INMOTION

Electric Unicycle V11 User Manual

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INMOTION

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1 About this manual

For your safety, and to make sure you're able to drive it correctly, please read this manual carefully before driving, and fully understand all the warnings and precautions listed in this manual.

To obtain the latest info about the features/functions and safety guidence, please download the user manual in digital version from the official website. www.inmotionworld.com

2 Product Overview

V11 is an electric unicycle with 18 inch wheels, powerful motor, intelligent BMS, dual-chamber air-spring suspension and other remarkable features and functions, (hereinafter referred to as V11 unicycle). Based on the principle of dynamic balance, the change of the unicycle's posture could be detected by the built-in gyroscope and acceleration sensor. Meanwhile with the servo control system, driver is able to make the below driving operations by leaning forward or backward, such as moving forward, acceleration, deceleration, braking and others.

2.1 Serial Number

The Serial number (hereinafter referred to as S/N) is the unique ID to each unit of the product, which could be used for the quality tracking, repair, insurance compensation, loss confirmation, etc. And the S/N is a 16-character number could be obtained from the following locations, such as package, the body of unicycle.

2.2 Packing list

Please double check all the components inside the package, and consult with your point of purchase if any parts lost.

User manual

Accessories

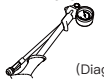
wrench*2

wrench*2

Extend air valve

charger

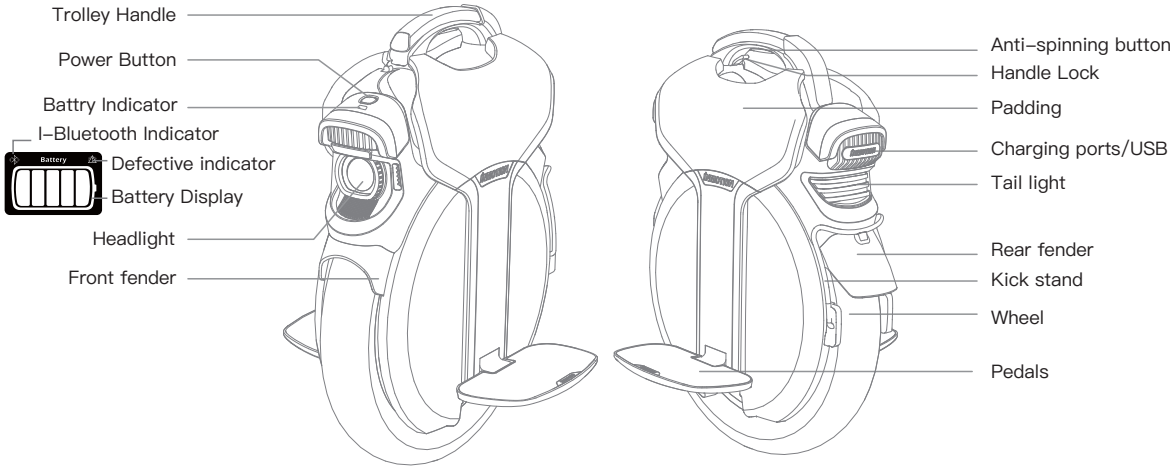
Inflate



(Diagram for your reference)

Warnings: Do not dis-assemble or modify the unicycle without permission from manufacturer, otherwise it may cause irreversible damage to the body of unicycle, even personal may injury by this.

2.3 Components



2.4 Features and Functions

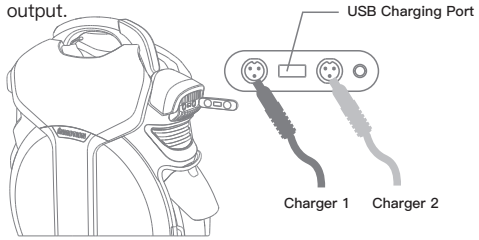
Power on/off: Long press the button to power on/off.

Headlight: Under the status of power on, one more click the button to light on/off. The headlight could be light off on INMOTION App.

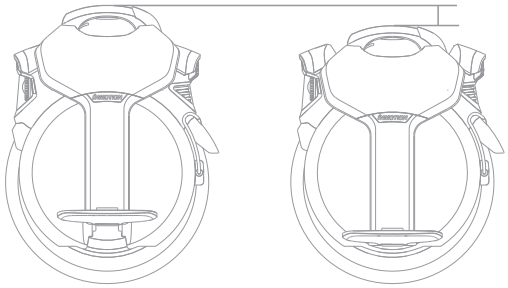
Taillight: Always on while riding, and blink when braking.

