# **Smart Wheels Product Manual**

#### PRODUCT OVERVIEW

#### 1.1 General Information

The original Smart Scooter is an Intelligent Personal Mobility Device. This device is an intuitive, technologically advanced solution that provides the user personal transportation based on dynamic balancing principles calculating the user's centre of gravity using gyroscope and acceleration sensors. Using the latest technology and production processes, each Smart Scooter undergoes strict testing for quality and durability. With its lightweight, portable design, ease of use, range, and low carbon footprint, the Smart Scooter is the Ultimate in Personal Mobility.

#### 1.2 What You Need To Know

Before you first experience your Smart Scooter, please read the USER MANUAL thoroughly and learn the basics to ensure your safety and the safety of others. It is highly recommended that your initial Smart Scooter experience be with a spotter who can assist you in cantering your balance. Once you keep your centre of gravity even, you will be able to stand on the Smart Scooter without moving, similar to standing on the ground. The most important thing to do is stay relaxed and confident.

The Smart Scooter is very intuitive and senses the slightest motion, so finding your centre of balance is key. Step on quickly, confidently, and evenly, but remember to keep your body quiet. Please refrain from flaying your arms, leaning too far forward and/or backwards, or stepping on your Smart Scooter unevenly, as this will cause you to lose control and increase your probability of injury. Please follow the detailed directions outlined in the How It Works Section.

## 1.3 WARNING

Failure to follow the basic instructions and safety precautions listed in the USER MANUAL, can lead to damage to your Smart Scooter, other property damage, serious bodily injury, and even death.

## PRODUCT DESCRIPTION

This intelligent personal mobility scooter brings a fun element to the way you see, move, and connect with the world. This 2 wheel motorized features colour lights in the front while in motion and the non-pneumatic hollow tires allow for better grip.

This scooter uses gyroscope sensors to enable self-balancing. The inner workings of the scooter use gyro sensors, two 350Watt motors and a set of rechargeable Lithium-ion batteries. Users can control the vehicle to go forward, accelerate, decelerate and stop by leaning forward or leaning backwards. With a full battery charge which will take around 1 to 2 hours, it has a range of roughly 15 to 20km and a highest speed at 10 to 12km/hr.

This self balancing scooter is a green product helpful tool in commuting. It can be easily carried around on bus or subway. Also it is a funny entertainment tool as well as skateboard. The electric self balancing scooter is IPS4 rated so it can handle Dust and light splash of water. The maximum gradient tilt that the 2 wheel self balancing scooter can reach is up to 15°. The electric scooter can also perform spins in place with zero

degrees radius. This electric scooter comes at a light weight of just 10kgs other electric scooters which come at a weight of 13 kg.

The electric scooter comes in a vast range of colours (white, red, green, blue, black and lime). The electric self balancing scooter by Smart Scooter is the most fun way to get around. This futuristic electric mobility scooter makes you connect with the world in a faster, easier and smarter way. It takes under 5 minutes to get familiar with Smart Scooter and 20 minutes to master it. With this Smart Scooter you can drive over cracks up to 0.50" without worry. Reinvent the way you travel and interact with the world around you with the Smart Scooter.

## **SAFETY PRECAUTIONS**

SMART SCOOTER SAFETY PRECAUTIONS -MUST READ FAILURE TO FOLLOW ANY OF THE FOLLOWING SAFETY PRECAUTIONS CAN AND MAY LEAD TO DAMAGE TO YOUR CYBOARD, VOID YOUR MANUFACTURER WARRANTY, LEAD TO PROPERTY DAMAGE, CAUSE SERIOUS BODILY INJURY, AND CAN LEAD TO DEATH.

Please wear all appropriate safety and protective gear before operating the Smart Scooter.

Make sure to wear comfortable clothes and flat closed toe shoes when operating your Smart Scooter.

Please carefully read the User Manual, which will assist in explaining the basic working principles and provide tips on how to best enjoy your Smart Scooter experience.

Before stepping on your Smart Scooter, make sure it is placed flat on level ground, the power is on, and the Running Indicator light is green. Do not step on if the Running Indicator is red.

Do not try to open or modify your Smart Scooter, as doing so will void your manufacturer warranty, and may cause failure to your device leading to serious bodily injury or death.

Do not use the Smart Scooter to place yourself or anyone else and their property in danger.

Do not operate the Smart Scooter while under the influence of drugs and/or alcohol.

