

ac:best

INSTRUCTION MANUAL

ELECTRIC BICYCLE



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SERVICE

IMPORTANT:FOR ACTBEST ONLY

For damaged or defective product, questions, replacement parts or any other service support please contact our customer service department by the below methods:

service@actbest.net

Response Time: 24-48 hours Emailing us with the Order ID will be the best method to receive a response during peak business hours.

PLEASE DO NOT RETURN THIS PRODUCT WITHOUT ASKING OURCUSTOMER SERVICE.

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IMPORTANT SAFETY WARNING

Battery and Charging:

-**Please fully charge** your batteries before first use and after each use for the recommended charge times (see below). Li-ion batteries typically take 4-6 hours to charge.

-Charge at 0°C~45°C, discharge at -20°C~60°C, keep the battery dry, do not put the battery in acidic or alkaline liquid, avoid rain, keep away from fire, heat and high temperature environment.

-It is strictly forbidden to reverse the positive and negative poles of the battery, and it is strictly forbidden to damage, insert or short-circuit the battery.

-Please use the original special charger when charging, do not exceed 6 hours, and the charging current does not exceed 3A.

-When not in use for a long time, please store the battery in a cool and dry place, and charge it for 5 hours every month.

-Users must operate in accordance with the instructions when charging, otherwise the consequences will be at their own risk.

-When charging, it should be placed in a ventilated environment, and it is strictly forbidden to charge in a closed space or indoors. Hot sun or high temperature environment.

-When charging, connect the battery and charger first, and then connect the power supply; when the battery is fully charged, first cut off the power supply, and then unplug the charger connector. -When the green light is on, turn off the power supply in time.

It is forbidden to connect the charger to the power supply without charging for a long time. -During the charging process, if the indicator light is abnormal, there is a strange smell, or the charger case is overheated, stop charging immediately and repair or replace the charger.

-During the use and storage of the charger, pay attention to avoid the entry of foreign objects, especially to avoid the inflow of water or other liquids, so as not to cause a short circuit inside the charger.

-Try not to carry chargers with your bike. If you really need to carry it, you should put it in the toolbox after shock absorption. Do not disassemble or replace the accessories in the charger by yourself.

BEFORE YOU RIDE

MANUAL IMPORTANT

-Read the manual before first ride for better performance, comfort, and enjoyment. First ride in controlled environment, away from cars, obstacles, and other cyclists.

GENERAL WARNING

-Bicycling is inherently risky, and proper maintenance is essential to reduce the risk of injury. This manual includes many warnings and cautions regarding the importance of maintaining and inspecting your bicycle. Please note that any fall can result in serious injury or death, and we do not repeat this warning throughout the manual wherever the risk of falling is mentioned.

Tips for Maximizing E-bike Range:

- Pedal more for greater distance, and try to avoid frequent stops and starts.
- Cold weather can decrease battery capacity, so keep this in mind when planning your trip.
- Wind can be a factor, with tailwinds helping you go further and headwinds reducing your range.
- Smoother terrain, such as paved roads, can help you travel further.

Proper bike maintenance, including tire pressure and battery care, will help maximize range.

SAFETY CHECKLIST

Before first 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 positioned in relation to 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 sidewalk.

Ensure tires have tread and have no bulges or excessive wear.

Ensure rims run true and have no obvious wobbles or kinks.

Ensure all wheel 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 the direction of travel

Check that the headset locking mechanism is properly adjusted and tightened.

the If bicycle is fitted with handlebar end extensions, ensure they are properly positioned and tightened.



4.Chain

Ensure chain is oiled, clean and runs smoothly

Extra care is required in wet or dusty conditions

5.Bearings

Ensure all bearings are lubricated, run freely and display no excess movement, grinding or rattling

Check headset, wheel bearings, pedal bearings and bottom bracket bearings.



6.Cranks and Pedals

Ensure pedals are securely tightened to the cranks.

