



The manufacturer reserves the right to change and release product firmware updates and to keep this manual up to date.
<https://www.okai.co>

OKAI ES20



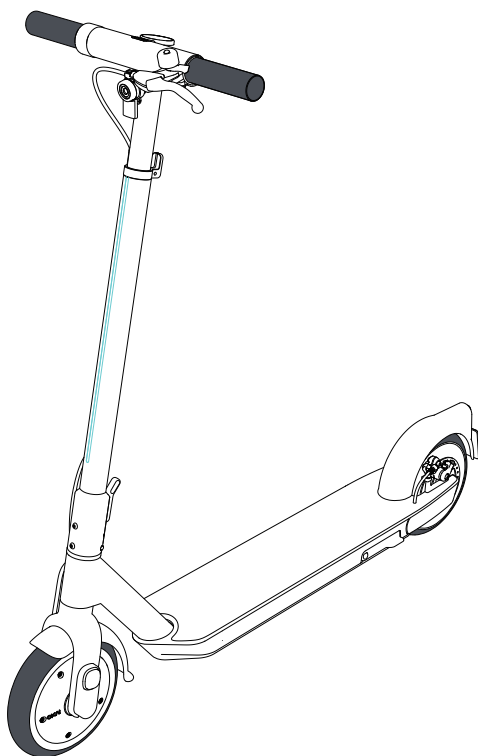
Instruction Manual

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Thank you for purchasing the OKAI electric scooter.

Thank you for purchasing the OKAI electric scooter.

OKAI sincerely hopes that you can ride the scooter safely and enjoy a comfortable riding experience. Since riding a scooter carries certain risks, please read this practical manual carefully before riding, and adequately prepare before going on the road. Please keep the instruction manual in case you need it from time to time. If you give the electric scooter to others, please also provide them with this user manual. Failure to comply with this user manual may cause serious injury to people or cause damage to the product. OKAI does not assume any responsibility for this. In order to be concise and easy to read, the OKAI E-Scooter will be referred to as “product” in the following Content.



1-1.Technical Data

Item	Content	ES20
Specifications	Dimensions(Unfolding):length,width,height	1145*450*1130(mm)
	Dimensions(folding):length,width,height	1145*450*400(mm)
	N.W.	16KG
	Maximum Speed	25km/h
	*Range	40Km
	Maximum Gradient	20%
	Adapted Terrain	Flat /Mountain
	Operating Temperature	0~40°C
	Storage Temperature	—20~45°C
	IP Rating	Finished product IPX5
	Charging Time	2A<6
Battery Specifications	Rated Voltage	36V
	Rated Capacity	9.8Ah (10 series 2 parallel)
	BMS	Negative point port
	Battery Quantity	20Pcs
	Swappable battery?(Yes or No)	No
	Charging cabinet version	/
Motor Specifications	Motor Size	8.5inch
	Max Torque	16N.m
	Rated Voltage	36V
	Rated Power	250W
	Max Power	500W
	Motor Control Mode	Brushless gearless motor

Item	Content	ES20
Brake	Braking Distance	<10M
	Brake Type	The front wheel adopts electric brake, while the rear wheel adopts disc brake.
Tire	Tire Size	Front and rear wheel: 8.5inch
	Tire Material	Front wheel:Pneumatic tire Rear wheel:Solid honeycomb tire
Charger	Input Voltage	100-240V
	Output Voltage	42V
	Output current	2A
User	Max Load	100KG
	AGE Recommended	>14 years old
	Height Required	120-200cm
Characteristics	Brake light	Light off/low light flashing alternately
	Riding mode	Taillight low light
	Certification	CE,ROHS,WEEE, FCC,Sea and air transport report
Packing	Manner of packing	1pc/ctn
	G.W.	19.5KG

*Specifications are subject to change without prior notice.

