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The illustrations and function descriptions in this user manual are for illustration purposes and reference only, and the products are subject to the real product. The mentioned technical performance indicators are based on the specific experimental environment, and the actual indicators may vary depending on the setting and environment. This product needs to be used with mobile phones or other smart devices. The realization of all functions of this product requires network support, with the network fee being subject to the supplier's service rate. This product is only used to assist safety management and cannot replace other safety measures. Do not use this product for any illegal purposes. Some services are provided and supported by third parties, which may change at any time. Inwari does not provide any guarantee for third-party services. Please read the terms of the third-party service and privacy policy carefully before use.

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Model No. ES14
Original Instructions



User Manual of 5TH WHEEL Electric Scooter

V1.0

The picture is for reference only.
Before using the product, please read this manual.
IMPORTANT! Read carefully and keep for future reference.

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* Please read and know the instructions described in the user manual carefully before using the electric scooter and keep it for future reference.

Please do not dispose of this product casually, it needs to be disposed of in accordance with local recycling regulations.

Welcome

Thank you for choosing the 5th Wheel Electric Scooter ES14 (hereinafter referred to as ES14). Enjoy the pleasure brought by ES14.



1 Safety Instructions

Note: Before using this product, please carefully read the following important safety information.

1. This electric scooter can be used by one adult only. Never carry others.



2. Wear safety helmet and other protective equipment while using this product.



3. Never ride this product in an unsafe or illegal place.



4. Please practice in an open area (not on lanes) first and use this product until you are skilled in operation.



5. Do not make dangerous actions or ride with one hand only. Keep your feet on the scooter.



6. Avoid obstacle jumps and anticipate and adapt your trajectory and speed to those of a pedestrian before crossing these obstacles. Meanwhile, get out of the vehicle when these obstacles become dangerous due to their shape, height or slippage. Do not try to directly pass steps are higher than 1.2inch.



7. For your safety, please control the speed to be less than 19mph. Avoid using it at night as much as possible. If you use this product at night, turn on the headlight and control the speed to 9.3mph or less.



8. Do not use this product at the ambient temperature below 23°F. Temperature range of charging and cycling environment: 50°F - 104°F.



9. In the event of bumps or poor road conditions, please use this scooter slowly or get off the scooter and push it forward.



10. Do not use this product on an oily or icy surface.



11. To avoid damage caused by water to its electrical parts, please do not immerse this product at a depth of more than 1.57 inch in water.



12. Avoid using this product as much as possible in bad weather such as rain, snow and wind, to prevent unnecessary damage caused by insignificant factors.



13. Use this product in accordance with relevant instructions in this manual. Do not use this product beyond the allowable load range.



14. Avoid using or keeping this product at high or extremely low temperatures, or keeping this product together with flammables.



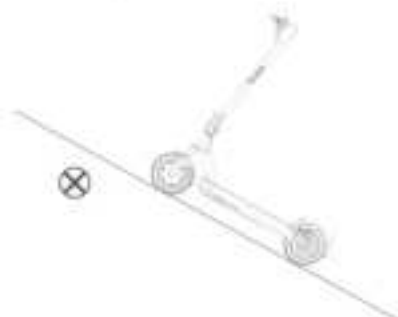
15. The scooter is a special riding product. Please ride it on smooth roads without pits.



16. Do not attach any load to the handlebar which will affect the stability of the vehicle.



17. Engage the kickstand when the vehicle is not in use. Flip up the kickstand before use. Do not park the vehicle on the slope.



19. Braking performance and friction between the tire and road deteriorates in wet conditions, so it is harder to control the speed and easier to lose control. Slow down and brake early when it is raining.



18. The minimum height of the user is 55 inch, while the maximum height is no more than 86.6 inch; the maximum age of the user is 70 years old, while the minimum age is no less than 13 years old.



20. **WARNING** Keep plastic covering away from children to avoid suffocation.



21. The user shall take the time to learn the basics of the practice to avoid any serious accident that can take place in the first month.



