



# TURBO



OPERATION MANUAL  
H1-TRB

# **WARNING!**

## **PLEASE READ THE USER MANUAL THOROUGHLY.**

**Failure to follow the basic instructions and safety precautions listed in the user manual can lead to damage to your Turbo, other property damage, serious bodily injury, and even death.**

Thank you for purchasing the Hover-1 Turbo Electric Scooter. Please read all instructions carefully before using and retain this manual for future use and reference.

This manual applies to the Turbo Electric Scooter.

- In order to avoid dangers that are caused by collisions, falls, and loss of control, please learn how to ride the Turbo safely.
- You can learn operating skills by reading the product manual and watching videos.
- This manual includes all operating instructions and precautions, and users must read it carefully and follow the instructions.
- Hover-1 can not be held liable for damage or injury caused by failure to understand and follow the warnings and instructions in this manual.

## **ATTENTION**

1. Use only the supplied charger with this scooter.  
Charger Manufacturer: GuangDong Marshall Electric Vehicle Co., Ltd  
Model: MSL-CH29100P
2. The operating temperature range of the Turbo is 32-104° F (0-40° C).
3. Do not ride on icy or slippery surfaces.
4. Read the user manual and warning labels before riding.
5. Store the Turbo in a dry, ventilated environment.
6. When transporting the Turbo, avoid violent crashes or impact.

## **LOW TEMPERATURE WARNING**

Low temperature will affect the lubrication of moving parts inside the Turbo scooter, increasing internal resistance. At the same time, in low temperatures, the discharge capacity and the capacity itself of the battery will be significantly decreased.

Use caution when riding the Turbo in cold temperatures (below 40 degrees F).

Doing so may increase the risk of mechanical failures of the scooter, which may lead to damage to your Turbo, other property damage, serious bodily injury and even death.

## **SAFETY INSTRUCTIONS**

- Keep the Turbo away from heat sources, direct sunlight, humidity, water and any other liquids.
- Do not operate the Turbo if it has been exposed to water, moisture or any other liquids to prevent against electric shock, explosion and/or injury to yourself and damage to the Turbo.
- Do not use the Turbo if it has been dropped or damaged in any way.
- Repairs to electrical equipment should only be performed by the manufacturer. Improper repairs voids the warranty and may place the user at serious risk.
- Do not puncture or harm the exterior surface of the product in any way.
- Keep the Turbo free from dust, lint, etc.
- Do not use this Turbo for anything other than its intended use or purpose. Doing so may damage the Turbo or lead to property damage, injury or death.
- This product is not a toy. Keep out of reach of children.
- Do not expose batteries, battery pack, or batteries installed to excessive heat, such as direct sunlight, or open flame.
- Do not allow hands, feet, hair, body parts, clothing or similar articles to come in contact with moving parts, wheels or drivetrain, while the engine is running.

- Do not operate or allow others to operate the Turbo until the user understands all instructions, warnings and safety features described in this manual.
- Check with your doctor if you have a medical condition that could affect your ability to use the Turbo.
- Persons with head, back or neck ailments or prior surgeries to those areas of the body are not recommended to use the Turbo.
- Persons with any mental or physical conditions that may make them susceptible to injury or impair their physical or mental capabilities to recognize, understand and perform all of the safety instructions and to be able to assume the hazards inherent in unit use, should not use the Turbo.



## NOTES:

In this manual, the above symbol with the word “NOTES” indicates instructions or relevant facts the user should remember prior to using the Turbo.



## CAUTION!

In this manual, the above symbol with the word “CAUTION” indicates a hazardous situation which, if not avoided, can cause minor or moderate injury.



## WARNING!

In this manual, the above symbol with the word “WARNING” indicates a hazardous situation which, if not avoided, can cause death or serious injury.

## SERIAL NUMBER

Please keep the serial number on file for warranty claims as well as proof of purchase.



## WARNING!

**WARNING:** Prolonged Exposure to UV Rays, Rain and the Elements May Damage the Enclosure Materials.  
Store Indoors When Not in Use.



