

# BATRIBIKE<sup>®</sup>

## ELECTRIC BICYCLES

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**DIAMOND**



**QUARTZ**



**GRANITE**



**User  
Manual**



**REGENERATIVE RANGE**

MODEL:-



**QUARTZ**



**GRANITE**



**DIAMOND**

SERIAL NUMBER:-

				<b>B</b>	<b>B</b>				
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PURCHASE DATE:-

		/			/				
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DAY

MONTH

YEAR

	<b>DEALER STAMP</b>
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**IMPORTANT PLEASE READ THIS MANUAL FULLY  
PRIOR TO ASSEMBLY AND USE**

For your safety and to ensure a long and trouble free life of your Batribike bicycle, check the operation of brakes, lights, bell and gears, and check tyre pressures are correct.  
Also check all fasteners, including quick release mechanisms, before every ride.

Thank you for purchasing a **BATRIBIKE** Electric Bicycle  
 from Fallowgate Limited.  
 With care and correct usage your bicycle  
 will give many years of service.

### **Important**

#### **PLEASE CHARGE THE BATTERY BEFORE FIRST USING THE BICYCLE**

*Even though the battery indicator will show charge this cannot be  
 relied upon until the battery has had the initial full charge.*

### **PACKAGE CONTENTS**

1 ELECTRIC BICYCLE  
 1 BATTERY  
 1 BATTERY CHARGER with UK Mains Lead  
 1 MANUAL

## **Contents**

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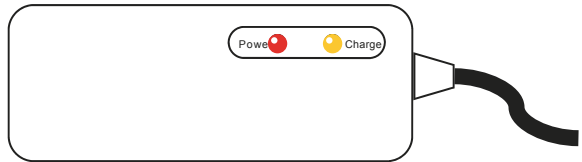
## Charging the Battery

The battery can be charged on or off the bike. To remove the battery, unplug the battery from the bike, (Blue Plug), then unlock with the one of the two keys provided, hold down the plastic clamping tab and slide out the battery from the rear of the carrier. Insertion is the reverse of the above procedure.



### WARNING

Ensure that charging socket cover is CLOSED before removing or inserting battery. Failure to do so will result in breakage of the cover.



**USE ONLY THE CHARGER SUPPLIED**

The charging lead is plugged in to the charging socket located behind the slide cover on the battery.



Unplug the battery from the bike (Blue Plug) before charging, then plug in the charging lead.



(To remove the Blue Plug slide the silver locking tab backwards and rotate the plug anti-clockwise, then pull out of the socket).

### IMPORTANT

It is important to plug the charger into the battery before switching on at the mains. Similarly, switch off at the mains before unplugging the charger from the battery.

Plug the charger into the mains socket and switch on at the wall outlet. The lights on the charger will illuminate after a few seconds.



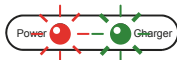
The RED light indicates that mains power is applied. The other light will show ORANGE whilst charging is taking place. This may take up to six hours for a flat battery.



When the battery is charged the ORANGE light will change to GREEN.

Once charged, switch off at the wall outlet and unplug. Unplug the charging lead from the battery and slide the cover back over the charging socket.

**NOTE:** If the battery is charged and the charger left switched on for an extended period the charger will enter a low power state, indicated by both the RED and ORANGE/GREEN LEDs flashing slowly. Switch off and unplug as above.



The battery does not have to be completely discharged before it is recharged. The Lithium battery has no 'memory' and therefore can be charged at any time. It is perfectly acceptable to recharge the battery after a short ride so that the battery is fully charged before the next ride.

**If your BATRIBIKE is not in use for an extended period it is imperative that you charge the battery before storage and then charge the battery once a month to prevent deterioration.**



**If Lithium batteries are left flat for an extended period then they may no longer be functional and a new replacement will be required.**

**With correct User Care as outlined above your battery should have a lifetime of around 1000 charges.**

## Usage

Your **BATRIBIKE** Electric Bicycle can be used as a normal pedal cycle by simply not switching on the battery.



To use under electric power plug in the battery with the blue plug located on the end of the battery beneath the rear of the seat. Then press and hold the ON/OFF, MODE switch on the handlebar display. The Power Indicator on the display will light to show the remaining power in the battery. If the unit shows 2 LEDs or less it is recommended that you charge the battery.