23. Cross the protected passages while walking, in all cases, take care of yourself and others.



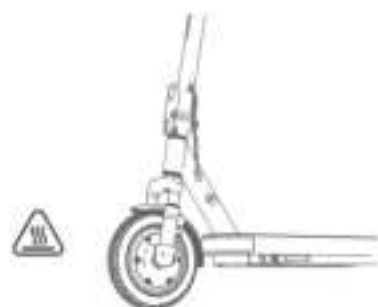
22. Notify your presence when approaching a pedestrian or cyclist when you are not seen or heard. Avoid high traffic areas or overcrowded areas.



24. Do not divert the use of the vehicle. This vehicle is not intended for acrobatic use.



25. Caution, the brake may become hot in use. Do not touch after use.



26. Eliminate any sharp edges caused by use. Do not modify or transform the vehicle, including the steering tube and sleeve, stem, folding mechanism and rear brake.



27. The user has the obligation to always wear shoes when riding.

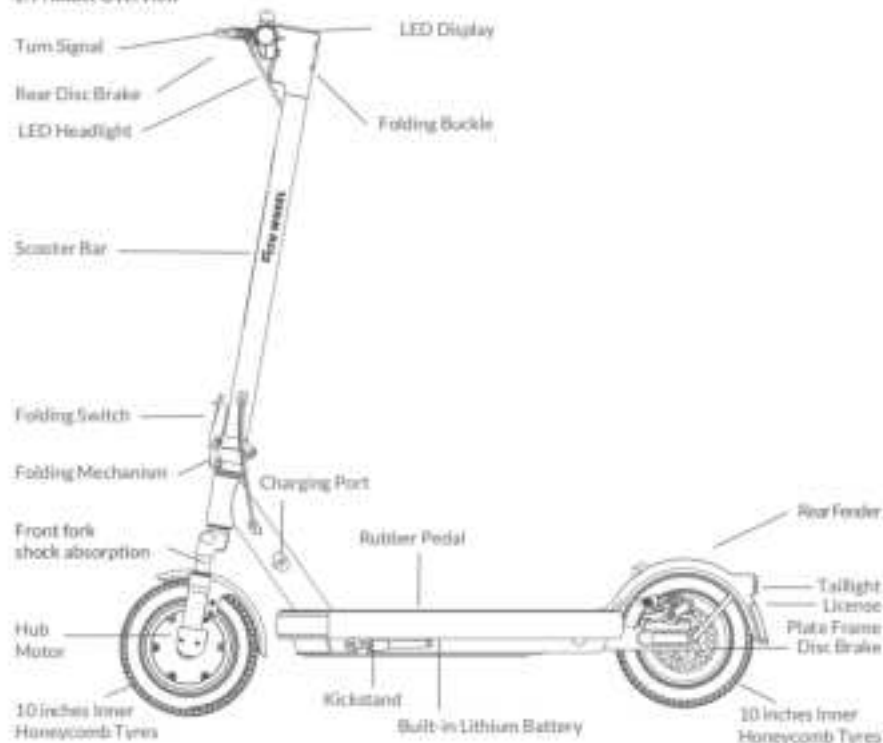


28. In any case, anticipate your trajectory and your speed while respecting the code of the road, the code of the sidewalk and the most vulnerable. If any, local special laws and regulations should be observed during riding of this product.



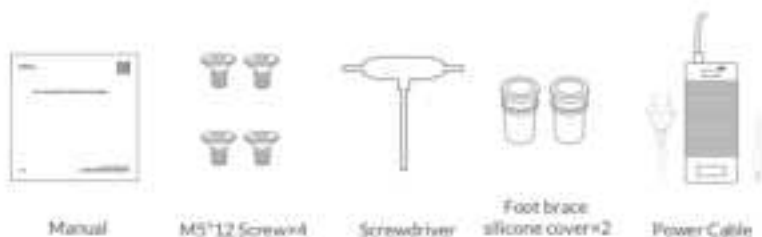
2 Introduction to Functions

1. Product Overview



*The accessories and any additional items which are not approved by the manufacturer shall not be used.

