

AKEZ

Electric bicycle

OPERATION INSTRUCTION



AKEZ new energy (Tianjin)Co.,Ltd

THANKS FOR USING

Thank you for choosing our electric bike.

This manual has important safety precautions and correct instructions for use. Please read it completely and carefully before using it for the first time.

This manual can help you:

1. Understand the basic operation steps of the product and how to use the monitor;
2. Familiar with the principle of safe riding and get a safe and pleasant riding experience;
3. Understand the composition structure and basic operation mode of products, learn daily maintenance methods and prolong the service life of products.

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SCHEMATIC DIAGRAM OF VEHICLES AND PARTS LIST



Note: some details of the vehicle may be different from the schematic diagram, please refer to the physical object

PARTS LIST

Charger, instruction manual, certificate of approval, accessory box
fender, battery key *2

RIDING PREPARATION

1.Before riding, please read this manual carefully to understand the performance and related requirements of the product, find an open and flat place for trial riding, and fully master the operation of the vehicle before riding on the road.

2.Check the condition of the whole vehicle: check the brakes, tires, handlebars instruments and batteries of the vehicle to ensure the good condition of the whole vehicle.

3.Check the circuit system: turn on the power supply, check whether the indicator lights on the instrument are normal, whether the car lights are normal, whether the battery power is enough to support the completion of your required cruising range and charge first if the battery power is insufficient.

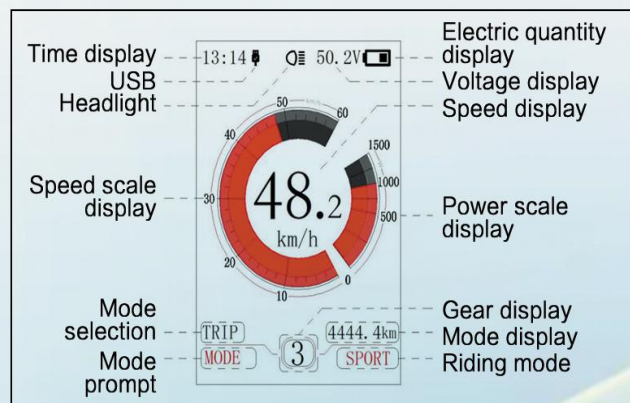
4.Check the brake system: if it fails, please stop using it and contact customer service.

5.The height of saddle tube can be adjusted according to personal preference, but the insertion depth should not be lower than the minimum insertion depth (marked with safety line as the minimum depth) to ensure safety, and lock the saddle tube quick release clip (as shown below).



FUNCTION AND USE OF DISPLAY

Before using the monitor, press the power button to turn on the monitor



Key operation instructions:

Power button: press and hold for 3 seconds to turn on or off. In the static state, the instrument will automatically turn off without any operation for 5 minutes

+key: short press to switch gears, long press for 3 seconds to switch riding modes

-key: short press to switch gears, long press for 3 seconds to enter the boosting state, and release to exit the boosting mode

Information key: short press to switch various display information

Headlight key: press and hold for 3 seconds to turn on or off backlight and headlights

Error code description:

"04" is displayed at the speed position: the speed control handle is not home

"05" is displayed at the speed: the governor is faulty

"07" is displayed at speed: overvoltage protection

"08" is displayed at speed: Hall signal line of motor is faulty

"09" is displayed at speed: motor phase line fault

"11" is displayed at the speed: the controller temperature sensor is faulty

"12" is displayed at speed: fault of current sensor

"13" is displayed at the speed: the temperature inside the battery is faulty

"14" is displayed at the speed: temperature fault in the motor

"21" is displayed at the speed: the speed sensor is faulty

"22" is displayed at the speed: BMS communication failure

"30" is displayed at speed: communication failure

CHARGING AND BATTERY PROTECTION

1.Charging mode

Mode 1: Insert the car body to charge directly

Mode 2: Take out the battery and charge it

(1) When using the charger for the first time, carefully check whether the rated output voltage of the charger is consistent with the battery voltage and whether the input voltage of the charger is consistent with the grid voltage.

(2) When charging, first place the charger in a ventilated place, then insert the charger output plug into the charging hole, and then insert the charger power plug into the AC power supply. Please make sure that the contact between the input power plug and the AC socket is completely reliable.

(3) The charger indicator light changes from red to green, indicating that the electricity is fully charged; It is advisable to charge for 5–6 hours at a time, and the longest time should not exceed 9–10 hours.

