

BFISPORT



EB20-02F

e-bike

**Thank you for choosing a
BFI e-bike.**

User Manual

Introduction – EB20-20FAT model

Important!

Write down immediately your key number.

Replacement keys can only be purchased by providing the correct key number.

This bicycle has been designed for a smooth and easy riding experience.

For this purpose, we combined the best aspects of motor vehicles with a bicycle that can be used without a license plate or a driving licence.

Traffic laws and regulations must, of course, always be respected. Always remember to pay attention to everybody else on the road.

Please carefully read this manual and keep it in a safe place for future reference.

Should you sell the e-bike, please do not forget to also include this manual.

Have a nice ride!

Safety warnings

- Read and follow all the instruction in the user manual before using the e-bike.
- Owners of the e-bike must check and obey any local laws applicable to e-bike usage concerning helmet use, speed limits, and accessible areas.
- Any bicycle, even the most sturdy and expensive, can become unsafe due to normal wear and tear, falls, transport, ageing or other external factors.
- The user is responsible for the safe use of his bicycle. It is therefore important to perform the regular safety checks.
- Use the bicycle only if it is in perfect mechanical conditions.
- Conform your riding style to your personal skills and the surrounding conditions.
- For your personal safety always wear a helmet and proper protective equipment.
- A helmet may be legally required by local law.
- Comfortable clothes and athletic shoes are also recommended.
- Be sure that your clothing or your load will not become entangled with the wheels.
- After a fall or an accident, always remember to have your bicycle checked by a specialist.
- Bicycles are safe to use only if yearly checked by a specialist.
- Unsuitable replacement parts and accessories may render the bicycle unsafe. Always seek a specialist advice.
- Drive safely and always be fully aware of the fact that bicycles are silent, and their approach often goes unnoticed by other road users.
- Riding e-bikes is advisable only to those who can already ride normal bicycles. People who have not been riding bicycles for a long time, should ride e-bikes in traffic only when they feel confident.
- Do not modify or tamper with the bicycle in a way that will alter its riding behaviour or speed; should such modifications be attempted, the manufacturer declines any responsibilities and the warranty would be void.

Proper use



Bikes with electric engines (E-bikes) are designed to be used on good surfaces and roads, and they are not suitable for off-road tracks or leaps.

E-bikes maximum load is of **100** kg, user and cargo together.

Minimum load is of **30** kg.

Operation

- When accelerating, the user should assist Pedelec with his own muscle power. This especially when a lot of energy is required.

According to present regulations, you will notice what follows:

- The assistance will be de-activate automatically at 25 km/h.
- The power will stop automatically when you stop pedalling.
- If the engine does not start when using the e-bike, seek assistance in a specialized bike shop.

When purchasing

Check the following:

- Your bicycle has been made ready to be used and has been safely inspected by specialized personnel.
- The retailer explained you the bicycle functions and the safety checklist.
- The specialized personnel will adjust the bicycle to suit your body weight.
- For the most complex parts, request the original instructions.

Before first using the e-bike in traffic or off-road.

- Perform the safety checklist.
- Train yourself to drive and brake on a safe surface, first using the rear brake, and then gradually increasing the front brake. You must be able to brake suddenly without losing control. If the front wheel stops turning the e-bike will become unstable, and this is why the brakes should be adjusted by an expert.

After 4 weeks or 300 km

- It is normal that on every bicycle – even the sturdiest or most expensive ones – the first adjustments of brakes, gear shift, bearings, wheels and bolted connections should be repeated. This is done to prevent breakdowns and malfunctions.
- Before first using the bicycle, carefully read these instructions and make sure that the bicycle has been correctly assembled.
- Apply the maximum care when driving under the rains, on gravel or smooth roads.
- The bicycle can be used under the rain without getting damaged. The intellectual components, like the battery and the engine, should never be immersed directly in water.
- Never touch the battery terminals with your bare hands, and never try to short-circuit them with a tool.

- Do not disassemble the electric component but ask for the assistance of a specialist workshop.
- Do not lend your e-bike to other people without first instructing them.
- The battery can be damaged by weather.