Accessories



Note: Please check out all the items in the package carefully. If anything is missing or damaged, please contact email: aftersales@invanti.com

Product Contents	Quantity
User Manual	1
M5*12 Screw	4
Screwdriver	1
Foot brace silicone cover	2
Power Cable	1

3 Product Display

Unfolded status



Folded status





This QR code is a video tutorial for product use. It is recommended to scan this QR code to learn more about how to use the product.



Pay attention

1. Press the power key to open the scooter.
2. For safety, the factory setting of scooter ES14 is non-zero start, you need to slide the scooter to 2mph, and the throttle can be used normally.
3. The scooter can be turned on normally and cannot ride in walking mode, but can only be pushed.
4. Can't start when charging.
5. Do not throw away the manual, please refer to the manual for specific operations.

4 Scooter Assembly

1. Unfold the folding mechanism of ES14 and put down the kickstand.

Unfold ES14 and fix the folding mechanism. (Refer to "Folding and Carrying" for details of unfolding.)



3. Use the tools included in the package to tighten the screws.



2. Insert the handlebar into the scooter bar.



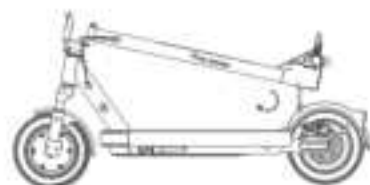
4. After assembly, check whether the power switch can work normally.



5 Unfolding/Folding/Carrying

1. Unfolding Operations

1. Turn the folding clip clockwise until it is fully open.



2. Pull up the body lever while opening the folding clip.



3. Turn the folder clockwise until it is fully snapped.



4. Check whether the folder key is returned to the bottom.



2. Folding Operations

Note: For safety, it is recommended to fold the scooter after it is shut down.

1. Lift the folder key up.



2. Rotate the folder counterclockwise while lifting the folder key.



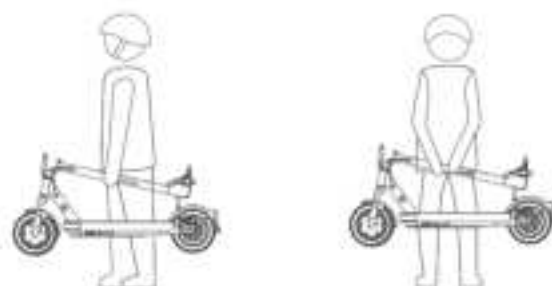
3. Lower the body rod slowly.



4. Open the folding clip and hang it on the rear fender buckle.



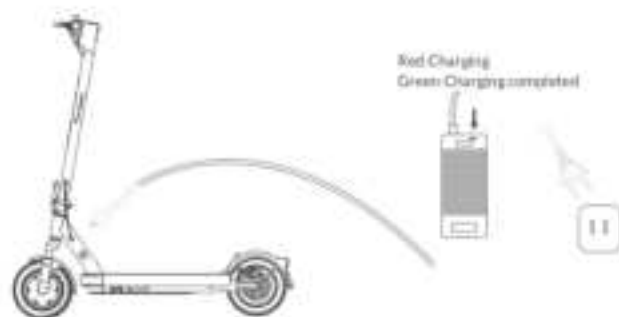
3. About Carrying



After folding, you can carry the scooter with one or two hands. Please check whether the folding hook is reliable before moving the scooter.

4. About Charging

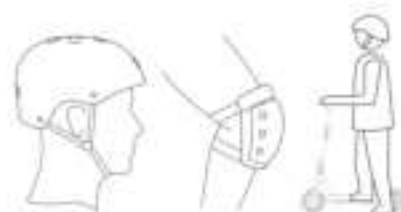
- 1. When the indicator light is red, it indicates that it is charging, and when fully charged, it will turn green. During charging, the scooter cannot be opened and the charger needs to be unplugged to open it.



