommended in wet weather if avoidable. Ride in wet weather only if necessary.

It is not recommended at night if avoidable. Ride at night only if necessary.

If you do not have the experience, skill, and tools to complete maintenance and adjustment of your bike, you must seek the assistance of a certified, reputable bike mechanic to maintain, tune, and ensure the bike is safe to ride.

Never immerse or submerge your eBike in water as the electrical system may be damaged.

Never clean your bicycle with a pressure washer.

Do not ride if you notice ANYTHING on the bicycle is damaged, worn or operating outside of normal parameters.



## General Operating Rules

Pay special attention to all the general operating rules below before operating your BGB eBike.

Always ride your BGB eBike within the laws of your country.

Always ride in a steady and predictable manner. Never ride against traffic.

Always use correct hand signals to indicate turning.

Always ride defensively. Other road users may not be able to see you and YOU may be hard to see.

Always avoid potholes, gravel, wet or oily roads, wet leaves, curbs, manhole covers, train tracks, speed bumps, drain gates, thorns, broken glass, and any other obstacles, hazards, or dangers.

Expect the unexpected such as car doors opening or cars maneuvering.

Always wear appropriate cycling clothing for the conditions in which you are riding.

Always maintain a safe stopping distance from all other objects, riders, and vehicles.

Always ensure that you fully and entirely understand all instructions and safety notes/warnings.

Always 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 ensure you follow the recommended maintenance schedule for your BGB eBike. Do not use this product with standard bike trailers, stands, vehicle racks, or accessories that are not rated or tested for safety and compatibility and have been verified as safe and compatible with BGB eBike.

Familiarize yourself with all the features and operations of your BGB eBike. Practice and become confident and proficient in all aspects of your BGB eBike in a controlled setting before riding in riskier conditions.

**DO NOT ENGAGE IN EXTREME RIDING** including off-road riding. This includes but is not limited to jumps, stunts, or any riding that exceeds your capabilities.

eBikes components are subject to higher wear when compared to bikes without power assistance. This is because eBikes can travel at higher average speeds than regular cycles and have a greater weight. Higher wear is not a defect in the product and is not subject to warranty. Typical components affected are the tyres, brake pads and rotors, suspension forks, spokes, wheels, and the battery.



Although many articles/advertisements/catalogues depict extreme riding, this is not recommended nor permitted, and you can be seriously injured or killed if you perform extreme riding. BGB eBikes and eBike parts have strength and integrity limitations, and extreme riding should not be performed as it can damage the eBike 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. It is your responsibility to 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 motor cut-off switches before each ride. The brake system is equipped with motor cut-off switches to the motor whenever the brakes are applied.

Check proper operation of brake motor cut-off switches before riding.

Extreme care should be taken when using the pedal assistance system and throttle on your BGB eBike. Ensure you understand and are prepared for the power assistance to engage as soon as pedalling or throttle use is underway.

Always use the lowest assist level until you are comfortable with your BGB eBike and feel confident in controlling the power.

Any aftermarket changes to your BGB eBike not expressly approved by Big Game Bikes will void the warranty and create an unsafe riding experience.

BGB eBike 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 safety equipment installed on your BGB eBike.



Your cables, spokes, and chain will stretch, and bolted connections can become loose. Always have a certified, reputable bike mechanic perform a thorough and comprehensive inspection of your BGB eBike within the first 100-150 miles (150-200 km) (depending on riding conditions such as total weight, riding characteristics, and terrain). Regular inspections are particularly important for ensuring that your BGB eBike remains safe, fully functional and operational.



### Basic eBike Care

To ensure safe riding conditions you must properly maintain your BGB eBike. Follow these basic guidelines and see a certified, reputable bike mechanic at regular intervals to ensure your bike is safe for use.

Properly maintain batteries by keeping them fully charged when between uses. See the Long-Term Battery Storage section for information on storing the battery for longer than two weeks between rides.

Never immerse or submerge the bike or any components in any liquid.

Check wiring and connectors to ensure there is no damage and the connectors are secure.

Keep your BGB eBike clean. Use a mild, non-corrosive detergent and damp cloth to wipe the frame.

Store your BGB eBike in a dry, secure location. Never leave your BGB eBike in the rain or exposed to weather or materials or elements that could damage your BGB eBike. If you do ride in wet conditions, immediately dry your BGB eBike at the earliest convenience and apply antirust treatment to the chain and other unpainted steel surfaces.

