

# Ninebot One S2 User Manual

Due to technology upgrading and firmware update, functions of the real product may differ slightly from those described in the User Manual.  
For latest product functions and safety instructions, please download the Ninebot app and refer to the electronic manuals in the app.

[www.ninebot.com](http://www.ninebot.com)

**ninebot one** 

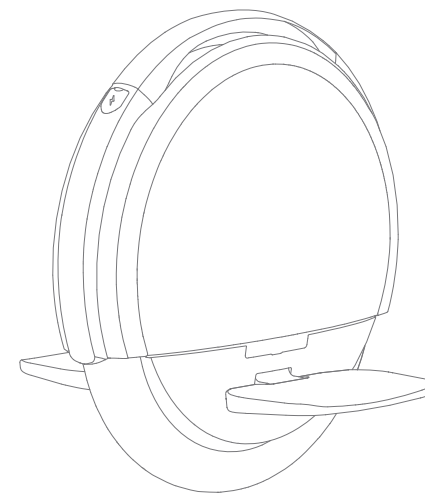
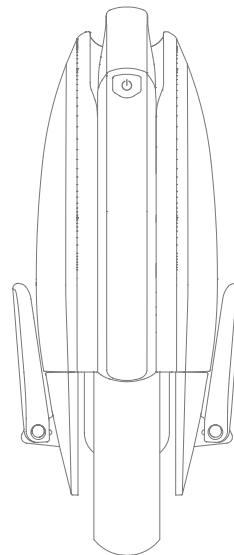
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## Welcome!

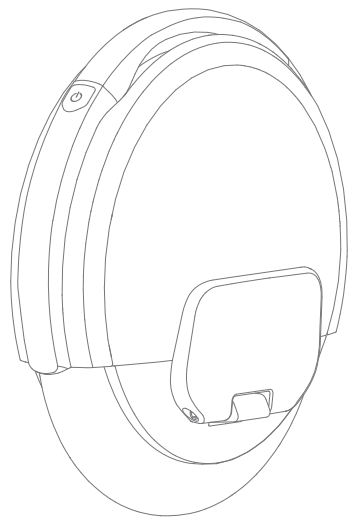
Thank you for choosing Ninebot One® S2. Ninebot One S2 is a portable smart electric self-balancing vehicle and a leisure device as well.

Enjoy the fun of riding Ninebot One S2!