6 Riding and Parking

Preparation for riding

1. Select an appropriate riding place.
2. Unfold the scooter according to the unfolding instructions and wear protective equipment.
3. It is necessary to check that the steering system is correctly adjusted, that all connection elements (such as a folding system) are correctly tightened and not broken, and that the brakes and wheels are in good condition.



Riding

1. Press the power button to turn on the scooter.
 2. Put one foot on the footboard and the other foot on the ground.
 3. Make the scooter body slide forwards to 2mph and gently press the right thumb accelerator. The scooter will slowly run forwards. When the scooter is running steadily, put the other foot onto the footboard. The larger holding angle of the right thumb accelerator, the higher the speed.
2. Note: For the riding safety, ES14 has a non-zero start mode. The accelerator cannot be enabled until the body slides forwards for a certain distance.

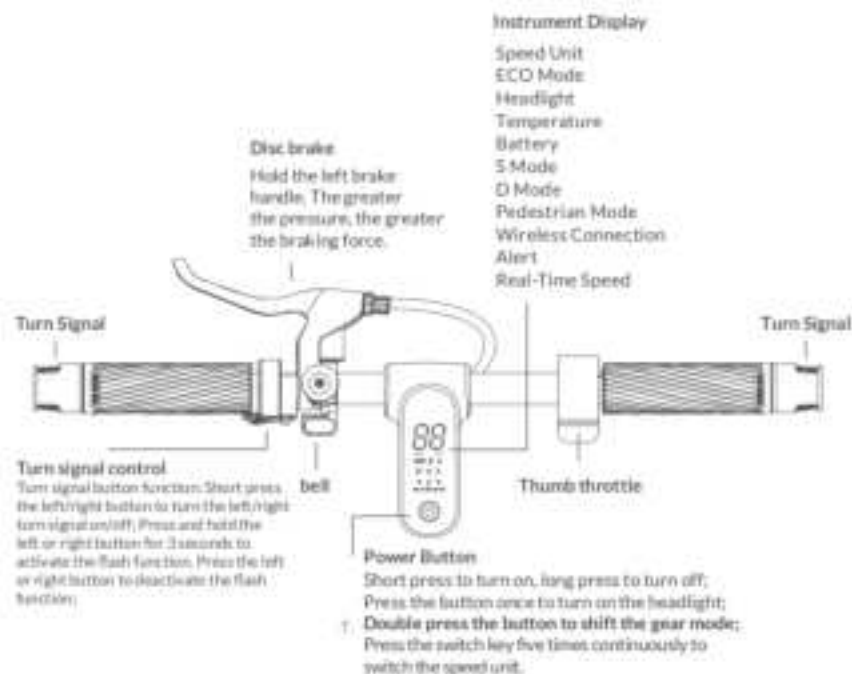


Stop

1. Under normal circumstances, if you hold the left brake lever, the motor will be immediately powered off and subject to braking. The greater the holding force, the greater the braking force.
2. Under emergency conditions, you can step on the rear brake to simultaneously enable the electromagnetic brake of the front wheel and friction brake of the rear wheel.



7 Control System



LED Display



Power Switch

Short press to turn on, long press to turn off;

Press the button once to turn on the headlight; Double press the button to shift the gear mode; Press the switch key five times continuously to switch the speed unit.

Gear Setting

Quickly press the power key twice to switch gears. Gears can be set to pedestrian mode (maximum 3mph), ECO mode (maximum 10mph), D mode (maximum 15mph) and S mode (maximum 20mph).

Speed Control

When riding the scooter at a speed faster than 2 mph, the throttle will get started and take effect. By pressing the throttle, the user can control the riding speed. (Speed Range: 2-20mph)

Brake Control

Hold the left brake handle. The greater the pressure, the greater the braking force.

LED Headlight

After the scooter is turned on, the single power switch turns on/off the front lights.

Emergency Braking

Under normal circumstances, do not use emergency braking vigorously during high-speed driving, so as to avoid the riding risk or damage to the rear wheel. The company is not responsible for the damage.

