



# **SELF-BALANCING ELECTRIC SCOOTER**

## **USER MANUAL**

[Revision 2.0 October 2015]

**RETAIN THIS MANUAL FOR FUTURE REFERENCE**

**PLEASE READ THIS MANUAL CAREFULLY BEFORE USE**



## TABLE OF CONTENTS

<b>SAFETY REMINDERS .....</b>	<b>1</b>
About the Safe Use of the Electric Scooter .....	1
Weight Limit of User .....	1
Achieving the Longest Distance.....	1
<b>DRIVING THE ELECTRIC SCOOTER .....</b>	<b>2</b>
Electric Scooter Starting Guide.....	2
Operation Instructions .....	3
Electric Scooter Protection Functions .....	3
Electric Scooter Driving Practices.....	4
<b>INSTRUCTIONS FOR DRIVING SAFELY .....</b>	<b>4</b>
<b>CHARGING INSTRUCTIONS AND BATTERY MAINTENANCE .....</b>	<b>6</b>
When Battery Power is Low.....	6
Charging your Battery .....	7
Temperature Levels .....	7
Detailed Specifications of the Battery .....	8
Reminders when Shipping the Battery.....	8



# SAFETY REMINDERS

## ABOUT THE SAFE USE OF THE ELECTRIC SCOOTER

We hope that all drivers can safely drive the electric scooter and can enjoy the fun times the electric scooter can bring.

Remember how you learned to first ride a bicycle, drive a car, or use other means of transportation?

All of these experiences can be applied to allow you to use your electric scooter better.

- It is strongly recommended for first-time users to read this user manual. Before each use, please check the tires for any damages, if there is a loose part or you have any situation, please contact the agent for repair.
- Please read the instructions before use, you will get a lot of important safety information, including speed limit, indicator light warning, and safety shutdown.
- Please do not use the electric scooter for purposes that could endanger one's personal safety.
- Please do not arbitrarily modify the electric scooter parts, which not only affects the electric scooter but may even negatively affect its performance. It can also do serious harm.

## WEIGHT LIMIT OF USER

- There are two reasons for driver's weight limit:
  - Ensure the safety of the users.
  - Reduce potential damages from overloading the electric scooter.
- User's maximum weight limit: 100 kg.
- User's minimum weight limit: 20 kg.

**WARNING!** Increased risk of falling if the user goes over the maximum weight limit.

## ACHIEVING THE LONGEST DISTANCE

Getting the longest distances with your electric scooter is related to many factors, such as:

- **Terrain:** On smooth, flat ground/surfaces, distance range will increase. On rough ground/surfaces, however, the distance range will decrease.
- **Weight:** The weight of the user can affect the distance range.
- **Environment Temperature:** Storing your electric scooter in the recommended temperature can increase the distance range. Extreme temperatures, however, will decrease the distance range.
- **Maintenance:** Reasonable charging and maintenance of the battery can increase the distance range.



## SELF-BALANCING ELECTRIC SCOOTER

- **Speed and Driving Style:** Maintaining a medium speed can increase the distance range. Frequent starts, stops, accelerations and decelerations will reduce the distance range.

# DRIVING THE ELECTRIC SCOOTER

When using the electric scooter, the user needs to pay attention to safety reminders. User must fully understand all of the matters needing attention in these instructions before driving your electric scooter. These safety reminders are very important for you.