Anti-spinning button: At the static status, the motor stops running when hold the Anti-spinning button.

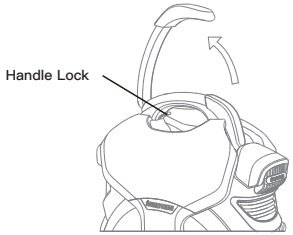
Charging: The original charger is DC 84V/2.5A. The indicator of the charger is red/green, mean on-charging/charging completed. With two chargers working together, the charging time will be 50% cut off. The USB port could be used for power output.



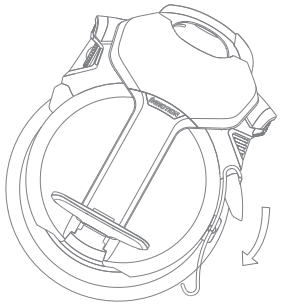
Suspension: The shock absorption will be supported by two built-in Air-spring refilled the air into the spring before use. Refer to Chapter 3.1 on page 6.



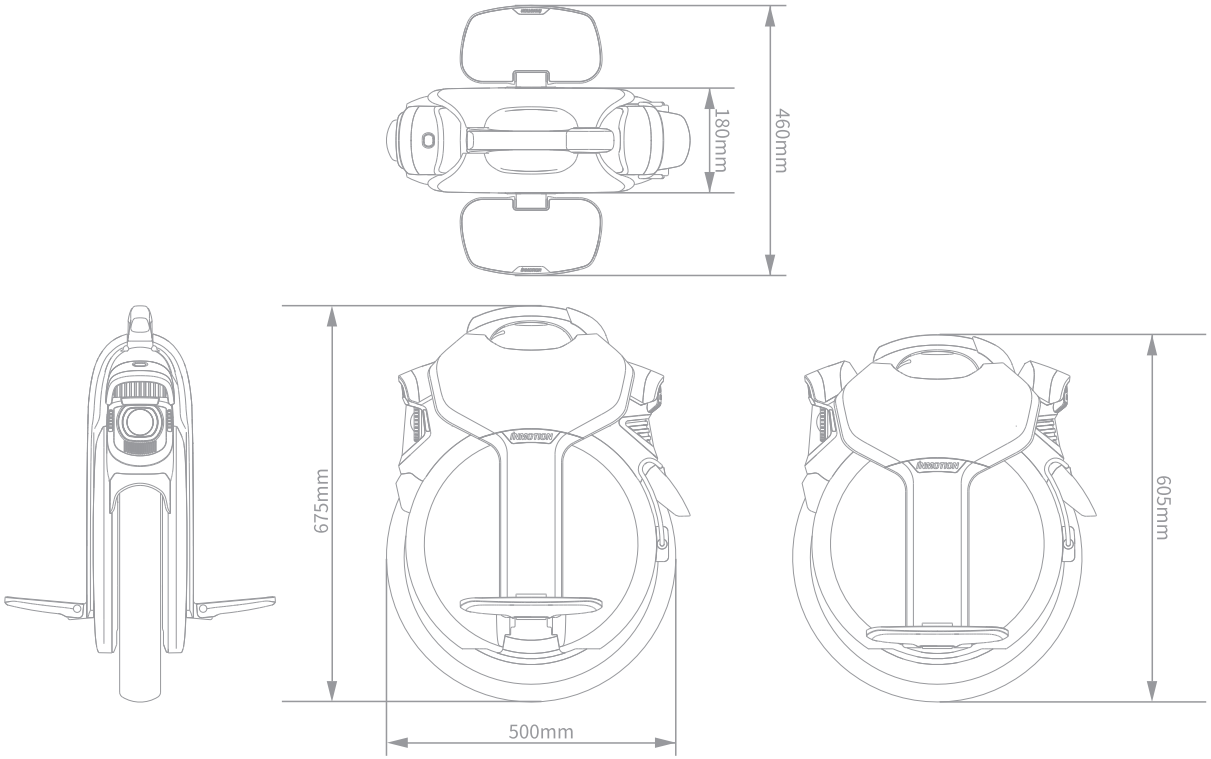
Trolley Handle: Press the unlock button under the Trolley handle to unfold it; when the Trolley handle is not in use, hold the lock button under the Trolley handle to fold.



Kickstand: Turn down the kickstand to park the unicycle.