The top battery efficiency will be obtained above 0°C. When using the battery below 0°C, you must expect a reduced capacity of about 1/3. However, using the battery below 0°C will not damage it.

Traffic laws

The traffic laws and regulations demand the following (check your local laws too):

1. When driving at dusk or at night, the bicycle should be equipped with a white frontal light and a rear red light. The light should not be flashing (check your local laws). The lights should be installed on the bicycle, and not worn by the cyclist. It is permitted to remove the lights from the bicycle when not used.
2. Every bicycle should be equipped with front and rear refractors, and on the pedals too, and it is permitted to install other refractors on the wheels.
3. Every bicycle should have a bell (check your local laws).
4. We suggest stipulating an antitheft insurance.
5. We suggest stipulating a civil liability insurance. Check with your insurance company that your insurance policy will cover all damages caused by you.
6. Cyclist should always respect all the traffic laws and regulations (check your local laws).

Safety checklist

Troubleshooting for this section is listed in the next page with the respective number for each action:

1. Pull the brake levers with all your strength, they should not touch the handlebar.
2. Pull the brake levers and push the bicycle forward – the brake pads should clench the discs.
3. Block the front wheel and turn the handlebar – the handlebar should not turn.
4. The seat should not turn or flip upside-down.
5. The seat and handlebar can only be extended up to the mark on their respective pole.
6. Check that the wheel is blocked, the quick release lever should not protrude.
7. Spin the wheels – they should move aligned and smoothly – without touching any parts in any point.
8. Let the bicycle fall from 20 cm of height – if the attachments like the luggage carrier, the mudguards or the lights are moving or clicking, they might be wrongly installed.
9. Check the lights and the bell.
10. Check the tyres conditions and pressure, and look for loose spokes.
11. Check the frame, the handlebar and the forks for cracks or bending.
12. The brakes and shift cables should not show tears or other signs of damage.
13. Look for any broken link on the bicycle chain.
14. Test the brakes and the gearshift good condition with a road test.
15. Check the electrical engine and the charging level of the battery.

Troubleshooting

Maintenance carried out by unqualified technicians might result in serious accidents:

1. The screw on the brake levers can be used to adjust the distance between the same levers and the handlebar.
2. Brakes adjustment should be carried out by an expert.
3. Most handlebars can be tightened with a screw located in the middle of them. All other adjustment should be carried out by an expert.
4. Tighten all the screws around the seat.
5. The seat and handlebar can only be extended up to the mark on their respective pole.
6. Properly true the wheel, tighten the nuts, lock the quick release device.
7. Loosen and true the wheel – the distance from the forks and the frame should be proportioned.
8. Tighten loose screws. Ask an expert to repair any broken part or screw.
9. Tighten loose screws, replace the light, fix the cables.
10. Inflate the inner tube with a hand pump – compressed air might damage the tyres. Ask an expert to repair any damaged tyre or loose spoke.
11. Any minor damage to the bicycle should be repaired by qualified personnel.
12. Damage cables should be immediately replaced by qualified personnel.
13. Damaged chains should be immediately replaced by qualified personnel.
14. If the braking is too strong, weak or unstable, or if the bike rides irregularly, or if the gearshift does not work properly, the bicycle should be fixed by an expert.
15. Seek a qualified service centre to service the electric engine.

Safe driving

- Use the e-bike only if you are healthy and in good shape.
- Do not ride the bicycle under the influence of alcohol, drugs or medicines.
- The e-bike should be calibrated according to the body weight of the rider.
- Practice riding, braking, shifting gears and turning in a safe way before riding in heavy traffic.
- Wear gloves in cold weather, so to always be able to grip the handlebar with two hands and apply strength when braking.
- Securely set your load in the luggage carrier. Do not hang carry bags on the handlebar, as this can lead to critical accidents.
- Please bear in mind that a heavy load will much influence the bicycles behaviour; use purposely built bicycle bags, which will allow for a lower gravity centre.
- Bicycles have a longer braking distance than cars, so you must respect the safety distance.
- The brake distance is further increased on humid, wet or dirty surfaces.
- Ride with caution, e-bikes do not accelerate quickly! Do not steer abruptly when starting, or you might risk falling.
- Practice how to quick start before a rise, so to avoid slowing down too much and putting yourself in danger.

