





 $\stackrel{\scriptstyle \times}{\scriptstyle \times}$ 

## **USER'S MANUAL**

## CONTENTS

1
1
2
4
4
5
6
7
7
7
8



**Only for EU countries.** Do not dispose of electric appliances together with household waste material! In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implantation in accordance with national law, electric appliances that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

## WELCOME TO YOUR NEW HOVERXBOARD

Congratulations on your purchase of the new self-balancing hoverboard, the HoverXBoard. You can now cruise through the streets in style, moving to the groove of your favourite music on our Bluetoothenabled hoverboard.

The HoverXBoard is the new age, high-tech means of personal transport, powered by aerospace control theory, fuzzy algorithm, gyroscope and a self-balancing acceleration sensor system. Its server control system detects alterations in your body posture based on the transference in your body weight and precisely drives the motor to your desired longitudinal direction. Leaning slightly forward or backward on the pedal sensors will take you through acceleration, deceleration, braking and other operations. To turn, simply slow down and shift your foot towards the left or right for self-steering.

Designed with highly adaptive controls for easy operation and mobility, this sleek and lightweight personal transporter is set to elevate your style quotient while lowering your carbon footprint. The HoverXBoard will become your perfect companion for recreation, scenic tours and short-haul travels, moving as one with you through everyday moments.

## SAFETY FIRST

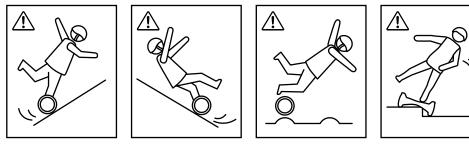


# TO ENSURE YOUR SAFETY AND TO GET THE BEST PERFORMANCE FROM YOUR HOVERXBOARD, PLEASE READ THESE INSTRUCTIONS CAREFULLY.

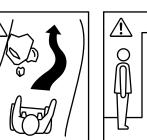
- 1. Children below the age of 14 should always be accompanied by an adult when using the HoverXBoard.
- Children or persons who do not meet the minimum weight limit of 20kg and maximum weight limit of 120kg should not use the HoverXBoard.
- Individuals without prior experience and/or possess poor physical coordination and adaptability will
  require time to learn how to use the HoverXBoard. You are strong advised to exercise extra care
  when learning to use the HoverXBoard.
- 4. Read all instructions in this manual carefully before using the HoverXBoard and adhere to all safety measures and user guidelines to avoid injury or damage to property.
- 5. Children are prohibited to clean and repair the HoverXBoard without parental guidance.
- 6. Always check for damaged tires or loose accessories before using the HoverXBoard. If you notice any abnormality, please contact the authorised service centre for repair or servicing immediately.
- 7. Do not use the HoverXBoard for activities which could cause injury or damage to others or their property.
- Do not change the HoverXBoard parts; this could affect performance or cause serious damage to the HoverXBoard.
- The HoverXBoard should not cause damage or injury to the user due to loss of control, fall or collision. To avoid damage or injury, ensure you read and follow all instructions in this manual carefully.
- 10. To maintain the HoverXBoard in good condition, use only after reading and fully understanding all instructions in this manual.
- 11. Ensure every safety measure is taken when using the HoverXBoard. This includes:
  - ► Wearing suitable sportswear, knee guard, elbow guard, etc. when using the HoverXBoard;

- ▶ Relaxing your legs and bending your knees slightly, keeping your feet on the foot pad while riding;
- Only allowing one rider on the HoverXBoard at any one time;
- ▶ Prohibiting children, the elderly and pregnant women to use the HoverXBoard;
- Prohibiting children and persons who do not meet the weight limit (20kg-120kg) from using the HoverXBoard;
- ▶ Prohibiting the use of the HoverXBoard under the influence of alcohol or drugs;
- Ensuring you are free from distractions when using the HoverXBoard, such as using a mobile phone, listening to music through earphones, etc.;
- Paying close attention to the road conditions when riding the HoverXBoard, avoid extremely steep or undesirable roads and obstacles (i.e. roads exceeding the height limit, filled with sand, stones and soil, wet floors, snowfields, icy grounds, etc.);
- ▶ Not using the HoverXBoard on slopes of more than 15°, or in dimly lit or dark places;
- Not using the HoverXBoard under unsafe circumstances, such as dangerous places in the vicinity of flammable gases, steam, liquid, dust or fibre, etc.;
- Not using the HoverXBoard on public transportation; the HoverXBoard is meant for personal use only;
- ▶ Not accelerating at high speeds when the alarm is sounded.

## FAILURE TO FOLLOW SAFETY INSTRUCTIONS AND WARNINGS COULD RESULT IN SERIOUS INJURY. MISUSE OF YOUR HOVERXBOARD MAY DAMAGE YOUR HOVERXBOARD AND VOID YOUR WARRANTY.