(4) After charging, the input plug of the charger should be unplugged first, and then the output plug connected with the electric bicycle should be unplugged. It is forbidden to connect the charger to the live power outlet for a long time without charging.

2.Precautions for battery protection

(1) When installing the battery, pay attention to the positive and negative directions of loading the battery, and make sure to lock the battery lock, otherwise the resulting damage to the components will not be covered by the warranty.

(2) Due to the characteristics of lithium battery, it is sufficient to charge it fully every time, that is, the indicator light of charger changes from red to green, so as to avoid overcharge and overdischarge as much as possible.

(3) Please do not put anything on the battery and charger when charging otherwise the charger may overheat and have serious consequences.

(4) Please use the charger supplied by the original factory to charge the battery. If other non-original chargers are used for charging, the battery will lose its warranty qualification, and any safety problems will occur at its own risk, and our company will not be responsible for it.

(5) You can charge the battery at any time. If you don't charge the battery in time when it is out of power, your battery will gradually lose its performance and shorten its life. Proper use and maintenance can keep the capacity of your battery about 80% after more than 500 times of charging and discharging, but it is inevitable that the overall capacity of the battery will decrease.

(6) If the battery remains in a state of depletion for a long time, it will lead to permanent loss of performance. If you want to store your battery for a long time and not use it, please store it in a cool and dry place, keep the temperature between 10–21°C, avoid direct sunlight, and take out the battery every 30 days for charging which can prolong the life and maintain the performance of the battery.

(7) Please don't deliberately short the battery, which will cause very serious consequences. All charger damage caused by improper use will not be covered by warranty.

(8) Please do not dispose of your waste batteries with domestic garbage after the battery life is reached, but dispose of them according to the local battery recycling regulations.

(9) If you have any questions about battery use, maintenance or storage please feel free to contact customer service.

REPAIR AND MAINTENANCE

1. Regularly check the screws of the car and the places needing fastening, and tighten them regularly.
2. The rim must be smooth. If it is not smooth, it will increase riding resistance or create danger.
3. The vehicle itself is equipped with high-quality drive chain, so please keep the chain clean, and drip chain oil frequently for continuous lubrication.
4. Please always check whether the brake pads are worn before riding to ensure the safety during riding.
5. Please avoid riding in wet or rainy days. If you can't avoid it, please always remember that the braking distance of vehicles will be several times higher than normal in rainy and snowy days. Ride slowly and keep a distance from other vehicles to brake in time.
6. Always check the tires for scars, cracks or excessive wear. The inner tube and air nozzle should be vertical to the rim and not crooked; The damaged or excessively worn outer tire needs to be replaced immediately. Please find a professional technician to replace your outer tire. If your tire accidentally punctures and leaks, please contact a professional technician to repair or replace it.
7. It is forbidden to refit or install the frame, front and rear forks, standpipe and other components and electrical functional accessories. If there is any damage, the original accessories should be replaced, and any responsibility or damage caused by refitting should be borne by yourself.
8. If the shock absorber fails or is damaged, it is necessary to disassemble the original shock absorber and replace it with a new one to achieve the best shock absorption effect.
9. It is forbidden to wash vehicles with water, so as to avoid potential accidents caused by soaking of internal electronic components and circuits; There are stains on the surface of the car body, which can be wiped with a small amount of water with a soft cloth; Do not use alcohol, gasoline or other corrosive and volatile chemical solvents for cleaning, otherwise the appearance or internal structure of the car body will be seriously damaged.

COMMON FAULTS AND TROUBLESHOOTING METHODS

fault type	Possible reasons	Solution
After starting the bike, there is no power output	bike without power supply	Battery under voltage charge the battery
Insufficient cruising range	1. Insufficient battery charge 2. Insufficient tire pressure 3. Frequent braking, starting and overloading 4. Battery aging or normal attenuation 5. The ambient temperature is too low, and the battery is easy to decay	1. Charge the battery in time 2. Check the tire pressure, and inflate if it is insufficient 3. Pay attention to driving habits 4. Replace the battery
battery cannot be charged	1. The charger plug is not plugged in properly 2. The battery temperature is too low or too high	1. Check whether the plug is loose 2. Restore the battery to the charging temperature
monitor has no display	1. Bike without power supply 2. Power converter is damaged 3. Display failure	1. Charge the battery in time 2. Contact customer service and replace the monitor