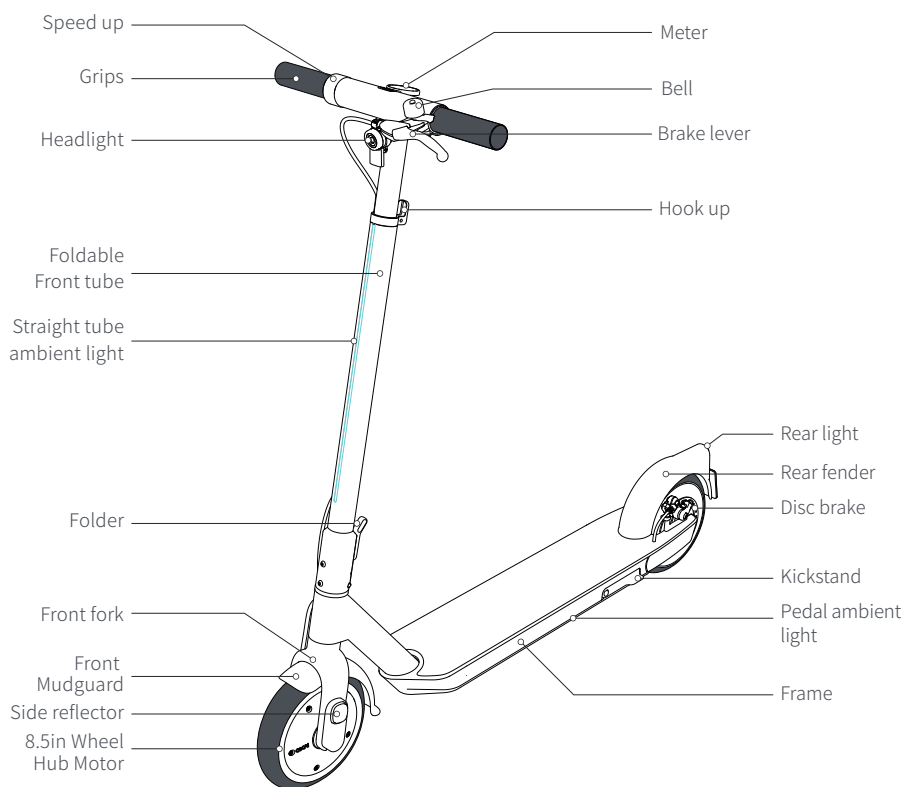
*Range: When fully charged, with a load of 75kg, an ambient temperature of 25°C, driving on a flat road at a constant speed of 60% of the maximum speed.

*Factors affecting the range include: speed, ambient temperature, climbing, number of starts and stops, etc.

1-2.Symbol Explanations

DANGER	Indicates a hazard signal with a high degree of danger. If not avoided, death or serious injury may occur.
WARNING	A hazard signal that indicates a moderate hazard. If not avoided, death or serious injury may occur.
CAUTION	A hazard signal that indicates a lower hazard. If not avoided, mild or moderate injury may occur.
	This symbol marks additional information and instructions about the product and its use.
	This symbol stands for "conforms to EU standards", meaning "conforms to" EU Directive". The manufacturer makes a ce mark to confirm that the product complies with applicable European directives and regulations.
	Please read the instruction manual carefully before use.
	Positive and negative display.
	This product is a second-class protection product.
	Wear personal protective equipment(PPE).
	The product can only be used by one person at a time.
	It can only be used on flat and dry roads.
	Please do not use this product after taking alcohol, sedatives or psychotropic drugs.
	Minimum age: 14 years old.
	Do not enter the road with these signs.

1-3.List of finished product and parts



Size: length 1145*width 450*height 1130MM

· An electric scooter is intended for sport and entertainment purposes, not for use as a means of transportation, but the transportation function of the product once you drive it into public areas (as permitted by the laws and regulations of your region and country) also carries potential safety risks for all vehicles. Drive strictly in accordance with the instructions in this manual to ensure the safety of yourself and others to the utmost extent, and to ensure compliance with national first-level traffic laws and regulations of various provinces and cities, such as traffic regulations, etc.

· Please note: Once you drive an electric scooter on public roads or other public places (as permitted by the laws and regulations of your region and country regarding the use of electric scooters on public roads or other public places), even if you fully comply with this safe driving guide operation, you may also face risks caused by illegal driving/improper operation by others, or other vehicles. Just like when walking or riding a bicycle, you may also be injured by other vehicles. As with any vehicle, the faster you drive an electric scooter, the longer the distance required to brake, and emergency braking on smooth surfaces may also cause the wheels to slip and lose balance or even fall over. Therefore, it is very important to be vigilant when driving, maintain a proper speed, and maintain a reasonable and safe distance from other people and vehicles. When driving on unfamiliar terrain, stay alert and drive at a low speed.

· Please respect the pedestrian's right of way when driving. Avoid frightening pedestrians, especially children.

· When driving in countries and regions where there are currently no national standards and regulations related to electric scooters, such as China, please be sure to comply with the safety requirements for drivers in this manual. Zhejiang Okai Automobile Industry Co., Ltd. will not bear any direct or joint liabilities for any financial losses, losses of life, legal disputes, or any other unfavorable events that occur due to the violation of the recommended uses indicated in this manual.