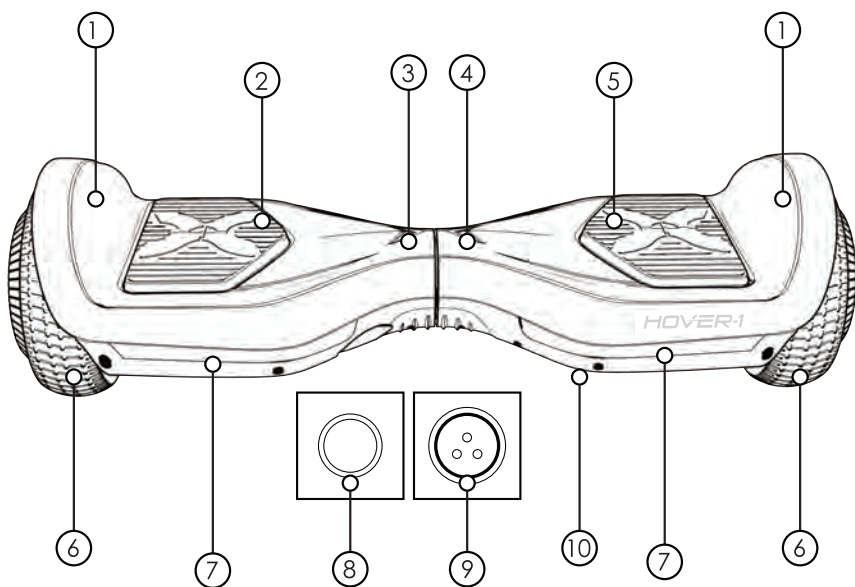
# INTRODUCTION

The Hover-1 Turbo is a personal transporter. Our technology and production processes are developed with strict testing for each Turbo scooter. Operating the Turbo without following the contents of this manual may lead to damage to your Turbo or bodily injury.

This manual is designed to give you the information you need for the safe operation and maintenance of your Turbo. Please read it thoroughly before riding your Turbo.

## PACKAGE CONTENTS

- Hover-1 Turbo Electric Scooter
- Wall Charger
- Operation Manual



## FEATURES/PARTS

- |                      |                                   |
|----------------------|-----------------------------------|
| 1. Fender            | 6. Tire                           |
| 2. Right Foot Mat    | 7. LED Light                      |
| 3. Battery Indicator | 8. Power Button (Located in rear) |
| 4. System Indicator  | 9. Charge Port (Located in rear)  |
| 5. Left Foot Mat     | 10. Protective Chassis Casing     |

## OPERATING PRINCIPALS

The Turbo uses digital electronic gyroscopes and acceleration sensors to control balance and motion, depending on the user's center of gravity. The Turbo also uses a control system to drive the motors that are located within the wheels. The Turbo has a built-in inertia dynamic stabilization system that can help assist with balance when moving forward and backwards, but not while turning.

**TIP** – To increase your stability, you must shift your weight in order to overcome the centrifugal force during turns, especially when entering a turn at higher speeds.

## WARNING

Any Turbo that does not work properly can cause you to lose control and fall. Inspect the entire Turbo thoroughly before every ride, and do not ride it until any problems have been corrected.

## SPECIFICATIONS

Model:	Hover-1™ Turbo (H1-TRB)
Net Weight:	15.84 lbs (7.2 kg)
Load:	44-220 lbs (20-100 kg)
Max Speed:	Up to 7 mph (11.3 km/h)
Max Distance Range:	Up to 6 miles (9.65 km)
Max Incline Angle:	10 degree
Minimum Turning Radius:	0°
Charge Time:	Up to 5 hours
Battery Type:	Lithium-ion
Battery Voltage:	25.2 V
Battery Capacity:	4.0Ah
Power Requirement:	AC 100-240V, 50/60 Hz
Ground Clearance:	1.5 Inches (3.81 cm)
Platform Height:	4.5 Inches (11.43 cm)
Tire Type:	Non-Pneumatic Solid Tires

(866) 831-1520

# CONTROLS AND DISPLAY

**PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY**

## **TURNING YOUR DEVICE ON/OFF**

**Power On:** Take your Turbo out of the box and place it flat on the floor. Press the power button (located on the rear of your Turbo) once. Check the LED indicator (located in the center of your Turbo). The battery indicator light should be lit, indicating the Turbo is powered on.

