

FIRE-X5

OPERATION MANUAL

Please read this manual in its entirety before operating your new e-Bike.

**By proceeding, you agree that you fully understand the contents of this manual
and the operation and maintenance instructions contained within.**



NOTICE!

**Before using your new e-Bike the first time,
fully charge your Li-ion battery (4-7 hours)**

**Always recharge the battery before the power indicator shows no power.
Failure to follow these instructions voids any warranty, whether stated or implied.**

This product is not intended for operation on public streets or highways. Serious injury can result from the unsafe operations of this vehicle.

This product is not designed to be jumped, even from the curb, the e-Bike frame could break causing serious injury or death. If jumped, the warranty is void.

Do not operate this product under the influence of drugs and/or alcohol; in high traffic, on wet, oily and other dangerous surfaces. Avoid uneven surfaces, potholes, surface cracks and obstacles.

It is recommended that the rider wear leather gloves, kneepads and leather boots. Always wear a helmet. Never carry passengers on your e-Bike.

Check your state and local laws governing the use of motorized vehicles in your area. It is YOUR responsibility to comply with state and local regulations relating to the use of the e-Bike.

A special note for parents:

It is a tragic fact that most bicycle accidents involve children. As a parent or guardian, you bear the responsibility for the activities and safety of your minor child. Among these responsibility are to make sure that the bicycle which your child is riding is properly fitted to the child; that is in good and safe operating condition; that you and your child have learned, understand and obey not only the local motor vehicle, bicycle, and traffic laws, but also the common sense rules of safe and responsible bicycling. As a parent, you should read this manual before letting your child ride the bicycle. Please make sure that your child always wears helmet when riding.

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Specifications



- FOLDABLE FRAME (ALLOY 6061)
- ALL-SEASON FAT TIRES (20"/ 4.0")
- TEKTRO DISK BRAKES (MECHANICAL)
- FRONT FORK SUSPENSION (ADJUSTABLE WITH LOCK)
- SAMSUNG CELLS BATTERY (48 V/14AH LITHIUM)
- BAFANG GEAR BRASHLESS MOTOR (500W/48V)
- SHIMANO GEAR, SHIFTER TOURNEY (7-SPEEDS)
- MAXIMUM CRUISE SPEED ON FLAT GROUND: 32 KM/H (THROTTLE ONLY)
- MAXIMUM CRUISE DISTANCE ON FLAT GROUND: 45 KM (THR) – 70 KM (PAS)
- GROSS WEIGHT: 30-32 KG
- DIMENSIONS UNFOLDED: 68"/48"/25", FOLDED 40"/29"/24"

Battery charging

You can charge your battery installed in bike or uninstalled.

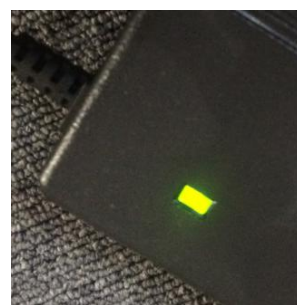
If you want to uninstall the battery, pull out the lock bar and open the frame. The battery can be taken out easily after the frame is folded.

Install the battery: please make sure that the lead rail on frame gets into the slot in battery. And make sure the battery is placed completely upon the conductive contact inside.

To charge installed battery you need just open the cover on frame:



Red - Charging



Green - Fully charged

Battery charging

1. Red light means charging
2. Green light means fully charged
3. Input: AC100-240V~, 1.6A (Max) 50/60Hz
4. Output: 42.00V—2.0A
5. Insert the XLR plug into the charger port on the bike/battery being sure the charger plug is fully seated in the charger port.
6. Plug the charger into the outlet. The green light on the front of the charger will illuminate when the charger is working properly.
7. Once the charger has “found” the battery the green light will turn solid red. At this point the charger process has begun.
8. Once the battery reaches full charge, the red light will turn solid green.
9. When charging is complete, unplug the charger from the wall before removing it from the charger port.