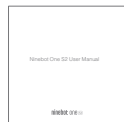


# 1 Product and Accessories

Vehicle body



User Manual



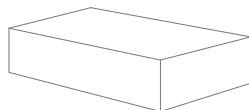
Legal Statement



Tip Card

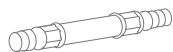


Accessory box x 2

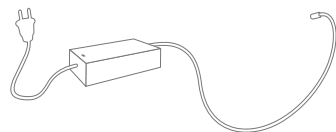


Accessories in the box

Extended nozzle

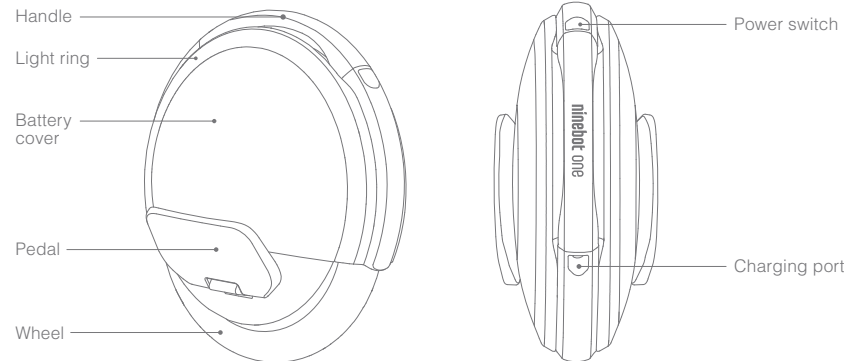


Quick charger

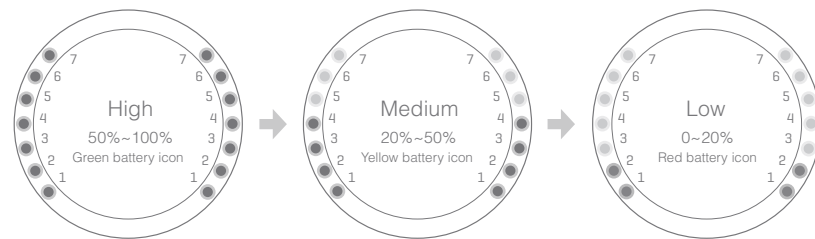


Please check whether the items in the box are complete and intact. If any item is missing or damaged, please visit the official website <http://www.ninebot.com>

# 2 Schematic Functional Diagram



Battery level display



The battery level is displayed only when the vehicle is still.

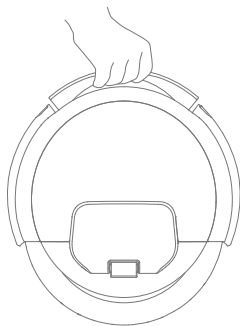
Each cell of the battery level represents 13% of electricity consumption. The change of light from green to yellow indicates the decreasing of remaining power, and the flashing red battery icon indicates that the power is going to run out - please charge the battery before use.

You can view a more accurate remaining battery level and an estimated mileage in the Ninebot app. When the battery level is less than 30%, the speed will be limited gradually; when the battery level is less than 20%, the speed limit will be 12 km/h; when the battery level is less than 10%, the speed limit will be 4 km/h.

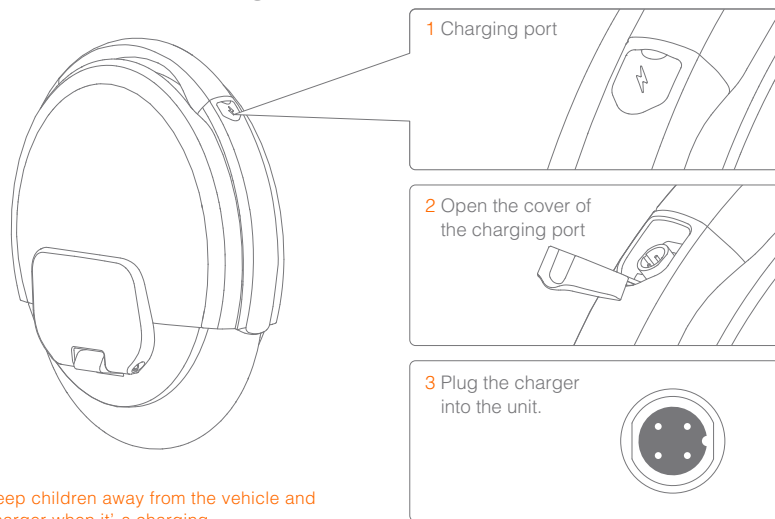
## Portable mode


The Ninebot One S2 is set to portable mode when the vehicle is delivered. If you lift the handle when the vehicle is powered on, the wheels will stop turning. The vehicle will run normally when you reset the handle.

You can switch off portable mode on the phone app. If you do, do not lift the handle when the vehicle is powered on, or the wheels will still turn and may cause injury.



## 3 Connection of Charger



 Keep children away from the vehicle and charger when it's charging.

## 4 First Use



You need a smart phone running Android or iOS to download and install the Ninebot app. After watching the safe driving instructional video and completing the training for beginners, you can start using the vehicle. Search for Ninebot in an Android market or Apple's App Store, or scan the QR code on the left to download the app.

