



Balance Scooter

User's Guide for Model GSB56WC

SHENZHEN SYNERGY DIGITAL CO., LTD.

- Thank you for choosing the Self Balancing Electric Scooter.
- The Self Balancing Electric Scooter is a highly technological, light and double wheels self balancing electric scooter.
- Before operating this vehicle, read all the instructions for safe assembly and operations.
- <User's Guide> can guide you through the functions and usage of Self Balancing Electric Scooter.

 WARNING!

- Before using this scooter, familiarize yourself with how to operate, so that you can keep the scooter in the best condition possible.
- The <User's Guide> can help you to learn how to safely drive this electric scooter.
- <User's Guide> has all the instruction and notes, the operator must read it carefully and follow these instructions. If the operator fails to follow the instructions or violate the warnings, our company won't be responsible for any related results.
- If you want to get service and technology support, you can contact the 1-888-999-4215 number for assistance.

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Chapter 1 General information

1.1 About the manual

Before operating this vehicle, read all the instructions for safe assembly and operation. <User's Guide> can guide you through the functions and usage of the Self Balancing Electric Scooter. The user's guide is applied to all the Smart Vehicles. If you have any questions or you cannot get the information you want from the manual please contact the 1-888-999-4215 number for assistance.

1.2 The risk of driving

Self Balancing Electric Scooter is a smart transport and recreation tool. Its technology and the process of production has been tested. However, if you don't follow the manual carefully you will get injured.



Failing, losing control, crashing, including violating the rules of the user's guide can lead to injury or even death. In order to avoid, please read this manual carefully.

1.3 The preparation before operation

Before using, the battery should be fully charged. Please find more details in Chapter 7.

1.4 Related explanation

Please pay attention to "WARNING" and "NOTE".

	Your improper use will cause a dangerous condition.
	THESE RECOMMENDATIONS SHOULD BE FOLLOWED CLOSELY.

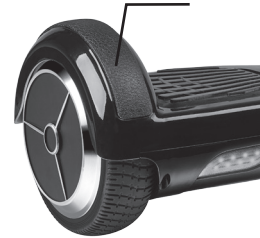
Chapter 2 Product introduction

2.1 Description of the electric scooter

Self Balancing Electric Scooter which can go forwards, backwards, steering and stop are controlled by Dynamic equilibrium. It possesses fashionable appearance, simple operation, easy to control, low-carbon emission and environmental protection.



Place the bumper strips as shown to help prevent crashing and scratching.



2.2 Description and identification



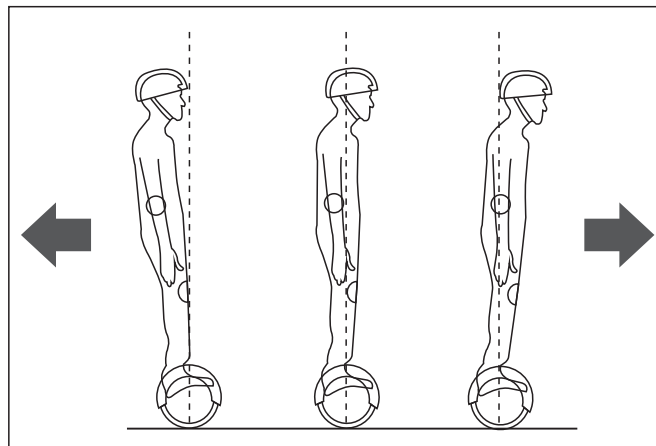
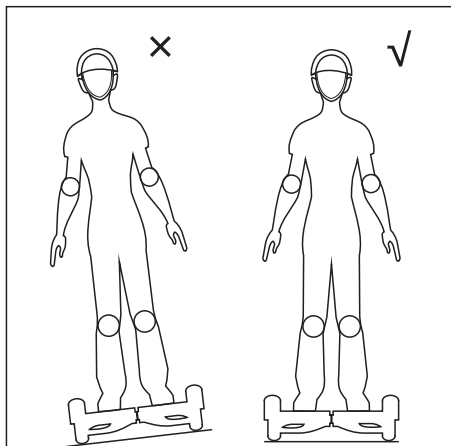
2.3 Calibration

If your scooter seems to pull to the left or right, you may need to recalibrate its sensors. The process requires two levels, available at any hardware store. Many smartphones have free “bubble level” apps as well.

