



Two Wheels Balancing E-scooter Drifting Board

Instructions for use

Dear customer:

While you enjoy the happiness given by our product, please read this S series intelligence self-balance E-scooter user manual, a detailed understanding is needed before using this product incase leading to a damage caused by improper operation.

- It is prohibited to use this product in public transportation; According to the local laws, please do not use this product in restricted area
- Please do not use this product in the rain or place this product in the liquid

- Please use our product on the smooth road
- This product is designed for entertainment, please do not engage dangerous actions
- Highly recommend wearing protective clothing before using our product
- There is a velocity limitation designed on our product, please do not exceed the speed limit
- Prohibited to drive it after drinking or taking drugs.
- Prohibited to drive it with carrying goods.

1Safety use information

1.1 About safety use

For your security, please read the safety use information carefully.

- Comply with relevant clause in this manual, you will drive the scooter safely. Please check if there is any damage on the tires; if there is any looseness happens on the parts, if there is any abnormal occurrence, please contact retailers.
- We strongly suggest you to read the manual before driving for the first time,

from which you can get information about speed limit, safety indicator.

- Please do not modify any part of this product.

1.2Max driving distance

The max driving distance of Smart self-balance vehicle would be differed with that shown in this manual for many reasons such as road condition, user's weight, temperature, speed and driving habit.

1.3Speed limit

This product has the speed limitation of 10km/h, there will be a warning beep from the buzzer when driving over this speed. Meanwhile, there would be an upward from scooter in order to limit the speed.

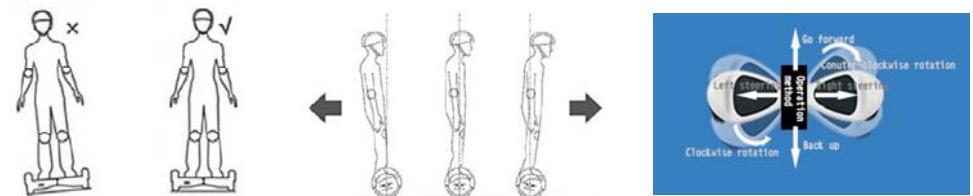
2 Product introduction

2.1 Self-balancing E-scooter brief description

Self-balancing E-scooter are new high-tech means of transport, outdoor sports products, which uses aerospacecontrol theory,fuzzy algorithm, gyroscope and acceleration sensor system, it detects changes in body posture basedon body weight change and the server control system, which can precisely drive motor to adjust to achieve thelongitudinal direction of the self-balancing. User slightly forward and back through the body, to achieve progress, acceleration, deceleration,braking and other operations; when you need turn, slow down and in accordance with theneed to control the left and right of self-steering, move

foot a little forward or backward, the body center of gravity shifted to the left, scooter turn left, changing to the right, scooter turn right.

Smart scooter comes with a stylish lightweight balanced appearance, simple operation, flexible control, easy to carry, low carbon and environmental protection, it is the perfect companion for recreation, scenic tour, short-haul travel and other life applications.





3Parameter table

Model	S1-a	S1-b	S2-c	S3-a
Photo				
Top Speed	10km/h	10km/h	10km/h	10km/h
Endurance Mileage	20km	20km	20km	20km
Climbing capacity	15°	15°	15°	15°
Turning Radius	0°	0°	0°	0°
Battery	36v/4.4Ah	36v/4.4Ah	36v/4.4Ah	36v/4.4Ah

Voltage/Capacity				
Fully charge	3 hours	3hours	3hours	3hours
Motor	6.5inch	8inch	10inch	6.5inch
Max Load	100kg	100kg	100kg	100kg
L * W * H	590x185x165m m	590x200x210m m	660x250x260 mm	590x180x200mm mm
Weight (approximation)	10kg	11kg	11.5kg	10kg

4Function introduction

4.1 Pedal sensor

Sensor located under the pedal to detect the force coming from the rider, the scooter would automatically change into standby mode once the rider gets off from the scooter.

- When riding on scooter, please keep the foot on pedal, do not tread outside.
- please do not put any extra weight directly on the pedal during the riding, for the reason that extra weight may cause the power always on, which would cause dangerous.

4.2 lights

Indicator lights

Indicator lights are located in the middle section, displaying running information of smart scooter.

1Battery status indicator:

two Green lights indicate the full power, lights would go off as the power goes down, every light stands for 25% of the power.

2Running indicator lights:

after the rider stepped on pedal, running lights will be lit, the green light indicates the system into operation; red light indicates that the system

abnormality, this time riding ban.

LED running lights:

LED Running lights located on the underside of the pedal, opposite the power switch. When the scooter is running straight or stationary, the LED running lights are keeping on. Running lights flashing when steering.

4.3Bluetooth stereo speaker

Combination of High-quality Bluetooth module and high-quality stereo speakers, while walking to listen, let your journey is no longer monotonous; Bluetooth stereo speakers, can be connected with phone, IPAD, laptops and other electronic devices have Bluetooth connectivity, compatible with most

mainstream mobile phones: Apple, Samsung, Hua wei, millet, HTC and so on.