**Power Off:** Press the power button once.

## **MAT SENSOR**

There are four sensors under the foot mats on your Turbo.

When riding the scooter, you must ensure you are stepping on the foot mats. Do not step or stand on any other area of your scooter.

The Turbo may vibrate or spin in one direction, if weight and pressure are applied to only one foot mat.

## **BATTERY INDICATOR**

The display board is located in the middle of the Turbo.

- Green LED light indicates the hoverboard is fully charged.
- Red flashing LED light and beeping indicates low battery.
- Yellow light indicates the board is charging.

When the LED light turns red, please recharge the Turbo.

## **SYSTEM INDICATOR**

When the operator triggers the foot mats, the System Indicator LED will light up, which means that the system enters the running state.

When the system has an error during operation, the running LED light will turn red (for more details see SAFETY ALERTS).

# BEFORE RIDING

It is important that you fully understand all elements of your Turbo. If these elements are not used correctly, you will not have full control of your Turbo. Before you ride, learn the functions of the various mechanisms on your scooter.

Practice using these elements of your Turbo at slower speeds in a flat, open area before taking the Turbo out in public areas.

## PRE-RIDE CHECKLIST

Ensure that your Turbo is in proper working order each and every time you ride. If a part of the scooter does not function correctly, please contact our Customer Support Center.



## WARNING

Any Turbo that does not work properly can cause you to lose control and fall. Do not ride a Turbo with a part that is damaged; replace the damaged part before riding.

- Ensure the battery is fully charged before riding your scooter.
- Ensure that the screws on the front and back tires are locked firmly before each ride.
- Please wear all appropriate safety and protective gear as previously mentioned in the User Manual before operating your Turbo.
- Make sure to wear comfortable clothes and flat closed-toe shoes when operating your Turbo.
- Please carefully read the User Manual, which will assist in explaining the basic working principles and provide tips on how to best enjoy your experience.

# SAFETY PRECAUTIONS

Different localities and countries have different laws governing riding on public roads, and you should check with local officials to ensure you are complying with these laws.

Hover-1 is not liable for tickets or violations given to riders who do not follow local laws and regulations.

- For your safety, always wear a helmet that meets CPSC or CE safety standards. In the event of an accident, a helmet can protect you from serious injury and in some cases, even death.
- Obey all local traffic laws. Obey red and green lights, one-way streets, stop signs, pedestrian crosswalks, etc.
- Ride with traffic, not against it.
- Ride defensively; expect the unexpected.
- Give pedestrians the right-of-way.
- Do not ride too close to pedestrians and alert them if you intend to pass them from behind.
- Slow down at all street intersections and look to the left and right before crossing.

Your Turbo is not equipped with reflectors. It is not recommended that you ride in conditions of low visibility.

## WARNING

When you ride in low-visibility conditions such as fog, dusk, or night, you might be difficult to see, which could lead to a collision. In addition to keeping your headlight on, wear bright, reflective clothing when riding in poor lighting conditions.

Think about safety when you ride. You can prevent many accidents if you think about safety. Below is a helpful checklist for Compact riders.

## SAFETY CHECKLIST

- Do not ride above your skill level. Ensure you have had enough practice with all functions and features of your Turbo.
- Before stepping on your Turbo, make sure it is placed flat on level ground, the power is on, and the System Indicator light is green. Do not step on if the System Indicator light is red.
- Do not try to open or modify your Turbo. Doing so, voids the manufacturer warranty and may cause your Turbo to fail, resulting in injury or death.
- Do not use the Turbo in a manner that would put people or property in danger.
- If riding near others, keep a safe distance to avoid collision.
- Be sure to keep your feet on the pedals at all times. Moving your feet off your Turbo while driving is dangerous and may cause the Turbo to stop or veer sideways.
- Do not operate the Turbo while under the influence of drugs and/or alcohol.
- Do not operate the Turbo when you are restless or sleepy.
- Do not ride your Turbo off of curbs, ramps, or attempt to operate in a skate park, empty pool. Misuse of your Turbo, voids the manufacturer warranty and may lead to injury or damage.
- Do not continuously spin in place, it will cause dizziness and increases risk of injury.
- Do not abuse your Turbo, doing so can damage your unit and cause failure to the operating system leading to injury. Physical abuse, including dropping your Turbo, voids the manufacturer warranty.
- Do not operate in or near puddles of water, mud, sand, stones, gravel, debris or near rough and rugged terrain.
- The Turbo can be used on paved surfaces that are flat and even. If you encounter uneven pavement, please lift your Turbo over and past the obstruction.
- Do not ride in inclement weather: snow, rain, hail, sleet, on icy roads or in extreme heat or cold.