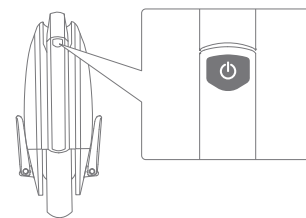
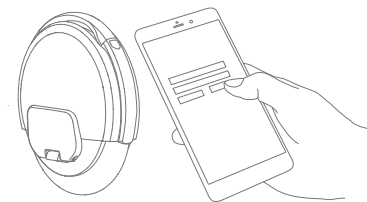
[Scan here to download and install the app.](#)

1 Download and install the app, register or log in, and power on your vehicle.

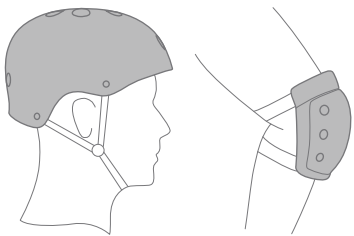
2 Ensure the vehicle is safely balanced, and perform a power-on and off test.

**For your safety, your new Ninebot One S2 is not activated, and the speed and sensitivity are set to low. You must install the app and follow the instructions to activate the vehicle before use.**

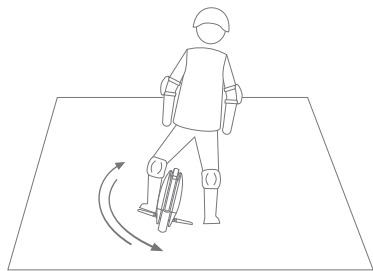
3 Click Find Device to connect to the Ninebot One S2. You will hear a beep to indicate successful connection. The phone will then display the connected icon and data about the vehicle. After a successful connection, follow the instructions on the app.



## 5 Learning to Ride



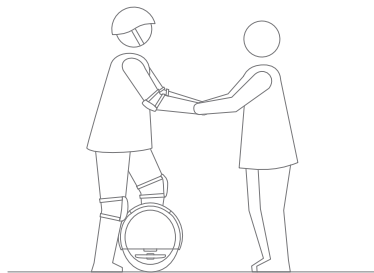
Wear a helmet and other protective gear to prevent injury if you fall when you learn to ride the Ninebot One S2, as shown in the picture.



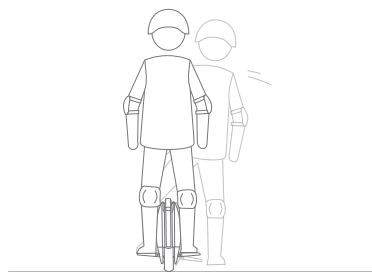
1 Put one foot on the pedal, and move the vehicle back and forth.

After the Ninebot One S2 is activated, the app will prompt you to enter the beginner tutorial. Please follow the instructional videos or directions below before riding the vehicle.

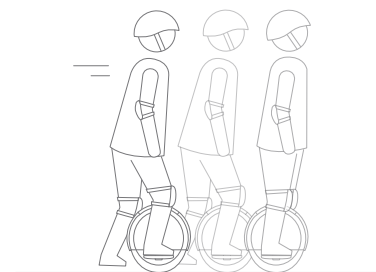
For your safety, the Ninebot One S2's speed is limited to **4 km/h** before it's activated. After it's activated and before the beginner tutorial is completed, the speed is limited to 7 km/h. After the beginner tutorial is completed, Ninebot One S2's speed will be limited to **12 km/h**. After you've ridden a total distance of 1 km, the speed limit will automatically be removed.



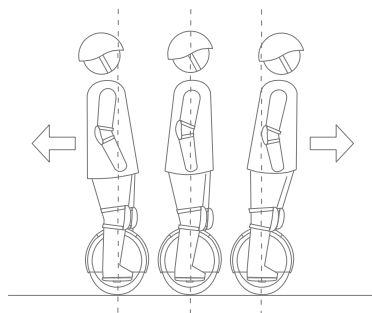
2 Place one foot on the pedal, keep your legs and body upright, and gradually move the center of your body weight up.