· To avoid potential injury, do not lend the electric scooter to people who can't operate it. If you give the electric scooter to a friend to use, please be responsible for your friend's safety, teach them to operate the scooter, and tell them to wear protective equipment.

· Please perform a basic inspection of the electric scooter before each driving. If you find that there are loose parts, the battery life is obviously reduced, the tires are excessively worn, the steering makes abnormal noises or malfunctions, etc., please stop using the scooter immediately, and do not force it to drive.

3.Safety Instructions

This section lists the safety instructions that should be followed when using this product.

3-1 Safety instructions

It may be dangerous to use this product! Learn to use the product step by step and spend enough time on practicing. Please follow all the tips and warnings set forth in this manual to reduce risks but cannot eliminate all risks. Therefore, even if you have enough practices, guidance or expertise, you may still lose control, collide or fall over, which may cause serious consequences.

1. An instruction to keep the printed instructions for further reference and to be read carefully before use.
2. Maximum speed allowed: 25 km/h.
3. Pregnant women, the disabled, and those who suffer heart, head, back or neck diseases (or have undergone operations on these parts) should not use this product.

4. Do not use this product after taking alcohol, sedatives or psychoactive drugs, so as not to affect your judgment.
5. Keep a distance of at least 1m from pedestrians, other vehicles and any obstacles.
6. This product can only be used when the environment permits it and the personal safety of bystanders is guaranteed.
7. Pay attention to the obstacles in front places and those far away, the unobstructed view will be helpful for safe use!
8. This product may be used by only one person. It is forbidden to use this product with others. Don't make sharp turns when driving the scooter at high speed.
9. Avoid sudden acceleration or sudden braking; do not lean your body for acceleration.
10. Excessive forward or backward is strictly prohibited.
11. Do not misuse this product. Do not use this product on roadsides, ramps, in skate parks, empty swimming pools, or any place similar to sliding plates.
12. Do not use this product to cross obstacles, slopes, ice or snow, nor climb up or down steep slopes, stairs or escalators. Do not expose this product in the rain.
13. Do not use this product in places where the depth of the puddle exceeds 2cm, because water may enter the motor.
14. Don't jump on this product. Don't try to use this product to do any acrobatics or juggling.
15. In order to avoid distraction when driving the scooter, please do not wear earphones, earplugs, make or answer calls, take pictures or videos or do any activities that are not related to driving, so that you may monitoring the external environment well while driving the scooter.
16. Be sure to hold both handles when riding.
17. Do not use this product at night or in places with poor light.
18. When you encounter pedestrians or other obstacles, check if you can pass safely.
19. Please use this product and its accessories at an appropriate temperature. Pay attention to the temperature requirements for battery charging.
20. Please always wear personal protective equipment (to protect wrists, knees, head and elbows) suitable for your weight and size to avoid injury. In working areas, local laws or regulations may have minimum requirements for helmets. In addition, it is suggested that safety mirrors be worn.
21. According to French traffic rules, reflective clothing and helmet is strongly required during cycling.
22. Do not hang this product with other products or vehicles.
23. When being not used, this product should be parked with the kickstand.
24. Any load added to the handle will affect the stability of the scooter.
25. **WARNING!** The braking distance will be extended under humid conditions.
26. **WARNING!** If any mechanical parts are subject to great external pressure and wear, different materials and parts may react differently to wear. If a part exceeds the expected service life, it may suddenly break, which may cause injury. Cracks, scratches and discoloration in the area affected by external pressure indicate that the part has exceeded its service life and should be replaced in time.
27. **WARNING!** Please keep the plastic cover away from children to avoid suffocation.
28. Please spend enough time practicing how to use this product, so as to avoid accidents caused by lack of skills.
29. If training is required, the seller may provide corresponding training tutorials
30. When you are approaching pedestrians or cyclists, you may flip / turn the bell for reminding them.
31. When passing a protected passage, please get off and walk through it.
32. Pay attention to protect your own safety and the safety of others in all cases.
33. Do not use this product for other purposes such as carrying people and objects.
34. Using the brake for a long time may cause heating, and thus do not touch it.
35. Regularly check all kinds of bolts, especially the axle, folding system, steering system and brake shaft.