2.5 Dimension



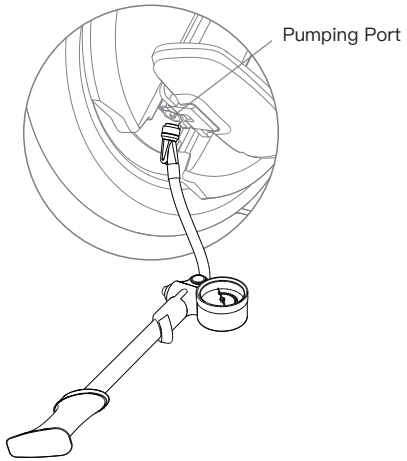
2.6 Specification

Specification		Parameter
Size	Dimension	500*180*675mm
Weight	Max.of Payload	120kg
	Net weight	Approx. 28kg
Requirement to rider	Age	16+ Years
	Height	120 ～200cm
Performance	Max.of Slope	35°
	Working Temperature	-10°C~+45°C
	Storage Temperature	-20°C~+45°C
	IP Rating	IP55
Battery	Rating Voltage (VDC)	74V
	Max. of Capacity	1500Wh
	Intelligent BMS	Capacity Equalization/overcharge/under-voltage overheat protection
Motor	Rating Power	2200W
	Max. of Power	4400W
Charging	Input Voltage (VAC)	100~240VAC/50~60Hz
	Output Voltage (VDC)	Approx. 84V
	Current	Approx. 2.5A
	Certificate	CE,FCC,ETL
	Charging time	Approx. 8h
Indicator	Remaining power (5 grids)	

3. How to use

3.1 Refill the Air-spring

Check the weight-barometer, and refill the air chamber with the manufacturer-provided inflator. The inflating position is at the bottom of the pedal.



Weight-barometer

Weight	Air pressure
Under 50kg (50kg included)	40~60psi
60~70kg	60~80psi
70~80kg	80~120psi
80~90kg	120~130psi
90~100kg	130~150psi
100~120kg	150~170psi

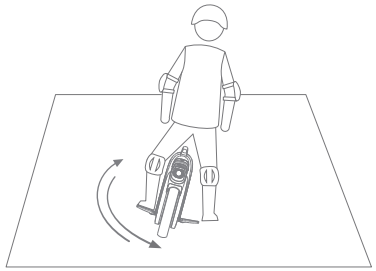
3.2 Install the App

Inmotion V11 unicycle supports Bluetooth 5.0 LE, the BLE ID is: V11-XXXXXXXX, where XXXXXXXX is the last 8 digits of S/N. Install Inmotion App on your mobile device (iOS 8.0 and above or Android 4.4 and above), and follow the prompts to connect your unicycle.
More functions in details, please check on the official website to download the manual of the latest version of Inmotion App.

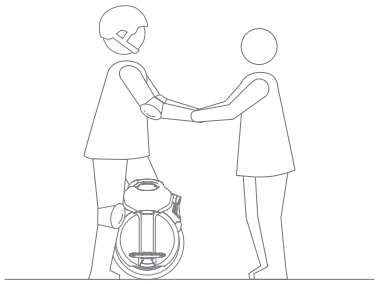
Scan to download

3.3 How to ride

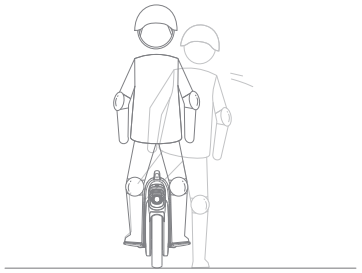
Before driving, please take all safety measures, such as: wearing sports clothes, helmets, knee pads, elbow pads and other protective tools.



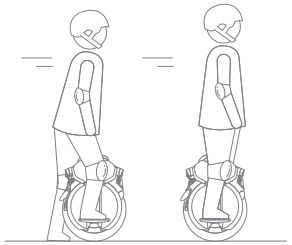
1. Put one foot on the pedal, glide forth and back.



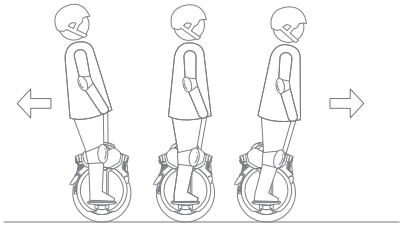
2. One foot on pedal, keep your body upright, and gradually move up your center of gravity onto unicycle.