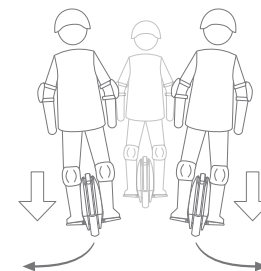
3 Place one foot on the pedal, raise the other off the ground for 1-2 seconds, and slide forward.



4 Place one foot on the pedal, push the other foot down on the ground, and slide forward.

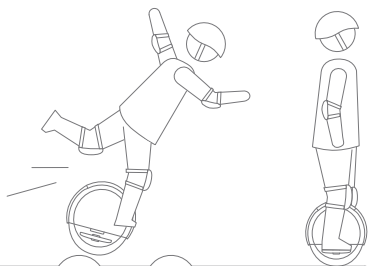


5 Place both feet on the pedals and direct the vehicle by adjusting your center of gravity.

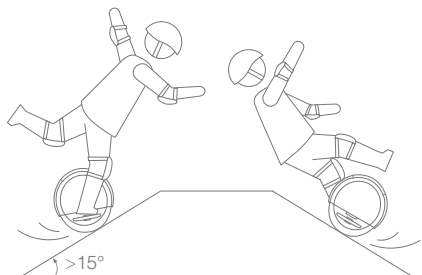


6 Turn by shifting your weight onto one foot.

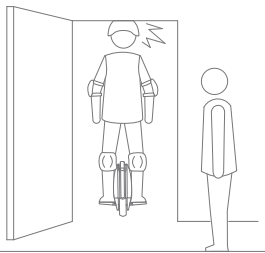
## 6 Potential Safety Hazards



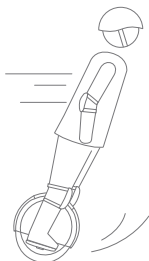
- ⚠️ If you ride through a braking zone, curb, or on rugged surfaces, do not suddenly brake to a stop or speed up, because you may skid. Ride at a medium speed, between 3 and 10 km/h, and bend your knees slightly.



- ⚠️ Do not ride the Ninebot One S2 on slopes above 15 degrees; otherwise, you may fall due to insufficient power of the vehicle.

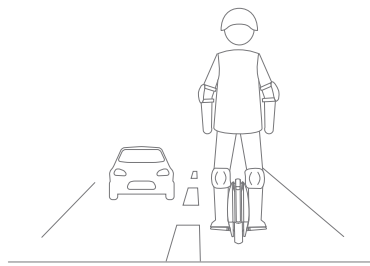


- ⚠️ Watch out the door frame, ceilings and elevator exit etc.

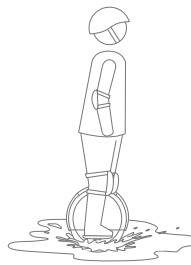


- ⚠️ Do not rapidly accelerate or decelerate.

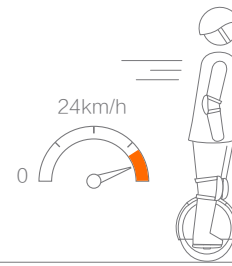
## 7 Forbidden Maneuvers



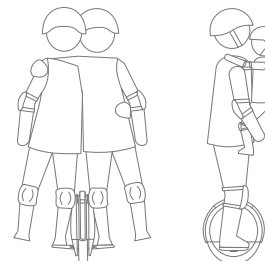
- ⊗ Do not ride the Ninebot One S2 on motorways or in residential areas where there are moving vehicles and people.



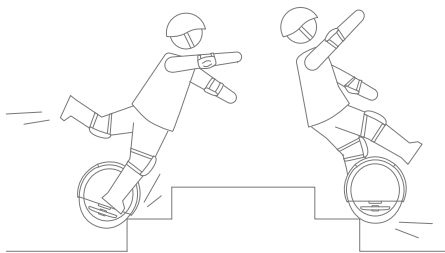
- ⊗ Do not ride the vehicle through water deeper than 3 cm.