Turn signal control

Turn signal button function: Short press the left/right button to turn the left/right turn signal on/off. Press and hold the left or right button for 3 seconds to activate the flash function. Press the left or right button to deactivate the flash function;

Speed Unit Switching

After opening the vehicle, press the switch key five times continuously to switch the speed unit.

Cruise Mode

Press and hold the throttle at the same speed for 5 seconds to activate cruise control mode. Cruise mode can be turned off by braking or re-pressing the throttle. (The cruise control function is off by default, which can be enabled in the mobile APP)

8 Indication Description

If there is anything abnormal about the scooter, the warning indicator will flash, with the flashing value 4-55 displayed.

Codes	Describe	Maintenance and treatment
4	Short trouble	Check if a short circuit is wired or installed.
10	Instrument panel communication failed	Check the circuit between the dashboard and the controller.
11	Motor A current sensor is abnormal	Check the line of the phase line (yellow line) of the controller or motor A.
12	Motor B current sensor is abnormal	Check the controller or motor C phase line (blue line) part of the line.
13	Motor C current sensor is abnormal	Check the controller or motor C phase line (blue line) part of the line.
14	Throttle Hall exception	Check if the throttle is zero, the throttle line and the throttle are normal.
15	Brake Hall anomaly	Check whether the brake will be reset to zero position, and the brake line and the brake will be normal.
16	Motor Hall anomaly 1	Check that the motor Hall wiring (yellow) is normal.
17	Motor Hall anomaly 2	Check whether the motor hall wiring (green, brown) is normal.
18	Motor Hall anomaly 3	Check that the motor Hall wiring (blue) is normal.
21	BMS communication anomaly	BMS communication exception (bms communication battery is ignored).
22	BMS password error	BMS password error (bms communication battery ignored).
23	BMS number exception	BMS number exception (ignored without communication battery).
28	Upper bridge MOS tube fault	The MOS tube failed, and the error was reported after restarting that the controller needed to be replaced.
29	Lower bridge MOS pipe failure	The MOS tube failed, and the error was reported after restarting that the controller needed to be replaced.
31	Battery temperature anomaly	Battery temperature is too high, check the battery temperature, static release for a period of time.
50	Bus high voltage	The main line voltage is too high.
51	System overload	Exceed system load.
54	MOS phase line short circuit	Check the phase line wiring for a short circuit.
55	Controller high temperature alarm	The temperature of the controller is too high, and the vehicle is restarted after the vehicle is cooled.
57	Motor high temperature alarm	The temperature of the motor is too high and the vehicle is restarted after the vehicle is cooled.

9 About Charging



Remove the rubber protective cover from the charging port.



Connect the charger.



After charging, push the rubber protective cover back in.

1. Remove the rubber protective cover, and insert the charger connector into the charging port of the body.
2. Insert the power plug of the charger into the power socket.
3. When the charger indicator is red, it indicates that the battery is being charged. When the charger indicator turns green, it indicates that the battery has been fully charged.
4. Requirement to power-off the vehicle during charging, or into a certain non-operational mode.

10 About the Battery and Charger

Each ES14 electric scooter is equipped with a dedicated lithium battery and smart charger. Both the scooter and its accessories have product identification numbers. It is forbidden to use the chargers of other brands. The chargers provided by the company must not be used for other purposes. The company is not responsible for the resultant damage to the battery or charger.

Battery

The lithium battery provided by the company can be recharged for at least 800 times, and more than 1,000 times under normal circumstances. Please charge full battery for the first time before using it. The battery can be charged at any time, and there is no any damage to charge it frequently. Meanwhile, please don't forget to charge it per 3 months if you don't use it for a long term.

Operating Temperatures

Charging: 0°C ~ 45°C

Discharging: 30°C ~ 60°C

Charger

The dedicated charger provided by the company has charging protection function for the built-in charger. When the battery is 100% charged, the charger will be powered off automatically. The charging time is about 5-6 hours. Damage to the battery arising from water, collision and other abnormal factors is excluded from the warranty policy.