DO NOT use your BGB eBike on the beach or in coastal areas. Exposure to salt, which is very corrosive. Damage from corrosion is not covered under warranty.

Regularly clean and lubricate all moving parts, tighten components, and adjust as required.

Regularly inspect all pre-attached and optional component hardware to ensure proper and secure attachment as well as good working condition.





### Recommended Service Intervals

Regular care, inspection, and maintenance are critical to ensure your BGB eBike functions as intended.

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 are performed at the time or mileage interval that comes first in the following table.

This is only a guide. Consult a certified, reputable bike mechanic if you have any doubts or concerns. ALWAYS replace any damaged or broken components



## Weekly or every 100-200 miles (150-300 km)

#### **Inspect and Service**

- 1. Check your bicycle for damage or faults and any signs of wear and corrosion.
- 2. Check/adjust all components, accessories, nuts, and bolts are secure and have not become loose, moved, or changed from their intended position.
- 3. Check tyre pressure. Inflate/deflate your tyres, if necessary.
- 4. Clean your bicycle as described above.
- 5. Adjust any parts of the bicycle that may have come loose or that may have moved or changed from their normal position.

#### To Do

- Consult a certified, reputable bike mechanic if you have any doubts or concerns.
- Replace any damaged, worn or broken components.





## Monthly or every 250-750 miles (400-1200 km)

#### **Inspect and Service**

- 1. Check the points raised in the schedule above.
- 2. Check your brakes including brake pad alignment, brake cable tension.
- 3. Check your gears are changing properly and ensure proper derailleur cable tension.
- 4. Check chain wear.
- 5. Check for corrosion damage.
- 6. Check spoke tension.

#### To Do

- Consult a certified, reputable bike mechanic if you have any doubts or concerns.
- Replace any damaged, worn, or broken components.



## 6 Months or every 750-1250 miles (1200-2000 km)

#### **Inspect and Service**

- 1. Check the points raised in the two schedules above.
- 2. We highly recommend a thorough safety check and tune-up by a certified, reputable bike mechanic.

#### To Do

- Consult a certified, reputable bike mechanic if you have any doubts or concerns.
- Replace any damaged, worn, or broken components.



## Every 12 Months or every 2000 miles (3000 km)

#### **Inspect and Service**

1. We recommend that your BGB eBike is thoroughly and comprehensively inspected in its entirety by a certified, reputable bike mechanic.

- Book your BGB eBike into a certified, reputable bike mechanic workshop.
- A thorough and comprehensive inspection is required.
- If any parts or components need to be replaced or are suggested to be replaced that this work is carried.
- Failure to do so will void your warranty.



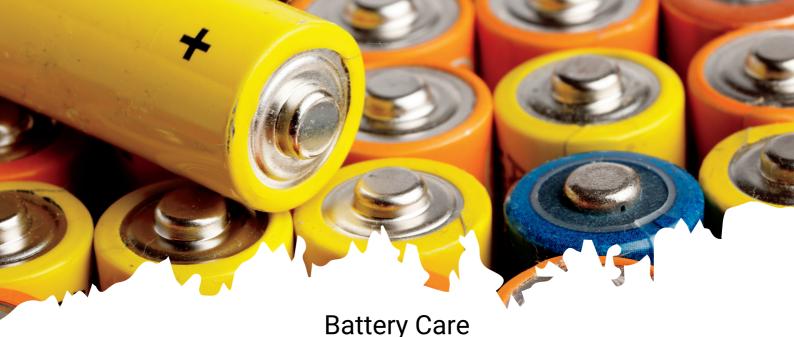


## Safety Checklist

#### NOTICE: Before every ride, we recommend following this safety checklist.

- Check your brakes work properly.
- Check tyres have good tread, have no bulges or excessive wear, and are free from any other damage, and are inflated correctly and within the recommended limits as described on the tyre sidewalls. Check there are no air leaks.
- Check wheels run true and have no obvious wobbles, dents, or kinks. Ensure all wheel spokes are tight and not broken.
- Check axle nuts and quick-release mechanisms to ensure they are tight and correctly positioned.
- Check the handlebar and stem are correctly adjusted, tightened, and allow proper steering.
- Check the chain is clean, oiled, and runs smoothly.
- Check all bearings are lubricated, run freely, and display no excess movement, grinding, or rattling.
- Check pedals and cranks are secure.
- Check that the derailleur is functioning properly.
- Check that the seat is adjusted properly and secure.
- Check that the electric motor works as it should and runs freely and is not making any unusual noises.
- Check the battery is fully charged, not damaged, and locked to the battery mount.
- Check all electrical connectors are secure, not damaged, and function as they should.
- Check obvious signs of ANY damage.
- Check ALL fittings on the bike are properly secured and functioning.