PRECAUTIONS FOR RIDING

1. People under the age of 16 are prohibited from riding or carrying people.
2. The maximum load-bearing capacity of the vehicle is 130kg, and overload is strictly prohibited.
3. Before each ride, please carefully check whether it is fully charged, whether the tire pressure is normal, and check the braking distance and braking force. The left hand brake handle corresponds to the rear brake and the right hand brake handle corresponds to the front brake. Please pay attention to pinch the rear brake first when riding the brake, especially when braking in emergency.
4. Please wear a safety helmet with proper size when riding. If you lend an electric bicycle to others for riding, please ensure that others also wear a safety helmet with proper size.
5. Please hold the brake when you stop and wait.
6. Abide by traffic laws and regulations. It is strictly forbidden to drive in motor vehicle lanes. Do not run backwards or run red lights.
7. It is forbidden to ride with one hand or let go, and cannot be used as cross-country, jumping, racing, etc.
8. If you need to ride at night or in low visibility, you can choose vehicle lighting equipment.
9. Vehicle cruising range will be affected by battery charging, tire inflation selected power gear, rider's weight, terrain, whether to start or stop constantly and other factors.
10. Please pay attention to the maintenance of electric bicycles and keep them in good condition.

MAIN PARAMETERS OF BIKE

PROJECT	PARAMETER	PROJECT	PARAMETER
Frame material	Aluminium alloy	Battery specifications	48V 13AH
Wheel size	26 inches	Charging time	5-6H
Maximum load bearing	130kg	Type of motor	Moment
Center distance between front and rear wheels	1000mm	Rated power of motor	500W
Driving mode	5th gear boost/ manpower	Rated voltage of motor	48V
MAX speed	≈30km/h	Whole vehicle weight	28kg
Auxiliary endurance	≈100km	Bike size (length * width * height)	194*72.5*109mm
Brake system	Oil brake	Packing size (length * width * height)	164*28*87mm
Battery type	Lithium battery		

Note: 1. The cruising range is tested under the conditions of load of 130kg ambient temperature of 25°C, flat road surface, speed of 15-33km/h and no wind. The cruising range will be affected by load, road conditions, temperature, wind speed and riding habits.

2. Unauthorized modification and installation are strictly prohibited.

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step1: Take out all the parts in the carton



Step 2: Adjust the stand to the position in front of the car with No.5 tool



Step 3: Tighten the screws with No.5 tool



Step 4: Screw off 4 screws with No.4 tool

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 5: Put the handlebar into the middle round hole and tighten the screws



Step 6: Screw off the screw with No.12 opening tool and put it for later use



Step 7: Install the front wheel



Step 8: Tighten with quick-release screws

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 9: Fold the quick release wrench



Step 10: Install the front fork damping switch with No.3 tool



Step 11: Install the shift finger with No.3 tool



Step 12: Install the oil brake handle with No.5 tool

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 13: Install the anti-skid handle sleeve with No.3 tool



Step 14: Install the brake handle and anti-skid handle sleeve on the other side with No.5 tool



Step 15: Install the monitor with No.3 tool



Step 16: Install the display function buttons with No.3.tool

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 17: Insert the display line in the direction of the arrow



Step 18: The appearance of the handlebar after installation



Step 19: Install the seat on the seat tube with No.6 tool



Step 20: What it looks like after installation

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 21: Install the assembled saddle on the frame, tighten the clamp and fold the spanner



Step 22: What it looks like after installation



Step 23: Mount the pedal R on the crank R.



Step 24: The pedal must be tightened when using the No.15 opening tool

SCHEMATIC DIAGRAM OF ASSEMBLY STEPS



Step 25: Mount the pedal L on the crank L.



Step 26: The pedal must be tightened when using the No.15 opening tool



Step 27: Install headlights and front fenders with No.5 tool



Step 28: Install the rear fender with a cross tool

SERVICE GUIDE

1. After sales policy

(1) Shopping records will be used as proof of after-sales service

(2) If it is not within the warranty period, our company is still responsible for after-sales and needs to charge corresponding fees.

(3) Battery replacement beyond the warranty period shall be purchased at the price of our company's parts. Old batteries must be recycled by specific recycling units, and cannot be discarded at will, so as to ensure safety and avoid environmental pollution.

2. Statement of responsibility

Our company has the right of final interpretation and modification of the contents of this instruction manual. If there are any adjustments and changes to the model specifications, functions or other contents of the vehicle, no further notice will be given.

3. Contact us

If you need advice on riding, maintenance and warranty during use, you can contact us at any time.