36. It is prohibited to refit this product, including steering tubes, steering sleeves, steering rods, folding mechanisms and rear brakes.
37. Accessories and any additional items which are not approved by the manufacturer shall not be used.
38. When riding, the noise should not exceed 70dB.
39. When using the product, users must wear shoes.
40. This appliance can be used by children aged from 14 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
41. Traffic in the city has many obstacles to cross such as curbs or steps. It is recommended to avoid obstacle jumps. It is important to anticipate and adapt your trajectory and speed to those of a pedestrian before crossing these obstacles. It is also recommended to get out of the vehicle when these obstacles become dangerous due to their shape, height or slippage.
42. Get closer to your seller so he can refer you to an appropriate training organization.
43. Avoid high traffic areas or overcrowded areas.
44. In any case, anticipate your trajectory and your speed while respecting the code of the road, the code of the sidewalk and the most vulnerable.
45. Notify your presence when approaching a pedestrian or cyclist when you are not seen or heard.
46. Cross the protected passages while walking.
47. In all cases, take care of yourself and others.
48. Power-off the vehicle during charging.
49. Do not divert the use of the vehicle.
50. This vehicle is not intended for acrobatic use.
51. Caution, the brake may become hot in use. Do not touch after use.
52. Regularly check the tightening of the various bolted elements, in particular the wheel axles, the folding system, the steering system and the brake shaft.
53. Eliminate any sharp edges caused by use.
54. Do not modify or transform the vehicle, including the steering tube and sleeve, stem, folding mechanism and rear brake.
55. The self-tightening nuts as well as the other self-tightening fastenings may lose their efficiency and that they may need to be retightened.
56. **WARNING!** As with any mechanical component, a vehicle is subject to high stresses and wear. The various materials and components may react differently to wear or fatigue. If the expected service life for a component has been exceeded, it may break suddenly, therefore risking causing injuries to the user. Cracks, scratches and discoloration in the areas subject to high stresses indicate that the component has exceeded its service life and should be replaced.
57. In order to prevent theft of scooter, it is recommended that the user be equipped with a physical lock.
58. **WARNING!** Risk of Fire and Electric Shock – No User Serviceable Parts.
59. Prolonged exposure to UV rays, rain and the elements may damage the enclosure materials, store indoors when not in use.

Failure to use common sense and heed the above warnings will increase the risk of serious injury or even death, so be careful!

3-2 Battery safety precautions

- The battery should not be exposed to excessive heat such as sunlight, fire or the like. Otherwise there will be a risk of explosion!
- If this product is not used for more than 30 days, please fully charge the battery.
- Fully charge the battery every 90 days. Otherwise, the battery will conduct self-discharge and be damaged.
- If the battery emits a strong smell or becomes hot, stop using the product immediately. Do not open the product casing and don't try to disassemble the battery by yourself.
- Please dispose of the battery correctly and safely.

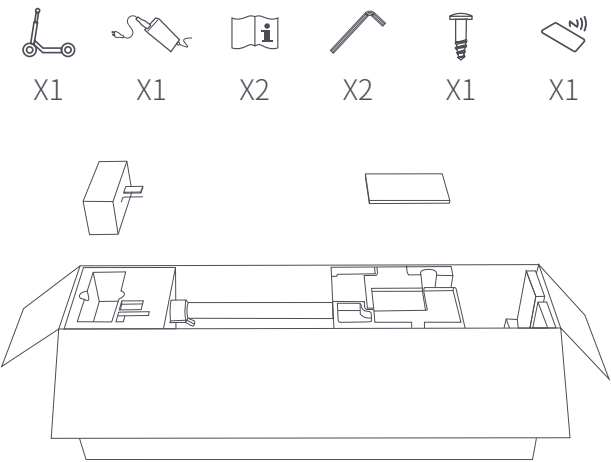
3-3 Safety instructions for battery charger

- Please use the original battery charger provided with the product for charging.
 - The battery charger is not suitable for children under 14 years old, people with mental disorders, those who are disabled, etc., unless they use this product under the supervision or guidance of their guardians.
 - Check again whether the power plug and cable are damaged. If so, they must be replaced by the manufacturer, a designated service agent or a person with similar qualifications to avoid danger.
 - Before cleaning, storage and transportation, disconnect the battery charger from the power source and allow it to cool down.
 - Protect electrical components from moisture. When the battery charger is cleaned or used, do not immerse it in water or other liquids to avoid electric shock. Do not put the battery charger in water. When being charged, this product must be placed in a well-ventilated place. After the battery is fully charged, immediately disconnect the charger from the power source.
 - Regularly check whether the battery charger is damaged. A damaged battery charger must be repaired before use. Do not use a battery charger that has been left exposed for a long time or damaged.
 - Do not connect a damaged product to the battery charger. There is a risk of electric shock!
 - Do not disassemble the battery charger. Repairs must be performed by reliable after-sales service personnel. Incorrect assembly may cause fire or electric shock.
 - Do not use the charger near flammable and explosive items, otherwise there is a risk of fire and explosion.
 - Please check the technical data before connecting the battery charger to the power source. Improper use may cause fire! The battery charger should be used indoors only.
 - Do not misuse the battery charger. The battery charger is only suitable for this product. Use with other products may cause fire or electric shock.
 - Make sure that the battery charger and the charging port are properly connected and not blocked by foreign objects.
 - Keep the charging port clean, dry, and free from dust and humidity. Do not put any objects on the battery charger, and don't cover it. Otherwise, the battery may overheat.
- Do not place the battery charger near any heat sources.
- Be sure to place the power line in places where no one may trip, step on, or damage it. Otherwise there will be a risk of material damage and personal injury.
 - Do not disconnect the battery charger from the power source by pulling the power line. Please manually remove the plug.
 - Do not attempt to charge non-rechargeable batteries.