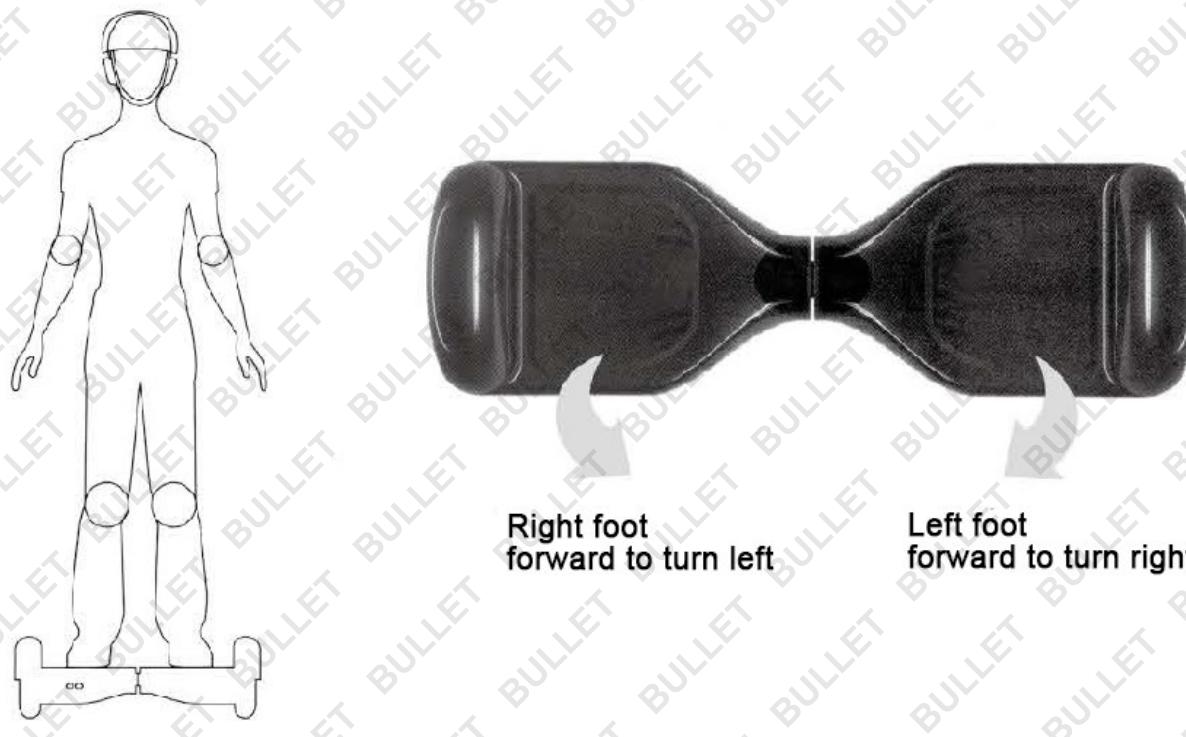
## ELECTRIC SCOOTER STARTING GUIDE

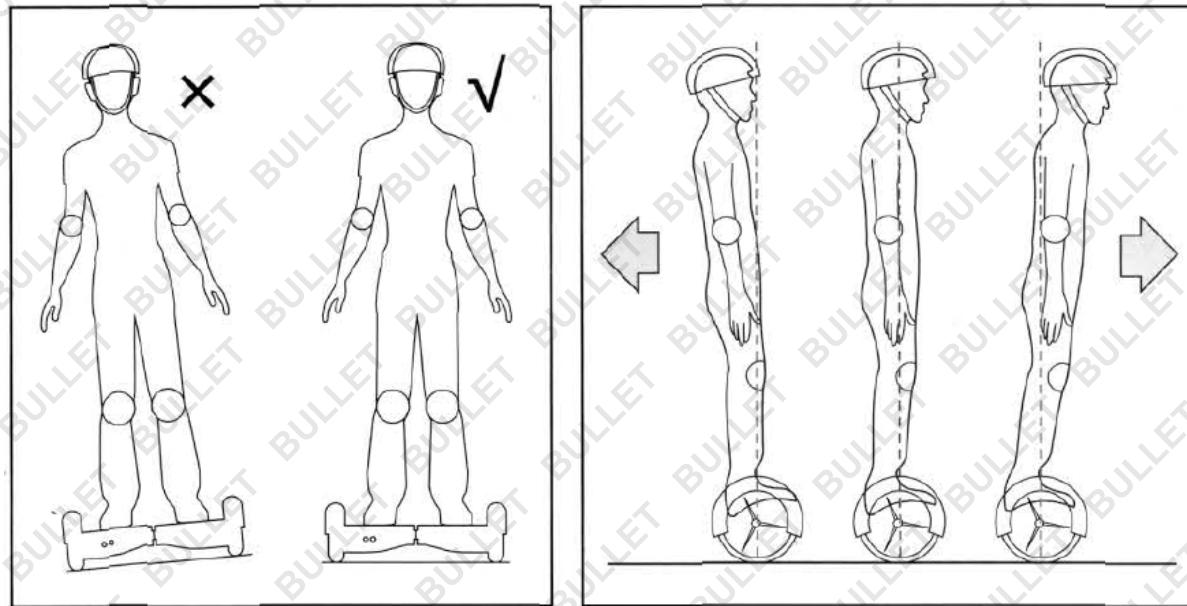
- **Step 1:** Start the electric scooter by pressing the power switch button.
- **Step 2:** Driving preparation: After putting a single foot on the scooter, the switch on the trigger will be activated when the indicator light turns on. The automatic system will then get into the balance state. Put the other foot on the scooter after the scooter balances itself and then you can use it.
- **Step 3:** Users can control the vehicle to go forward, accelerate, brake, etc. by leaning forward or backward after keeping himself/herself balanced on the scooter. Remember that the user must not adjust his/her body angle too widely.