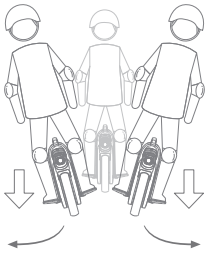
3. One foot on pedal,try put the other foot off the ground for 1–2 seconds.



4. One foot on pedal, and the other foot pedals backward and glides.



5. Put your feet on each pedals, control your center of gravity to move forward and backward.



6、Press the pedals with feet by different force to make a turn.

4. Care and Maintenance

4.1 Storage

Please store the unicycle V11 in a dry and indoor location with, proper temperature and humidity. If you do not use unicycle for a long time, please recharge the battery at least once a month.

4.2 Battery Maintenance

•Do not put the battery at the environment with high temperature over 50°C or low temperature below –2°C (for example, do not put V11 or its battery in a car exposed under strong sunshine in summer). It's prohibited to throw the battery into fire, Otherwise which may lead to battery failure, overheating, even a risk of fire. For other maintenance precautions, please refer to the label on battery.

•Avoid the battery be exhausted completely before recharging. It's recommended to recharge before using, which could greatly extend the battery life.

•Under the regular temperature, the battery could perform a higher milerage; and under the environment below 0 ° C, the battery life and performance will decline.

•Typically, under the environment –20°C, the milerage may be only half or less than under the regular temperature. After the temperature rises, the mile range will be restored. For details, please refer to the remaining mileage displayed in the App.

Tips: The battery of V11 will be used up after about 120 to 180 days in standby status even it was fully charged. If the battery is not recharged in time, the battery may be damaged by over–discharged and this will be unrecoverable. There is a smart chip inside the battery to record the number of charging and discharging. The damage caused by long–term non–charging is not covered by warranty.

⚠ Warning：Please don't dis–assemble the battery without authorization, otherwise some serious safety accidents may caused by electric shock or short circuit.

4.3 Inflate and replace the inner/outer tires

If the air pressure of V11 tires is insufficient, please inflate in time. The default value for unicycles is 2.8Bar.

4.4 Cleaning and reminding

•Before cleaning, please make sure the unicycle be powered off, unplug the charging cable, and close the charging port. Keep the charging port be dry always.

•Wipe the outer case of V11 by a soft cloth with soapy water or clean water. It is forbidden to wash V11 by using a high-pressure water gun.

•The IP rating of V11 is IP55, do not immerse the V11 into water, some permanent damage would caused by this.

Tips: Do not cleaning the unicycle parts with alcohol, gasoline, medium oil or other corrosive and volatile chemical solvents, otherwise the appearance and internal structure might be seriously damaged.

4.5 Cleaning and reminding

For your safety and good driving experience, we suggest all users to strictly in accordance with the following requirements：

1. Please read carefully and fully understand the User Manual before driving.
2. Please do not allow people under the age of 14 to drive.
3. The pregnant women and persons with physical or psychological are forbidden to drive this unicycle.
4. Do not drive the unicycle while being sick or taking medicine or drinking, or if the physical or mental state is not good.
5. The unicycle is for single rider. Two or more persons are prohibited from driving on the unicycle at the same time, and it is not allowed to drive the unicycle with children on hold or carrying heavy goods.
6. Before driving, please make sure you have sufficient physical and mental conditions to get on/off from the unicycle and control it without assistance..
7. Do not modify or repair the unicycle without authorization .
8. Please make sure there is no any loose, damaged, faulty parts or other abnormal conditions before driving.
9. Before recharging the unicycle, please make sure the charging port be dry, trouble-free, and no foreign matter. Insert it into the correct charging socket, and avoid approaching by children and pets, and keep it away from flammable objects.
10. The battery of unicycle must be placed in an environment between -20°C and 45°C. Do not recharge and use it under the environment out of range -20°C ~ 45°C.
11. Please stop using it immediately and avoid any objects approach if the battery is deformed (including damage, odor, smoke or overheating).

