



SHENZHEN MAGIC WHEEL TECHNOLOGY CO., LTD.



B708-A9, 7/F, Yousong Technology Building, No. 108, Donghuan First Road, Songhe Community, Longhua District, Shenzhen, China



<https://ausomstore.com/>



[support@ausomstore.com](mailto:support@ausomstore.com)

Hereby, SHENZHEN MAGIC WHEEL TECHNOLOGY CO., LTD. declares that the radio equipment type Electric Scooter L1 is in compliance with Directive 2014/53/EU. The full text of the EU/UK declaration conformity is available at the following internet address. [https://drive.google.com/drive/folders/1biuKWBOxycRfHNto6uN-JFeB1Ko4sWDPy?usp=drive\\_link](https://drive.google.com/drive/folders/1biuKWBOxycRfHNto6uN-JFeB1Ko4sWDPy?usp=drive_link)

Hiermit erklärt SHENZHEN MAGIC WHEEL TECHNOLOGY CO., LTD., dass der Funkanlagenotyp Electric Scooter L1 der Richtlinie 2014/53/EU entspricht.

Der vollständige Text der EU/UK-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar.

[https://drive.google.com/drive/folders/1biuKWBOxycRfHNto6uN-JFeB1Ko4sWDPy?usp=drive\\_link](https://drive.google.com/drive/folders/1biuKWBOxycRfHNto6uN-JFeB1Ko4sWDPy?usp=drive_link)



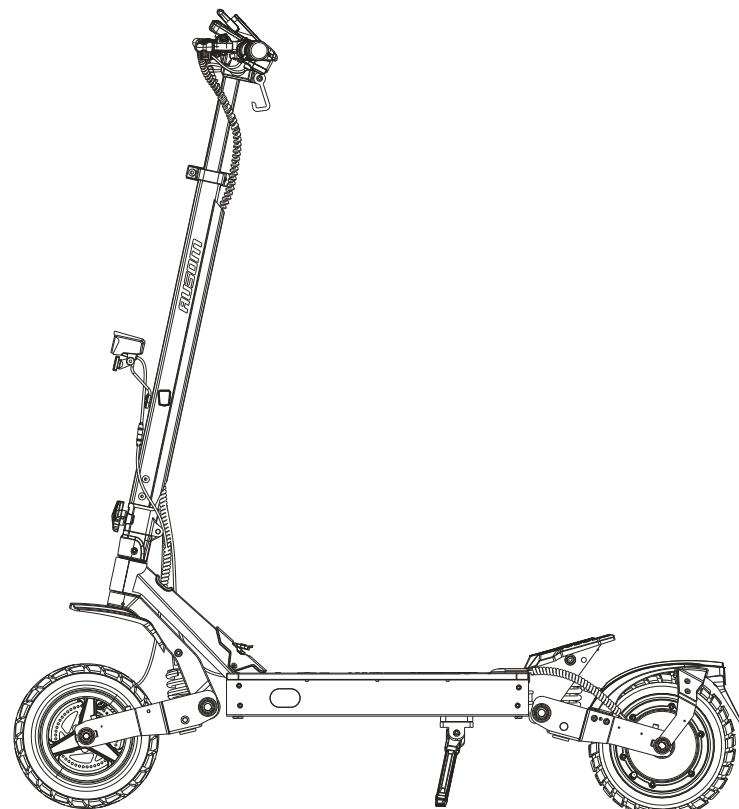
EC REP SERVICES SL  
Calle Gran Via 49,7 DCH.Madrid 28013 Spain  
Email: [ecrepserice@hotmail.com](mailto:ecrepserice@hotmail.com) Tel: +34682797075



REPLAB CONSULTING LTD  
376 NEWPORT ROAD , CARDIFF, WALES, CF23 9AE  
E-mail: [UKREP@REPLAB.CC](mailto:UKREP@REPLAB.CC) Tel: +44 7395577022



Made in China



# L1 ABE 20.8Ah

# USER MANUAL

# LANGUAGES

ENGLISH	01~16
ITALIANO	17~32
FRANÇAIS	33~48
DEUTSCHE	49~64
ESPAÑOL	65~80
POLSKI	81~96

# IMPORTANT! Read carefully and keep it for future reference!

## Contents >>>

1. Note
2. Warning
3. Diagram
4. Specification
5. Package List
6. Assembly Guide
7. Tips for Beginners
8. Folding & Unfolding
9. LCD Display Guide
10. Charging
11. Maintenance
12. Troubleshooting
13. Warranty
14. Compliance Statements

## 1. Note >>>

Before your first ride, it is important for you to know your new e-scooter well, so that you can get the best performance, comfort, enjoyment and safety from it during your ride. To understand the new scooter and the correct operation, you should first read the manual carefully.

Second, it is significant to take your first ride under a safe and controlled circumstance, like staying away from cars, obstacles and other riders. Avoid heavy traffic areas or crowded areas. At all times, anticipate your trajectory and speed while complying with road regulations and pedestrian pathway rules and prioritizing vulnerable road users. Signal your presence when approaching pedestrians or cyclists who may not see or hear you. Dismount and walk your vehicle when crossing pedestrian crossings. In all circumstances, exercise care for yourself and others.