- 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 Turbo. ALWAYS BE ON THE SIDE OF CAUTION.
- Do not attempt to ride over bumps or objects greater than ½ in. even when prepared and bending your knees.
- PAY ATTENTION - look at where you are riding and be conscious of the road conditions, people, places, property and objects around you.
- Do not operate the Turbo in crowded areas.
- Operate your Turbo with extreme caution when indoors, especially around people, property, and narrow spaces.
- Do not operate the Turbo while talking, texting, or looking at your phone.
- Do not ride your Turbo where it is not permitted.
- Do not ride your Turbo near motor vehicles or on public roads.
- Do not travel up or down steep hills.
- The Turbo is intended for use by a single individual, DO NOT attempt to operate the Turbo with two or more people.
- Do not carry anything while riding the Turbo.
- Individuals with lack of balance should not attempt to operate the Turbo.
- Pregnant women should not operate the Turbo.
- This device is recommended for riders ages 8 and older.
- At higher speeds, always take into consideration longer stopping distances.
- Do not step forward off of your Turbo.
- Do not attempt to jump on or off your Turbo.

- Do not attempt any stunts or tricks with your Turbo.
- Do not ride the Turbo in dark or poorly lit areas.
- Do not ride the Turbo off road, near or over potholes, cracks or uneven pavement or surfaces.
- Keep in mind that you are 4.5 inches (11.43 cm) taller when operating the Turbo. Make sure to go through doorways safely.
- Do not turn sharply, especially at high speeds.
- Do not step on the fenders of the Turbo.
- Avoid driving the Turbo in unsafe places, including near areas with flammable gas, steam, liquid, dust or fiber, which could cause fire and explosion accidents.
- Before riding, ensure that tires are in good condition and have sufficient tread remaining.
- Do not operate near swimming pools or other bodies of water.

## **WARNING**

When a hoverboard and a kart (sold separately) are being used, it is NOT ADVISABLE to ride the combo uphill. If using on a steep incline above 5-10°, a safety mechanism built into the hoverboard will activate, which will shut down your hoverboard automatically. If this happens, dismount your hoverboard, place it on a flat surface, wait 2 minutes, and then power your hoverboard on again.

## **WARNING:**

To reduce the risk of injury, adult supervision is required. Never use in roadways, near motor vehicles, on or near steep inclines or steps, swimming pools or other bodies of water; always wear shoes, and never allow more than one rider.



# RIDING YOUR TURBO

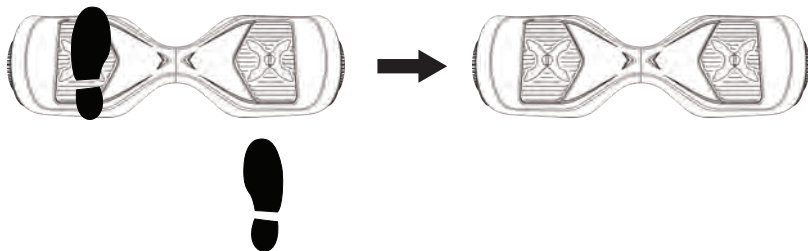
**FAILURE TO FOLLOW ANY OF THE FOLLOWING SAFETY PRECAUTIONS CAN AND MAY LEAD TO DAMAGE TO YOUR Turbo, VOID YOUR MANUFACTURER WARRANTY, LEAD TO PROPERTY DAMAGE, CAUSE SERIOUS BODILY INJURY, AND CAN LEAD TO DEATH.**

Before using your Turbo, be sure to familiarize yourself with the operating procedures.

## OPERATING YOUR Turbo

Make sure the Turbo is fully charged before initial use. For charging instructions, please follow details under CHARGING YOUR Turbo.