4.4Bluetooth speaker usage:

- Turn on the Bluetooth Speaker.
- Open the Bluetooth device to search for Bluetooth speaker.
- Find Bluetooth speakers and pairing Bluetooth devices to play music after Bluetooth speaker paired.
- Adjust the volume up and down, pause, play and other functions with Bluetooth device.

4.5 Protection

When riding, if there is a system error or faulty operation, the two-wheel scooter will alarm the driver with lights. Please stop riding when Alarm indicator light, buzzer alarm beeps intermittently, the system cannot enter the self-balancing mode and charging.

Self-balancing E-scooter will automatically enter stop state when following phenomenon occurs:

- Foot pad forward or backward more than 35 degrees, scooter will enter the stopped state.
- When riding, foot platform forward or backward more than 10 degrees, scooter will enter the stopped state.

- When there is something wrong with the tire, it will enter the stopped state after two seconds.
- If the battery voltage is below the protection point, it will enter shutdown state after 15 seconds.
- If continued large current discharge (such as long time climbing), it will come into the shutdown state after 15 seconds.

When riding, please be careful if there is any of the following phenomena:

- When riding, if the battery is low or over speeding, foot platform upturned, it is prohibited to continue.
- When scooter is over speeding, control ability becomes weak, need lowering speed.
- The body rocking back and forth more than 30 seconds, stop riding.
- When system come into protected mode, running indicator will turn red light, buzzer will alarm at a highfrequency.

WARNING:

When the two-wheel scooter to enter the shutdown state, the system will automatically lock machine; please

press the lock key to unlock the machine. please do not continue to drive the two-wheel scooter when the battery is

low. otherwise, the scooter cannot keep balance due to lack of electricity. in this case, the driver is likely to be hurt.

When the battery power reaches a minimum point, if continue to drive the scooter, it will affect battery life.

5Performance Introduction

5.1 Ramp angle

Two-wheel scooter maximum climbing angle is affected by many factors, it can be up to 25 degrees, but the climbing angle, the driver weight, battery charge saturation, driving skills will affect it.

WARNING

Before climbing, it cannot sprint, must be riding uphill slowly, when the motor torque is not enough, drivers should get off immediately to avoid the scooter retreat or danger of falling; when riding downhill, please be slowly. otherwise, inertia will cause scooter being out of control.

5.2 The driver's weight limit

- Driver's maximum weight limit: 100 kg
- Driver's minimum weight limit: 20 kg
- The reason for limiting driver weight has the following points: 1 ensure the driver's safety; 2 to reduce damage for scooter.

WARNING

- Overweight will have falling danger.

5.3 The maximum Range

Two-wheel scooter's maximum range is 20 kilometers, the maximum range is affected by many factors, such as:

- Land types: smooth, flat ground driving will increase with distance, or it will reduce distance.
- Weight: The weight will affect maximum Range
- Ambient temperature: Store at recommended temperature will increase with distance, or it will reduce maximum Range.
- Maintenance: reasonable battery charging and maintenance will increase the travel distance, or it will reduce the traveling distance.

- Speed and driving style: Keep a moderate speed will increase with distance, if frequent start, stop, accelerate, it will reduce travel distance.

5.4 Speed Limit

- Self-balancing E-scooter's maximum speed of 10km / h.
- When the driver reaches the maximum speed, the scooter will buzz to alarm.
- When riding at a predetermined speed, it can maintain the balance of the driver. When the driving speed is greater than the set speed, the scooter will buzz to alarm, so that it can be in a safe speed.

6 Battery information

Describes the self-balancing E-scooter charging method, how to care for the battery, you need to pay attention to security items and battery specifications. For your safety and that of others, prolong battery life and improve battery performance furthest, please be sure to follow the following operations to use the battery.

6.1 Battery specification

Battery type	Lithium battery	Working temperature	-15° C ~ 50° C
Charging time	2-3 hours	Charging temperature	0° C ~ 40° C
Voltage	36V	Storage time	20° C - 25° C
Initial capacity	2-4A	Storage of relative humidity	5% ~ 95%

6.2 Battery low energy

When you find the power indicator light becomes red and flashing, it indicates low battery, for your safety, you should stop riding, there is not enough energy

to operate you normal riding when the power is low, the system will automatically tilt the pedals to prevent the person from riding, if you insist on riding it at this moment, it is possible to fall down and get hurt, it will reduce the battery life also.

Cautions.