Your eBike battery is an expensive component but with some very easy and simple processes, you can enjoy many years of use.

## **Balancing the Battery**

Your battery will arrive in a state of 'sleep'. The battery should arrive with a 50% charge so you are welcome to go for a ride immediately but don't go too far, perhaps 10 miles or so.

You need to balance and 'wake up' your battery.

- 1. After the first 3 rides, regardless of how far you have ridden or the amount of battery used, charge the battery and leave the charger attached to the battery and the outlet for as close to 12 hours as possible (but not longer than 12 hours). Even if the green charged LED shows, leave the battery on charge.
- 2. Disconnect the charger from the battery as close to 12 hours as possible and store your battery until your next ride. Ensure to use your battery again within 24 hours. If you do not plan to ride again within 24 hours then delay the next 12-hour charge until you are ready to ride within 24 hours.
- 3. Go for another 2 rides, no matter the distance or battery capacity used, and repeat the steps above.
- 4. After the third charge, follow the normal charging procedure as below.

## **General Charging**

Charging your eBike battery is very easy. Red LED means charging. Green LED means charge complete.

- 1. Always ensure the wall socket is switched off.
- 2. Plug the charger into the wall socket and then into your battery.
- 3. Switch on the charger at the wall socket and ensure the red charging LED lights up.
- 4. Turn the charger off at the wall once the green charged LED light comes on.
- 5. Then remove the charger from the battery and store it safely.

Charging times vary so take the time to learn how long it takes to charge your battery, depending on your battery's state of charge, to ensure you end the charging process as soon as the green LED appears.

Notice: The battery may take longer to charge when fully depleted, when very new, and after 3–5 years of regular use. If your battery does not seem to be charging normally, is taking longer to charge than expected or you are experiencing a substantial reduction in range, please discontinue use and contact Big Game Bikes immediately.



## S2 eBike Display Manual

### Display Icon Information



**Brake Indicator:** This icon appears to advise that the brake has been engaged and power to the motor has been disabled.

**USB Power On:** Confirms if USB port is powered and ready for use.

Light Indicator: Confirms the lights are turned on and dims the display for night riding.

Current Speed: Real-time actual speed information.Average Speed: Your average speed for this ride.Max Speed: Your maximum speed travelled this ride.

**Peddle Assist Indicator (PAS):** Displays the current level of power assistance, where 0 is neutral and no power and where 1 - 9 corresponds to power assist level. 1 is low, 9 is high.

**Error Warning:** The system has detected an error.

**Battery Charge Percentage:** 100% - The battery is fully charged. 0% indicates the battery is empty and requires charging.

**Battery Charge Level:** This level is based on your riding style and optimised by a range algorithm. The display learns how you ride and provides battery level information based on this data.

Speed preference: KPH or MPH

**Mileage display:** 'POW' - Power output from the motor. 'Trip' - distance travelled this ride. 'ODO' - odometer, total accumulated mileage. 'Time' - Time elapsed since the system powered on.



## **Keypad Function**



**Power On/Off:** Long press the POWER button for about 1 to 3 seconds to turn the system on. Long press the power button for about 1 to 3 seconds to turn the system off.

**PAS Levels:** Pressing the **PLUS** button or **MINUS** button will increase or decrease the level of assistance. The lowest being 0 (neutral and no power) up to 9 being maximum power. By default, the system has 5 PAS levels.

\*PAS - Peddle assistance levels





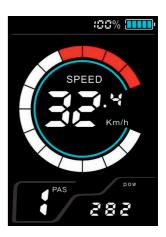


Mileage Display: Short pressing the POWER button scrolls through the ODO, Trip, Time and Power data









Trip

Motor Power Output



**Speed Information:** Short pressing the **POWER** button scrolls through the AVG (Average speed), MAX (maximum speed) and SPEED (real time speed)







AVG (Average speed)

MAX (Maximum Speed)

SPEED (Real Time Speed)

Clear logs: Press the PLUS and MINUS button for 1 second to clear average, max, trip and time data.

Walk Mode (6 kph): Press and hold the MINUS button to use walk mode.