Stand directly behind your Turbo and place one foot on the corresponding foot mat (as described in the diagram below). Keep your weight on the foot which is still on the ground, otherwise the Turbo may begin to move or vibrate, making it difficult to step on evenly with your other foot. When you are ready, shift your weight to the foot already placed on the Turbo and step on with your second foot quickly and evenly (as described in the diagram below).



## NOTES:

Stay relaxed and step on quickly, confidently and evenly. Imagine climbing stairs, one foot, then the other. Look up once your feet are even. The Turbo may vibrate or spin in one direction, if weight and pressure are applied to only one foot mat. THIS IS NORMAL.

Find your center of gravity. If your weight is distributed correctly on the foot mats and your center of gravity is level, you should be able to stand on your Turbo just as if you were standing on the ground.

On average, it takes 3-5 minutes just to get comfortable standing on your Turbo and maintaining proper balance. Having a spotter will help you feel more secure. The Turbo is an incredibly intuitive device; it senses even the slightest bit of motion, so having any anxiety or reservation about stepping on may cause you to panic and trigger unwanted movement.

When you first begin using your Turbo, the fastest way to move in your desired direction is to focus in that direction. You will notice that just thinking about which way you would like to go will shift your center of gravity, and that subtle movement will propel you in that direction.

Your center of gravity determines which direction you move, accelerate, decelerate, and come to a complete stop. As described in the diagram below, tilt your center of gravity in the direction you wish to move.

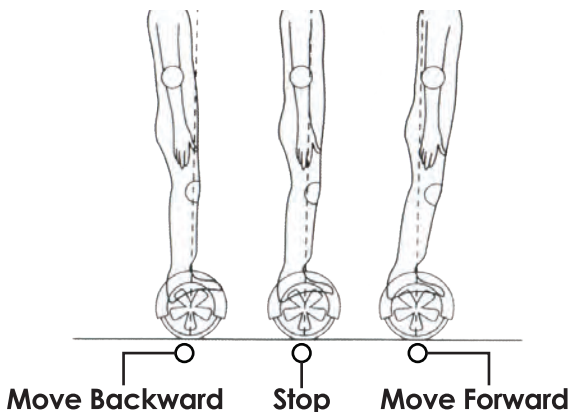
To turn, focus on the direction you wish to turn and stay relaxed.

## **WARNING**

Do not turn sharply or at high speeds to avoid danger. Do not turn or ride quickly along slopes, as it may cause injury.

As you get comfortable on the Turbo, you will notice it becomes easier to maneuver. Remember at higher speeds, it is necessary to shift your weight to overcome the centrifugal force.

Bend your knees if you encounter bumps or uneven surfaces, then dismount and carry your Turbo to a safe operating surface.

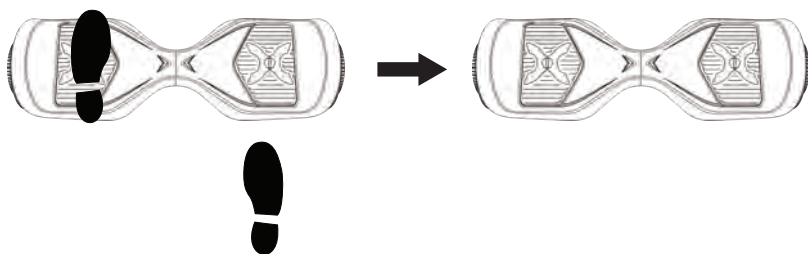




## NOTES:

Try staying relaxed and focus on finding your center of gravity to maintain full control of your Turbo.

Dismounting your Turbo can be one of the easiest steps, yet when done incorrectly, may cause you to fall. To properly dismount, from a stopped position, lift one leg up and set your foot back down on the ground (STEPPING BACK). Then step off completely as described in the following diagram.



## WARNING

Make sure to lift your feet completely off the foot mat to clear the Turbo when stepping back to dismount. Failure to do so may send the Turbo into a tailspin.

### WEIGHT AND SPEED LIMITATIONS

Speed and weight limits are set for your own safety. Please do not exceed the limits listed here in the manual.

- Maximum Weight: 220 lbs
- Minimum Weight: 44 lbs
- Maximum Speed: Up to 7 mph

## **WARNING**

Overweight exertion on the Turbo may increase possibility of injury or product damage.