- Do not ride it if battery is Odorous or too heat.
- Do not ride it if anything leaks out from battery.
- Only professional can disassemble and maintenance battery.
- Do not touch anything leaking out from battery.
- Do not let children or animals touch the battery. Before installing the battery or riding, please make sure to unplug the charger, It is very dangerous to do that when it is charging.
- Do not open the battery or insert something into the battery as it contains

dangerous substances

- Only use the charger provided by our company to charge the scooter
- It is forbidden to charge the over discharge lithium battery which has to be scrapped
- The battery can only be used when it is allowed by local law
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6.3 Charging

- Open the scooter charging port cover at back side.
- Make sure the charging port is dry, no foreign matter in the charging port.
- Connect the charger to the wall charger(1 00V-240V; 50 / 60Hz),make sure the charger light becomes green , then

connect the charger to the scooter.

- When the charger light becomes red, indicating charging works well, otherwise check if it is connected.
- When the indicator light on the charger from red to green, the battery is fully charged, then please stop charging.

(Self-balancing E-scooter charging time is about two hours; too long charging time will affect battery life.)

- Please store and charge battery according to Hoyle, otherwise the battery is possible to be damaged and effect battery life.
- Too long charging time will affect battery life.
- Please keep charging environment clean and dry.
- When charging port is wet, do not charge it.

6.4 Temperature is too high or too low

- If you want balance in to run the most efficient, the battery temperature must be indicated on the battery specification temperature range.
- Temperature before charging and the charging process must be within the recommended values. Close to the recommended temperature, the charging efficiency is the highest, if it is too cold or hot, the charging time will be longer, or not fully charged.

6.5 Transporting a battery Note

WARNING:

Lithium batteries are considered as dangerous goods during transportation it needs to be permitted by the local law.

7 Self-balancing E-scooter study skills

Riding scooter must be careful, therefore, you must fully understand all "User

Manual" before driving.

7.1 Self balancing E-scooter steps:

Step 1: Turn on the scooter, ready to start, the scooter will be in the state for beginners. After turning off the power, press the switch 2 times constantly, the scooter will be in normal state, its speed will be faster.

Step 2: Riding preparation, use one foot to touch both pedal switches, triggering running lights green, the system entries the self-balancing state, make the scooter in the horizontal position and stable.

Step 3: One footstep on the pedal first, running light gets green, the system

becomes self-balancing state, step on

Turn on the scooter, ready to start, the scooter will be in the state for beginners. After turning off the power,

press the switch 2 times constantly, the scooter will be in normal state, its speed will be faster.

with the other foot to ride it after the scooter is stable

Step 4: Keep the balance after step on the scooter, scooter will stay stationary. According to lean forward or backwards your body to control the balance of scooter forward or backward, be sure not to move your body too fast

Remind

If the pedal switch of the scooter is not in the horizontal position after you touch it by your foot, the buzzer will beep,

and running light get red, the system cannot enter self-balance state, then the operation is prohibited at this moment.

Step 5: Control scooter to turn direction with your left and right foot to pressure the foot pedal.

Step 6: Step down, you need to make the scooter stationary equilibrium, keep a state of equilibrium, get down one foot from the scooter backward, then get down the other foot from the footpad.

WARNING:

- Do not turn rapidly in high speed to avoid dangerous situations.
- Do not shift laterally or turn direction on the slope, it will make scooter balance equilibrium angle skewed to affect riding safety.

7.2 Scooter practice

Before you ride the scooter outdoor, for your safety, please make sure that you have been able to skillfully ride

8 Maintenance

Self-balancing E-scooter requires the user to perform routine cleaning and maintenance.

Cleaning Note:

- Make sure that the balance of micro-wheeled vehicle power supply and

charging cable is disconnected.

- Two wheel scooter power is off .
- Wipe the case with a soft cloth to clean the balance of micro-wheeled vehicles.

Caution:

Self-balancing E-scooter designed wheeled dust and waterproof rating of IP57 limit of fine dust and splash proof; prohibiting the use of high pressure water jets or immersion in a liquid balance on the two-wheel scooter vehicles for cleaning. Avoid water or other liquids seep into the car, which will lead to permanent damage to the internal electronics.

Store

- Please make sure your two wheel scooter is full charged before store it to

prevent excessive discharge if long placed.

- If the storage two wheel scooter will be placed more than one month , remove the battery storage, and ensure that at least every three months on the two-wheel scooter to full discharged.
- Ensure the battery full charged to prevent the long time does not use leads to excessive battery discharge.
- If store more than one month, please take out the batter, ensure the scooter is fully discharged at least every three months.
- Please do not charging if temperature below 0° , need to put the scooter to the template over 10° then charging.
- You can mask the scooter, to prevent micro dust affects the performance.
- Please put the scooter in drying temperature, indoor place

WARNING:

- In order to protect the safety of the user, the user cannot opened scooter himself, otherwise mean users give up theproduct maintenance warranty rights.

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. 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.

Caution: Any changes or modifications not expressly approved by the party responsible

for compliance could void the user's authority to operate the equipment.
This equipment complies with FCC radiation exposure limits set forth for an
uncontrolled environment.
This transmitter must not be co-located or operating in conjunction with any
other antenna or transmitter.



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