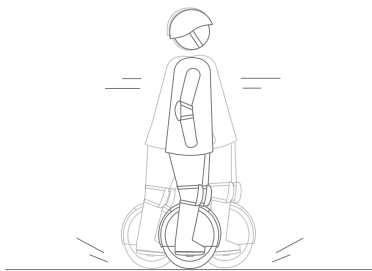
- ⊗ If you go too fast or if power is low, the pedal will gradually tilt and give an alarm. Do not speed up in this case.



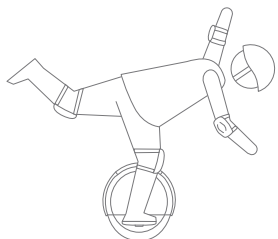
- ⊗ Do not carry a passenger or child on the vehicle.




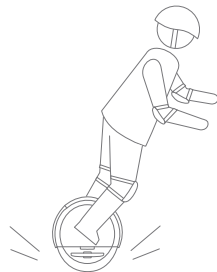
 Do not ride Ninebot One S2 on stairs or escalators.




 Do not accelerate quickly or rock the vehicle back and forth.



 Do not ride the vehicle standing on one foot.



 Do not jump while riding the vehicle.

## 8 Safety Instructions

- Ninebot One® S2 is a leisure device. In public areas, it is considered a means of transport with the same risks that other types of transport have. Follow the instructions to protect yourself and others.
- You need to understand that, in public roads, you are subject to risks caused by misconduct or improper operations of other vehicles or drivers even if you fully comply with these instructions. Note that your braking distance increases the faster you' re going and that you can pose a hazard to pedestrians and cyclists. Be careful that you don' t slide and lose control on smooth surfaces. Be vigilant, ride at a sensible speed, and keep a safe distance from other vehicles. Be vigilant and ride slowly in unfamiliar areas.
- Respect pedestrians' right of way. Do not scare pedestrians, especially children. When you' re behind someone, slow down and give a verbal warning if necessary before passing them. Pass pedestrians on the left side in countries where vehicles drive on the right. When someone is approaching from the opposite direction, keep to their right and slow down.
- Strictly follow the safety requirements specified in this user manual if the country where you are does not have national standards or regulations on electric self-balancing vehicles. Ninebot Inc. will not assume any liability for accidents, injuries, deaths, disputes, conflicts of interest, or property losses that arise from your violation of this user manual.
- Do not let anyone ride the vehicle if they haven't been trained to. To teach a friend how to use the Ninebot One S2, set the vehicle into teaching mode for beginners on the app. Instruct your friend to wear protective gear and explain the safe riding guidelines. You can also watch or download the instructional video by scanning the QR code on the label of the pedal or on the tip card.
- Perform a basic check on the Ninebot One S2 before each ride. Check for loose parts, punctures or tire wear, and abnormal noises or faults when steering. Stop or do not use the device if you find a fault. Use the app for troubleshooting. Contact the official customer service or your distributor for maintenance services.

## 9 Daily Maintenance

### Cleaning and Storage of the Ninebot One S2

Wipe away stains with a soft cloth dipped in water. For stubborn stains, use a toothbrush and toothpaste, and then clean with a wet cloth. Use sandpaper or a similar abrasive material to smooth scratches on plastic parts.

**Tip:** Do not use alcohol, gasoline, kerosene or any other corrosive or volatile chemical to clean the vehicle or you risk damaging its appearance and parts.

Power off, unplug, and close the charging port when you clean the vehicle to avoid electric shocks and water damage. Do not use a high-pressure water gun to clean the vehicle.

Store the vehicle in a cool, dry place indoors if you're not going to use the vehicle for some time. Don't leave it outdoors. Exposure to excessive sunlight or extreme temperatures may affect the vehicle's appearance, battery life, and tires.

### Maintenance of Ninebot One S2's Battery

Do not place the battery in an environment where the ambient temperature is higher than 50°C or lower than -20°C, e.g., **in a car in summer**. Do not expose the battery to fire. Check the nameplate on the battery pack for more battery maintenance details.