12. It is forbidden to try to open or disassemble or do any abnormal operation to the battery.
13. Due to different battery conditions and environmental conditions, after fully charged (5 grids of remaining power displayed), the standby time of V11 is up to 180 days. While 1 grid remaining power displayed, the maximum standby time is 30 days. Please pay attention to the remaining power, to prevent irreversible damage to the battery caused by untimely recharging.
14. Do not wear inappropriate shoes (high heels) or clothing to drive the unicycle, make sure to wear the professional protective gear on driving.
15. It is strongly recommended to wear protective glasses on driving to prevent the damage to your eyes caused by dirt, dust or insects in the air and the other possible adverse effects.
16. It is forbidden to driving the unicycle on heavy rainy weather and other inclined roads. The resistance to tires is reduced on the wet or slippery road, and the braking distance increased, the slip or accident may be easily caused by this, including loss of control
17. It is forbidden to drive the unicycle in bad weather, low visibility, poor light, and other adverse environments. Please do not drive the unicycle while you're extreme fatigue.
18. On driving, please pay attention to the changes in the road surface or surrounding environment in time, and avoid being harm to yourself or others.
19. Do not drive in unsuitable road conditions and environments such as stairs, elevators, or revolving doors.
20. On driving, please pay attention to the distance between the unicycle/your body and the obstacles.
21. Please do not take the risks when you encounter steep slopes, uneven road sections or other terrains that you have not encountered before.
22. Do not make a turning at the high speed, and do not brake suddenly on smoother roads. The dangerous situation (such as skidding) may easily be caused by these behaviors mentioned above.
23. It is forbidden to answer the phone or do any activities or behaviors that may distract you while driving the unicycle so that you can focus on monitoring the external environment at any time.
24. Unicycle is a personal transportation product for short-distance, and it is forbidden to use it to carry any goods or other improper purposes.
25. The data and parameters of the unicycle may be different according to the different models. please forgive that we may not inform the user if any change in parameters.

5. Legal Notices

5.1 Personal Information Statement

1. The personal information includes what you voluntarily entered when you connected to the unicycle with Inmotion App (hereinafter referred to as APP) to bind the devices and you're voluntarily provided during using the product. Personal information, including but not limited to your name, gender, age, address, contact information, occupation, and time and place of using our services.
2. While using the APP, your personal information provided on the procedure of owner verification, product serial number activation, questionnaire, after-sale tracking, events to collect the suggestions to the related products or services, will be helpful to us to provide you with better products and services and improve your user experience.
3. You reserve the right not to provide personal information, however, this may let us be unable to provide you with better product functions and services, or even affect your use of our products and services.
4. Under any of the following conditions, you agree that we may provide your personal information to relevant third parties:
(1) After your special authorization;
(2) Comply with the mandatory requirements of the relevant laws or government agencies (including judicial agencies);
(3) Enforce available service terms (including investigation of possible violations);
(4) For the purpose to deal with fraud, security or technical issues;
(5) To protect the rights, property or safety of users or the public from damage to the extent required or permitted by law;
(6) In special and/or emergency situations.
5. The use, transmission, and storage of your personal information include electronic data, and the aforementioned behavior may be located within or outside China.
6. For your better user experience, you fully agree that Inmotion and its affiliates may occasionally push information about products and services to you.
7. For the security of your personal information, we will take reasonable and safe measures to protect it from unauthorized disclosure and use. And you agree that Inmotion will decide how long to store and retain your personal information according to the time required for the specified purpose or any agreement, laws, and regulations.

8. You agree to waive all claims, liabilities, and losses caused or probably to be caused by the disclosure or use of your personal information in accordance with this legal statement by receivers and/or users such as Inmotion and/or affiliates Claims, liabilities and losses are caused by the direct intentional acts or gross negligence of the recipient and/or user.

5.2 Intellectual Property Statement

1. Unless otherwise stipulated by laws and regulations, or otherwise stipulated in the agreement, Inmotion has intellectual property rights (including but not limited to the copyright, trademark rights, patent rights, and their application rights, implementation rights related to products and their accessories, APPs, and websites, Permission, etc.) All rights are reserved. Without the prior written consent of Inmotion, no illegal use or any other punishment shall be allowed.
2. This legal statement applies to the laws of the People's Republic of China.
3. For all claims, responsibilities, and losses caused by consumers or any third party in violation of this legal statement, Inmotion shall not be liable for any compensation.
4. This legal statement constitutes an inseparable statutory part of Inmotion's products.
5. You can choose to accept all the terms of this legal statement and use Lexing Tianxia products. If you use Inmotion products, you are deemed to agree to accept all the terms of this legal statement and bear any possible risks and responsibilities.

6. Warranty

For warranty policy, please consult with the point of purchase or email to the manufacturer's service team: service@imscv.com.
Again, we appreciate your purchasing of Inmotion products.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution

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

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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