How to carry the e-bike

- To carry your e-bike, secure it vertically on a special bicycle rack on top of your car, so to avoid excessive stress on the handlebar or other parts.
- Remove any attachments, such as mudguards, bottles, pumps and similar, as they can be ripped off by the strong wind.
- When transporting your e-bike under the rain at high speed, water will get into the bearings and inside the cables, causing premature damage.
- To transport the e-bike horizontally inside your vehicle, please make sure that the hub gears are facing upwards, so to prevent any damage.
- Perform the safety checklist after any transportation.

Maintenance

- Every e-bike should be inspected by an expert at least once a year. This inspection should be carried out to find any hidden damage, like micro-fractures in the frame or handlebar, damaged brake cables, broken rims, used up brake pads, etc.
- Make sure you only use suitable and safe replacement parts; especially about brakes, when replacing the pads make sure that the new ones are suitable for the rims, so that the braking power complies with the local traffic laws.
- In case the controller device shows abnormal behaviour, bring it to a bike shop. Do not attempt to replace the controller without expert help.
- Keep both the e-bike and the controller clean and avoid water infiltrations (rain is not a problem).
Do NOT immerse the battery in water. Do not clean with a water pump or a pressure washer, but only with a damp cloth.
- Always keep the battery charged, regardless if the bicycle is being used or not.
- Use only the original battery charger.
- **If you should store the bicycle, remember to regularly recharge the battery at least every two months**, to avoid loss of battery capacity.

- Store the battery preferably in a dry place at room temperature.
- The battery should reach its maximum charge capacity after about 10 charging cycles.
- Do not expose the battery to high temperatures, such as the direct light of the sun in closed vehicles or naked flames, etc.
- If after an accident you should find the battery is leaking, you must immediately replace it. Ask your dealer.
- Batteries must not be disposed of as ordinary waste but must be taken to a special waste collection point, according to local regulations.
- Do not overexert the bicycle. This includes using bicycle trailers and riding off-road.
- On a steep rise, remember to boost the bicycle power with your own strength, to avoid overheating the system. In case of overheating, a fuse will activate to prevent damage.
- To save battery power during acceleration, you might want to help by using your own strength.

Cleaning and storage

Cleaning

- Regularly clean your e-bike; is the best way to find damages.
- E-bikes should not be cleaned with pressure cleaners, or with steam current or strong water jets. This system might facilitate sand grains and humidity to get inside the bearings and the cables, thus damaging them prematurely.
- Clean the e-bike with warm water and a detergent to dissolve grease. You will find all the suitable cleaning products in a bike shop.
- Clean the chain and the gears, too. A clean chain, smoothly moving and well lubricated, considerably increases the lifespan of the gears.
- After cleaning them, lubricate again the chain and the gear; use a suitable product, resistant to rain.
- Operational flaws like dirty or corroded parts, especially the chain, are not included in the warranty. Chains are not immune to rust and should be taken care accordingly.
- After cleaning and lubricating, remove any residual grease from the rims.
- Residual grease on the rims may reduce brakes efficiency.

Storage

- When not in use, the e-bike should be stored in a dry place.
Exposing it to outside weather will highly reduce their lifespan. This why it's particularly important to protect the e-bike with a purposely made anti-corrosive coating. This product may be bought by any bike shop.
- If you do not use the e-bike for a long period, keep it hanging on the wall; this way tyres will be protected from damage.
- Clean and set up the e-bike before storing it, and during this period have it checked by a specialised bicycle workshop.
- Remember to deactivate the system by switching off the main switch.
- Even if the e-bike can be used under the rain or in adverse weather conditions, it must be stored indoor or in a covered space, to avoid humidity from affecting the electric parts and the engine.
- Also, remember to protect your e-bike from thieves.