To extend the battery's life, charge it frequently and do not let it go flat. At room temperature, the battery pack gives better mileage and performance. Both will decline at sub-zero temperatures. At -20°C, the battery mileage will be halved or worse. At normal temperatures, the battery mileage will return to normal. You can refer to the mileage displayed on the app for details.

**Note:** A fully-charged Ninebot One S2 can remain in standby mode for about 120 to 180 days. After that, over discharge will occur and the battery may be damaged. This damage is irreversible. Note that a smart chip is embedded in the battery that records when it's charged and discharged. If the battery is not charged for long time and get the irreversible damage aforesaid will void the warranty. (Note: Do not disassemble the battery pack, or you may be seriously injured.)

## 10 Specifications

Performance Indicator	Item	Parameters of Ninebot One S2
Size	Vehicle size (mm)	448*419*182
	Max. load (kg)	120
Quality	Net weight (kg)	11.4
	Age range (years)	16 - 50
Riding requirements	Height range (cm)	120 - 200
	Max. speed (km/h)	24
Main parameters of the vehicle	Standard mileage[1] (km)	Approx. 30 (Mileage varies with the user's weight, the environment, the temperature, road conditions, and so on.)
	Max. slope	Approx. 15°
	Beginner mode	Yes. The beginner mode is automatically deactivated after cumulatively riding 1 km. You can reactivate beginner mode on the app.
	Applicable terrains	Hard road surfaces, flat dirt roads, slopes under 15 degrees, steps no higher 3 cm, and trenches no wider than 3 cm.
	Operating temperature	-10°C - +45°C
	Storage temperature	-20°C - +45°C
	Waterproof grade	IP54 (waterproof in light rain)
Parameters of the battery pack	Rated voltage (VDC)	54.3 ---
	Max. charging voltage (VDC)	63 ---
	Rated capacity (Wh)	310
	Smart BMS	The vehicle powers off when any of the following alarms is activated: balance, overcharge, undervoltage, and overheating. The app shows the battery's status.
Parameters of the motor	Rated power (W)	500
	Max. power (W)	1000
	Safety certification	CCC, CE
Parameters of the standard charger	Rated power (W)	120
	Rated input voltage (VAC)	100~240VAC/50~60Hz
	Rated output voltage (VDC)	Approx. 63 ---
	Rated current (A)	Approx. 1.9
	Safety certification	CCC,CB,CE,FCC,PSE,UL
Charging duration (H)		Approx. 3
	Display panel	Ring type display panel on both sides, with 14 x 2 independent RGB LEDs, battery level display, and customized lighting.

[1] Standard mileage refers to full power, a load of 70 kg, a temperature of 25°C, and an average speed of 15 km/h on a flat road surface. Note: The data and parameters vary with model. They are subject to change without notice.