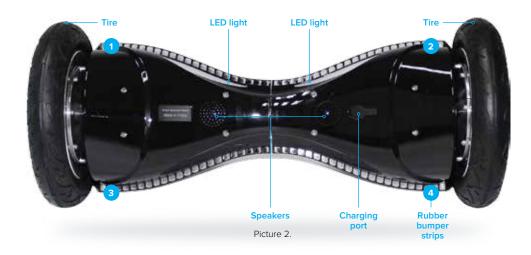




## GETTING TO KNOW YOUR HOVERXBOARD



Picture 1.



The HoverXBoard is designed to be intuitive to use and control. Its pedal sensors are designed with high sensitivity towards shifts in the user's body weight, while its indicator lights provide additional safety. To ensure you get the best from your HoverXBoard, always follow the suggested use and instructions in this manual.

#### PEDAL SENSORS

There are two sensor switches under each pedal. When the rider steps on the pedals, the sensor switches are turned on. The self-balancing feature of the HoverXBoard will be activated and it will calibrate your centre of gravity. When your feet leave the pedals, the sensor switches are automatically shut off and the self-balancing feature will deactivate, returning the HoverXBoard to standby mode. **WARNING:** When riding the HoverXBoard, always ensure your body weight rests on the pedals' sensor switches and do not step off of the sensor switches.

#### **INDICATOR LIGHTS**

- Battery level indicator light: Green light indicates battery level of more than 30%; red light indicates battery level of less than 30%.
- Status indicator light: Green light indicates normal function; red, or flashing red light indicates possible malfunction. Stop using the HoverXBoard immediately.
- Headlight (running lights): Headlights are always on when the HoverXBoard is stationary or moving straight ahead. The left headlight flashes when the HoverXBoard turns left; the right headlight flashes when the HoverXBoard turns right.
- Disco light (optional): Disco lights flash according to the rhythm of the music being played.

#### **BLUETOOTH STEREO SPEAKERS (OPTIONAL)**

#### How to activate the Bluetooth speakers:

- 1. When the HoverXBoard is turned on, the built-in Bluetooth module is automatically switched on.
- 2. Search for 'HoverXBoard on your mobile device (mobile phone, tablet pc, etc.).
- 3. Connect the HoverXBoard and your device via Bluetooth to play music on your device through the HoverXBoard.
- 4. You can adjust the volume, pause a song, change songs, etc. through your device.

#### PLACING THE RUBBER BUMPER STRIPS

Place the rubber bumper strips in positions 1, 2, 3 and 4, as indicated in Pictures 1 & 2.

#### SAFETY FEATURES

- When there is a system error or faulty operation, the HoverXBoard will warn the rider through its indicator lights or alarm, such as the status indicator lights turning or flashing red, or an intermittent alarm is sounded.
- The HoverXBoard will not start if the HoverXBoard is unable to activate the self-balancing mode, or when it is charging.
- When the pedals tilt forward or backward over 15°, or when the voltage is lower than 27.5V (no battery life), the HoverXBoard will stop immediately.

#### STOP using the HoverXBoard immediately in the event of the following:

- The pedals tilt up while riding due to low battery level, or when riding at high speeds;
- ▶ You are travelling at high speeds and the HoverXBoard becomes difficult to control. Lower the speed

to a comfortable riding speed where you have full control of the HoverXBoard;

- ▶ The HoverXBoard starts wobbling for more than 30 seconds;
- ► The HoverXBoard enters the safety mode, the status indicator light turns red or the alarm is sounded.

#### CALIBRATING SELF-BALANCE FEATURE

- 1. Place the HoverXBoard on level ground.
- 2. Press and hold the power button for 5 seconds and ensure the HoverXBoard does not wobble. When both indicator lights flash red, calibration is successful.
- 3. Switch off the HoverXBoard, then turn it on again.

#### SWITCHING MODES

When switching on the HoverXBoard, press the power button once, then again within 2 seconds. A "beep" sound will be produced to indicate modes have been switched successfully.

#### **CLIMBING SLOPES**

The climb angle is dependent on many factors, such as battery level, user's weight, riding skills and the condition of the slope surface. The maximum climb angle is 25°. DO NOT sprint before climbing a slope. Immediately get down from the HoverXBoard if you feel the motor power is unable to sustain the climb. ALWAYS ride slowly when climbing uphill or sliding downhill.

Load range:	20KG to 120KG
Maximum riding distance*:	20KM
Speed limit:	12KM/H

\*The riding distance is dependent on the road conditions, rider's weight, riding skills and environmental temperature.