- Step 1: Power off the scooter.
- Step 2: Place each level parallel with the wheel touching the inside of the wheel base.
- Step 3: Rotate the scooter until both levels on each wheel base are level. If you do not have a level, make sure both platforms are equal with each other and level to the ground as best as possible.
- Step 4: While keeping the scooter level, hold the power button down. The scooter will make the normal power on tone. Wait 3 seconds and you will hear a single beep. Release the power button. Front LEDs will begin flashing. Power the scooter off.
- Step 5: Power on again. The scooter should now be calibrated. If the scooter is still not calibrated correctly, go to step 1 and begin making minor adjustments.

2. 4 Operating principal

- Self Balancing Electric Scooter uses Dynamic equilibrium, using internal gyroscope and acceleration sensors. The status of the electric scooter is controlled by the center-of gravity. It is adjusted by motor which is controlled by the servo control system. When you lean forward, it will sense your actions to accelerate. When you need to turn, slow it down and move your foot forwards or backwards then the center-of gravity of the body moves left or right therefore the scooter can sense moving left or right.
- Self Balancing Electric Scooter has inertial dynamic stabilization system, so it can keep anterior-posterior balance but cannot guarantee the left and right. So when turning, the scooter needs to be operated slowing, otherwise, you may get injured.



Chapter 3 Pedal Sensor and Indicator operation

3.1 Pedal sensor

Self Balancing Electric Scooter has 4 sensors below the pedal, when the operator steps on the pedal, the scooter will adjust itself to a balancing pattern automatically.

When riding it, you have to make sure that the pedal is being stepped on, please don't step on the parts outside the pedal. Don't put things on the pedals to make the scooter operate by itself and increase the possibility of crashing and even cause personal injury and damage to the scooter itself.

3.2 Battery & Operation Indicators

The indicator is located in the middle of the scooter. It is used for operation information.

- Battery indicator part: Green light means fully charged, when the green light turns yellow, means there is half battery, turns red means 20% battery, the scooter needs charging.
- Operation indicator: When the pedal is triggered, the operation indicator will light then the system comes into operating condition; when the system runs an error, the indicator will turn red.



Chapter 4 Safely use

About Safely Use

We hope every operator can ride the scooter safely and enjoy it. Thinking back to the experiences when you learned riding a bike or driving a car, can help you learn the scooter faster.

- Follow the <User's Guide>, you can ride a self-balancing electric scooter safely. We highly advise you read the manual carefully.
- Please read the manual carefully, from it you will get important information, including speed limitation, indicator warning and turn off safely.
- Please never use the scooter in a manner which may cause personal injury and property loss.
- Please don't modify the parts of the electric scooter, because it can influence the capacity and operation of the scooter.

4.1 The weight limitation of the operator

The reason of the weight limitation: 1. guarantee the safety of the operator; 2. decrease the damage of overloading.

Maximum load: 264 lbs

Minimum load: 44 lbs



Overloaded you may fall down.

4.2 Range per charge

The range per charge is related to many factors, for example:

- Topography: On even roads, the range per charge will be increased, on uneven terrain, it will be decreased.
- Weight: The weight of the operator can influence the driving distance.
- Temperature: Extreme temperature will decrease the driving distance.
- Maintenance: If the scooter is charged properly and the battery is kept in good condition, this will maximize the driving distance.
- Speed and driving style: Keeping a steady speed will increase the driving distance, on the contrary, frequent start, stop, acceleration, deceleration will reduce the distance.

4.3 Max. Speed

- The max. speed of the scooter is 7.46mph.
- When the operator exceeds the max. speed, the scooter will give out an alarm sound.
- In the permissive speed, the electric scooter can balance itself well.

Chapter 5 Learn how to use it

<User's Guide> has all the instructions and notes, the operator must read it carefully and follow these instructions.

5.1 Learn how to use it

Step 1: Press the power button to turn on the scooter.

Step 2: Put the scooter on a flat ground and make sure all safety measures are taken. Put one foot on the pad that will trigger the pedal switch to turn on the operation indicator, after the system enters the self-balancing mode, put the other foot on the pad.

Step 3: Take control of the scooter forwards or backwards, do remember the movement of your body shouldn't be abrupt.

