

USER MANUAL

WARNING! IMPROPER USE OF POWER ROVERS AND/OR FAILURE TO READ THIS USER MANUAL MAY LEAD TO SERIOUS BODILY INJURY AND DEATH. Congratulations on the purchase of your new Power Rover!

PLEASE READ THE USER MANUAL THOROUGHLY BEFORE OPERATING



Before you get started, please make sure to read the User Manual.

It is highly recommended to start your first Power Rover experience with a friend. Having a spotter during initial use will increase your confidence and help you become acclimated to your Power Rover. Always wear the proper safety gear before operating.

PLEASE NOTICE:

- Power Rovers are an Intelligent Personal Mobility Device.
- Before riding, please read the User Manual carefully, and follow all Safety Precautions.
- Improper use of this product can lead to property damage, serious bodily injury, and/or death.
- The information in this User Manual will help you better understand, enjoy, and maintain your Power Rover.

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1.Product Overview

1.1 General Information

The Power Rover 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 center of gravity using gyroscope and acceleration sensors. Using the latest technology and production processes, each Power Rover undergoes strict testing for quality and durability. With its lightweight, portable design, ease of use, range, and low carbon footprint, Power Rovers are the Ultimate Last Mile Solution.

1.2 What You Need To Know

Before you first experience your Power Rover, 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 Power Rover experience be with a spotter who can assist you in centering your balance. Once you keep your center of gravity even, you will be able to stand on the Power Rover without moving, similar to standing on the ground. The most important thing to do is stay relaxed and confident. The Power Rover is very intuitive and senses the slightest motion, so finding your center 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 Power Rover unevenly, as this will cause you to lose control and increase your probability of injury. Please follow the detailed directions outlined in the USER MANUAL in Section 3 under Operating Principles.

1.3 WARNING

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

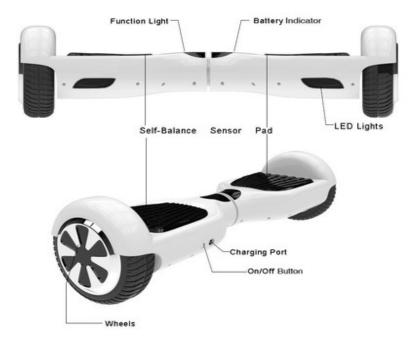
2. Product Description

2.1 Description of Power Rover

The Power Rovers are a technologically advanced Personal Mobility Device. It has two wheels that balance and transport the user using battery powered brushless motors. The Power Rovers use digital gyroscope modules and acceleration sensors to calculate the user's center of gravity and move the device accordingly. The Power Rovers can move forwards, backwards, turn in either direction or turn in place. The compact footprint and zero degree turning radius allow you to enjoy your Power Rover both indoors and outdoors.

2.2 Description of Power Rover Components

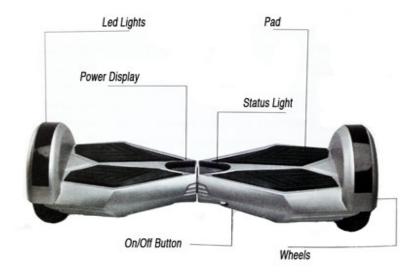
Model BT6:



Model BT6.5:



Model BT8:



3. Operating Principles

3.1 How Power Rovers Work

The Power Rover uses digital electronic gyroscopes and acceleration sensors to control balance and motion intelligently, depending on the user's center of gravity. The device also uses an intelligent control system to drive the brushless motors that are located within the wheels. The Power Rover 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.

3.2 PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

Step 1: Getting Started - Take your Power Rover out of the box and place it flat on the floor. Locate the power button, press to turn on, you will hear an alert.

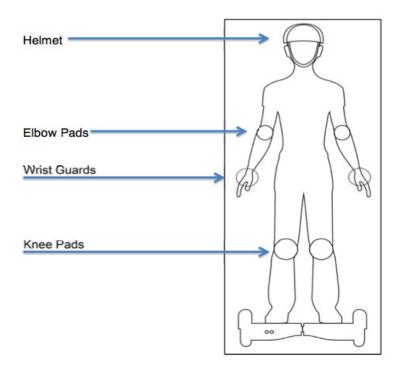
Step 2: Checking the Display Board - located in the center of your Power Rover. The Power Rover should power on and beep indicating it is on. The Battery indicator light should be lit, indicating there is power to the device.