## USING YOUR HOVERXBOARD

- 1. Press the power button to switch on the HoverXBoard.
- 2. Place one foot on the pedal first. When the running lights turn green, this signals the self-balancing feature is activated. You can then place your other foot on the pedal and find your stability.
- 3. By maintaining your balance on the HoverXBoard, you will remain stationary. Lean forward or backward to move and maintain the stability of the HoverXBoard. Do not shift your body weight abruptly.
- 4. Control the direction with your left or right foot by applying pressure to the front or back of the pedals.
- Always ensure the HoverXBoard is stationary before stepping down. While maintaining your balance, lower one foot from the HoverXBoard, then remove your other foot quickly.

**WARNING**: If both pedal switches are not in the horizontal position after you step onto the HoverXBoard, the running lights turn red, or the system cannot activate its self-balancing feature, stop using the HoverXBoard immediately.

## CHARGING YOUR HOVERXBOARD

This section is intended to describe battery specification, charging method, how to protect the battery and provide safety measures. Please read this section carefully and adhere to the instructions to ensure your safety, prolong battery life, as well as to improve battery performance.

#### **BATTERY DETAILED SPECIFICATIONS**

Battery type	Lithium battery	Working temperature	-20°C–60°C
Charging time	2-3 hours	Charging temperature	0°C-45°C
Voltage	36V	Storage time (-20°C–25°C)	12 months
Initial capacity	4.3Ah	Relative humidity of storage	5%-95%
Maximum charge voltage	42V	Charge current	2A

#### **BATTERY LIGHT INDICATION**

	Battery voltage	Battery indicator
Working state	>34.3V	Green light
	34-34.3V	Green flicker
	<34V	Red light
Charging state	<40.8V	Orange flicker
	>40.8V	Orange flicker

#### **BATTERY SAFETY**

- Do not attempt to repair or replace the battery on your own. Only an authorised service centre may disassemble and provide maintenance for the battery.
- In order to improve operating efficiency, ensure the battery temperature stays within the specified parameters.
- Batteries are regarded as dangerous products. Ensure your local laws allow shipment of products containing batteries to your country.
- ► Batteries contain dangerous substances. Do not open or insert anything into the battery.
- Only use the designated charging equipment provided by the supplier to charge your HoverXBoard.
- Charging lithium batteries which have been over discharged is prohibited. Excessive discharge of a
  battery poses a security risk and can only be scrapped.

#### DO NOT use the HoverXBoard under the following circumstances:

- ► The battery is odorous or overheated. Do not touch any substance leaking from the battery;
- ► Near children or animals. Do not let them touch the battery;
- The HoverXBoard is charging. Before installing the battery or riding, ensure the charger is unplugged from the power outlet. It is very dangerous to use the HoverXBoard while it is still charging.

#### CHARGING YOUR HOVERXBOARD

- ▶ Ensure the charging environment is clean and dry, and the temperature is within the specified parameters.
- Open the charging socket at the bottom of your HoverXBoard. Ensure the charging ports are clean, dry and free from dust, debris or dirt.
- ▶ NEVER plug in the charger if the charging socket, the cable or the wall socket is wet or moist.

#### HOW TO CHARGE YOUR HOVERXBOARD:

- 1. Plug in the cable of the charger into a properly grounded wall socket. Check if the LED light of the charger turns green.
- 2. Connect the charger to the charging socket of your HoverXBoard. The light on your charger should turn red to indicate that your HoverXBoard is charging.
- 3. The battery indicator on the HoverXBoard will turn amber during charging.
- 4. The charging process takes approximately 2-3 hours. Do not leave the device unattended during the charging process.
- 5. When your HoverXBoard is fully charged (the light on your charger will turn green), unplug the charging cable from the charging socket of your HoverXBoard before unplugging the charger from the wall socket.

## CLEANING & MAINTENANCE

#### CLEANING

Ensure the charger and charging cable are disconnected, and the HoverXBoard is turned off before cleaning. Use a soft cloth to wipe the shell to clean the HoverXBoard. Do not add excessive lubricating oil to the bearings.

**WARNING:** Do not use a high-pressure water gun or immerse the HoverXBoard in liquid to clean it. This may lead to malfunction and permanent damage.

#### STORAGE

Before storage, ensure the HoverXBoard is fully charged to prevent the battery from excessive selfdischarge due to long periods of disuse. Ensure the HoverXBoard is charged and discharged at least once every 3 months.

If the storage environment temperature is less than 0°C, do not charge the HoverXBoard. Place the HoverXBoard in a warmer environment (higher than 10°C) to charge. Store at a temperature between 0-40°C.

Store the HoverXBoard indoors in a dry and cool environment. You can store the HoverXBoard in a dust bag (not provided) to prevent dust accumulation affecting the performance of the HoverXBoard. **WARNING:** Do not dismantle or modify the HoverXBoard or warranty may be void.