Ensure cranks are securely tightened to the axle and are not bent

7.Derailleurs

Check that front and rear mechanisms are adjusted and function properly Ensure shift and brake levers are attached to the handlebar, shift and brake.Ensure derailleurs, 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 either If are 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

10.Motor Drive Assemble 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

POWER SUPPLY PRECAUTIONS

	Parameter	standard Edition
Dimensions	Main material	Aluminum alloy
	Size	L64*W23*H41 inch
	Tire Size	20 X 4.0 inch
	Package Size	L55*W13 3*H31.5 inch
Performance parameter	Weight	55lbs
	Maximum load	330lbs
	Best Riding Speed	32MPH
	Range	35-50 miles (throttle mode)
		50-80 miles (pedal assist)
	Maximum Climbing angle	30°
	Operating Temperature	better 0°C~45°
Waterproof Level	Ip54	
Electrical Specifications	Rated Battery Voltage	48V
	Motor Line Type	Power
	Motor Rated Voltage	48V
	Motor Rated Power	1300W
	Charging Voltage	48V3A
	Input Voltage	AC110~220V±
	Undervoltage Protection Value	31V
	Overcurrent Protection Value	3A
	Charging Time	4~6 hours

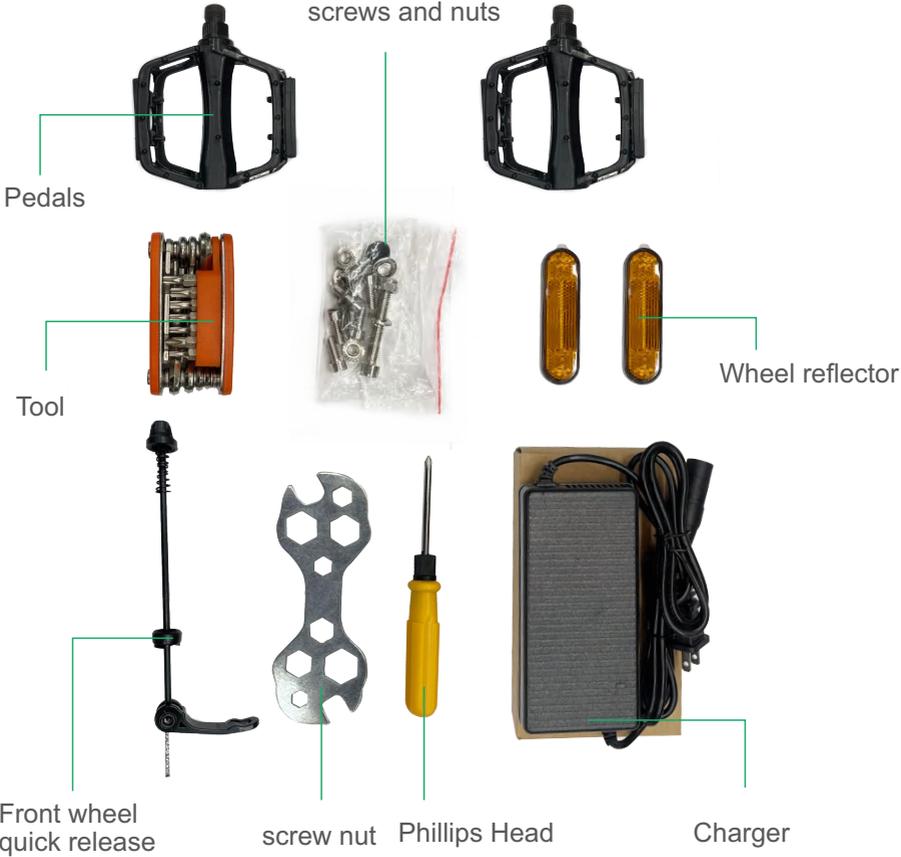
	Parameter	standard Edition
Features	Display	Multi-function color LCD screen
	Front lights&Rear light &Turn signals	Yes
	Braking method	Motorcycle oil disc brake
	Speed transmission	7 SPEEDS (shimano)

PRECAUTIONS FOR INSTALLATION

 **Important Reminder:** Before installation, please confirm that all product components and assembly parts are present and accounted for. Please check the product structure and make sure there are no missing parts or components before assembly. (Check the following PACKAGE LIST & PRODUCT STRUCTURE)