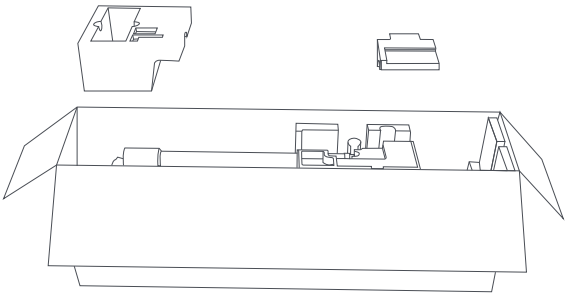
4-1 Using the product for the first time

This section provides information on how to use the product correctly. To ensure user safety and service life, it is important to follow these instructions.

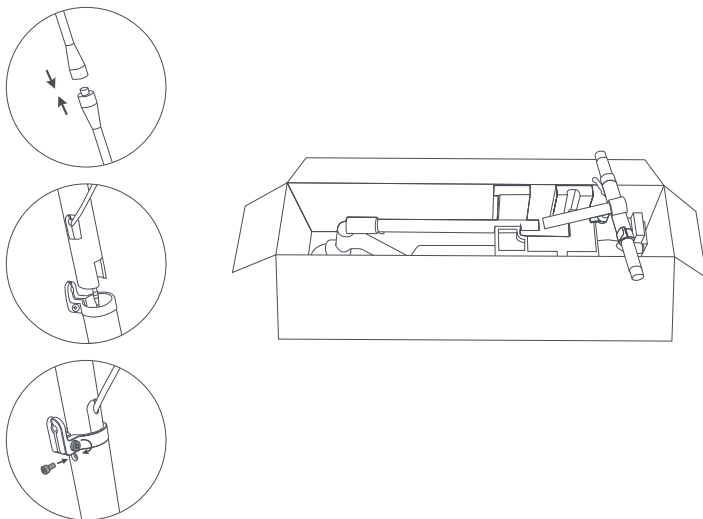
1.Take out the charger, wrench, NFC cards, screws and instruction.



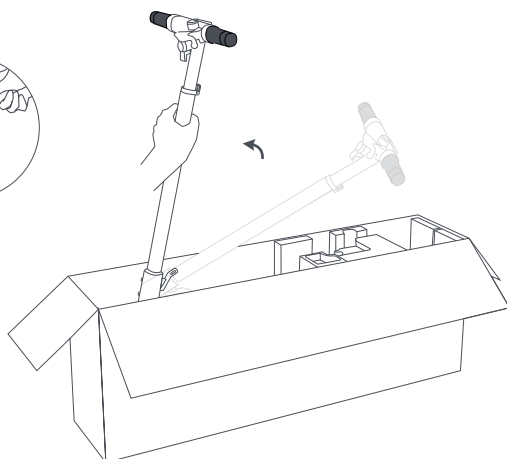
2.Remove the front foam, the middle foam cover, and the tail paper from the carton.



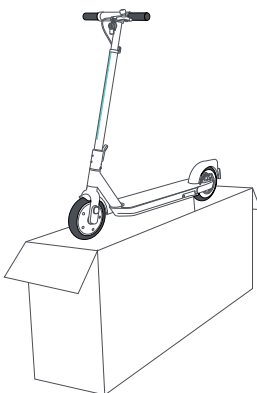
3.Remove the car head from the middle foam, after the wiring harness connection is completed, lift up the front tube, then insert the car head into the front tube and tighten it with screws, and then tighten the embrace hoop.



4.Lift up the front tube, pull up and lock the folder handle.



5.Remove the scooter from the carton.