Battery Indication: The Green LED light indicates the Power Rover is charged >%50, the Yellow/Amber LED light indicates the battery power is under <50%, the Red LED light indicates the power is down to 10%, when the LED light becomes red, please recharge the device.

Running Indicator: When the operator triggers the rubber foot pads, the Function/Status LED will light up, which means that the system enters the running state; when the system has an error during operation, the Function/Status LED light will turn red and you will hear the system alert you with a beep.

Step 3: Charging your Power Rover - Make sure the Power Rover is fully charged before your initial use. For charging instructions, please follow details in Section 8 under Battery and Charging Specifications.

Step 4: Safety Gear - Wear all proper safety gear, including, but not limited to a helmet, knee pads, elbow pads, and wrist guards.



Step 5: Stepping On - Stand directly behind your Power Rover. Place one foot on the Rubber Foot Pad.

Keep all your weight on your back foot still on the ground. Otherwise, your device will begin to move, 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 device and step on with your second foot quickly and evenly.

TIP– Stay relaxed and step on quickly, confidently and evenly. Many people overthink this step, imagine climbing a stair, one foot, then the other. Once your feet are even, try to look up.

Step 6: Staying Balanced - Find your center of gravity. If your weight is distributed correctly on the foot pads, and your center of gravity is level, you should be able to stand on your Power Rover, just as if you were standing on the ground. IF NOT, you may feel like you are moving in a particular direction, turning, spinning in place, wobbling back and forth, or simply uncomfortable with the device.

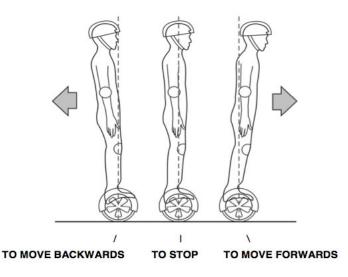
NOTE – On average, it takes 5-10 minutes just to get comfortable standing on the Power Rover and maintaining proper balance. Having a spotter will help you feel more secure. The Power Rover is an incredibly intuitive device; it senses even the slightest bit of motion, so having any anxiety or reservation about stepping on may cause you to panic and trigger movement that is not otherwise natural to you. The best way to overcome that initial anxiety is by having a spotter.

TIP – Stay relaxed, stand evenly, and apply an equal amount of pressure on both sides of the device. Relax your muscles as much as you can. Taking a deep breath and exhaling can help you achieve this. Slightly bending your knees can also help. Once you can stand IDLE and STOP, you are ready for the next step.

If you begin to turn in a particular direction, focus on turning in the opposite direction to stop turning.

When you first begin using your Power Rover, 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.

Step 7: Riding your Power Rover - Keeping in mind what we learned in Step 6, apply the following general principles to the operation of your Power Rover.



Notice in the diagram above, your center of gravity determines which direction you move, accelerate, decelerate, and come to a complete stop.

TIP - Try staying relaxed and focus on finding your center of gravity to maintain full control. 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. The more comfortable you get on the Power Rover, the easier you will maneuver. Remember at higher speeds, it is necessary to shift your weight to overcome the centrifugal force. For bumps or uneven roads, bend your knees.

Step 8: The Dismount - Stepping off of the Power Rover can be one of the easiest steps, yet when done improperly, 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.

NOTE - A common error is to try and step forward.

TIP – make sure to lift your leg completely off to clear the device when stepping back, otherwise you can get sent into a tailspin.

4. Remote Control

4.1 Remote Control

Please notice in your box the Power Rover has a remote control (optional on some models). The function of remote control is to power the device on and off remotely and its maximum operating range is approximately 10 feet.