### **IMPORTANT NOTE:**

***Do not put pressure on the pedals when turning on the power.***

*The system initialises the pressure as it starts up and pressing on the pedals will give a false reading. This means that you will have to push harder on the pedals to activate the pedal assist. If you have inadvertently done this, simply switch off, remove your feet from the pedals and switch on again.*



The **Regenerative Range** is equipped with Torque Sensor technology. This means that as you put pressure on the pedals the system senses your efforts and provides a boost. Under normal riding on flat ground the amount of power put in by the motor is low but as you reach an incline or turn into a head wind you naturally place more effort into the pedalling. The torque sensor adjusts the output to match the conditions. This means that the assistance provided by the motor increases only when needed, thereby maximising range.

There are four selectable levels of assistance available. Press the MODE switch on the handlebar display to show the current level. (Flashing LEDs). To change the assistance level press the MODE switch again within a couple of seconds. The assistance will be changed to the next highest level. When Level 4, (Full Power) is reached, pressing the MODE switch again will revert to Level 1, (Low Power).





**RANGE: Battery level 3 shown**

If the MODE switch is not pressed within a couple of seconds the LED display will revert to showing the battery power remaining. (Steady LEDs).

(Estimated mileage will vary with terrain but at full power (Level 4), a 75kg rider should be able to travel up to 40 miles over level ground with a fully charged battery).

There is also a twist throttle provided on the right handlebar grip. To use the throttle twist the grip slowly towards you to increase the power and away from you to decrease again. If you release the throttle it will return to the off state. You can use the throttle at any time, i.e whilst pedalling or without pedalling. If the bicycle is used under throttle only without pedal assist then the range will be substantially reduced. (Around 20 to 25 miles at Level 4 with a 75kg rider on flat ground).

#### **IMPORTANT NOTE:**

***When power is switched on the twist grip throttle is live.***

*Take extra care when getting on and off the bike that the throttle is not twisted as the bike may be propelled forwards without you. We would recommend switching off before getting off the bike until you are fully familiar with the operation of the controls.*

*You can also hold the brake on as this will disable the motor.*

## **Battery Meter**

The handlebar display shows the charge remaining in the battery when the LEDs are steady (not flashing). When 4 lights show the battery is full or nearly full. The lights will gradually go out as the battery power is used up. The final light will flash just before the battery is exhausted.



## Gears

The **DIAMOND, GRANITE & QUARTZ** are provided with 7 speed Shimano gears. To change gear you use the right handlebar mounted selector. Gear number 1 is low for hills and rough terrain and gear 7 is high for normal road use. To increase the gear simply press the + button with your right thumb. To decrease the gear push the black lever away from you with your thumb. You must be pedalling as you change gears.



## Lights

Lights are provided on your **BATRIBIKE** bicycle. These are power efficient LED units which achieve a long life on each set of batteries.

**SAFETY FEATURE** - The power for the front and rear lights is kept separate from the main power supply so that in the event that the battery is exhausted you will still have lights for safety.

The front light is powered by 3 AAA size batteries and is switched on by the black push button switch at the rear of the unit.



To replace the batteries simply twist the lens anti-clockwise and pull free.







The rear light requires 2 AA batteries. You will require a small Philips screwdriver to take off the red lens for battery replacement. It is switched on by the small switch on the underside of the unit.

## Braking

To stop, release the throttle and pull the brake levers.

## Regenerative Braking



A feature of the **Regenerative Range** is the addition of REGENERATIVE BRAKING. This allows the rider to use the motor “like a dynamo” to effect efficient braking without using the normal brakes.

To initiate Regenerative Braking you simply pedal gently backwards. After a couple of turns the motor will be put into braking mode and the bicycle will slow down. At the same time, power will be regenerated and put back into the battery, thereby helping maintain charge levels to some extent. (This does not replace the need for mains charging).

The pedalling backwards is not using any effort, it is simply letting the electronics know to put the motor into Regenerative Mode. If you cease to pedal backwards the bicycle will revert to normal freewheel mode.

The slowing down effect of the Regenerative Braking is very marked and you need to be going downhill to effectively use this mode.

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## Centre Stand (where fitted)

To put the bicycle on its stand:-

- 1) While holding the bicycle upright, place your foot behind the stand.
- 2) Pull the bicycle backwards until the stand is in place.