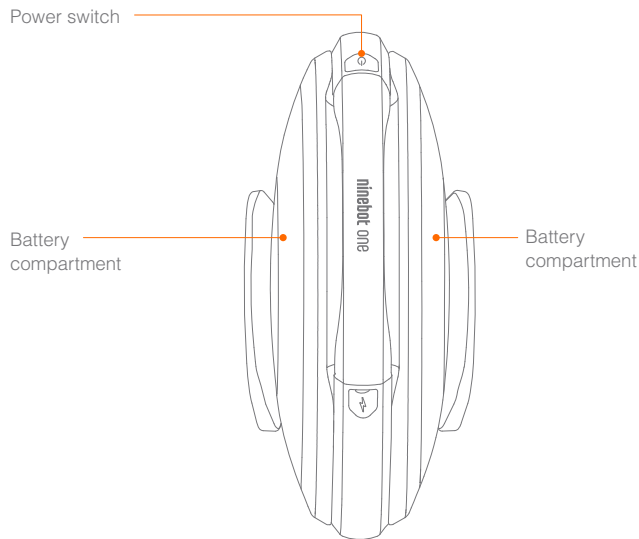


## 11 Removing Battery Pack

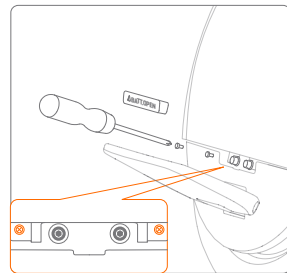
The standard Ninebot One S2 (with a capacity of 310 Wh) has two battery packs, one on either side. You can remove one battery pack to limit speed and mileage, and reduce the weight of the Ninebot One S2. Removing one pack limits the speed to 18km/h, the mileage to around 15km, and the weight of the vehicle to about 10.5kg.

(Mileage will vary with the user's weight, temperature, road conditions, and so on.)

**⚠** Removing a battery pack can be dangerous. Turn to our after-sales service or your distributor and do not attempt to remove the battery back by yourself.

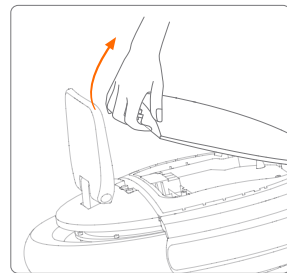


① Open the soft rubber plug.



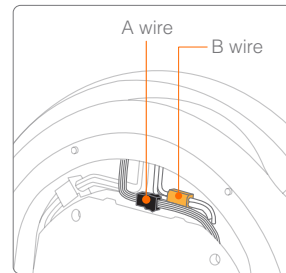
After powering off the vehicle, open the soft rubber plug on the left side of the vehicle (as shown in the figure, above the pedal), and unscrew the Philip's screw on both sides

② Open the battery cover.



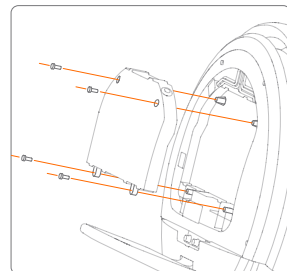
As shown in the figure, use your finger to open the battery cover from the bottom up using the gap in the middle. Use a screwdriver if necessary.

③ Untie the battery wires.



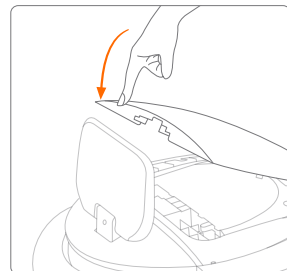
Release the black A wire first, and then release the yellow B wire. To do so, pull the plug firmly, but don't pull on the wire directly or you may damage it.

④ Remove the screws.



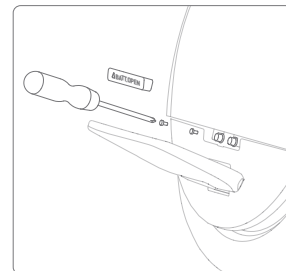
When unscrewing the four screws in the four corners of the battery, do not press too hard because you may damage the battery.

⑤ Install the battery cover.



As shown in the figure, push the top snap into place first, and then press the housing.

⑥ Fix the screws and the soft rubber plug.



Tighten the screws, and install the soft rubber plug.

## 12 Trademark and Legal Statement

九号单轮®, NinebotOne®, 九号机器人®, Ninebot®, 九号平衡车®, 纳恩博® are registered trademarks of Ninebot (Tianjin) Technology Co., Ltd. and its affiliated companies (hereinafter referred to as Ninebot Inc.). Ninebot Inc. reserves all rights to 纳恩博®, 九号机器人®, 九号平衡车®, Ninebot® and the 9® character icon. Other trademarks mentioned herein may be registered trademarks of their respective owners.

Ninebot Inc. owns the patents for the Ninebot One S2 series. Ninebot Inc. has prepared this manual and owns the copyright. Without the written consent of Ninebot Inc., no organization or individual shall copy or distribute all or any part of this manual or use Ninebot Inc.'s patents.