**NOTE:** The buzzer will sound off a long buzz and the indicator lights will turn on if the electric scooter's body is not in a balanced state when the foot-kick switch is on. The system can't get into self-balance state.

At this time, any operation on the electric scooter is not allowed.

- **Step 4:** Control the electric scooter's left and right direction.
- **Step 5:** Getting off the scooter: Get off before the scooter completely stops and in a balanced state. First, put one foot down on the ground, then the other foot can leave the scooter mat swiftly.





## OPERATION INSTRUCTIONS

### WARNING!

- Do not use the electric scooter for high-speed sharp steering.
- Don't operate the electric scooter on slopes. It will lead to the electric scooter's balancing angle to offset, affecting your driving safety.

## ELECTRIC SCOOTER PROTECTION FUNCTIONS

While in the process of running, if the system goes wrong or is operating irregularly, the electric scooter will remind users in different ways. Alarm light will go on, the buzzer will give out an alarm frequently and/or the system can't get into a balanced state.

- When getting on the electric scooter, the platform will move forward or backward to more than 10 degrees.
- The battery voltage/power is too low.
- The battery is in the process of charging.
- When operating, the platform will become warped. Then, operation will not be allowed.
- The scooter runs at a speed that is too high.
- The electric scooter's body will shake back and forth for more than 30 seconds.
- Alarm light will turn on when the system goes into the protection mode. In this process, the buzzer will give out an alarm frequently.
- If the scooter's platform inclines more than 35 degrees, the scooter will stop immediately.
- If the tyre is locked, the electric scooter will shut down automatically after 2 seconds.
- If the battery voltage is lower than the protection level, the scooter will shut down automatically after 15 seconds.



## **SELF-BALANCING ELECTRIC SCOOTER**

- If the electric scooter is exerting a lot of effort (for example, climbing a long, rough slope), it will shut down automatically after 15 seconds.

### **WARNING!**

The electric scooter will automatically lock itself whenever it goes into protection mode. Press the "UNLOCK" button to unlock the scooter. When the battery power has ran out, or the system produces information about parking safely, do not continue operating the electric scooter. Otherwise, the electric scooter can't reach the balanced state due to a lack power, in the case of the user getting hurt. If the battery voltage decreases to the minimum level, continued usage of the electric scooter will affect its battery's life.