**Use only we provided authorized Li-Ion charger.
Using any other charger will damage the battery and void your warranty.**

Safety Checklist

Before you ride, it is important to carry out the following safety checks:

1. Brakes

Ensure front and rear brakes work properly. Ensure brake shoe pads are not over worn and are correctly position in relation of the rims. Ensure brake control cables are lubricated, correctly adjusted and display no obvious wear. Ensure brake control levers are lubricated and tightly secured to the handlebar.

2. Wheels and Tires

Ensure tires are inflated to within the recommended limit as displayed on the tire sidewall. Ensure tires have tread and have no bulges or excessive wear. Ensure rims run true and have no obvious wobbles or kinks. Ensure all wheels spokes are tight and not broken. Check that axle nuts are tight. If your bicycle is fitted with quick release axles, make sure locking levers are correctly tensioned and in the closed position.

3. Steering

Ensure handlebar and stem are correctly adjusted and tightened, and allow proper steering. Ensure that the handlebars are set correctly in relation to the forks and direction of travel. Check that the headset locking mechanism is properly adjusted and tightened. If the bicycle is fitted with handlebar end extensions, ensure they are properly position and tightened.

4. Chain

Ensure chain is oiled, clean and runs smoothly. Extra care is required in wet or dusty conditions.

5. Bearing

Ensure pedals are securely tightened to the cranks. Check headset, wheel bearings, pedals bearing and bottom bracket bearings.

6. Cranks and Pedals

Ensure pedals are securely tightened to the cranks. Ensure cranks are secure to axle and are not bent.

7. Derailleur's

Check that front and rear mechanisms are adjusted and function properly. Ensure shift and brake levers are attached to the handlebar. Ensure derailleur, shift levers and shift and brake cables are properly lubricated.

8. Frame and Fork

Check that the frame and fork are not bent or broken. If either is bent or broken, they should be replaced.

9. Accessories

Ensure that all reflectors are properly fitted and not obscured. Ensure all other fittings on the bike are properly and securely fastened, and functioning. Ensure the rider is wearing a helmet.

10. Motor Drive Assembly and Throttle

Ensure all motor drive components are correctly mounted and functioning properly.

11. Battery Pack

Ensure the batteries are in good operation condition and kept fully charged and properly secured and locked.

12. Helmet

It is strongly advised that a proper safety helmet be worn at all times when riding your bicycle. In addition, if you are carrying a passenger on a child safety seat, they must also be wearing a helmet.

Ready to Go

It is important for you to understand your new bicycle. It is also important that your first ride on your new bicycle is taken in a controlled environment, away from cars, obstacles, and other cyclists.

Bicycles can be hazardous activity even under the best of circumstances. Proper maintenance of your e-Bike is your responsibility as it helps reduce the risk of injury.

Battery Gauge

When the throttle or sensor is engaged (Powering the motor) and the bicycle is in motion, the LED's on the battery gauge (on the throttle or separate unit) indicate instantaneous line voltage as measured at the battery terminals and not the available energy in the battery pack.

The line voltage will fluctuate depending on the instantaneous load that the motor is under. For example, when starting out from a dead stop, or going up a steep hill, the motor will be under a high load and may show a reduced number of LED's.

When the throttle is disengaged (i.e. no power to the motor due to the bicycle being stationary or coasting) the LCD display will indicate the voltage of the battery pack. The voltage of the battery pack will rise when no load is on the motor. The best indication of how much battery life is remaining is to check the LCD display, after reaching cruising speed, on a flat straight road as this will allow the battery voltage to stabilize and give a much more accurate reading.

LCD-1

Functions and Display



- 3 buttons, including **M**, **(+)** and **(-)**
- **M** is for on/off switch display and power.
- **(+)** is for up level and **(-)** is for down level.

ON/OFF: hold **M** button 2 seconds to startup; hold **M** button for a second time to turn off the display and power. After 5 minutes of motor not working, the LED display will be turned off automatically and cut off the power supply.

Backlight and Headlight: hold **(+)** for 2 seconds to turn-on or turn-off the display backlight, headlight and rear light.

Assist Ratio Gear (PAS level): press **(+)** or **(-)** shortly to switch 1-5 virtual gear. Gear 1 is for the minimum power while 5 is for the highest. Gear 0 is without boost function.