Third, scooters are vehicles with certain risks. It's necessary to learn the local traffic rules about riding e-scooters on public roads before your first ride and follow the rules on your each ride. For your own safety, never forget to put on a qualified helmet before getting on the scooter. Protective gear, like elbow guards and knee pads, is suggested for a better protection.

Fourth, the electric scooter is supplied without basic mandatory equipment, which may vary from place to place. Therefore, if you intend to use the e-scooter on public roads, it's necessary to equip the scooter with the basic mandatory equipment, in accordance with the relevant laws and regulations.

Fifth, the kickstand shall be deployed when the scooter is stationary.

Sixth, this scooter is intended for users aged 14 to 75, subject to local regulations.

Seventh, users must always wear securely fastened, closed-toe footwear when operating the scooter.

Eighth, braking distance will increase on wet or slippery surfaces.

In addition, this product is designed for your personal use. Do not use it for commercial or other purposes. This vehicle is not designed for stunt performances. Do not misuse the vehicle for unintended purposes.

Last, keep this manual safe for reference. Maintain contact with your dealer for help or references on safe use.

## 2. Warning >>>

Before each charge, check the charger, cable and plug. If there is any damage, do not use the charger.

Before riding, check the tire pressure and check whether the handlebar are installed correctly and tightly and whether the headlight is clean and not covered by anything.

Make sure the battery contains enough power before riding. If the battery level is low during your ride, keep the scooter running at a slow and constant speed and charge it as soon as possible.

When braking on a wet road, the braking distance is usually longer than on a dry road. Therefore, brake earlier for a safer stop.

Furthermore, avoid puddles, wet mud, swamps, water, snow or ice. Try not to use the e-scooter on rainy, stormy or snowy days. If the electric parts (control unit, engine and battery) get damp, wet or soaked, it will cause irreversible damage, or even a battery explosion.

This product can only be used by one adult at a time. Do not carry any extra passengers. And don't ride it if you don't feel well or under the influence of alcohol or drugs.

This vehicle is not a toy. Same as other vehicles, it is possible to fall, crash or encounter other dangerous situations. Please don't offer your e-scooter to anyone that doesn't know how to use it correctly. If you let anyone else ride your scooter, it will be your responsibility to ensure that all riders understand all warnings, cautions, instructions and safety

precautions, and to ensure that they are able to use this product safely and responsibly and protect themselves and others from injury.

Caution: Brakes may become hot during use. Do not touch them after operation.

Periodically inspect the tightness of all bolted connections, particularly wheel axles, folding mechanisms, steering systems, and brake levers.

Eliminate any sharp edges resulting from usage.

No modifications or alterations to the vehicle are permitted, including but not limited to steering tubes, handlebars, folding mechanisms, and rear brakes. Modifications not specified in the manufacturer's instructions are strongly discouraged.

**⚠ WARNING!** Like any mechanical component, this vehicle is subject to high stress and wear. Materials and components may respond differently to wear or fatigue. Exceeding a component's service life may cause sudden failure, potentially resulting in user injury. Cracks, scratches, and discoloration in high-stress areas indicate the component has exceeded its service life and must be replaced.

Urban environments contain obstacles such as curbs or steps. Jumping over obstacles is not recommended. Before traversing obstacles, anticipate and adjust your trajectory and speed to accommodate pedestrian flow. Dismount when obstacles present hazards due to shape, height, or slipperiness.

**⚠ WARNING!**

Keep plastic covers away from children to prevent suffocation.

Never use this product out of the specified places according to the regulations.

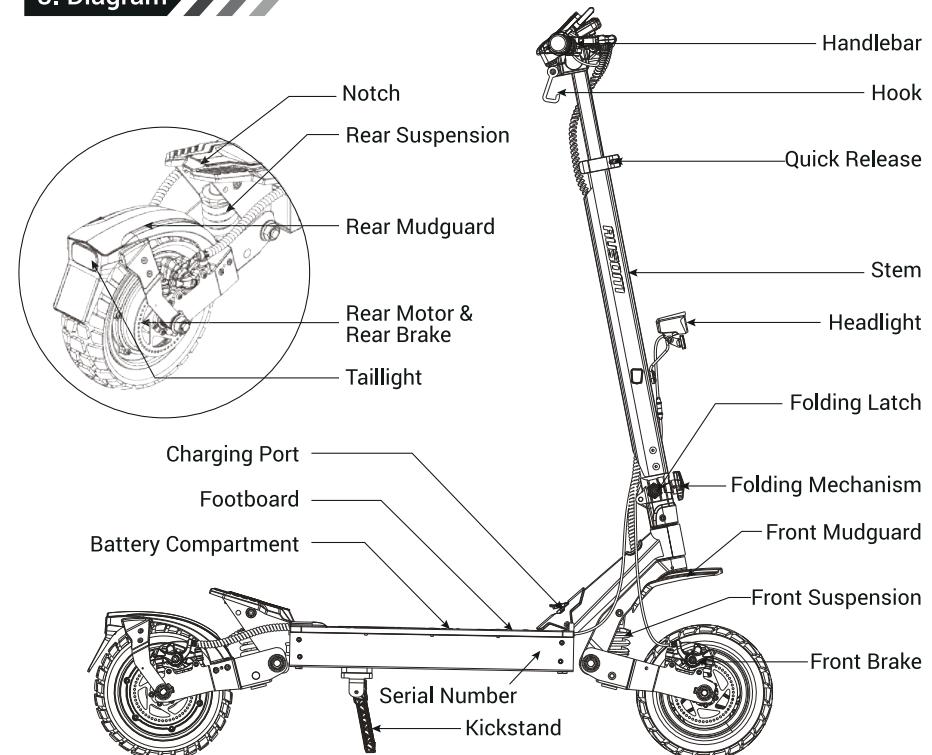
Stop using the product if it is damaged.