**USB Function:** Long press (1 second) the **MODE** button to turn on the USB port located at the bottom of the display. Great for charging for phone - DC 5V max 500ma.







## Settings Menu

When the display is turned on, press the **MODE** button twice (<0.3 seconds between presses). This will enter the settings menu. Press the **MODE** button twice to exit the setting menu. (<0.3 seconds between presses). When in the setting state, press **MODE** button to select the desired adjustment, when the parameter flashes, press **PLUS** button and **MINUS** button to adjust the parameter setting. Press **POWER** button to save and move to the next parameter. Press **MODE** button twice to exit the setting state (<0.3 seconds between presses).

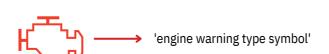
\*if no key operation is performed for 30 seconds, the display automatically exits the setting state. In the riding state (the speed indication is not 0), you cannot enter the setting interface. If you start cycling in the setting interface (the speed indicator is not 0), you will automatically exit the setting.

	Default Setting	BGB Recommended	Description	
P1	4	4	Screen brightness 1 through 5 with 1 = DIM 5 = BRIGHTEST.	
P2	5	5	Auto-shutdown (represented in minutes) - 1 minute through 9 minutes or OFF. To save power, the systemcan shut down automatically or not at all. Select, how long the system remains on when the bicycle is notbeing used before shutting down.	
P3	0	1	Distance - 0 = KPH or 1 = MPH.	
P4	0	0	Automatic gearing - DO NOT CHANGE.	
P5	1801	1801	Advanced Menu (Password 1801)	
A1	48	48	System Voltage = 48v - DO NOT CHANGE	
A2	5	5	PAS levels - 3/5/6/9.	
А3	99	25	Speed limit in KPH. 25 = UK on-road limit. 100 = no speed limit. 25kph/15.5 mph for use on road	
A4	15	5	Current/Power limit. 5 = UK on-road limit. We do not recommend increasing above 15 when off-road. 5 amps x 48v = 240w. On road, do not exceed 250w.	
A5	24	24 / 27	Wheel circumference - 16/18/20/22/24/26/27/700C/28/29/30/31/32. You can change this setting toimprove the accuracy of the speed reading.	
A6	1	1	Number of speed measuring magnets - DO NOT CHANGE	
A7	12	12	Number of PAS magnets - DO NOT CHANGE	
A8	0	0	Throttle control. 0 = limited to 6 kph. 1 = Unlimited (Ensure A10 is set to 2 to enable the throttle)	
A9	0	0	PAS Orientation - DO NOT CHANGE	
A10	2	0	0 = PAS only. 1 = throttle only (see A8 for additional throttle settings). 2 = PAS and throttle enabled. 0 for PAS only disables the throttle. This is required for use on the road.	
A11	0	0	PWM (Pulse Width Modulator) duty cycle - DO NOT CHANGE	
A12	5	0	Initial power produced when starting. For a gentle start use 0. For maximum starting power use 5.	



## **Error Code Definition**

The display can provide error indications for faults. When a fault is detected, the LCD screen displays an 'engine warning type symbol', and the error code "n" and error description are displayed at the speed display position. Please refer to the error code comparison table to determine the corresponding fault.





Error Code 08H	<b>Possible Problem</b> Battery under voltage	<b>Solution</b> Charge the battery
40H	Motor fault	If the Hall of the motor is faulty, check whether the Hall wire is short-circuited and whether the plug is plugged in
0011		properly. If all are good, replace the motor.
20H	Handlebar fault	Check the wiring and plug of the handle, if all are good, replace the handle.
10H	Controller fault	Controller is damaged, replace the controller.
30H	Communication fault	1. Check the display wires for breaks.
		2. Check whether the connection between the controller and
		the instrument plug is in good condition.
		3. Unplug the PAS sensor to see if an error is reported. If no
		error is reported, the sensor is short-circuited and damaged,
		and the sensor needs to be replaced.
		4. Unplug the switch to see if an error is reported. If no error
		is reported, the handlebar is short-circuited and damaged,
		and the handlebar needs to be replaced.
		5. Unplug the motor hall wire to see if an error is reported. If
		no error is reported, the motor Hall is short-circuited and
		damaged, and the motor needs to be replaced.
		6. If the above methods cannot solve the problem, use the
		replacement method to troubleshoot the problem: replace
		the controller or instrument to troubleshoot which problem
		is.