6 KM/H walking assistant: hold **(-)** for 2 seconds to activate walking assistant. It can assist you when you push the bike forward or up on a slope.

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Battery Display: six (6) blocks full battery. Last block twinkle: really low battery - must stop and charge immediately.

Current display: showing output current. Each block stands for 2Amp. If current exceeds 12Amp, it shows 6 blocks.

Under use interface: press **M** to switch to display: ODO, single time distance, riding time, max speed, or circularly display all.

Setting: Hold **(+)** and **(-)** at the same time for 2 seconds to enter setting interface. Press **M** to switch between different settings. Press **(+)** or **(-)** to change settings. Hold **(+)** and **(-)** at the same time to quit setting interface.

In setting interface:

- (1)** Press **(-)** to erase ODO, riding time and max speed.
- (2)** Set speed limit.
- (3)** Set wheel diameter.
- (4)** Switch between KM/H and MPH

Error Code Display:

Electronic control system failure will display (flashing) fault code. Once the fault is resolved, it will stop flashing.

ERROR **01**: Current abnormal or MOSFET broken

ERROR **02**: Throttle abnormal

ERROR **03**: Motor phase abnormal

ERROR **04**: Hall sensor signal abnormal

ERROR **05**: Brake signal abnormal

ERROR **06**: Under voltage

ERROR **07**: Motor protection; please do not block the motor from rotating

ERROR **08**: Controller communication abnormal

ERROR **09**: LCD communication abnormal

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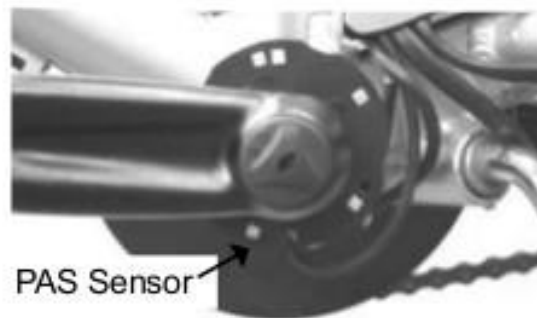
THROTTLE

Your bike equipped with a “Thumb Throttle”, operating much like a motorcycle or ATV and the more you push the throttle, the faster the motor will move the bike.

Before you begin riding, turn the main power switch on, then start riding as you would ride a regular, non-motor assisted bicycle. After you have begun to ride, slowly twist/push the throttle. The more you twist the throttle, the more motor power will be applied to the wheels. You may feel the pedals get a “lighter” feel than riding without the motor assisting you. Once you have twisted the throttle all the way, the motor will accelerate you to its full speed of 32km/h.

PAS (Pedal Assist System)

In this mode, motor power is only active when the pedals are in forward motion. Begin riding as you would on a normal non-electric bicycle, and while the pedals are in motion, the motor is activated to make it easier to pedal the bike. Available 5 levels of assist.



Taking care of your battery

Proper maintenance of the batteries will maximize their lifespan and available ride time. On your bike installed Li-Ion (Lithium Ion) battery. These are very user friendly types of batteries when cared properly.

FULLY CHARGE BATTERY BEFORE FIRST USE.


Below are the recommended charge times for your battery:

- Li-Ion (Lithium Ion) batteries 4-7 hours
- Charge batteries at least every 90 days.
- Always store bicycle with fully charged batteries.
- Never charge the batteries for more than 24 hours
- Always disconnect the charger from the wall outlet and bicycle when charging is complete (as indicated by the status on the charger) before storing the bicycle.

Do not store the batteries below 10°C (50°F) and never allow battery to freeze below 0°C (32°F) while long time store.

Be friendly to the environment! Be sure to recycle your old batteries at a local battery recycling center. Do not throw them in the garbage.

Frequent “stops and starts” will drain a battery more quickly than sustained long term use. Even with proper care, rechargeable batteries do not last forever. Average battery life depends on use and conditions.