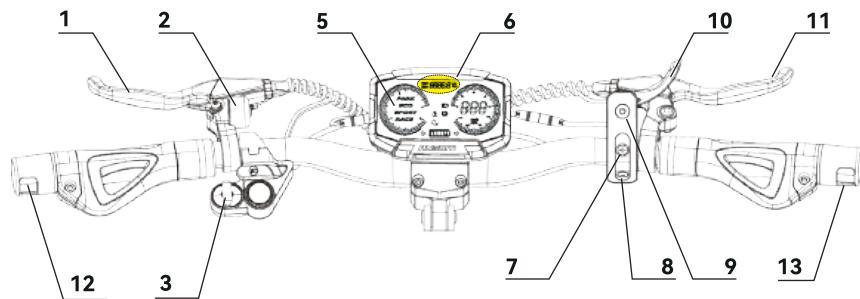
Do not use this product near a water source.

The kickstand does not ensure the stability of the scooter if used on slopes, stairs, or soft/unstable surfaces.

Any load attached to the handlebar will affect the stability of the vehicle.

## 3. Diagram >>>





1. Brake Lever  
2. Bell  
3. Turn Signal Light Switch  
4. Light Switch  
5. LCD  
6. Password Display/NFC Detection Area  
7. Plus Button  
8. Minus Button  
9. Power Switch  
10. Throttle  
11. Brake Lever  
12. Left Turn Signal  
13. Right Turn Signal

#### 4. Specification ➤➤➤

L1		
eKVV Type-Approval		
Basic Spec	Speed Level	10/15/20 km/h (Eco/Sport/Race)
	Unfolded Size	1250×690×1392 mm
	Folded Size	1250×690×560 mm
	N.W.	29.6 kg
	Length of Handlebar	690 mm
	Footboard Top to Ground	252 mm
	Footboard Bottom to Ground	178.5 mm
	Size of Footboard	515×187 mm
	Maximum Permissible Mass	135 kg
	Maximum Permissible Load	105.4 kg
	Waterproof Level	IP54
	Material of Frame	STL
	Max Range	90 km
Motor	Rated Voltage	DC48V
	Rated Power	500W
	Max Output Torque	29 Nm

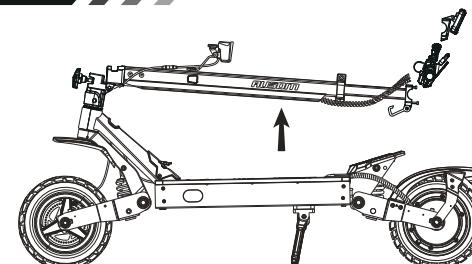
Battery	Capacity/Voltage	20.8Ah / DC48V
	Power Capacity	998.4Wh
	Charging Time	14 hours
	Protection System	Yes
Charger	Model	GJS90-5460150
	Input	AC100-240V 50/60Hz 2.5A
	Output	DC54.6V 1.5A
Brake	Type	E-ABS + Front & Rear Disc Brakes
Tire	Size	10"×2.75"
	Type, Material	Tubeless Rubber Tires
	Best Tire Pressure	50PSI
Suspension	Type	Swingarms + Adjustable Springs
	Adjustment	Use a C-shaped spanner (recommended size: 45-52 mm) to adjust the nut on the upper end of the spring. Turn it clockwise to tighten and counterclockwise to loosen.
Display	Type	4.5" LCD
	Security Lock	NFC & Passcode
NFC	Frequency Band	13.56MHz
	Maximum Transmission Power	300mW
Permissible Rider Heights		140-200 cm

**Note:** The maximum range and speed data are provided by the Ausom lab. The maximum range is achieved under the following conditions: fully charged battery; optimal tire pressure; 70kg load; constant speed of 15 km/h; temperature of 20–25°C; wind speed below 3 m/s; dry, hardened, flat, slope-free asphalt/concrete roads; and a circulation route exceeding 1 km to ensure comprehensive data collection. The maximum speed is achieved under the following conditions: fully charged battery; optimal tire pressure; full throttle; 70kg load; temperature of 20–25°C; wind speed below 3 m/s; dry, hardened, flat, slope-free asphalt/concrete roads; and a route exceeding 0.5 km. The actual data may vary based on different road conditions, temperature, humidity, wind speed, and the riders habits (the frequency of braking, speed shifting, etc.) and rider's weight.