When storing the e-bike, remember to recharge the battery at least every two months.

Controller display



There are three buttons on the display.

Power on/off

Press the power-on button to turn-on the display and the bike controller.

Press again the same button to turn-off the display and the controller.

When the e-Bike is not used for more than 10 minutes, the display will automatically turn off (hibernation mode).

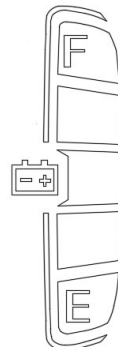
Light indicator

The front light is not controlled by the display.
This indicator will never turn on with this product.

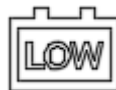


Battery

If all lights are on means the battery power is around 80%-100%.
Four light on mean the battery power is around 60%-80%.
Three lights on mean the battery power is around 40%-60%.
Two lights on mean battery power is around 20%-40%.
Just one light on means the battery power is around 0%-20%.
When only one light is on, battery needs to be charged soon.
We suggest stopping soon and charge the battery.



When battery is very low, the icon will turn on.
Please stop immediately and charge the battery.



Brake Indication

Each time you use the brake, this symbol will turn on.



PAS Level

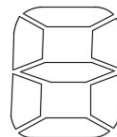
There are five different speed mode.

Motor assistance level: from 1 (17km/h max) to 2 (19km/h max) to 3 (21km/h max) to 4 (23km/h max) to 5 (25km/h).

When the display is turned-on, press “+” and “-” buttons to select the desired motor assistance level.

The display will show the current motor assistance level.

MODE



Push-assistance Mode

To activate the push-assistance mode, the display must be turned-on already.

Press the “-” button to activate the function: the bike will enter into 6km push-assistance mode.

The display will show the relative symbol.



The bike will move forward.

The push-assistance mode may only be used when the user needs to push by hand the bike.

Danger of injury when the wheels of the eBike do not have ground contact while using the push-assistance function

Pay attention when using this function.

The push-assistance function switches off as soon as you release the “-” button.

USB port

USB port on the bottom side of the display can be used for charging a device (a mobile phone for example).

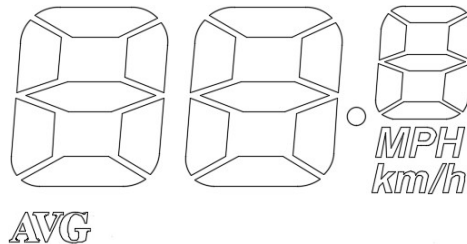
Be careful if you use the USB port during the ride.

Running Speed

Real speed.

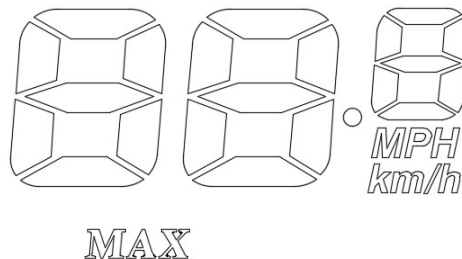
Measuring unit is set in Km/h by default.

See “Parameter settings” to switch to Mph.



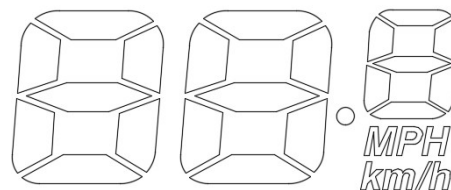
Average Speed

It shows the average speed in Km/h or Mph.



Max Speed

It shows the max speed in Km/h or Mph.



Cruise Function

The function is not set for this model.

This indicator will never turn on with this product.



Motor Failure

This indicator will never turn on with this product.



Wheel Failure

This indicator will never turn on with this product.



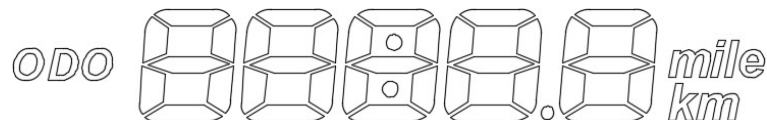
Controller Failure

This indicator will never turn on with this product.