Do not operate the Smart Scooter when you are restless or sleepy.

Use your best judgment to keep yourself out of dangerous situations with your Smart Scooter.

Do not ride your Smart Scooter off of curbs, ramps, or attempt to operate in a skate park, empty pool, or in any way similar to a skateboard or scooter. The Smart Scooter IS **NOT** A SKATEBOARD.

Do not turn sharply, especially at high speeds.

Do not continuously spin in place, it will cause dizziness and you will fall and injure yourself.

Do not abuse your Smart Scooter, doing so can damage your unit and cause failure to the operating system leading to injury.

Do not drive in or near puddles of water, mud, sand, stones, gravel, and debris or near rough and rugged terrain.

The Smart Scooter can be used on paved roads that are flat and even. If you encounter uneven pavement, please lift your Smart Scooter over and past the obstruction.

Do not ride in inclement weather: snow, rain, hail, sleek, on icy roads or in extreme heat.

Do not ride in or near pools or other large bodies of water.

#### CONTINUED SAFETY PRECAUTIONS

For Bumps and Uneven pavement- Bend your knees when riding on bumpy or uneven pavement to absorb the shock and vibration and help you keep your balance. If you are unsure if you can safely ride on a specific terrain, step off and carry your Smart Scooter. ALWAYS ERR ON THE SIDE OF CAUTION.

Do not attempt to ride over bumps or objects greater than 1/2 inch even when prepared and bending your knees.

PAY ATTENTION- look at where you are riding and be aware of the road conditions, people, places, property and objects around you.

Do not operate the Smart Scooter in crowded areas or where not permitted.

Operate your Smart Scooter with extreme caution when indoors, especially around people, property, and narrow spaces like doorways and other narrow spaces.

Operate your Smart Scooter with extreme consideration for people and property at all times.

Do not operate the Smart Scooter while talking, texting, or looking at your phone.

Do not ride your Smart Scooter where it is not permitted.

Do not ride your Smart Scooter near motor vehicles or on public roads.

Do not climb or travel down steep hills with your Smart Scooter.

The Smart Scooter is intended for use by a single individual, DO NOT attempt to operate the Smart Scooter with two or more people.

Do not carry anything while riding the Smart Scooter.

Individuals with lack of balance should not attempt to operate the Smart Scooter.

Women who are pregnant or who may become pregnant should not operate the Smart Scooter.

At higher speeds, always take into consideration longer stopping distances.

DO NOT step forward off of your Smart Scooter step off backwards.

Do not attempt to jump on or off your Smart Scooter.

Do not attempt any stunts or tricks with your Smart Scooter.

Do not ride the Smart Scooter in dark or poorly lit areas.

Do not ride the Smart Scooter near or over potholes, cracks or uneven pavement.

Do not operate your Smart Scooter off-road.

Keep in mind that you are 4.3in. (11cm) taller when operating the Smart Scooter. Make sure to go through doorways safely.

Do not exceed the maximum or minimum weight limits.

Do not step on the fenders of the Smart Scooter.

Avoid driving the Smart Scooter in unsafe places, including near areas with flammable gas, steam, liquid, dust, fibre, which could cause fire and explosion accidents.

Follow all of the state, local, and federal laws in your respective jurisdiction regarding operation of the Smart Scooter or similar products.

Enjoy your Smart Scooter safely and responsibly. If you have any questions and/or concerns, or if you would like more information on safety tips, please feel free to contact the Smart Scooter team and visit our website for more information and tips on how to best enjoy your Smart Scooter experience.

## WEIGHT AND SPEED LIMITATIONS

PLEASE NOTICE – Speed and Weight Limits are set for your own Safety. Please do not exceed the limits listed in the User Manual.

Weight Restrictions

Maximum Weight: 265lbs – 120 kg.

Minimum Weight: 45lbs – 20 kg.

**Speed Limits** 

Maximum Speed in Standard Operating Mode: 6.2mph (10 to 12km/h.)

Maximum Speed in Beginner Mode: 3.7mph (6 km/h)

NOTE – To prevent injury, when top speed is reached, the governor will beep to alert the user and tilt the user back.

## **OPERATING RANGE**

Please notice the Smart Scoter can travel a distance of 8-12 miles (13-20km) on a fully charged battery in ideal conditions. The following are some of the major factors that will affect the operating range of your Smart Scooter.