#### 5. Package List ➤➤➤

E-Scooter x 1	2.5mm Allen Key x 1	Motor Nut Cap x 8
User Manual x 1	3mm Allen Key x 1	NFC Card x 2
Charger x 1	4mm Allen Key x 1	Spare NFC Card With Lanyard x 1
Gloves x 1	Side Decorative Panel (Left and Right) x 2	M3*8mm Socket Head Cap Screw x 6

#### 6. Assembly Guide ➤➤➤



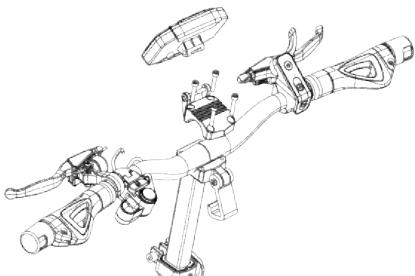
1. Open the kickstand to make it stand up and unfold the stem.



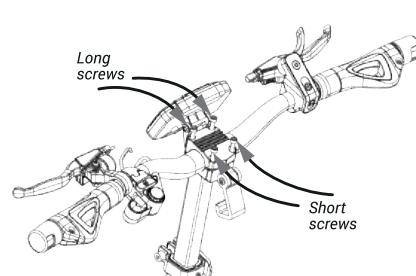
2. Push the stem forward till it is straight.



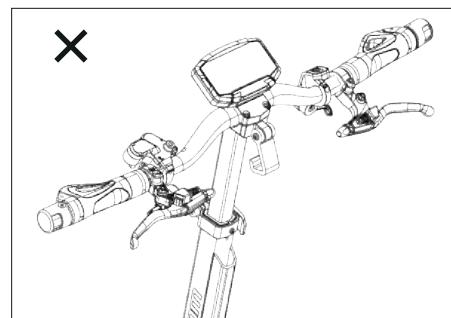
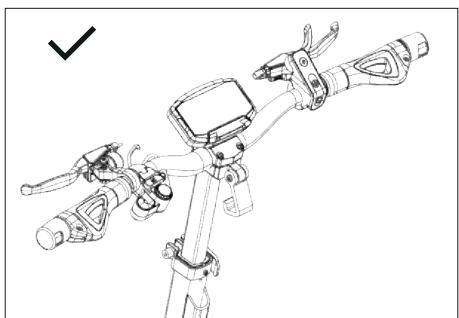
3. Lock the folding mechanism. (Please refer to the folding steps.)



4. Loosen the screws. Place the handlebar on it and make sure the handlebar is in the middle of the stem.

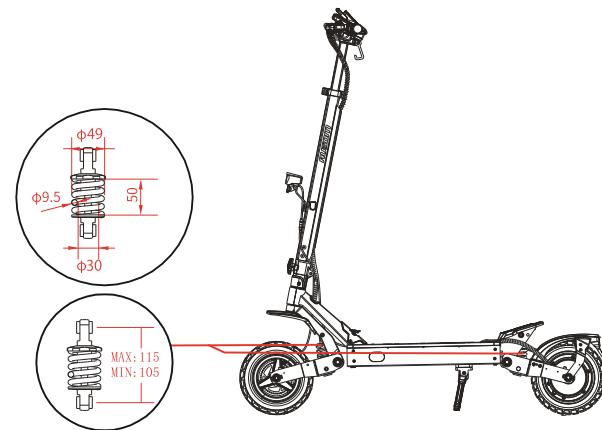


5. Tighten the screws to secure the display and handlebar.

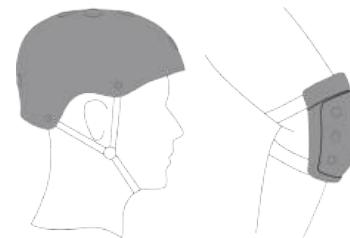


## 6. Suspension Adjustment

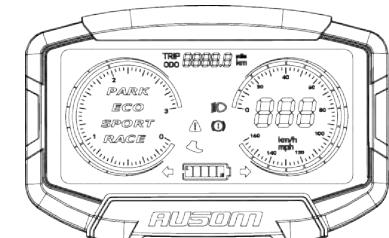
The damping effect can be adjusted by using a C-shape spanner (recommended size: 45-52mm) to adjust the nut on the upper end of the spring. Turn it clockwise to tighten and counterclockwise to loosen.



## 7. Tips for Beginners



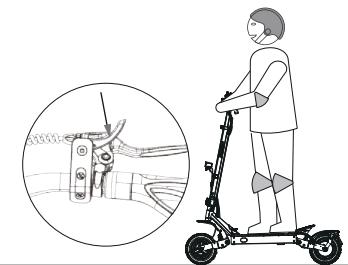
1. Wear protective gear, including a qualified helmet, knee pads, wrist and elbow guards.



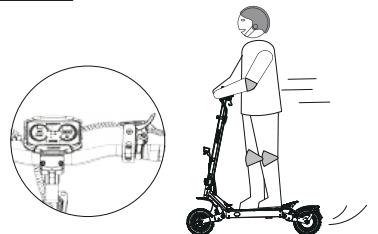
2. Turn the display on and check the battery. For the first ride, make sure the scooter is fully charged and the tires are properly inflated.



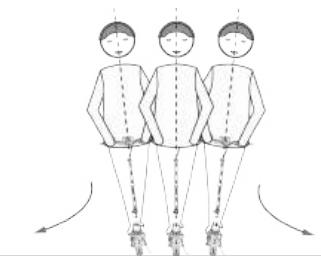
3. Put one foot on the footboard and another foot on the ground. Then, push the scooter forward.