## **ELECTRIC SCOOTER DRIVING PRACTICES**

- When you are driving the electric scooter outdoors, for your safety, please ensure that you have the necessary skills in driving the electric scooter:
- Wear comfortable clothes and flat shoes; keep your body flexible.
- Practice driving the electric scooter on an open field until you can easily get on the electric scooter. Practice going forward, backward, turning left/right, stopping and getting off.
- Pay attention if the ground is flat.
- You can learn to drive the electric scooter in a different terrain, but you must drive at a slower speed in case of an unfamiliar terrain. You mustn't let the electric scooter off the ground at any time.
- The electric scooter is designed to be driven on flat terrains.
- If you are not skilled enough in driving the electric scooter, please move to an open place; avoid pedestrians and dangerous places with obstacles. Take care not to hit your head when you are going through a door; make sure that you can pass through it safely.

## **INSTRUCTIONS FOR DRIVING SAFELY**

This section highlights a few safety reminders and warnings and helps you learn more about the safety rules that you should pay close attention to before using the electric scooter. In order to ensure that you can safely drive the electric scooter, please be sure to thoroughly read this user manual and follow the instructions that are given here. Also, pay close attention to the operation instructions and safety warnings in this user manual. Understanding these security issues can enhance your driving safety skills and enjoyment of your electric scooter.

### **WARNING!**

- At any circumstances, when using the electric scooter, you are likely to lose control, collide with something or fall, which could cause harm to yourself and others. In order to avoid these possibilities, you must carefully read and refer to the instructions in this manual whenever you are attempting to drive your electric scooter. Ensure that the electric scooter being used is in good condition. Carefully read and be familiar with all of the electric scooter instructions and materials that are provided before using the electric scooter.
- When you are learning to use the electric scooter, please make sure that you have taken all safety measures such as: wearing a helmet, knee and elbow pads, gear, etc.
- The electric scooter is only for personal use. Do not use it as a means of transportation.



## **SELF-BALANCING ELECTRIC SCOOTER**

- Do not drive your electric scooter on roads that are used by motor vehicles.
- A child's weight must not be less than 20kg and they must also be supervised by adults while driving. A person with a heart disease, high blood pressure or are not wearing any protective gears and clothing should not use the electric scooter. Pregnant women and people with disabilities should not use the electric scooter as well.
- Do not use the electric scooter while under the influence of drugs and/or alcohol. Do not load any object onto the electric scooter while using it.
- While using the electric scooter, obey all local traffic rules and let pedestrians pass through first.
- For your safety, be aware of your surroundings while using the electric scooter.
- Bending your knees slightly and relaxing your legs while driving helps you keep balance on concave and convex terrains.
- Make sure that the soles of your feet are planted firmly on the mat while driving the electric scooter.
- Please wear comfortable clothes (sportswear preferable) in order to handle the electric scooter better.
- The electric scooter can accommodate only one person. It cannot load two or more people at the same time.
- Users and their belongings should not be heavier than the marked maximum weight (100kg) to reduce the chances of falling and/or injuries, even damaging the electric scooter. Also, users may have difficulties controlling the electric scooter while going down a slope; stopping or slowing down the electric scooter will be difficult.
- Limit the electric scooter's speed to a manageable one to ensure that you can stop the scooter in time for your safety and that of others.
- If accidents occur when you are using the electric scooter, wait for the arrival of paramedics.
- Please keep a safe distance from other users of electric scooters while driving. This is to reduce accidents from occurring.
- Always remember that while riding the electric scooter, your body height will have an additional 10cm. Pay close attention to your head while going through any doorway.
- Be aware of your balance while turning so that you can avoid falling; do not drive too fast while turning.
- Focus your attention on driving. Do not do other things like talking on the phone, listening to music, etc.
- Do not drive backward over a long distance or at a high speed, turn back at a high speed, or drive the electric scooter beyond the recommended top speed.
- This product is not designed to be a medically-safe equipment. Drivers must use this electric scooter without using any external force.
- Do not drive the electric scooter in places with low visibility.
- Avoid driving on slippery roads or roads with obstacles, such as glazed ice, snow and/or wet/slippery terrain.
- Please avoid driving on roads with rocks, pebbles and other debris on them.
- Avoid driving in narrow spaces or on roads with obstacles.