Terrain: A smooth, flat surface will increase your driving distance, while driving uphill, as well as rough or uneven terrain will reduce your distance significantly.

Weight: The weight of the user can affect driving distance, a lighter user will have further range than a heavier user.

Ambient temperature: Please ride and store the Smart Scoter under recommended temperatures, which will increase driving distance; battery life, and overall performance of your Smart Scoter.

Maintenance: Reasonable battery charging and maintenance will increase the distance. Overcharging the battery can reduce range.

Speed and Driving Style: Maintaining a moderate speed will increase your distance; while travelling at high speeds for extended periods, frequent starts, stops, idling, along with frequent acceleration and deceleration will reduce your overall distance.

#### BATTERY INFORMATION AND SPECIFICATIONS

This section is intended to provide you basic information about your battery and charger, Please read this section carefully to ensure you for user safety and to prolong the life of your battery, as well as improve battery performance, please follow these instructions

**Battery Power** 

When the Battery Indicator light is green, your battery is over 50% charged; when yellow your battery is under 50% capacity; when the

Battery Indicator light turns red, your Smart Scooter is at less than 10% battery capacity, please stop operating your Smart Scooter and charge your battery 2-3 hours utilizing the charger that you received in your Smart Scooter package. To fully recharge your battery please follow the instructions under Charging your Smart Scooter.

**Battery Specifications** 

Battery: Lithium Battery

Charging Time: 2-3 hours

Voltage: 36V

Initial Capacity: 2 x 4.4mAh

Working Temperature: 5°F – 122°F (-15°C~50°C)

Charging Temperature: 32°F – 104°F (0°C~40°C)

Storage Time: 12 months

Storage Temperature: -4°F – 77°F (-20°C-25°C)

Storage Humidity: 5%-95%

## **BATTERY WARNING**

Failure to follow the Safety Precautions listed in the Battery Warning could lead to serious bodily injury and death. Seek immediate medical attention if you are exposed to any substance that is emitted from the battery.

NEVER LEAVE THE BATTERIES UNATNOED WHILE CHARGING.

Do not attempt to modify, change, or replace your battery.

Do not use your Smart Scooter if the battery begins to emit odour, overheats, or begins to leak.

Do not touch any leaking materials, or breathe fumes emitted.

Do not allow children and animals to touch the battery.

Do not open the battery, or insert anything into the battery, it contains dangerous substances.

Please only use the charger provided by Smart Scooter.

Do not attempt to charge the Smart Scooter if the battery has discharged or emitted any substances. In that case, the battery should be abandoned for safety.

Please follow all local, state and federal laws in regards to recycling, handling and disposing of Lithium Ion batteries.

The Smart Scooter should only be shipped in its original packaging.

Do not throw away your box as you need you Smart Scooter packaging for future use.

### **CHARGING YOUR SMART SCOOTER**

NEVER LEAVE THE BATTERIES UNATNOED WHILE CHARGING.

Step 1: Ensure that the charging port is clean and dry. Make sure that there is no dust, debris or dirt inside the charging port.

Step 2: Plug the charger into the wall, then connect the cable with the power supply (100V ~ 240V; 50, 60 Hz), make sure the light on the charger is lit GREEN.

Step 3: Connect the charging cable into the charging port of the Smart Scooter. The indicator light on the charger should change to RED, indicating that your Smart Scooter is now being charged. When the RED indicator light on your charger turns to GREEN, then your Smart Scooter is fully charged. A full charge typically occurs within 2-3 hours.

Step 4: Please unplug the charger from your Smart Scooter and from the power outlet.

Important Notes about Charging

If the GREEN light on your charger does not turn RED when you plug it into your Smart Scooter, it could mean you have to check the cables to ensure you have a proper connection; or that your Smart Scooter is already fully charged. Push and hold your power button next to the charging port to check the status of your battery in the display.

Do not overcharge, as this will affect the life of the battery.

The best charging temperatures are between 32°F – 104°F (0°C~40°C). Extreme cold and extreme heat will prevent your battery from charging fully.

Make sure to unplug your charger before standing on or operating your Smart Scooter, as this can be very dangerous.

Use only the Smart Scooter charger that you received in your box.

If the Smart Scooter is powered on when you enter the plug, the Battery Indicator will begin blinking, if the Smart Scooter is powered off when you enter the plug, the Battery Indicator will not blink.

NOTE – Only the indicator light on the charger will tell you the status of the battery during charging.