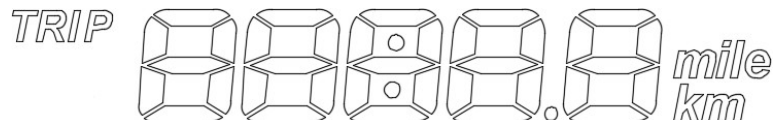


Multi-Function information

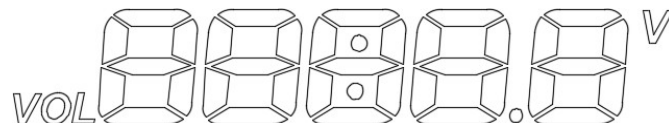
Total Distance in Km or miles (ODO).



Single Trip Distance in Km or miles (TRIP).



Battery Output Voltage in Volt during use (VOL).



Parameter setting

Press and hold the “+” and the “-” buttons together, to enter in the Setting mode.

Press and hold again the two buttons together to quit the Setting mode.

In Setting mode, press the power button to save the parameter and switch to next parameter.

Press the “+” or the “-” button to increase or decrease the parameter value.

Code P00 - Restore Factory Settings

Code P01 - Backlight Brightness

1: darkest level 3: brightest level

Code P02 - Change mileage Unit

0: KM 1: MILE

Code P16 – ODO Reset

Hold “+” button pressed for 5 seconds to reset the ODO distance information.

You are responsible of any adjust of these settings.

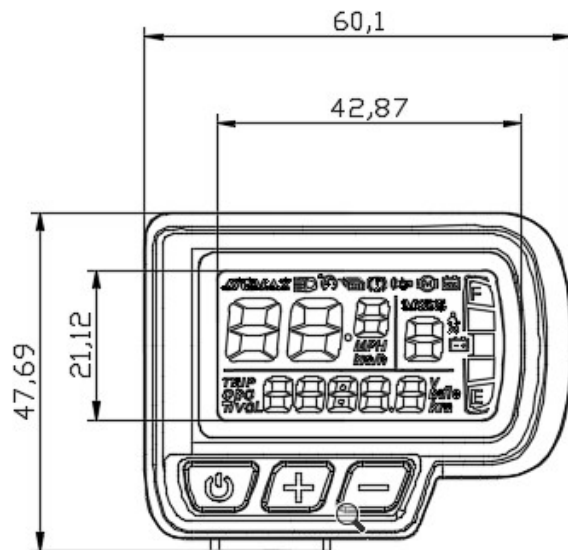
Contact your retailer or the after-sale-service for immediate support.

Error codes

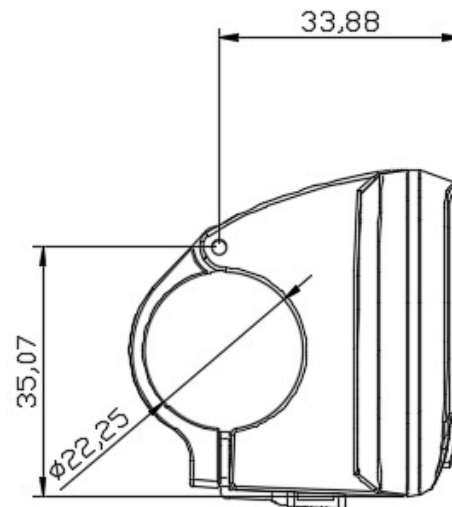
When one of these error codes appear on the display, kindly contact your retailer or after-sale-service for immediate assistance.

The error is probably due to a communication problem between the controller and the display. The bike will probably not work, but the bike can be used as a normal bike.

Code	Description
0	Normal – no error
1	Reserved – no error
2	Brake Error – electronic error, not mechanical
3	Reserved – no error
4	6KM/H Error
5	Cruise control error
6	Battery low voltage protection
7	Motor Error
8	Throttle Error
9	Controller Error
10	COM receive Error
11	COM send Error
12	BMS communication Error
13	Head light Error



Front View



Side View

Front light and horn

Press the buttons on the handle when the display is already ON: the front light will turn on/off and the bell will ring.