## HELP, SOMETHING'S GONE WRONG!

PROBLEM	POSSIBLE CAUSE	SOLUTION
My HoverXBoard boots up	The HoverXBoard was not placed on level ground.	Place the HoverXBoard on level ground and ensure the pedals are parallel to the floor.
but when I step on the pedal, the safety lights and indicators always light up with the alarm going off.	You have not calibrated your HoverXBoard successfully.	Turn off the HoverXBoard. Press and hold the power button for 5 seconds until the LED lights start to flash. Turn off the HoverXBoard then switch it on again to start riding.
My HoverXBoard fails to start.	The battery is drained.	Check the battery level and charge the HoverXBoard for a short while to see if it can be switched on.
My HoverXBoard fails to charge.	The power outlet is not switched on.	Ensure the main switch is switched on.
	The plug or charger is not connected properly to the power outlet or charging socket on the HoverXBoard.	Ensure the plug, charger and charging ports are connected properly.
The Cycling mode is not flexible.	You have not switched modes successfully.	Restart the HoverXBoard, or switch modes (switch off the HoverXBoard, press the power button again within 2 seconds; a 'beep' sound should be produced when modes have been switched successfully).

## ABOUT FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### CAUTION:

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

#### 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 to 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.

## SPECIFICATIONS

Product:	HoverX Board
Model:	HX65
Input:	42V/2A
Power:	36V/ 350W
Max Speed:	12km/h
Min load:	20kg
Max load:	120kg
Product Weight:	10kg
Dimensions:	580(L) × 180(W) × 180(H) mm

## WARRANTY TERMS & CONDITIONS (INTERNATIONAL)

This warranty as outlined below solely covers distributors of the Optimum range of appliances. Please contact your distributor for full product warranty.

#### Effective as of 1st January 2014

 Optimum® warrants this appliance to be free from defects in materials and workmanship and to perform satisfactorily under personal use for a period of 2 years from the date of purchase when used in accordance with

the accompanying instruction book

- 2. Any warranties exceeding this standard period are offered as extended terms by the selling distributor and claimable only through that provider.
- 3. Defects that occur within this manufacturers warranty period, under normal use and care will be repaired or replaced at our discretion only if the selling distributor is unable to do so. This is done solely at our option with no charge for parts. This warranty does not extend to accessories included or purchased separately. Replacements can be offered for major faults as determined by your distributor and at their own discretion.
- 4. In the event that the goods requiring repair are under warranty, and this distributor is unable to provide the repairs, the customer is responsible for the cost of the return of the product to Optimum<sup>®</sup> (or their approved service provider) and also the cost of return to the customer.
- 5. Whilst in transit, the goods are at the owner's risk and any further damage during this transportation is not covered under warranty.
- 6. Customers should ensure that the product being returned is properly packaged so as to ensure that no damage occurs to the product during transit. To be able to process the warranty claim, ensure you have included an explanation of any problem; Optimum<sup>®</sup> will not fault-find and will only repair described faults as covered under warranty.
- 7. This full warranty is void if this appliance has been subjected to abuse, negligence, accident, alteration, failure to follow operating instructions, or the product has been exposed to abnormal or extreme conditions.
- 8. Cosmetic changes that do not affect performance, such as discolouration of parts of the product in the hands of the user or the effects of the use of abrasive cleaners will not be warranted or considered defects. The cleaning or removal of dirt and debris along with any damage caused by allowing them to build up is not covered by this full warranty.
- 9. This warranty does not cover normal wear and tear of the product or parts.
- This warranty does not cover any defect caused by an accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised by Optimum<sup>®</sup>.
- 11. The warranty will not apply if damage, malfunction or failure resulting from alterations, accident, misuse, abuse, fire, liquid spillage, maladjustment of customer controls, use on an incorrect voltage, power surges and dips, thunderstorm activity, acts of God, voltage supply problems, tampering or unauthorised repairs by any persons, use of defective or incompatible accessories, exposure to abnormally corrosive conditions or entry by any insect, vermin or foreign object in the product.
- 12. Warranty does not cover damage done to any product by using the machine with an alternate power source (solar, inverter, generator, etc.) and the use of these devices to power your appliance is not recommended.
- 13. You must keep your purchase docket/receipt as proof of purchase and as proof of the date on which the purchase was made. The purchase docket or receipt must be presented when making a claim under this warranty.
- 14. In the event the receipt of purchase is not presented, then this warranty is invalid. Consumer Law allows us to request reasonable proof of purchase to service a warranty claim.
- 15. This warranty does not imply, intend to or detract any consumer rights listed in and able to be enforced from Regulated Consumer Law, any condition which is found to be in breach of the consumer law, the single condition shall be void only and all other conditions remain in place.

## CONTACT US

Please contact the distributor located in the Country where you made your original purchase for all Support, Servicing and Warranty.

HoverXBoard 6.5inch Manual v1