5. POWER ROVERS SAFETY PRECAUTIONS – MUST READ



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

- 1. Please wear all appropriate safety and protective gear, as previously mentioned in the User Manual, before operating Power Rovers.
- 2. Make sure to wear comfortable clothes and flat closed toe shoes when operating your Power Rover.
- 3. Please carefully read the User Manual, which will assist in explaining the basic working principles and provide tips on how to best enjoy your Power Rover experience.
- 4. Before stepping on your Power Rover, make sure it is placed flat on level ground, the power is on, and the Function/Status light is green. Do not step on if the Function/Status light is red.
- 5. Do not try to open or modify your Power Rover, as doing so will void your manufacturer warranty, and may cause failure to your device leading to serious bodily injury or death.
- 6. Do not use the Power Rover to place yourself or anyone else and their property in danger.
- 7. Do not operate the Power Rover while under the influence of drugs and/or alcohol.
- 8. Do not operate the Power Rover when you are restless or sleepy.
- 9. Use your best judgment to keep yourself out of dangerous situations with your Power Rover.
- 10. Do not ride your Power Rover 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 POWER ROVER IS NOT A SKATEBOARD.
- 11. Do not turn sharply, especially at high speeds.
- 12. Do not continuously spin in place, it will cause dizziness and you will fall and injure yourself.
- 13. Do not abuse your Power Rover; doing so can damage your unit and cause failure to the operating system leading to injury.

SAFETY PRECAUTIONS CONTINUED on the following page......

5. POWER ROVERS SAFETY PRECAUTIONS CONTINUED-MUST READ

- 14. Do not drive in or near puddles of water, mud, sand, stones, gravel, debris or near rough and rugged terrain.
- 15. The Power Rover can be used on paved roads that are flat and even. If you encounter uneven pavement, please lift your Power Rover over and past the obstruction.
- 16. Do not ride in inclement weather: snow, rain, hail, sleet, on icy roads or in extreme heat.
- 17. Do not ride in or near pools or other large bodies of water.
- 18. 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 POWER ROVER. ALWAYS ERR ON THE SIDE OF CAUTION.
- 19. Do not attempt to ride over bumps or objects greater then 1/2 inch even when prepared and bending your knees.
- 20. PAY ATTENTION- look at where you are riding and be cognoscente of the road conditions, people, places, property and objects around you.
- 21. Do not operate the Power Rover in crowded areas.
- 22. Operate your Power Rover with extreme caution when indoors, especially around people, property, and all narrow spaces like doorways, etc.
- 23. Operate your Power Rover with extreme consideration for people and property at all times.
- 24. Do not operate the Power Rover while talking, texting, looking at your phone or distracted by something else, be alert at all times.
- 25. Do not ride your Power Rover where it is not permitted.
- 26. Do not ride your Power Rover near motor vehicles or on public roads.
- 27. Do not climb or travel down steep hills with your Power Rover.
- 28. The Power Rover is intended for use by a single individual, DO NOT attempt to operate the Power Rover with two or more people.
- 29. Do not carry anything while riding the Power Rover.
- 30. Individuals with lack of balance should not attempt to operate the Power Rover.
- 31. Women who are pregnant or who may become pregnant should not operate the Power Rover.

SAFETY PRECAUTIONS CONTINUED on the following page......

5. POWER ROVERS SAFETY PRECAUTIONS CONTINUED-MUST READ

- 32. Young children and the elderly should not operate the Power Rover without proper instruction and supervision.
- 33. At higher speeds, always take into consideration longer stopping distances.
- 34. DO NOT step forward off of your Power Rover.
- 35. Do not attempt to jump on or off your Power Rover.
- 36. Do not attempt any stunts or tricks with your Power Rover
- 37. Do not ride the Power Rover in dark or poorly lit areas.
- 38. Do not ride the Power Rover near or over potholes, cracks or uneven pavement.
- 39. Do not operate your Power Rover off-road.
- 40. Keep in mind that you are approx. 4.3 inches taller when operating the Power Rover. Make sure to go through doorways safely.
- 41. Do not exceed the maximum or minimum weight limits.
- 42. Do not step on the fenders of the Power Rover.
- 43. Avoid driving the Power Rover in unsafe places, including near areas with flammable gas, steam, liquid, dust, fiber, which could cause fire and explosion accidents.
- 44. Follow all of the state, local, and federal laws in your respective jurisdiction regarding operation of the Power Rover or similar products.
- 45. Enjoy your Power Rover safely and responsibly.

6. 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.

6.1 Weight Restrictions

Maximum Weight: 220lbs. Minimum Weight: 70lbs.

6.2 Speed Limits

Maximum Speed in Standard Operating Mode: 12mph

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

7. Operating Range

Please notice the Power Rover can travel a distance of 8-12 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 Power Rover.