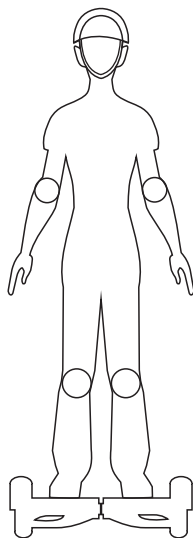


NOTE:

If you are not in a balanced condition when you trigger the foot-switch, the buzzer will alarm, and the warning LED will light. The system is not in a self balanced condition. Without a balanced condition you shouldn't operate the scooter.

Step 4: Control the left and right direction of the scooter.

Step 5: Before you get off, make sure that the scooter is still in balanced condition, then step off one foot, then the other foot.



Tilt right foot forward- Turn Left

Tilt left foot forward- Turn Right

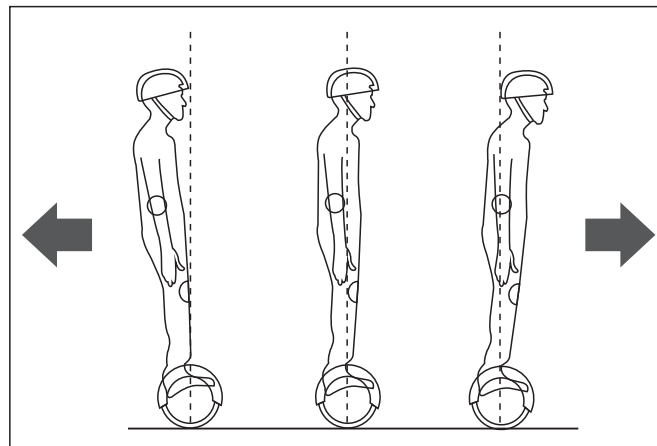
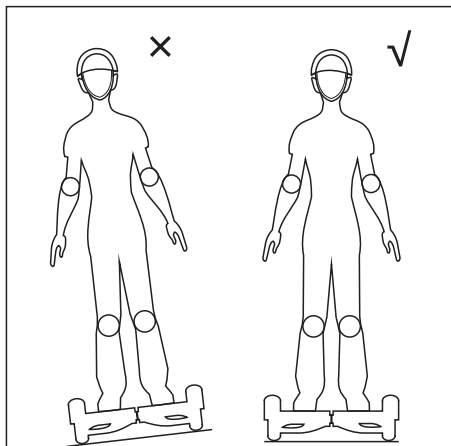


Diagram of operation



You should never turn violently when driving fast.

You should never ride sideways or turn on a slope. It will lead to a fall and injury.

5.2 Scooter will not operate in the following situations:

- During operation, if the system runs an error, the scooter will prompt operators in different ways such as prohibit riding, alarm indicator lights, buzzer alarm beeps intermittently as the system cannot enter self balancing mode.
- When stepping on the scooter, the platform moves forwards or backwards more than 10 degrees, the unit will not operate.
- The voltage of the battery is too low.
- During charging.
- During operation, the platform turns upside down will prohibit operation.
- Over speeding.
- The battery is not charged enough.
- Tire stall, two seconds later the electric scooter enters power off mode.
- The battery voltage is lower than the protection value, 15 seconds later the electric scooter enters into power off mode.
- Continuing large current discharge (such as a long-time climbing a very steep slope), 15 seconds later the electric scooter enters into power off mode.



When the scooter enters into the shutdown state, the system will lock down the machine automatically. It can be unlocked when you press the power button. When the battery has been depleted or the system gives out information with safety shutdown, please do not continue to drive the scooter, otherwise, the scooter cannot balance for the lack of battery. In this condition, the driver is likely to be harmed. If the battery reaches the minimum, the continued driving of the scooter will negatively affect the battery's life.

5.3 Riding practice

Before you drive the scooter outdoors, please make sure you are familiar with the skills of driving it:

- Try to wear casual clothing and wear flat shoes to maintain the flexibility of the body.
- Please go to open spaces to practice driving the scooter until you can easily get on and get off.
- Make sure the pavement is even.
- When you are driving on different terrain, you must slow down.
- Self balancing electric scooter is a transportation tool designed for a smooth road. When it is operating on uneven pavement, the user should slow down.
- Please avoid driving in places with pedestrians or obstacles.