6.NFC key card:In the off state, the NFC key card is close to the screen to turn on and unlock; in the power on state, the NFC key card is close to the screen, shut down and lock the scooter;
Function button:Short press the function button to turn on the product, and press it for about 3s to turn it off;

Press the function button to turn on/off the headlight when power-on;
Press twice to switch to E (pedestrian mode) /L (economy mode) /H (sports mode) when power-on;

E mode is pedestrian mode, with a maximum speed of 5km/h, which is suitable for use on pavement;

L mode is economy mode, with a maximum speed of 15km/h;

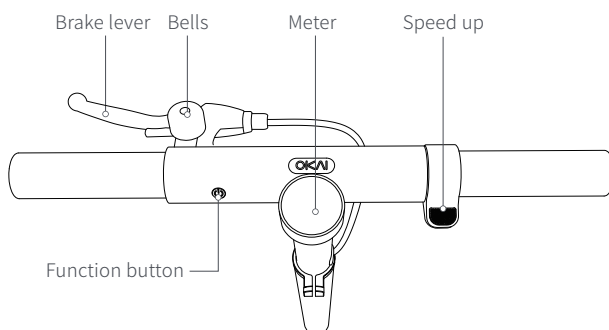
H mode is sports mode, with a maximum speed of 25km/h;

Press five times in riding mode to switch the speed unit;

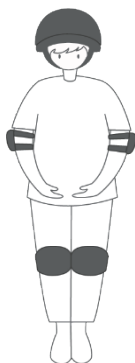
APP turns on the cruise function, which maintains a constant speed.When the vehicle speed is greater than 5km/h, press and hold the function button for 2 seconds to enter cruise mode at constant speed;

Brake handle: Squeeze the brake handle which will control both the disc brake and the electromagnetic brake;

Press the throttle to accelerate the scooter.

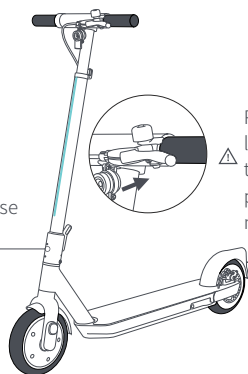


7. Wear a helmet and protective gear.



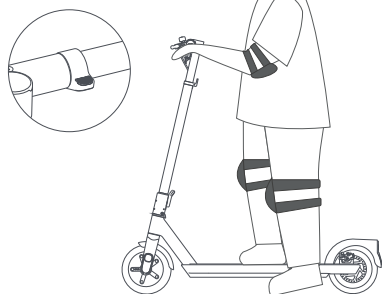
8. Please check the vehicle before each use.

⚠ If the folding pole is loose and shaking, tighten as soon as possible using stacker fixing screws.



⚠ Press the brake lever to confirm that braking power is normal.

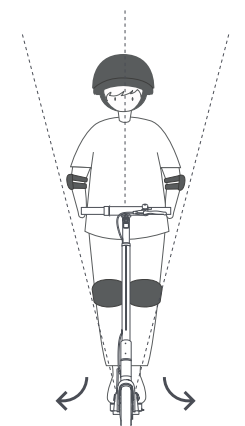
9. After there is an initial speed through pedalling, use the throttle to accelerate.



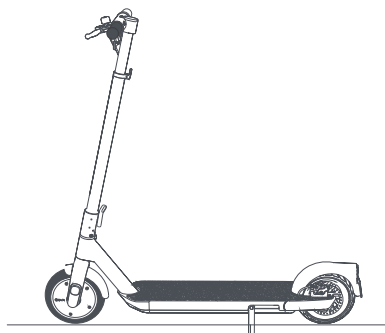
10. Release the acceleration handle to reduce speed, and squeeze the brake lever to brake.



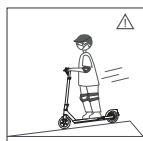
11.To change the center of gravity when turning, turn the handle slightly.



12.When you need to stop, release the acceleration handle to reduce speed, squeeze and brake the handlebar. Lay down the foot support and let the vehicle lean slightly in the foot support direction so that the foot support touches the ground, and the vehicle can be stabilized.



13.safety warning



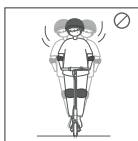
Pay attention to the speed when riding downhill.



Watch out for your head.



Pay attention to other vehicles on the road.



Do not shake.



Do not use your mobile phone.



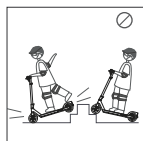
Do not ride the electric scooter on rainy days.



Do not use the electric scooter to carry people.



Always keep your hands on the handlebars.



Do not cross large gaps or steps.