- **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 Power Rover under recommended temperatures, which will increase driving distance; battery life, and overall performance of your Power Rover.
- 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.

8. 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 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/amber your battery is under 50% capacity; when the Battery Indicator light turns red, your Power Rover is at less than 10% battery capacity, please stop operating your Power Rover and charge your battery 2-3 hours utilizing the charger that you received in your Power Rovers package. To fully recharge your battery please follow the instructions under Charging your Power Rover.

Battery Specifications

Content	Parameters	
Battery	Lithium Ion Battery	
Charging time	2-3h	
Voltage	36V	
Initial Capacity	2-4Ah	

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%

8. Battery Information and Specifications Continued

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.

- Do not attempt to modify, change, or replace your battery.
- Do not use your Power Rover if the battery begins to emit odor, 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.
- The battery contains dangerous substances, do not open the battery, or insert anything into the battery.
- Please only use the charger provided by Power Rovers.
- Do not attempt to charge the Power Rover 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 lon batteries.
- The Power Rover should only be shipped in its original packaging.
- Do not throw away your box as you need your Power Rovers packaging for future use.

9. Charging Your Power Rover

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 ($100V \sim 240V$; 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 Power Rover. The indicator light on the charger should change to RED, indicating that your Power Rover is now being charged. When the RED indicator light on your charger turns to GREEN, then your Power Rover is fully charged. A full charge typically occurs within 2-3 hours. Do not overcharge the Battery.

Step 4: Please unplug the charger from your Power Rover 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 Power Rover, it could mean you have to check the cables to ensure you have a proper connection; or that your Power Rover 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 Power Rover, as this can be very dangerous.
- Use only the Power Rover charger that you received in your box.
- If the Power Rover is powered on when you enter the plug, the Battery Indicator will begin blinking, if the Power Rover 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.

10. Safety Alerts

During operation, if there is a system error or illegal operation performed with your Power Rover, the system cannot enter self-balancing mode, so the device will prompt the user in a variety of ways. You will notice the Function/Status 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 Power Rover, 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, the Power Rover will power off.
- If the tire is blocked, the Power Rover will stop after 2 seconds.
- When the battery level has depleted below protection mode, the Power Rovers 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 Power Rover engine will power off after 15 seconds.

11. Inspection, Maintenance, and Storage

Your Power Rover 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 Power Rover.

- Disconnect the charger and turn off your Power Rover.
- Routinely check the body of the Power Rover and tires for damage or excessive wear.

- Avoid using water or other liquids and cleaners on the Power Rover for cleaning.
- The Power Rover is IP54 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 Power Rover making sure that water does not get into the power button, charging port, the foot pads, or tires.

Storing your Power Rover

- Fully charge your battery before storing.
- If you are storing your Power Rover for an extended period of time, please fully charge your Power Rover 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 Power Rover into a warmer environment before charging. Check under Battery Information and Specifications for more details.
- To prevent dust from getting into your Power Rover, try wrapping it or sealing it with its original packaging.

Store your Power Rover indoors, in a dry and suitable temperature.

NOTE - Users who disassemble the Power Rover will forfeit their right of warranty.

12. Power Rovers Specifications and Packing List

Net Weight: approx. 22 lbs.

Load: 70-220 lbs.

Maximum Speed Limit: 12 mph

Range: 8-12 miles

Max Climbing Limit: 15°

Turning Radius: 0°

Battery: Lithium-ion

Power Requirement: AC100-240V/50-60 HZ

Dimensions: 23in*7.3in*7 inches

Ground clearance: 1 inch

Platform height: 4.3 inches

Tire: Non-pneumatic hollow tire

Battery voltage: 36 V

Battery capacity 4.4 AH

Packing List

Number	Product Name	Quantity
1	Power Rovers	1
2	Charger	1
3	Remote Controller	1 (optional)
4	User Manual	Online

13. Thank You

Thank you for purchasing from Power Rovers, and thanks 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 Power Rover for years to come. We appreciate your consideration and sincerely hope you enjoy and share your Power Rovers experience with all of your friends, family members, and loved ones.

THANK YOU AND ENJOY YOUR POWER ROVER!

~Team Power Rovers