**ATTENTION**

- Be sure to charge battery pack at least every 90 days even if not used. Doing so will help to maximize the life of your battery pack.
- Always be sure to turn the bike “OFF” after each use via the On/Off power switch.

Charger

The electric bike comes with its own “Smart Charger” that connects with an easy-access charger port for recharging the batteries. This charger has lights which show the battery charge status.

Batteries work best when they have a full charge, so always be sure to recharge them fully after each ride. If you leave them in a run-down condition, without recharging them, it will shorten their life expectancy.

Li-Ion (Lithium ion) batteries – charge time 4-7 hours

The charger may get warm to the touch, so make sure you charge them in an open area and do not lay anything on the charger unit while charging. Although you can't over-charge the batteries using the “Smart Charger”,

We recommend that you do not leave the charger plugged in for more than 24 hours. If your charger shows a solid green light after charging for a short period of time, your battery may have been only partially discharged (short ride), or this may be the sign of a partially worn out battery reduced charge capacity. Continue charging for the full time, to cover all the bases. If the battery still has not charged, you may need to replace it.

The charger and charger port should be regularly inspected for damage (cord, plug, enclosure, etc.). If damage is found stop using until the damage part can be repaired or replaced.



CAUTION
RISK OF ELECTRIC SHOCK, DRY LOCATION USE ONLY

Battery Storage

How to store your battery for an extended time?

Charge the battery every 3 months to avoid capacity loss. Batteries slowly self-discharge when left unused for a long time; if battery cells are allowed to reach a critically low voltage, their lifespan and capacity will be permanently reduced.

Always disconnect your charger from the wall outlet and battery before storing the battery.

Avoid storing your battery in extreme temperatures, whether hot or cold.

Batteries are best kept in a cool, dry place. Do not allow batteries to accumulate condensation, as this could cause shorting and corrosion.

The recommended storage temperature for Li-ion batteries is between 0° to 25°C.

Avoid exposing the battery to extreme heat (40°C or higher) for long time.

Battery FAQ'

Q: Do I need to charge the battery before using them?

A: Yes, you should charge the battery fully before first using them.

Q: Do I need to “break-in” my battery?

A: Yes, the battery will need to have a “break-in” cycle consisting of-three discharge/charge cycles before it will reach optimum performance. This involves three complete discharges and three complete recharges. After this initial “break-in” cycle battery will have maximum possible performance and less line voltage fluctuations under load.

Q: How long will the battery hold its charge?

A: Battery will self-discharge when not in use. The self-discharge rate depends on the temperature at which battery stored. Excessively cold or hot storage temperature will drain the battery faster than normal. Ideally the battery should be stored at room temperature.

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Q: Why should I recharge my battery at least 90 days (Li-ion) when it not in use?

A: Batteries naturally lose their charge over time. To keep batteries in optimal condition and extend their life, it is recommended that a top-off recharge be performed at least every 90 days for Li-ion batteries.

Q: Will I get more performance for my bike if I leave the batteries to charge longer?

A: No, once the batteries are fully charged (as indicated by the light on the charger) it is best to unplug them from the charger, leaving the battery charging longer than necessary is called “overcharging” and will not increase performance. Your bike supplied charger are designed to avoid over-charging a battery. Still we recommended that you always unplug a charger after the units is fully charged to avoid the possibility of unanticipated circumstances such as an unexpected power surge from a lighting strike (or other power line anomaly) potentially causing damage. Only use we supplied or approved charger.

Q: Is it normal that the batteries get warm when recharging?

A: Yes, it is normal that the battery will become warm to the touch during the recharging process. This is because the increase of internal resistance and less energy conversion efficiency from electric energy to chemical energy.

Q: How long will my batteries last before needing replacement?

A: Average battery life depends on use and conditions. Even with proper care, recharge batteries does not last forever.