Production factory: Shenzhen Hailong Tong Technology Co., Ltd

MODEL: HLT-180-5461500

INPUT: AC 100-240V 50/60Hz 2.0A MAX

OUTPUT: 54.6V $\approx$ 1.5A

Charging instructions

1. Open the rubber and insert the plug into the hole;
2. Insert another plug of the charger into the electric outlet;
3. When the indicator lamp is red, it shows the battery being charged. When the lamp turns green, the battery is finished charging.
4. Please shut down and keep away from water before charging.
5. Only use the specified charger for charging.
6. Warning: Please be careful not to get electric shock.

Kinetic energy recovery

Press the brake in the running process to enable the kinetic energy recovery system and convert part of kinetic energy into electrical energy to be stored and used. The kinetic energy recovery system can enhance the experience of emergency braking. At the same time, the recovered kinetic energy can help increase the endurance. Changes in the power are displayed simultaneously.

11 App Description

We pay great attention to user experience and constantly inject new functions into the App, so the App UI may change with version updating. The following contents are for reference only, please follow the instructions based on the current App version.

1. Please use your mobile phone to scan the QR code to download the App, or search "Stihwheel" in the app store to download and install it. If you have installed the App, please make sure it is the latest version.



2. Open the App, complete the registration for the first time use. After registering, please login to the homepage, tap "+" on the upper right or Search Devices button in the mid-lower section, then follow prompts to add your scooter. Please keep your Bluetooth and scooter on, and try again if you fail to scan.



Special note: About the locking function, it can only ensure that the scooter can't run normally. Due to the light weight of the whole scooter and the whole scooter is composed of mechanical parts, it can be removed with corresponding tools. To prevent your electric scooter theft, suggest always park your scooter in a well-lit and highly visible area for you, or invest in a high-quality and sturdy lock that can keep it securely locked up.

12 Maintenance

Lubrication



For maintenance, add a small amount of white grease or lubricant to the folded part once every six months. Check the scooter once every three months for screw loosening. Tighten the loose screw.

Battery



When you get the electric scooter for the first time, please fully charge the battery before using the scooter. The battery can be charged at any time to ensure the power supply. It will not be damaged during charging. When not in use, the battery needs to be charged once every three months.

*Laboratory data

Storage and daily maintenance



Avoid leaving scooter under direct sunlight or in severely humid places for a long time.

Keep the scooter clean.

Regularly check the tightening of the various bolted elements, in particular the wheel axles, the folding system, the steering system and the brake shaft.

Cleaning Recommendations



If you see stains on the scooter's body, wipe them off with a damp cloth. If the stains won't scrub off, put on some toothpaste, and brush them with a toothbrush, then wipe them off with a damp cloth.

Do not clean the scooter with alcohol, gasoline, kerosene or other corrosive and volatile chemical solvents to prevent fire damage. Do not wash the scooter with a high-pressure water spray. During cleaning, make sure that the scooter's turned off, the charging cable is unplugged, and the rubber flap is closed as water leakage may result in electric shock or other major problems.

Routine Inspection



1. Before riding, please confirm the folding mechanism is locked.
2. Please check whether the tires are badly worn. Please contact the local authorized dealer if they needs to be replaced.
3. Please check whether the tire pressure is at the standard value. If the tire pressure is too low, please inflate the tires immediately.
4. Please check whether the wear condition of the brake pad affects the use of the brake system. If so, please contact the local authorized dealer to deal with the problem.
5. The screws used in this product are self-tightened screws. Please note that the effect may be gone after several times of tightening.
6. **WARNING - Risk of Fire and Electric Shock - No User Serviceable Parts.**
7. Prolonged Exposure to UV Rays, Rain and the Elements May Damage the Enclosure Materials. Store Indoors When Not in Use.