## **SELF-BALANCING ELECTRIC SCOOTER**

- Use the electric scooter in conformance to its working conditions. Obtain permission from others first if it is needed.
- Do not do any sudden starts or stops while using the electric scooter.
- Avoid driving on steep slopes.
- Do not drive this scooter in unsafe environments, i.e., places that are full of flammable gas, water vapour, liquid, dust, and fibre where fire and an explosion could possibly occur.

# **CHARGING INSTRUCTIONS AND BATTERY MAINTENANCE**

This section mainly describes the electric scooters charging method, how to maintain the battery, safety instructions and battery specifications. For your safety and that of others, please make sure to use the battery following the instructions to prolong battery life and to improve battery performance.

## **WHEN BATTERY POWER IS LOW**

When you find that the power indicator light is red and flashing, the battery power is too low. You are advised to stop driving. When the battery power is low, the electric scooter will not have enough energy to be driven normally. The system will then cock the downside platform automatically. Any further use of the electric scooter is discontinued. If you are driving on the electric scooter while the battery is low, it is very easy to fall down and cause injuries to yourself and others. Furthermore, it will affect the battery's life.

- If any of the following battery situations develop, do not use the electric scooter.
  - Gives out a strange smell or has a high temperature.
  - Leaks out any liquid.
- Do not try to remove the battery by yourself; maintenance can only be performed by a professional staff.
- Do not touch the battery or any other material oozing out from the battery.
- Do not let children and animals touch the battery. Pull out the charger first before installing the battery and using the electric scooter. It is dangerous to do anything with the electric scooter while charging.
- Batteries contain dangerous substances; do not open the battery and do not insert any material into the battery.
- You can only charge the electric scooter battery with the charger provided by the official manufacturer.
- It is dangerous to charge the battery that is discharging liquid and/or other materials from it. Instead, dispose the discharging battery properly.
- The electric scooter battery should be used under the permission of your local laws.



## CHARGING YOUR BATTERY

- Ensure that the charging port is dry.
- Open the electric scooter's cover at the back.
- First, insert the charger plug into the mains (100 – 240V; 50 – 60Hz), then confirm if the charger's green indicating light is on. Next, switch the charger with the electric scooter.
- When the red light is turned on, it means that the charger is working normally. Otherwise, please check if the connection is good.
- Red light turning green means that the charging process is complete. After the light has turned green, disconnect the charger as soon as possible in order to prolong the battery life.



- Use local standard plug.
- Please charge and store the battery according to local rules, otherwise the battery will be damaged and the battery life will be shortened.
- The electric scooter's charging time is about 2 hours. Overcharging will affect the battery life.
- Dispose your battery properly. Keep the environment clean.
- If the charging port is wet/damp, do not charge the battery.

## TEMPERATURE LEVELS

If you want the smart drifting scooter to run in its highest efficiency, the temperature of the battery must be strictly controlled within the marked range in this manual before and in the process of charging it.

It is best to charge at a temperature close to the recommended temperature where charging efficiency is highest. The charging time will extend whether the temperature is too high or too low.



## DETAILED SPECIFICATIONS OF THE BATTERY

ITEM	PARAMETER
Type	Lithium-ion
Charging Time	2 – 3 hours
Voltage	36V
Initial Capacity	2 – 4AH
Working Temperature	-15 – 50°C
Charging Temperature	0 - 40°C
Storage Time (~20°C and 25°C)	12 months
Storage Relative Humidity	5 – 95%

## REMINDERS WHEN SHIPPING THE BATTERY

### WARNING!

Lithium-ion battery is considered to be dangerous goods and needs your local law's permission when transporting it.

### NOTE:

If you are transporting your electric scooter that is loaded with lithium-ion batteries by air or if you are transporting the electric scooter's lithium-ion batteries separately, please contact your local authorities for guidelines.



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