#### SAFETY ALERTS

During operation, if there is a system error or illegal operation performed with your Smart Scooter, the system cannot enter self-balancing mode, so the device will prompt the user in a variety of ways. You will notice the Running Indicator Light will turn RED and you will hear a beep sound alerting you to take precaution and cease operation. The following are common occurrences where you will hear the Safety Alerts; these notices should not be ignored, but appropriate action be taken to correct any illegal operation, failure or errors.

Prohibited riding surfaces (uneven, too steep, unsafe, etc.)

When you step on the Smart Scooter, if the platform is tilted more than 10 degrees forward or backward.

Battery voltage is too low.

The device is still charging.

During operation, the platform self initiates to tilt due to excess speed.

Overheating, motor temperature is too high.

The device has been rocking back and forth over 30 seconds.

System enters protection mode, the alarm indicator will light up and buzzer will alarm (this typically occurs when the battery is about to die).

If the platform is tilted forward or backward more than 35 degrees, Smart Scooter will power off. If the tire is blocked, Smart Scooter will stop after 2 seconds.

When the battery level has depleted below protection mode, the Smart Scooter engine will power off after 15 seconds.

While sustaining a high discharge current during operation (such as driving up a steep slope for a long period of time), the Smart Scooter engine will power off after 15 seconds.

#### INSPECTION MAINTENANCE AND STORAGE

Your Smart Scooter requires routine inspection and maintenance. This chapter describes maintenance steps and important operating tips. Before you perform the following operations, ensure the power and charging cable is disconnected.

Inspecting and Cleaning your Smart Scooter

Disconnect the charger and turn off your Smart Scooter.

Routinely check the body of the Smart Scooter and tires for damage or excessive wear.

Avoid using water or other liquids and cleaners on the Smart Scooter for cleaning.

The Smart Scooter is IP 54 rated. It can withstand a light splash of water, however if water or other liquids seep into the device, it will cause permanent damage to the internal electronics.

Wet a clean cloth with clean soapy water, rinse the cloth thoroughly, and wipe the body of the Smart Scooter making sure that water does not get into the power button, charging port, the foot mats, or tires.

Storing your Smart Scooter

Fully charge your battery before storing.

If you are storing your Smart Scooter for an extended period of time, please fully charge your Smart Scooter at least once every three months.

If the ambient temperature of the storage location is below 32°F (0 °C), please do not charge. You must bring the Smart Scooter into a warmer environment before charging. Check under Battery Information and Specifications for more details.

To prevent dust from getting into your Smart Scooter, try wrapping it or sealing it with its original packaging.

Store your Smart Scooter indoors, in a dry and suitable temperature.

NOTE -Users who disassemble the Smart Scooter will forfeit their right of warranty.

## REMOTE CONTROL

#### Remote Control

Please notice in your box the Smart Scooter has a remote control; its maximum operating range is 15 feet (approximately 5 meters).

Power OFF (A) Button: When the device is powered on, press and hold button A for 3 seconds to power off. A Note- You must press the power button on the actual device to power the Smart Scooter back ON.

Lock/Unlock (B) Button: While the device is powered on, click the B button to lock your Smart Scooter (your battery display will turn red, indicating locked mode).

Click the B button again to unlock your Smart Scooter (display green/active)

Note- After 10 minutes of no activity, your Smart Scooter will always power itself off to conserve battery.

## **Special Functions**

Beginner Mode: Press and hold the B button for 3 seconds; your Smart Scooter will switch to beginner mode reducing top speed to 3.7mph (6km/h). You will notice the Running Indicator will begin blinking, indicating you are operating in beginner mode.

To turn beginner mode off, press and hold the B button on the remote control for 3 seconds. The blinking Running Indicator light will turn off. This indicates that your device is back in standard operating mode.

Note- In beginner mode, the governor is set at 3mph, (6km/h) whereas in standard operating mode, the governor is set at 6.2mph (10km/h). For your own safety, the Smart Scooter will push back if you attempt to exceed the governed speed limit.

# THANK YOU

Thank you for the purchase of your new Smart Scooter, and thank for taking the time to read the User Manual. We hope that the information that you obtained from this manual will help you safely operate, maintain and enjoy your Smart Scooter for years to come. We appreciate your consideration and sincerely hope you enjoy and share your Smart Scooter experience with all of your friends, family members, and loved ones.

Thank you for Stepping onto the Future. Enjoy your new Smart Scooter!