13 Parameter Configuration

Parameter	Product name	ELECTRIC SCOOTER
	Model	ES14
Size	Upright: L x W x H	1154*535*1260mm
	Folded: L x W x H	1154*535*543mm
Weight	Net weight	16.8kg
Status	Max Load	120kg
Main parameters	Max Speed	20mph
	Full-battery endurance	24 miles (depending on the environment, angle, speed, driving habits and other factors)
	Max Incline	Approx. 20%
	Tyre	30 inch inner honeycomb tire
	Brake system	Disc brake+Electronic brake
	Display	Speed, kilometers, gear etc.
	Lighting system	LED high-brightness headlight tail light
Charging parameters	Motor power	400W
	Adapter Rated input voltage	100V-240VAC 50/60Hz
	Lithium battery	48V-7.5AH
Wireless parameters	Charging time	5-6h
	Wireless frequency range	2402-2480 MHz
	Wireless maximum output power	Max 4dbm

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14 Authentication

Applicable model: ES14

The product has passed the ANSI CAN/UL-2272 certification of the CSA.

The battery complies with the UN/DOT 38.3.

According to the Federal Communications Commission (FCC) Compliance Statement as follows:

The product complies with part 15 of the FCC rules, and the operation must meet the following two conditions: (1) the product should not cause harmful interference, and (2) the product must accept any received interference, including interference that may lead to accidental operation. Any change or modification not expressly approved by the responsible party may make void the user's right to operate the product.



The EU Compliance Statement is as follows:

WEEE needs to properly dispose of and recycle the product. This sign indicates that the product should not be disposed of together with other domestic waste throughout the EU. Therefore, in order to prevent possible harm of uncontrolled waste treatment to the natural environment or human health, it is necessary to recycle it and promote the sustainable reuse of material resources. To recycle the used product, use the return and collection system or contact the retailer who can use the product for environmentally safe recycling.



EU Battery Recycling Information

Batteries or battery compartments are marked in accordance with the European Directive 2006/66/EC and the amendment 2013/56/EU on batteries and accumulator cells and scrap batteries and accumulator cells.

The directive applies to the recycling framework of waste batteries and accumulator cells throughout the EU. The label on the battery indicates that the battery should not be discarded, but recycled at the end of its service life according to the

According to the European Directive 2006/66/EC and the amendment 2013/56/EU, batteries and accumulator cells are labeled to indicate that they will be collected separately and recycled at the end of their service life. The label on the battery may also contain the chemical symbols of the relevant metals in the battery (Pb, Hg and Cd). Users should not dispose of batteries and accumulator cells as garbage, but use the collection framework available to customers to recycle and dispose of batteries and accumulator cells. With the engagement of users, it is important to minimize any potential impact of batteries and accumulator cells on the environment and human health due to the presence of potentially hazardous substances.

Before placing electrical and electronic equipment (EEE) into a waste collection stream or waste collection facility, users of equipment containing batteries and/or accumulator cells must remove these batteries and accumulator cells for separate collection.



Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS Directive)

The products and parts (cables, wires, etc.) of Inventi (Beijing) Technology Co., Ltd comply with the requirements of directive 2011/65/EU on restricting the use of certain hazardous substances in electrical and electronic equipment ("RoHS recasting" or "RoHS 2").

Trademark and Legal Statements

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The products involved in the registered trademark of 5THWHEEL are protected by relevant patent laws.

In this user manual, we make our utmost to describe all the instructions and functions of the ES34 electric scooter. With constant updates and iteration, the ES34 electric scooter received may be slightly different from the product features shown in this manual. For more information, please visit the Apple App Store (IOS) to download the App.

Please note that Inventi has developed products with many functions and different models of products, and some of the functions mentioned here may not be applicable to the product or equipment received. The manufacturer reserves the right to change the design and function of the ES34 electric scooter and documents without notice.

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Contact Us

If you encounter any problems when using the product, please feel free to contact us through the following methods or scan the QR code to get a quick response and a satisfactory solution.

Aftermarket Platform: "Contact Seller"
Email Address: aftermarket@inventi.com

Use Camera or QR Scanner to Scan

Get 24/7 Customer Service



FCC 15.21 Information to user:

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC 15.105 Information to the user (Class B)

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.