4. When the scooter starts to run steadily, make both of your feet stand on the scooter. Accelerate the scooter by pressing the thumb throttle slightly.



5. Decelerate it slowly by releasing the thumb throttle. Grasp the brake lever for an emergency stop, if necessary.

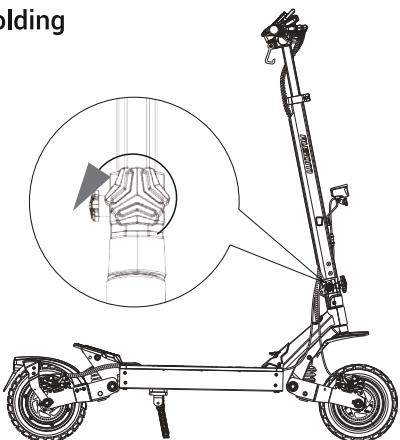


6. Incline your body slightly to the direction of steering and turn the handlebar slowly when making a turn.

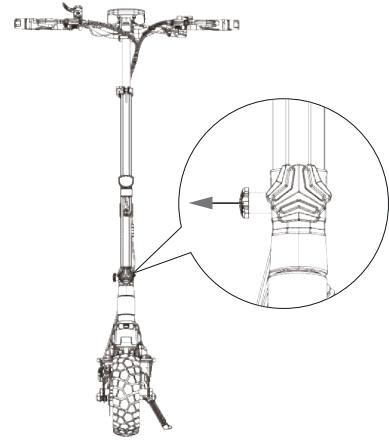
## 8. Folding & Unfolding ➤➤➤

**Note:** The folding and unfolding steps can only be done when the power is turned off.

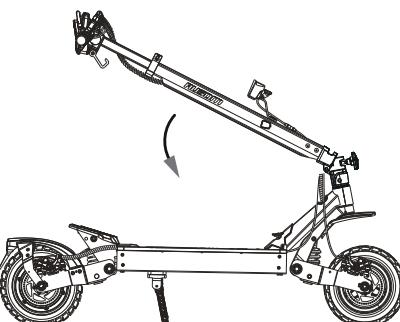
### Folding



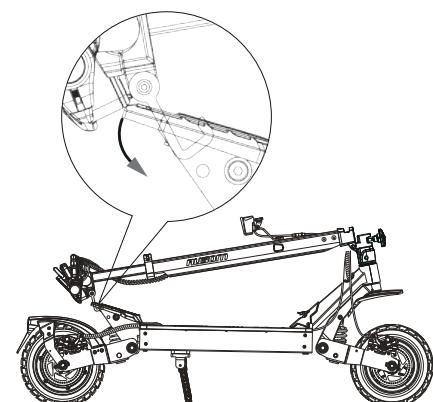
1. Hold the stem with one hand and turn the knob of the folding mechanism counterclockwise with the other hand.



2. Hold the stem with one hand and pull the folding latch outward with the other hand.

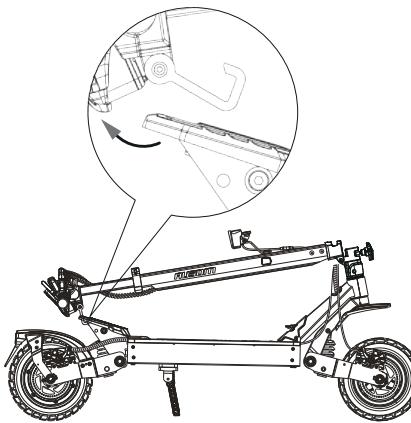


3. Put the stem down.

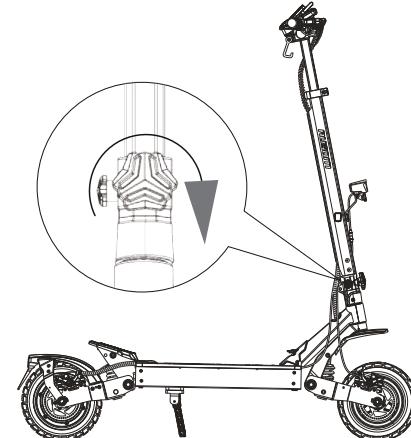


4. Secure the stem by fitting the hook into the slot and snap it into place.

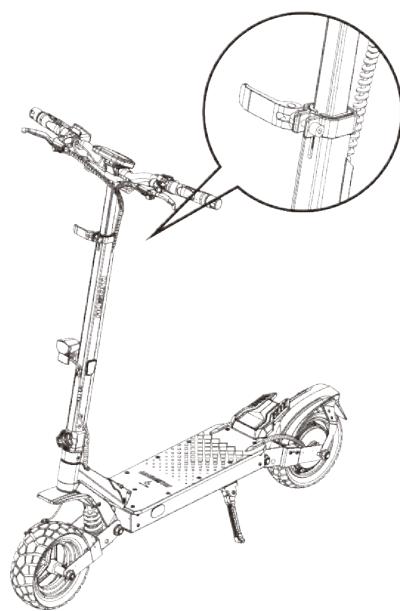
### Unfolding



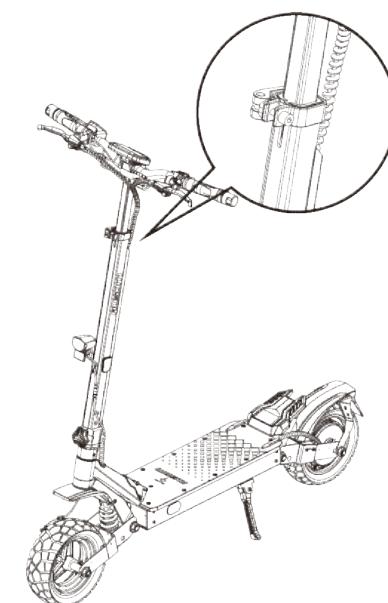
1. Press down the hook with one hand and pull up the stem with the other hand.