PACKAGE LIST

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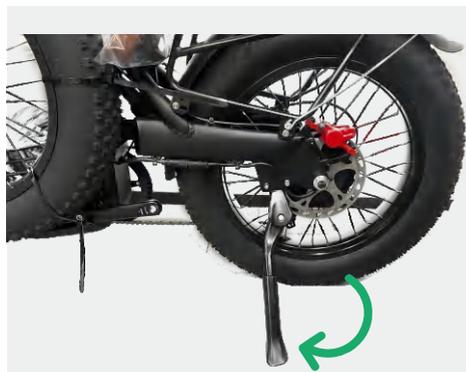
PRODUCT STRUCTURE



- 1 Shift Lever
- 2 Central Display
- 3 Brake Lever
- 4 Stem
- 5 Headlight
- 6 Front fender
- 7 Tire
- 8 Signal lights
- 9 Brake Disc
- 10 Front wheel quick release
- 11 Front Fork
- 12 Chain cover
- 13 Pedal
- 14 Chain
- 15 Rear Derailleur
- 16 Motor
- 17 Tail light
- 18 Rear carrier
- 19 Seat Tube Adjustment Quick Release
- 20 Saddle
- 21 Battery Lock Key Hole
- 22 Lithium Battery
- 23 Battery charging hole
- 24 Control adjustment button area
- 25 Signal lights switch button
- 26 Horn
- 27 Shock absorption
- 28 Bucket for stuff
- 29 wheel reflector

ASSEMBLY

Take the bike out of the box and place it upright with the direction foot support to keep the bike stable and facilitate subsequent operations.



Remove the protective cover of the front frame.



The two fixation points for the mudguard: the position above the front wheel is fixed with nuts.)

Pick up the front wheel and remove the protective plate.



Remove the brake caliper protection clip.



Open the accessory small carton, take out the front axle quick release inside, loosen the nut and separate it from the screw.



Insert the front axle quick release screw into the front axle core, tighten it with the nut,



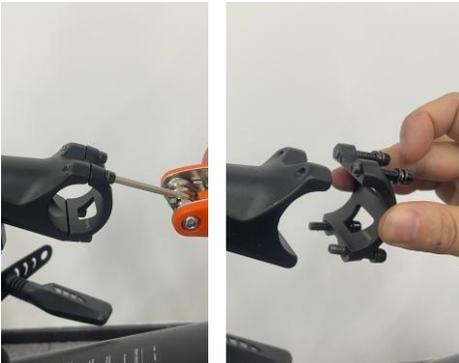
press the quick release handle to lock the front fork.



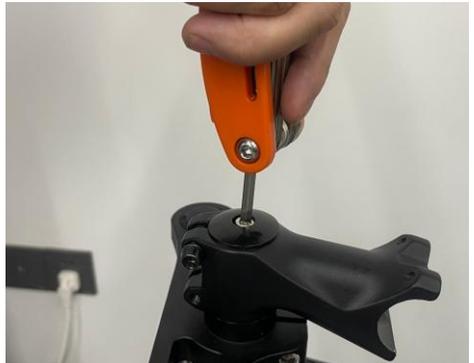
Lift the front of the bike and rotate the front wheel to check for any abnormal noise. If there is any, adjust the position of the disc brake to avoid it from touching the tire



Loosen the 4 screws of the handlebar binder bolt stem



Loosen the connection of the handlebar binder bolt



Loosen the connection until it is loose enough to be rotated 180 degrees, then secure the connection.

place the handlebar and adjust the horizontal angle of the handlebar, and then fix it with the pipe clamp screws

⚠ please make sure to fix the handlebar on the correct side



Loosen the turn signal nut, adjust the height and fix it to the highest line table to avoid rubbing the body turn signal to the front when turning

Loosen the turn signal nut, adjust the height and fix it to the highest line table (the red arrow signal) to avoid rubbing the body when turning, then turn signal to the front.