Stem and Handlebar Assembly



Functional LCD Displays with USB Port



Foldable Frame, Stem



Foldable Frame, Stem



Front Light



**Off-road Fat Tires: 20 x 3.0
Gorgeous Designed Mag Wheels**



Impressive Rear Motor

Saddle Assembly

1. Insert the seat post into the frame. Chose the quick release lever to hold the seat loosely in place.



3. Tighten the allen bolt to hold the seat firmly in place.



2. Adjust the desire height of the saddle.

Pedals Assembly

There are two pedals included in the box of your bike.

Insert the pedals into the end of the crank, without extra nuts, screws or pins.



1. Screw each pedal into a crank by hand.



2. Use an adjustable wrench to finish tightening the pedal in place.



How to recharge the battery

1. Turn off the bike. Do not use the bike when charging the battery.
Ensure the charging port is dry. Open the protective cover.
2. The switch next to the charging port must be in position “0” before recharging.
This switch activates the battery when it is in position “1”, and must be in position “0” when you do not intend to use the bike for a long period.



Insert the cable of the charger into the charging port of the bike. Then, the other end of the charger must be connected to the mains to activate the charger.

Means: connect first the battery charger terminal to the battery terminal, and then connect it to the 230V outlet.

3. Charge the battery until the signal indicator light turns **from red** (during the charging procedure) **to green color** (charging procedure is finished).

When the green light is on, the battery is fully charged. Too long charging time will affect the battery life.



4. Charging should be in a safe, dry and clean environment. Do not charge the battery if the temperature is lower than 0°C. Do not use a car cigarette kit to charge the battery. Use the original charger only.
5. You have two options to recharge the battery: recharge the battery after removing it from the bicycle or recharge the battery directly on the electric bicycle (suggested).
6. Battery can be charged using the charging port on the frame of the bike or, in case of need, the battery can be removed from the frame for recharge.
7. Nearby the charging port, there is a USB port.
This USB port can be used for charging a device (the mobile phone for example).
8. When charging is finished, remove the cable of the charger from the charging port of the bike. Disconnect the plug from the 230 V outlet and then disconnect the battery charger from the battery itself.
Move the switch to “1” position to activate the battery.
Close the protection cover
Attention: Do not remove the battery unless necessary.

Shifting Gears



1. Press outward with your thumb on the derailleur switch.
2. Press the derailleur downshift button to go back down one gear at a time.

How to fold the ebike

1. Push clasp up.



2. Push down the security lock and fold the handlebar.



3. Loosen the quick release lever of the seat post.



4. Lower the saddle to the bottom.

5. Push up the security lock. Pull out the folding lock.



6. Fold the frame.

Safety warnings: battery and battery charger



- Your electric bicycle is equipped with a Li-ion battery.
Never recharge the battery with an unsuitable charger. Using such a charger, the battery might overheat, and even catch fire or explode.
If the battery charger is damaged or lost, ask your authorized dealer for a replacement.
- Keep the battery charged even if you do not use the bicycle. The battery can be charged directly on the bicycle or after being removed.
- Do not recharge the battery near flammables, children or new-borns.
- While recharging, move any valuable objects away from the battery.
- Charging time varies according to the residual charge. If the battery is almost empty, it takes **up to 7 hours**. When the battery is completely charged, the LED light on the charger will go from red to green. This means the charger can be disconnected from the battery.
Never leave the battery charger connected for a long time.
- The battery and the charger will get warm during the charging process. This is normal.
- Please charge the battery before the first use.