2. Pull up the stem till the folding latch buckles up itself and turn the knob clockwise tightly.



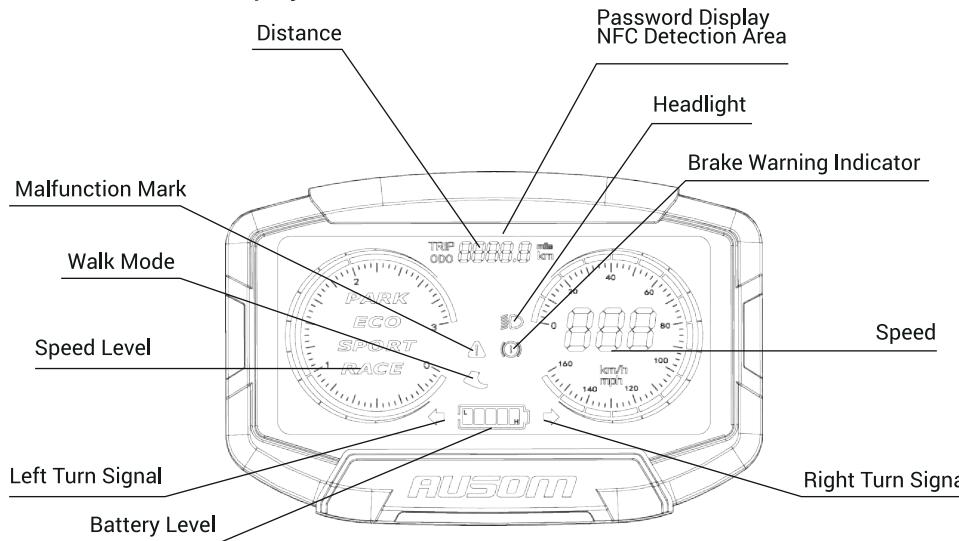
3. Loosen the quick release.



4. Adjust the handlebar height as needed and tighten the quick release.

## 9. LCD Display Guide ➤➤➤

### Contents on The Display



### Functions & Operations

#### 1. Turning On/Off the Display

##### By NFC:

Press for 3 seconds, and the screen will display "\_\_\_\_". Then place the NFC card over the NFC detection area. The display will be unlocked after the NFC detection.

##### By Password:

Press for 3 seconds, and the screen will display "\_\_\_\_". To enter the password, press or to select the number for the current digit and press to move to the next digit. After entering all the digits, press for 2 seconds to confirm. The display will be unlocked after confirming the password. The default password is 0000.

To turn off the display, long press for 3 seconds.

#### 2. Shifting Speed Level

Press or to shift among 3 speed levels.

#### 3. Odo/Trip Data Switching

When the display is on, press briefly to switch between odometer and trip data.

#### 4. Walk Mode

Press and hold to activate the walk mode and release to terminate the walk mode.

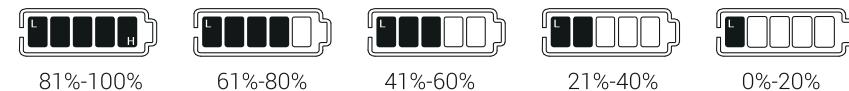
#### 5. Turning On/off the Headlight

Long press the light switch for 2 seconds to turn on/off the headlight.

#### 6. Switching Turn Signal Lights

Push the turn signal light switch to the left to activate the left turn signal and push it to the right to activate the right turn signal. To turn off the turn signal, push the switch again to the left when the left turn signal is on and again to the right when the right turn signal is on.

#### Battery Level Indicator



#### Hidden Menu

When the display is turned on, long press and to enter the hidden menu. In the hidden menu, short press the to switch among different parameter pages from P01 to P23.

On the parameter page, press or to increase or decrease the value. To exit the hidden menu, long press and . Alternatively, it will exit the hidden menu automatically after 8 seconds of no operation.

P02: Switching between km and mile. 0 means km and 1 means mile. (Default: 0)

P04: Setting the sleep time between 0-60 minutes. 0 means it never sleeps. (Default: 5 minutes)

P11: Setting the EABS brake force level, ranging from 1 to 5. 0 means off, 1 means the weakest and 5 means the strongest. (Default: 3)

P12: Setting the soft and hard start strength, ranging from 1 to 5. 1 means the softest and 5 means the hardest. (Default: 3)

P18: Binding and unbinding the NFC card. Long press to bind, and long press to unbind.

P19: Adjusting the backlight brightness. Level 1 is the darkest and level 3 is the brightest. (Default: level 3)

P23: Changing password. Enter the original password first. To enter the password, press or to select the number for the current digit and press to move to the next digit. After entering all the digits, press for 2 seconds till "S23" appears on the display. Then, enter a new 4-digit password and press for 2 seconds to save it.