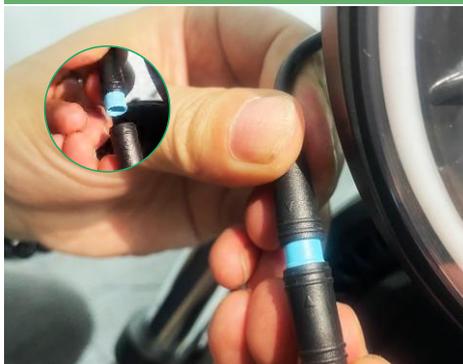
Fixed turn signal



Take out the headlight, remember to take out the rubber plugs on both sides of the headlight, and then fix it on the same shelf as the turn signal



Connect the headlight cable, in the picture above; notice the arrow marks on the two connectors

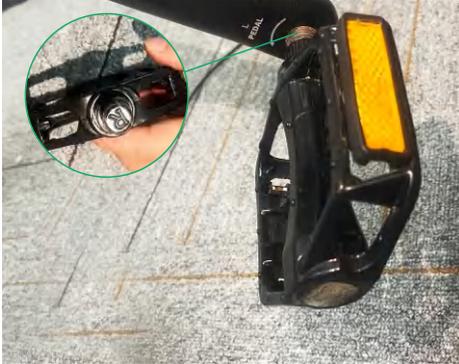


Install the cushion, adjust to your height, and tighten the bolts



When installing the pedals, pay attention to the port of the pedal shaft. The pedal with "L" stamp is the left pedal, the stamp with "R" is the right pedal, and the right pedal is installed on the side of the sprocket. Note: The left pedal is tightened to the left, and the right pedal is tightened

Place the wheel reflector as shown in the picture, if it cannot be pasted, please adjust the position gently



After all adjustments have been made, shift through every gear several times at varying speeds. This will ensure all your adjustments are correct and will allow you to pinpoint any trouble areas. If you encounter any problems, refer to the appropriate section and make any necessary adjustments.

Check the tire pressure and inflate each tube to the recommended psi as stated on the sidewall of the tire

Check that the kickstand operates smoothly and the kickstand bolt is secured tightly. Finally, examine the bicycle. Make sure all accessories are attached and all quick releases, nuts and bolts have been tightened securely.

Correct maintenance of your bicycle will ensure many years of happy riding. Service your bicycle regularly by referring to the relevant sections of this manual, OR take it to a professional bicycle shop.

Remember: Always wear a helmet and obey all traffic laws.

OPERATION

3 RIDING MODES

1. Manual Mode: Ride the bike as any regular bike.

2. Power-assisted Mode: Switch the key , power on, ride the bike then throttles operate by rotating the throttle.

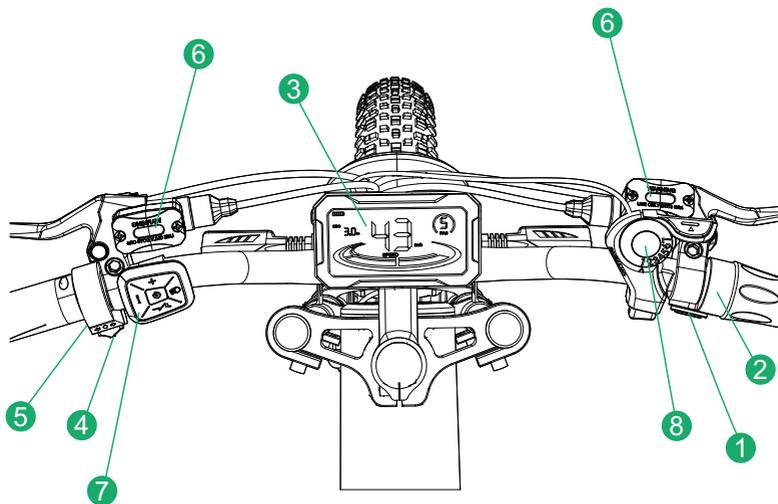
3. Pure electric Mode: Switch the key, power on, throttles operate by rotating the throttle.