**Make sure bicycle is on solid ground.**

## Side Stand (where fitted)

To put the bicycle on its stand:-

- 1) While holding the bicycle upright, push the stand to its full extent.
- 2) Lean the bicycle over onto the stand.

**Make sure bicycle is on solid ground.**

## Tyre Pressures

The tyres should be pumped up to within the range stated on the sidewall. This should be regularly checked as running with the correct pressures will ensure maximum range from the battery.

## Quick Release fittings for Seat Height Adjustment

With the locking lever in the loose position, tighten the nut until finger tight. The final tightening is done by moving the lever to the locked position. To undo move the lever to the loose position to enable height adjustment.

**Loose**



**Locked**



## Folding the Bicycle (Quartz only)

Fold pedals by squeezing in as per photo, and turning through 90 degrees.



Turn the pedals to the position shown in photograph so they are not trapped when folding the frame.

Release centre frame lock as follows:-



Flip catch



Turn to side



Lift up lever to release pin from frame

- Fold frame front to back.
- Unscrew handlebar folding lock fully and fold down handlebars.

Reverse procedure to return bicycle to riding position.

## Adjusting the Handlebars (Granite & Diamond)

The handlebars can be adjusted for height and angle to suit the rider. Hex keys, (not supplied), will be required to carry out these adjustments.

All other operation of your **BATRIBIKE** Electric Bicycle is as per a normal pedal cycle.

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## Service & Spares

Remember to check all nuts and screws before and after the first ride. This will need to be repeated after a week or so of riding and periodically to maintain safe use of your **BATRIBIKE** bicycle.

Cables may also stretch a little during the first few uses. Brakes and gears may need to be adjusted after the first few days to ensure correct operation. Refer to your local cycle shop if you are not familiar with this operation.

Your **BATRIBIKE** bicycle uses standard cycle parts wherever possible. Items such as tyres, tubes, lights, brake pads/blocks and cables may be obtained from your local cycle shop or retailer.

Specialist parts such as the motor, battery, torque sensor or frame components are only available from Fallowgate Limited or their authorised distributors.

Optional items such as Gel Seats, straight or extended handlebars etc are all available to fit and most standard cycle accessories should fit the **BATRIBIKE** Range. Fallowgate Limited is happy to provide accessories to meet your needs.

## Removing the Rear Wheel



If you need to remove the rear wheel, for example, to replace the rear tyre, then the motor can be unplugged to aid disassembly. The plug is located in the small plastic casing as shown, (Right).

Remember to ensure that the cable is suitably secured to the bicycle frame upon re-assembly.

## Charging Fuse

If the battery will not operate or charge correctly, firstly check the battery fuse (rated 30A) located on the side of the battery beneath the screw cover. Use a large flat bladed screwdriver or a small coin to remove the cover.



**Please consider the environment before disposing of any part of your Batribike Electric Bicycle.**



**The Battery Pack contains  
Lithium and Special  
Consideration should be given to  
its safe disposal.  
Your Local Authority should have  
the necessary facilities in place.**



**Never dispose of batteries in a fire or subject them to puncture or crushing.**



## Warranty

Please retain your receipt as this is your proof of purchase and entitlement to Warranty.

- The Frame of your new **BATRIBIKE Granite, Diamond & Quartz** is guaranteed for 3 years from date of purchase.
- The Motor and Electronics are guaranteed for 2 years from date of purchase.
- Other main cycle parts have a warranty of 1 year.
- The battery is covered for 1 year.

***Please take note of the Battery Care information contained in this manual to ensure your battery life is maximised.***

In the event of warranty repairs becoming necessary you should return your bicycle to your Authorised Batribike Dealer, (where you originally purchased your Batribike). Delivery & collection charges are not redeemable under warranty. Warranty is non transferable and applies only to the original owner.

Brake blocks/pads, tyres, lights and cables etc. are considered as consumables and replacements are available from BATRIBIKE or may be obtained from your local cycle shop.

**BATRIBIKE** Electric Bicycles are exclusive to:-

Fallowgate Limited  
Kellaway House  
Marton Road  
Sturton-by-Stow  
Lincoln  
LN1 2AH  
Phone: 01427-787774  
E-mail: support@batribike.com

**Fallowgate**  
LIMITED



BATRIBIKE are  
Full Members of  
the British Electric  
Bicycle Association