**Note:** Parameter pages not listed above are not adjustable.

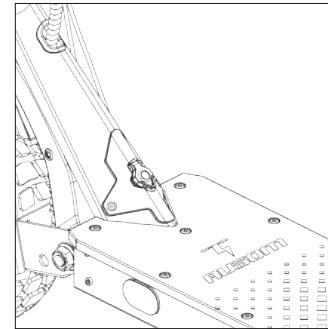
## Error Tracking

When the malfunction mark shows up on the screen, the number at the center of the screen is the error code. Please check the following problems and solutions.

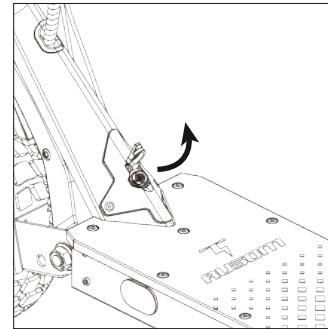
Error Codes	Problems	Solutions
E00	A fault has been found or resolved.	1) Restart the scooter.
E06	Battery Undervoltage	1) Fully charge the battery.
E07	Motor fault	1) Re-plug the motor and check whether the plug is properly connected. 2) Replace the motor or motor cable.
E08	Throttle fault	1) Reconnect the throttle. 2) Check the throttle spring to ensure it's seated correctly. 3) Replace the throttle.
E09	Controller fault	1) Check whether the pins of the controller plug are properly connected. 2) Replace controller.
E10	Communication receiving fault	1) Reconnect the LCD display. 2) Replace the display or display cable.
E11	Communication sending fault	1) Reconnect the controller. 2) Replace the controller or controller cable.

## 10. Charging ➤➤➤

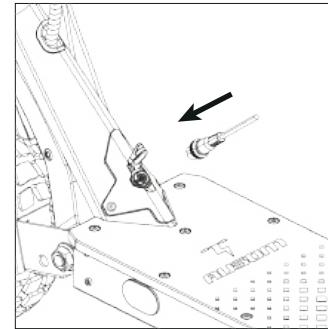
The scooter must be switched off during charging.



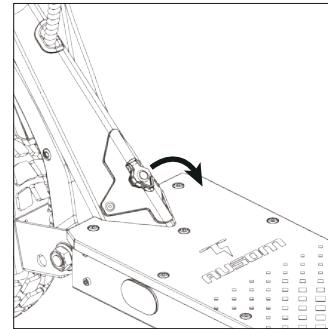
A) The charging port is in the front of the footboard with a cover.



B) Open the cover.



C) Plug in the charger and start charging.



D) Unplug the charger when charging is complete and close the cover.

## 11. Maintenance ➤➤➤

### Cleaning

Turn the power off, unplug the scooter and cover the charging port before cleaning the scooter. Use a soft and dry cloth to wipe the mainframe clean. Do not wash your e-scooter with alcohol, gasoline, acetone, or other corrosive/volatile solvents. These substances may damage the appearance and internal structure of the scooter. Do not soak the scooter or wash it with a pressure washer or hose.

### Storage

#### A)Scooter

1. Do not expose the e-scooter to direct sunlight or rain for an extended period of time, and avoid storing it at a high temperature. It's better to store the scooter in a dry and safe place at a temperature of 0°C-25°C.
2. Avoid corrosive gas, so as to avoid chemical corrosion and damage to the electrical parts and painted surfaces, which may lead to operational failure and accident.

3. Don't store it in an explosive or flammable environment or near flammable liquids.
4. Don't store it in the car trunk for a long term on scorching days.

#### B)Lithium-ion Battery

1. Charge the battery in time and avoid draining the battery completely. Because completely draining the battery may cause permanent damage to it. Never keep the lithium-ion battery discharged for a long time. If the voltage of the cell drops under allowed limit due to self-discharge, it will cause damage. For maximum durability, store the battery charged up to 50% of the maximum capacity. Charge the battery once or twice a month when the scooter isn't used for a long term.
2. Never charge the battery in an explosive or flammable environment or near flammable liquids.
3. Do not charge the battery on a flammable substrate, such as paper, textiles, etc., when the battery is detached from the vehicle. Charge it at a safe place away from flammable items.
4. Never charge a battery which is already damaged or is leaking.
5. Don't charge the battery too long. Stop charging when it gets full.
6. Charge or discharge the battery at a temperature within 0~45°C.  
It is better to store the battery indoors within 20°C~25°C temperature while it is not being used for a long time. (When used at 25°C, the battery range and performance is at its best. But using it at a temperature below 0°C can decrease its mileage and performance.)
7. Do not store the battery at a too high or too low temperature.  
The humidity of the storage place should be 60±25%RH. As for the working place, the humidity should be 5~85%RH.
8. Do not puncture, hit or crash the battery.
9. Don't try to disassemble the old or damaged battery or throw it away.
10. Please take it to the local professional battery recycling facility.