- The battery charger has an indicator light. When the light is **red**, the battery is recharging; when the light is **green**, the battery is fully charged.
- Please check that the mains supply tension is compatible with battery charger.
- Use the battery charger only indoor.
- Keep the battery and the charger out of reach of the children.
- Do not open the battery charger; it contains high-voltage components.
- Do not touch both electrodes at the same time; there is a risk of electric shock.
- Do not remove the battery from the bicycle while it is charging.
- **Fully charge the battery every 2 months, even when the bike is not used.**
- Do not recharge with different battery chargers than the original one.
- Avoid liquids or metal object entering the battery charger.
- Never use the battery charger next to oil, dust, dirt or steam. Avoid exposing to direct sunlight.
- Never use the battery charger during storms.
- Use the battery charger in well ventilated and not too warm places.
- Do not use the battery charger near heat sources, like naked flames and fires.
- Never subject the batteries to impacts and strong vibrations.
- Opening or damaging the battery will void the warranty.

Safety warnings: use of the eBike



- The electric bicycle is designed to be used by a single person.
- Never use the e-bike off-road, or jump with it, or overload it, in order to avoid damaging the bicycles or risking personal injury.
- Wear a helmet (check the local laws).
- Do not drive after drinking or taking drugs.
- This product is not suitable for children under the age of 12 (check the local laws).
- Adult supervision is required for minors of 16.
- Keep safe distance to objects and people to avoid any collision.
- Do not start or stop driving suddenly. Sudden movements could make the e-bike out of control.
- Overweight is prohibited. The e-bike could not be under control anymore.
- Underweight is prohibited. The e-bike might not be under control anymore.
- Do not drive the e-bike on grounds with snow or ice. The control of the e-bike will be reduced.

Maintenance of the e-Bike

First, make sure the charging cable is not connected. Second, the bike must be powered off and stopped.

Now you can wipe the e-bike with a soft damp cloth that will not damage the surface of the e-bike. Use neutral detergent and gently wipe the paint and the plastic dirty surfaces.

Then use a dry cloth to wipe clean.

Prohibit the use of high-pressure water flushing, to avoid damages to the internal electronic components and to the circuit, and cause accident hidden trouble.

Storage of the e-Bike

Please make sure your e-bike is fully charged before storing it.

Ensure a full charge every 2 months.

Do not store the bike at less than 0°C. It is suggested to store the e-bike in a dry indoor place.

WARNING

Do not open the vehicle for any reason. The user is responsible of any after-effect.

Disposal of the battery

According to the European Directive 2006/66/CE



This marking on battery indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Disposal of the product

According to the Directive 2012/19/UE and to the Legislative Decree n. 49 of March 14 2014



Products bearing the barred dustbin symbol must be disposed of separately from other waste. Therefore, the user must dispose of the product and its parts at suitable recycling centres for electronic and electro-technical waste, or the user must consign the used product to the retailer when buying a new equivalent product, on a one-by-one basis, or a one-to-zero basis for devices with one side shorter than 25 cm. Separate waste collection allows used equipment to be recycled, treated and disposed of without negative consequences for the environment and health, and it allows the materials in the equipment to be recycled. Users illegally disposing this product may be subject to administrative and financial penalties, as in Legislative Decree N° 49 of March 14th 2014.

Warranty

Carefully read all instructions before using the electric bike.

Do not use the electric bike if use is forbidden. Do not use the electric bike if this might cause danger for the user and people/things around.

This product is warranted to be free from defects in materials, workmanship and functionality (aesthetic parts are excluded) for a period of 2 years starting from the date of purchase in case of receipt, for a period of 1 year starting from the date of purchase in case of invoice.

This warranty shall not apply to any products that have been subjected to misuse, negligence, accidental or abnormal conditions of operation, and does not covers the natural capacity fadeout.

Please refer to qualified and authorized people for the repair of the electric bike.

A non-professional repair may cause malfunction and risks and void your warranty rights.

Warranty for the battery: 6 months.

If you have any question, please connect with us via email.

Email: emily.ji@bfi-ebike.com

Phone: +86-15201935308

Website: www.bfi-sport.com /bfi-china.en.alibaba.com

Declaration of CE conformity

We declare that the product described is in conformity with EN15194 directive.

BFISPORT

倍力斯
BFI Outdoor

E-bike & E-scooter
From 2010

MADE IN CHINA



EPAC ACCORDING TO EN 15194