Do not step on the fender.



Do not press the throttle when pushing the electric scooter.

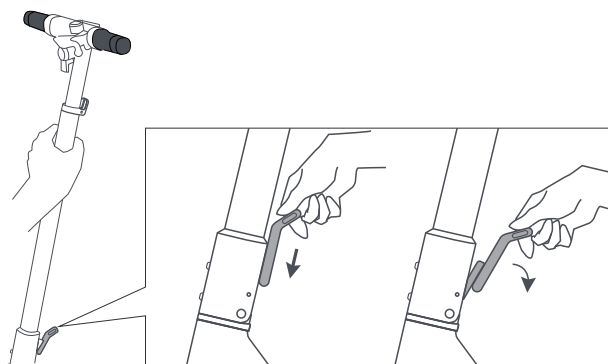


Do not stand on the scooter with one leg.

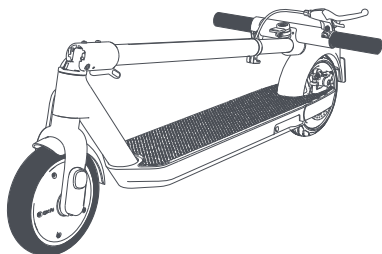


Do not put heavy items on the electric scooter.

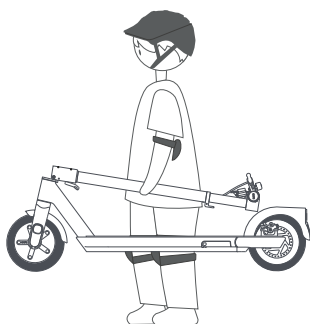
14. Folding operation



① Hold the front tube, press the folding handle down and then open it outwards;



② Put down the front tube, the front tube is automatically locked;



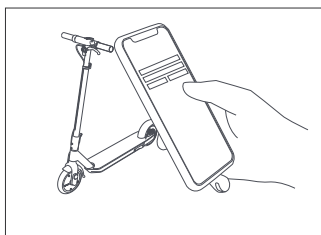
③ Hold the front tube to lift the electric scooter.

15. Activate the app

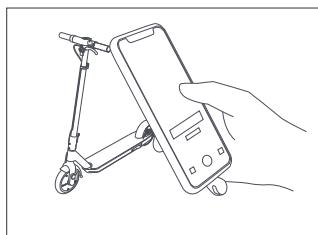
Please scan the QR code to download the app (the system version and Bluetooth version are subject to the actual requirements of the app). You can find the cruise control function in the app, and discover more ways to use the scooter.



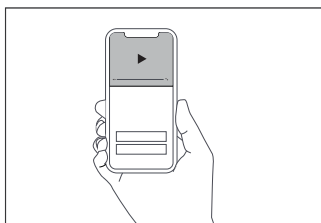
① Install APP, please register/login



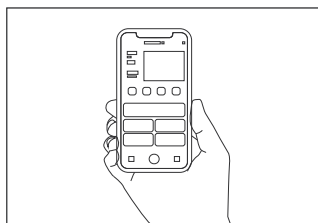
② Open the app, click "Search for Device".
Follow the app prompt to pair with and connect to the scooter.



③ Watch the driving guide



④ Start exploring a new riding experience



Now, you can use your car, check the status of the car and detect the car through the app. Please enjoy the ride.

4-2 Ride preparation

Checklist:

- Wheels - check that the wheels are not damaged or excessively worn.
- Loose parts - make sure that all parts, such as nuts, bolts and fasteners are safe. Parts should not make any abnormal sounds.
- Operating area-make sure that the operating area is open and flat without any obstacles.
- Laws and requirements - check and comply with any local laws or regulations. When using this product on public roads, comply with local laws and regulations.
- Safety equipment - always wear personal protective equipment (wrist, knee, head and elbow protection). In some areas, local laws or regulations may require helmets.

⚠ WARNING :Do not ride with the product using one hand. Don't try to perform any stunts or tricks while riding.

⚠ WARNING :Driving at a medium speed will increase mileage. When driving at high speed for a long time, frequently starting, stopping and idling, as well as frequent acceleration and deceleration will reduce mileage.

⚠ WARNING :Do not touch the brake parts with your hands after continuous braking.

5.Maintenance,Cleaning and Service

5-1.Maintain

Please follow the maintenance SOP provided by our company for the maintenance of this product and its accessories. If you have any questions or problems, please contact our company.