**Warning:** Please try not to charge indoors.

#### C) Other Parts

Brakes	Lubricate the brake cables slightly with oil monthly. Check the adjustment and replace the brake parts (blocks, shoes, pads) in time if they are worn. The cables must be replaced if they are damaged/down. It is recommended to inspect the brakes every 3 months. For normal usage, replacement every 6 months is advised; however, actual replacement should be determined based on usage conditions.
Tires	Regularly check for damage, wear, cuts and air leakage.
Kickstand	Clean and lightly grease it annually.
Lock Nuts & Other Lock Fasteners	Lock nuts and other lock fasteners may lose effectiveness and require retightening. Regular inspections of such fasteners should be conducted according to actual service conditions, with necessary retightening performed to prevent loosening or failure.

**Attention:** Use only original parts for replacement.

## 12. Troubleshooting

Please check the following issues and solutions before sending the product to designated repair offices.

Problem	Possible Causes	Solutions
The scooter can't be turned on.	a.The battery is dead. b.The electric wire is not plugged in properly or tightly.	a.Charge the battery. b.Reconnect the electric wire properly and tightly or contact the re-seller for help.
Brakes are not responsive.	a.Brake cables are not tight enough. b.Worn brake pads; c.The brake caliper screws are loose.	a.Tighten the brake cable and try again. b.Replace the brake pads. c.Tighten the brake caliper screws.
The battery fails to charge.	a.The charger isn't properly plugged in. b.It is out of the recommended temperature range. c.The battery is charged below rated voltage. d.It is damaged.	a.Plug it in properly and charge it again. b.Charge it at a temperature of 0~45°C. c.Charge it at rated voltage. d.Contact the re-seller for help.
The motor fails to work.	a.It's in non-zero start mode. b.The electric wire isn't plugged in properly. c.Motor/controller faults;	a.Slide the scooter forward above 5km/h and then try the throttle. b.Plug in the electric wire properly. c.Contact the re-seller for help.
Insufficient Riding Distance	a.The battery isn't fully charged. b.Low tire pressure. c.Frequent braking; d.Battery aging or battery capacity attenuation; e. Low ambient temperature;	a.Fully charge the battery. b.Pump up the tires. c.Develop good riding habits. d.Replace the battery. e.It's normal.

**Attention:** if any other failures occur and you can not find any solution from the chart above, please contact the re-seller to solve it. Any other maintenance and repair that need to be done by using professional tools and techniques, should be performed by a qualified scooter mechanic designated by manufacturer or the maintenance center.

## 13. Warranty

Ausom provides an easy, reliable and efficient service for all products under our warranty. Please refer to the chart below for the warranty periods of various products and accessories starting from the date of purchase.

Our distributors, partners, sellers and re-sellers should provide after-sale services directly to their customers. If your Ausom product has a warranty-related issue, please contact the seller from whom you purchased the product. You should provide all relevant order information, such as order numbers, invoices, receipts, etc.

Model	Components	Warranty	Components	Warranty
L1	Frame	1 year	Brake Assembly	6 months
	Motor	1 year	Folding Assembly	6 months
	Controller	1 year	Headlight	6 months
	Throttle Control	1 year	Taillight	6 months
	LCD Display	1 year	Handlebar	6 months
	Battery	6 months	Wheel	30 days
	Charger	6 months	Handlebar Grip	14 days
	Disc Brake	6 months	Others	14 days

## WARRANTY PROCESS

- ❖ Buyers have to provide sufficient proof of purchase.
- ❖ A description of the defect needs be provided in order to issue a warranty claim.
- ❖ Visible proof of defect must be provided along with the item's serial number (if any).
- ❖ Ausom must document what happens when buyers troubleshoot the products.
- ❖ You may need to return an item for quality inspection.
- ❖ When you return the defective product, you should put it in the original packaging or the packaging approved by the dealer.

## VALID PROOF OF PURCHASE

- ❖ The order number of your online purchase from the Ausom's authorized reseller. (Check the resellers from where to buy page.)
- ❖ Sales invoice.
- ❖ Dated sales receipt from the authorized Ausom's reseller.

*Please note that more than one type of proof of purchase may be required to process a warranty claim (such as receipt of money transfer and confirmation of address that the item was originally shipped to).*

## WARRANTY WILL BE VOID IN THE FOLLOWING SITUATIONS:

- ❖ The product is out of the warranty period.
- ❖ The product is lost or stolen.
- ❖ The product is free or complimentary.
- ❖ The product is used in inappropriate ways or conditions, including but not limited to: falls, extreme temperatures, water, improper operations.
- ❖ The product is not in its original state, such as modifications.
- ❖ The product has been used in combinations with accessories that is not compatible with the product.
- ❖ Buyers have no sufficient proof of purchase of products.
- ❖ Unsupported software or firmware has been installed to the product.
- ❖ When a damage is caused by the customer, the customer is responsible for the costs for the repairs and shipment.
- ❖ Customers' personal items are sent to Ausom, instead of the Ausom products.
- ❖ The product is purchased from an unauthorized re-seller.

## 14. Compliance Statements >>>

	This symbol indicates that the product is capable of being recycled.
	This symbol indicates that the product should not be disposed of as household waste. The product must be sent to separate collection facilities for recovery and recycling of electrical and electronic equipment.
	The warning sign indicates a potential hazard, danger, obstacle, or condition requiring special attention.
	This product is in compliance with the standards of the European Community.

### Noise Emission

- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A); where this level does not exceed 70 dB(A), this fact shall be indicated,
- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 µPa),
- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A).