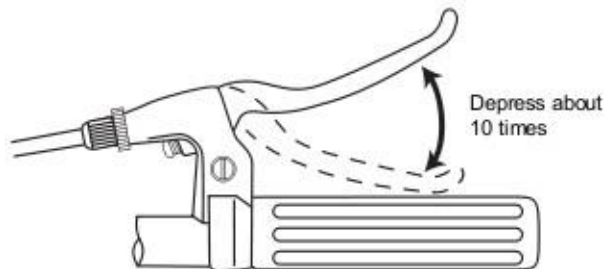
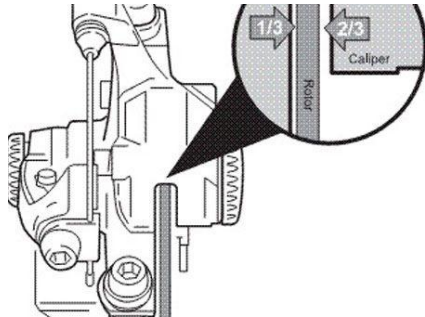
BATTERY DISPOSAL

Please recycle your old batteries

Do not dispose of batteries in a fire due to risk of explosion.

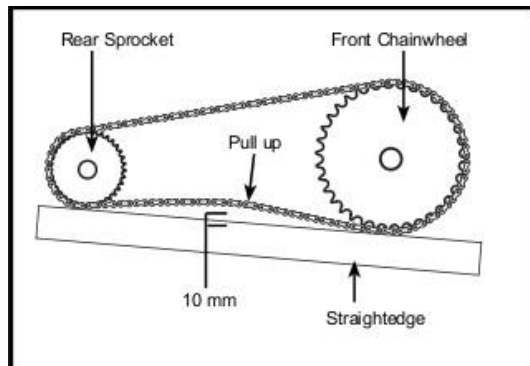
In the event of disposal, dispose only in accordance with federal, state and local regulations.

Braking Adjustment



Depress the brake lever about 10 times as far as the grip to check that everything is operating correctly and that the shoe clearance is corrected before riding the bike.

Chain Adjustment/ Inspection



The chain must be kept clean, rust free and frequently lubricated in order to extend its life as long as possible. It requires replacement if it stretches, breaks, or causes inefficient gear shifting. Make sure that there are no stiff links, they must all move freely.

Lubrication

The chain should be lubricated with light oil at least every month, or more often in wet, muddy, or dusty conditions. Take care to wipe off excess oil, and not to get oil on the tires or rim braking surfaces.

Troubleshooting

Failure symptoms	Cause of Problem	Solution
The battery indicator light on the meter is off, and the motor does not work	Battery voltage is too low	Immediately charge
	Battery is not providing proper power	Replace the battery
	The battery lock does not work, preventing battery from being properly secured	Replace of the battery lock
Motor is operating when battery lock is unlocked	The throttle handle is connected incorrectly to the controller	Reconnect per wiring diagram
	Controller is damaged	Replace the controller
The motor stops intermittently	Poor or loose battery connection	Adjust or clean contacts
	Battery moving due to vibration	Check or replace Battery lock
Reduced Ride Time	Battery is unable to hold charge properly	Replace of the battery
	Battery supplying lower voltage	Battery maintenance or replacement
Battery is not fully charging	Battery has gone bad	Replace the battery
	The charger has no output	Check connections or Replace the charger
	Poor contact between the charger plug and the charger socket	Clean or Replace charger socket
Headlights doesn't work	Switch of the headlights doesn't work or connection	Replacing of the switch, check connection
Controller does not function	short-circuit in the controller	Replacing of the controller



PRODUCT WARRANTY

CarsMan Private Garage Partnership

LIMITED WARRANTY

Your e-Bike is warranted to be free of manufacturing defects in material or workmanship for a period of 90 Days. During the warranty period we will provide replacement parts at no charge. Repair work will be charged at company's service rates. This warranty does not cover normal wear and tear, or damage caused by accident, neglect or misuse of the product.

Should you experience a problem or need to return your e-Bike for repair, please call our customer service department.

You will be instructed how to proceed. A copy of invoice is required.

Carsman Private Garage Partnership

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YOU ARE SOLELY RESPONSIBLE FOR COMPLYING WITH ANY AND ALL LAWS REGULATING THE USE OF THIS PRODUCT.

“USE AT YOUR OWN RISK”

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Carsman Private Garage Partnership
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