This manual, at the time of printing, describes all functions and instructions as far as possible. However, due to constant improvement in product features and changes in design, there may be discrepancies between the product described here and what you've purchased. Please scan the QR code on page 5 to download the app for Android or iOS, and read the latest e-version of the manual. In addition to Ninebot One S2, there are several other models and series of Ninebot with different functions. Some functions mentioned in this manual may not be applicable to your other Ninebot products. Due to product updates, the product described in this manual may differ from yours in color and appearance.

### Manufacturer

Ninebot (Tianjin) Technology Co., Ltd.

Address: No.11 Tianrui Road, Automobile Industrial Park, Wuqing District, Tianjin

Performance standard for the product: Q/12WQ5442-2016

## 13 Warranty Policy

### Warranty Clauses (applies to countries or regions other than the Chinese mainland)

- These warranty clauses are applied to global users of Ninebot One S2 to the maximum extent permitted by law. If there is any discrepancy between these warranty clauses and the local laws and regulations, the latter shall prevail.
- The warranty clauses apply only to products purchased or leased from Ninebot Inc. or its authorized distributors.
- The warranty period starts from the date of activation or day 60 corresponding to its serial number if the activation date cannot be confirmed.
- On the confirmation of Ninebot Inc. or its authorized distributor, you can return, replace, or have the vehicle repaired if it becomes faulty within seven days of purchase.
- On the confirmation of Ninebot Inc. or its authorized distributor, you can replace or have the vehicle repaired if it becomes faulty within 15 days of purchase.
- You must provide complete packaging and accessories if you return the vehicle.
- For a replacement, the packaging and accessories will not be replaced; e.g., the charger and the battery assembly. The warranty for the replacement will start on the date you receive it
- Ninebot Inc. and its authorized distributors provide paid services for faults outside of the warranty or scope of service. Please consult your local distributor for details.

## Warranty Policy

Type	Content	Duration
Vehicle body	Controller, motor, handle frame assembly	1 year
Batteries and charger	External charger, battery assembly	180 days
Quick-wear parts	Inner tubes and cover tires, battery cover, ring lamp shades, pedal assembly, main housing, LED lamp band	90 days
Accessories	Extended nozzle and other accessories	30 days

## Non-Warranty Clauses

- Damage from improper use or maintenance or adjustments that do not comply with the User Manual.
- Products that are out of warranty or scope.
- Failure to fill out the warranty card as required or incorrect information on the warranty card.
- Damage caused by force majeure or human activity; e.g., a fire, exposure to liquids, freezing, earthquake, dropping, or oxidation.
- Damage caused by overloading, obstacles out of the accepted scope, or extreme sports.
- Disassembly or repairs by unauthorized personnel.
- Intentionally damaging the vehicle or modifying product information.
- User-attributable damage, including transportation, loading and unloading by a user-appointed forwarder.
- Other failure or damage not caused by the product's design, manufacture, installation, or quality.
- For more details of after-sale services, please consult the distributor in your country or region.

## 14 After-sales Service


If you have any question on riding, maintenance, and security, you may visit the website of Ninebot Inc. to ask any questions or inquire about repairs.

### Contact Us

Tel: +86-010-84828002 (Only in China Mainland) Fax: +86-010-84828002-800

E-mail: sales@ninebot.com (Inquiry) Service@ninebot.com (After-sales Service)

Official website: www.ninebot.com

 Ninebot reserves the right to modify the terms herein at any time. Ninebot will publish any such changes on its website. The modified terms and rules shall enter into force upon publishing and become part of this manual.

 Affix the barcode here.

## IC Radiation Exposure Statement for Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

### IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with “Industry Canada RSS-102 for radiation exposure limits set forth for an uncontrolled environment”.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

**Déclaration d'exposition aux radiations:**

**Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.**

### **Federal Communications Commission (FCC) Interference 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 generate, 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 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.

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

### **RF exposure warning**

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