5-2.Clean

- Please turn off this product before cleaning.
- Unplug the battery charger from the product before cleaning each time.
- Never use solvents or abrasive cleaners. Never use stiff brushes, metal or sharp objects when cleaning. Otherwise the product's appearance and internal structure will be seriously damaged.
- Clean the battery charger and product with a slightly damp cloth. Afterwards, wipe all parts with a dry cloth.

⚠ WARNING :Do not immerse the product or battery charger in water or other liquids. Do not place the product or battery charger under running water. Doing so creates a risk of electric shock!

⚠ WARNING :This product cannot be cleaned using a power washer.

5-3.Storage and transportation

- Store the product in a dry, clean place, out of the reach of children, preferably in the original packaging.
- During transportation, turn off the product.
- The product can only be shipped in its original packaging. Don't throw away the packaging because shipping the product may be required in the future. Protect the product during transport (for example, using bungee straps) to prevent it from falling or tipping over to protect the product from impact and vibration.

⚠ WARNING

:This product contains a built-in lithium battery. Lithium-ion batteries are considered dangerous goods to be transported, and may only be transported when permitted by local laws and regulations.



:If you plan to travel by plane or other means of transportation with your product, please check with your transportation company whether product transportation is feasible.

6.Handling



This mark indicates that this product should not be disposed of with other Household-waste throughout the entire European Union. In order to prevent possible harm to the environment or human health caused by uncontrolled waste disposal, it is our responsibility to recycle this product to promote the sustainable reuse of material resources. To dispose of the used product, please contact the recycling system or contact the retailer of the product. They can recycle this product environmentally and safely.



Dispose of batteries in accordance with environmental protection requirements. Do not throw away the battery with daily garbage. Contact the recycling system in your community, or contact the retailer where you purchased the product.



Packaging materials can be transported back to the raw material circulation. Dispose of packaging materials in accordance with legal regulations. Relevant information can be obtained from the recycling system in your community.

7.Explanation of error codes

Error number	Error name	The reason	Troubleshooting method
01E	Overcurrent protection	The instantaneous output current of the controller exceeds the current limit range($>22A$)	The controller output current is less than 22A and then recovers
02E	Undervoltage protection	When the battery voltage is lower than $30 \pm 1V$	1. The fault is resolved automatically after charging 2. Replace the battery
03E	Motor phase line failure	Short circuit of motor phase line when unlocking	1. Replace the motor 2. Replace the controller
04E	Locked-rotor protection	The motor is blocked or short-circuited, or the drive is faulty	1. Release the locked-rotor state 2. Replace the motor
05E	The upper MOS tube is damaged	The drive upper bridge MOS tube is damaged or broken down	Replace the controller
06E	Damaged lower MOS tube	The driving lower bridge MOS tube is damaged or broken down	Replace the controller
07E	Motor Hall failure	The hall wiring sequence is wrong or the connection is bad	1. The plug-in connection is bad, reconnect it 2. Replace the motor
08E	Motor overheated	Motor temperature exceeds the normal operating temperature	1. Stop riding and cool down, and wait for the fault to be resolved by itself 2. Replace the motor
09E	Lever failure	Handlebar malfunction or poor connection	1. Check the connection of the switch handle and eliminate the poor contact 2. Replace the handle 3. Release the handle
10E	Left brake failure	Left brake lever Hall failure or poor connection	1. Check the brake lever wiring to eliminate poor contact 2. Replace the left brake lever
11E	Electronic control receiving timeout failed	The instrument communication connector is faulty or the device is faulty	1. Check the wiring of the instrument and the central control harness plug-in of the instrument, and eliminate the poor contact 2. Replace the meter
12E	Controller dropped	The instrument communication connector is faulty or the device is faulty	1. Check the wiring of the instrument and the central control harness plug-in of the instrument, and eliminate the poor contact 2. Replace the controller
13E	Battery communication failure	Poor contact of the battery communication line or defective device	1.Check the controller battery wiring and eliminate the bad wiring 2.Replace the controller 3.Replacement battery
15E	Controller firmware is missing	Controller program upgrade failed	1. Re-upgrade the controller program 2. Replace the controller
16E	Battery protection board is missing	Battery program upgrade failed	1.Re-upgrade the battery program 2.Replacement battery
17E	Instrument firmware is missing	Instrument program upgrade failed	1.Re-upgrade the instrument program 2. Replace the controller
18E	Handlebar does not return	The handle turns back into position when turning on or the handle is damaged	1. Put the transfer back into place 2. Replace the handle 3. Release the handle
19E	Left brake lever is not reset	The left brake does not return or the left brake is damaged when starting up	1. Return the left brake lever 2. Replace the left brake