Chapter 6 Safe driving

This chapter will focus on safety, knowledge and warnings. Before operating this vehicle, read all the instructions for safe assembly and operation. <User's Guide> can guide you through the functions and usage of the Self Balancing Electric Scooter. To ensure our products bring you the best driving experience, the best way is to read the user guide carefully before driving.

WARNING!

- Before starting, familiarize yourself with how to operate, so that you can keep the scooter in the best condition.
- When you are driving the scooter, make sure that all safety measures are taken. You should be wearing a helmet, knee pads, elbow pads and other protective gear.
- The driver should not wear loose or hanging clothing, shoelaces, etc. that can get caught in the wheels of the Electric Smart Scooter.
- Self Balancing Electric Scooter is only for personal entertainment. You are not allowed to ride it on public streets.
- Self Balancing Electric Scooter is not allowed on the motor vehicle lanes.
- Children, the elderly, pregnant women are not allowed to drive.
- Do not drive after drinking or taking drugs.
- Do not carry items when driving.
- When driving the scooter, you should give way to pedestrians
- Please be alert to things in front of you, maintaining good vision will help you drive the scooter safely.
- Relax your legs while driving, knees slightly bent, it can help maintain balance when encountering uneven ground.
- In the process of driving, make sure that your feet are always stepping on the pedals.
- Self Balancing Electric Scooter can only carry one person.
- Do not start or stop suddenly.
- Avoid driving on steep slopes.
- Do not drive in dimly lit or dark places.

- Driving the Self Balancing Electric Scooter is at your own risk and the company is not responsible for any accidents or damage you may cause.
- The weight of the user and their belongings should not exceed the maximum load indicated in the instruction, otherwise the driver may fall or be injured, or even damage the electric scooter. In addition, the driver's weight should not be less than the minimum weight as marked in the instruction.
- Ensure the vehicle speed is safe to yourself and others, and be ready to stop at any time when operating.
- When you are driving the scooter, please keep a certain distance from each other to avoid collisions.
- When steering you should use your body's center of gravity, the violent shift of center of gravity may cause you to wreck or fall off the scooter.
- Do not ride on rainy days as well as a long-distance backwards, high-speed backwards, turning at high-speed, drive too fast.
- Avoid driving on obstacles and avoid snow, ice, and slippery surfaces.
- Avoid driving on items made of cloth, small branches, stones.
- Avoid driving in narrow spaces or where there is an obstacle.
- Jumping on or off the scooter can and will cause damage that is not covered by warranty. Personal damage or abuse related to "trick riding" is not covered by the company and voids any warranty.

Chapter 7 Charging the scooter

This chapter mainly discusses the charging methods, how to maintain the battery, the safety issues you need to pay attention to, and battery specifications. For safety of yourself and others, and extend the battery's life and improve battery performance, please make sure to follow the following operations.

7.1 Low battery

When you find the battery indicator is red and flashing, it indicates low battery. It is recommended that you stop driving. When the power is low, there is not enough energy for your normal driving, then the system will automatically tilt the base of the platform to prohibit the operator's use. It is very easy to fall if you insist on driving at this time, and also negatively affect battery's life.

- Do not use the battery in the following cases.
 1. Giving out some odor or excessive heat.
 2. Leakage of any substance.
- It is prohibited to disassemble the battery.
- Do not touch any substance leaking out of the battery.
- Do not let children and animals touch the battery.
- Batteries contain dangerous substances inside, do not open the battery, do not insert anything into the battery.
- Only use chargers offered by our company.
- Don't over charge lithium batteries.



NOTE:

When you find the battery indicator is red and flashing, it indicates low battery. It is recommended that you stop driving and recharge the scooter. When the battery is low, there is not enough power for normal driving. The operational system of the scooter will automatically tilt the platform forward to prohibit use. This could cause the driver to fall off the scooter and become injured.

7.2 Charging steps

- Ensure the charging port is dry.
- Plug the power adapter into the DC power port on the back of the scooter and a standard power outlet. Make sure the green indicator on the adaptor lights up.
- When the red indicator lights on the charger indicates charging properly, otherwise check if the line is connect properly.
- When the indicator light on the charger changes from red to green, this indicates that the battery is fully charged.
- In this case, please stop charging. Over charging will affect the battery life.