Detailed description:

-Switch the key, power on, Throttles operate by rotating the throttle towards the rider much like a motorcycle. The more you twist the throttle, the faster the motor system will propel the bicycle.

-Before you begin riding, turn the main power switch on, then start riding as you would ride any regular, non motor assisted bicycle. After you have begun to ride, slowly twist the throttle (on equipped models) towards you. 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 when 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 about 18-20mph (28-32 km/h). Begin by first riding as if you are on a normal non-electric bicycle. After a few seconds, the motor will slowly activate and ramp up to 50% power. Then, while the pedals are in motion, you can slowly twist the throttle towards you to activate the 5 Pedal Assist Levels full motor power as below.

Level	1	2	3	4	5
MPH	8	14	19	25	32



(All function of the handlebar)

- | | |
|-----------------------------------|----------------------------------|
| 1 Switch | 5 Horn |
| 2 Throttles | 6 Motorcycle oil disc brake |
| 3 Multi-function color LCD screen | 7 Control adjustment button area |
| 4 Turn signals | 8 Speed transmission |



Multi-function color LCD screen LED

Color Screen Display:

- ① Battery level
- ② Speed
- ③ Riding distance
- ④ PAS (Power-Assisted Steering) assistance level 1-5
- ⑤ There is a USB charging port at the bottom left

<Not waterproof, remember to cover the port when not in use>

Problem	Possible Cause	Remedy
Grinding noise when pedaling	<ul style="list-style-type: none"> -Pedal bearings too tight -Bottom bracket bearings too tight -Chain fouling derailleurs -Derailleur jockey wheels dirty/binding 	<ul style="list-style-type: none"> -Adjust bearings -Adjust bearings -Adjust chain line -Clean and lubricate jockey wheels
Freewheel does not rotate	<ul style="list-style-type: none"> -Freewheel internal pawl pins are jammed 	<ul style="list-style-type: none"> -Lubricate. If problem persists. replace freewheel
Brakes not working effectively	<ul style="list-style-type: none"> -Brake blocks worn down -Brake blocks/rim greasy, wet or dirty -Brake cables are binding/ stretched/damaged -Brake levers are binding -Brakes out of adjustment 	<ul style="list-style-type: none"> -Replace brake blocks -Clean blocks and rim -Clean/adjust/replace cables -Adjust brake levers -Center brakes
When applying the brakes they squeal/squeak	<ul style="list-style-type: none"> -Brake blocks worn down -Brake block toe-in incorrect -Brake blocks/rim dirty or wet -Brake arms loose 	<ul style="list-style-type: none"> -Replace blocks -Correct block toe-in -Clean blocks and rim -Tighten mounting bolts
Knocking or shuddering when applying brakes	<ul style="list-style-type: none"> -Bulge in the rim or rim out of true -Brake mounting bolts loose -Brakes out of adjustment -Fork loose in head tube 	<ul style="list-style-type: none"> -True wheel or take to a bike shop for repair -Tighten bolts -Center brakes and/or adjust brake block toe-in -Tighten headset
Wobbling wheel	<ul style="list-style-type: none"> -Axle broken -Wheel out of true -Hub comes loose 	<ul style="list-style-type: none"> -Replace axle -True wheel -Adjust hub bearings

	<ul style="list-style-type: none"> -Headset binding -Hub bearings collapsed -QR mechanism loose 	<ul style="list-style-type: none"> -Adjust headset -Replace bearings -Adjust QR mechanism
Steering not accurate	<ul style="list-style-type: none"> -Wheels not aligned in frame -Headset loose or binding -Front forks or frame bent 	<ul style="list-style-type: none"> -Align wheels correctly -Adjust/tighten headset -Take bike to a bike shop for possible frame realignment
Frequent punctures	<ul style="list-style-type: none"> -Inner tube old or faulty -Tire Tread/casing worn -Tire unsuited to rim -Tire not checked after previous puncture -Tire pressure too low -Spoke protruding into rim 	<ul style="list-style-type: none"> -Replace Inner tube -Replace tire -Replace with correct tire -Remove sharp object embedded in tire -Correct tire pressure -File down spoke

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