## **NOTES:**

To prevent injury, when max speed is reached, the Turbo will beep to alert the user and tilt the rider slowly back.

## **OPERATING RANGE**

The Turbo can travel a distance up to 6 miles on a fully charged battery in ideal conditions. The following are some of the major factors that will affect the operating range of your Turbo.

- **Terrain:** Riding distance is highest when riding on a smooth, flat surface. Riding uphill and/or on rough terrain will reduce distance significantly.
- **Weight:** A lighter user will have further range than a heavier user.
- **Ambient temperature:** Please ride and store the Turbo under recommended temperatures, which will increase riding distance, battery life, and overall performance of your Turbo.
- **Speed and Riding Style:** Maintaining a moderate and consistent speed while riding produces maximum distance. Traveling at high speeds for extended periods, frequent starts and stops, idling and frequent acceleration or deceleration will decrease overall distance.

## **BALANCE & CALIBRATION**

**If your Turbo is unbalanced, vibrating, or not turning properly, you can follow the below steps to calibrate it.**

- First, place the Turbo on a flat, horizontal surface such as the floor or a table. The foot mats should be even with each other and not tilted forward or backward. Make sure the charger is not plugged in and the board is turned off.
- Press and hold the ON/OFF button for a total of 15 seconds. The scooter will turn on, lighting the battery indicator on the board.
- After the light flashes 5 times consecutively you may release the ON/OFF button.
- Turn the board off and then turn the board back on. Calibration will now be completed.

# SAFETY ALERTS

While riding your Turbo, if there is a system error or improper operation performed, the Turbo 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, which may make the device stop suddenly.

The following are common occurrences where you will hear the Safety Alerts. These notices should not be ignored, but appropriate action should be taken to correct any illegal operation, failure or errors.

- Unsafe riding surfaces (uneven, too steep, unsafe, etc.)
- When you step on the Turbo, if the platform is tilted more than 10 degrees forward or backward.
- Battery voltage is too low.
- The Turbo is still charging.
- During operation, the platform self initiates to tilt due to excess speed.
- Overheating, or motor temperature is too high.
- The Turbo has been rocking back and forth for over 30 seconds.
- If the system enters protection mode, the alarm indicator will light up and the board will vibrate. This typically occurs when the battery is about to run out of power.
- **If the platform is tilted forward or backward more than 10 degrees, your Turbo will power off and stop suddenly, possibly causing the rider to lose balance or fall off.**
- If any or both tires are blocked, the Turbo will stop after 2 seconds.
- When the battery level has depleted below protection mode, the Turbo engine will power off and stop after 15 seconds.
- While sustaining a high discharge current during use (such as driving up a steep slope for a long period of time), the Turbo engine will power off and stop after 5 seconds.

## **WARNING**

When the Turbo turns off during a Safety Alert, all operation systems will halt. Do not continue attempting to ride the Turbo when the system initiates a stop. Turn your Turbo off and back on to unlock it from a Safety Lock.

## **CHARGING YOUR TURBO**

### **CHARGING THE Turbo**

- Ensure that the charging port is clean and dry.
- Make sure that there is no dust, debris or dirt inside the port.
- Plug the charger into a grounded wall outlet. The charging indicator light ON THE CHARGER will flash green.
- Connect the cable with the power supply (100V ~ 240V; 50/60 Hz).
- Align and connect the 3-pin charging cable into the charging port of the Turbo. **DO NOT FORCE THE CHARGER INTO THE CHARGE PORT, AS THIS MAY CAUSE THE PRONGS TO BREAK OFF OR PERMANENT DAMAGE TO THE CHARGE PORT.**
- Once attached to the board, the charging indicator light ON THE CHARGER should be flashing in GREEN color, indicating that your device is now being charged.
- When the GREEN light on your charger stops flashing, then your Hoverboard is fully charged. A full charge may take up to 5 hours. While charging you will see a GREEN light.
- A full charge may take up to 5 hours. Only charging with powered-on scooter, you will see yellow flashing light on the scooter, which both indicates charging. Do not charge for more than 6 hours.
- After fully charging your Turbo, unplug the charger from your Turbo and from the power outlet.