- The charging time is approximately 2 hours, over charging will negatively affect battery's life.
- Please keep the charging environment clean and dry.
- When the charging port is wet, don't charge the scooter's battery.

7.3 The transport of the battery



Litium batteries are considered hazardous materials. The transport of it needs to follow local laws.

Chapter 8 The maintenance of the electric scooter

Self Balancing Electric Scooter needs to be maintained. This chapter mainly describes the relevant steps and important operation reminders to maintain it.

Please make sure that the power and charge coil are off before you do the following operation. You should not operate when the battery is charging.

8.1 Cleaning

- Make sure the power and the charge coil are off.
- Wipe the shell of electric scooter with soft cloth.



- Avoid water or other liquids seeping into the scooter as it can cause permanent damage to the internal electronics.

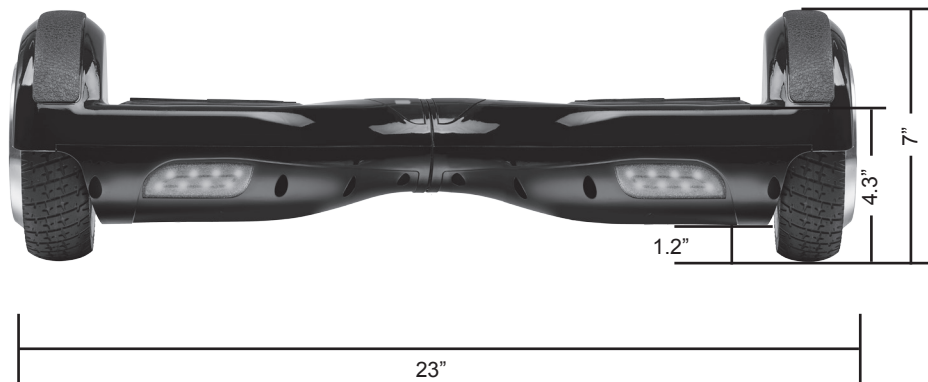
8.2 Storage

- Before storage, fully charge the electric scooter to prevent battery over discharge due to a long time of non-use.
- If stored more than a month, remove the battery.
- If the storage temperature is below 32°F, please don't charge the scooter. You can place it in a warm environment for charging.
- You can cover the scooter, in order to prevent dust.
- Store the scooter indoors, put it in a place with a dry and suitable environment.



- To protect user safety, users are forbidden to open the scooter, or you give up your warranty rights.

Chapter 9 The specification of the electric scooter



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Specification		
Name	Parameter	Remark
Net Weight	22 lbs	
Minimum Load	44 lbs	
Maximum Load	264 lbs	
Maximum Speed	7.46mph	Distance various depending on terrain, driving style and load.
Range Per Charge	15-20KM	Depending on load.
Climbing Capacity	max. 15°	
Radius of Turning Circle	0°	
Energy	Rechargeable Li-ion Battery	
Charger Voltage	100-240V 50-60Hz	
Dimension	23" x 7.3" x 7"	
Chassis Height	1.2"	
Pedal Height	4.3"	
Tire Mode	Free Inflatable Hollow Tire	

Chapter 10 Packing list

No.	Name	Quantity
1	Self Balancing Electric Scooter	1
2	Charger	1
3	Manual	1
4	Warranty Card	1
5	Bumper Strip	2
6	Carry bag	1

Hope you enjoy it!

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 to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Company Information

Contact Information

Website: www.gpx.com

Email Support: proinfo@dpiinc.com

Email Parts: partsinfo@dpiinc.com

Phone Support: 1-888-999-4215

Warranty

For Warranty Information and the most up-to-date version of this User's Guide, go to: www.gpx.com

International Support

To download this User's Guide in English, Spanish, and French, or to get answers to frequently asked questions, visit the support section at: www.gpx.com

Para descargar este Manual del Usuario en inglés, español y francés, o para obtener respuestas a preguntas frecuentes, visite la sección de apoyo en: www.gpx.com

Pour télécharger ce guide de l'utilisateur en anglais, espagnol ou français, ou pour obtenir des réponses à des questions fréquemment posées, consultez la rubrique d'assistance sur: www.gpx.com



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