



# NANROBOT LIGHTNING Electric Scooter User Manual

[Home](#) » [NANROBOT](#) » NANROBOT LIGHTNING Electric Scooter User Manual 

**NANROBOT** **LIGHTNING**



# USER MANUAL

This manual contains important information to help you use your product more safely.

OFFICIAL SITE: [WWW.NANROBOT.COM](http://WWW.NANROBOT.COM)

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## Contents

- 1 REQUIRED CHECK BEFORE RIDING
  - 1.1 CHECK THE SCOOTER BEFORE RIDING
- 2 SAFETY GUIDELINES
  - 2.1 SAFETY PRECAUTIONS
- 3 PRODUCT SPECIFICATIONS
  - 3.1 NANROBOT LIGHTNING SPECS
- 4 PRODUCT COMPONENTS
- 5 SAFETY GUIDELINES BEFORE RIDING
  - 5.1 PACKING LIST
- 6 UNBOXING
  - 6.1 IMPORTANT CHECKLIST
  - 6.2 HANDLEBAR ASSEMBLY
- 7 SCOOTER UNFOLDING
  - 7.1 HANDLEBAR UNFOLDING
- 8 SCOOTER FOLDING
  - 8.1 HANDLEBAR FOLDING
- 9 CHARGING & RANGE
  - 9.1 POWER TURN ON/OFF
  - 9.2 HANDLEBAR CONTROLS
- 10 CONTROL PANEL INSTRUCTIONS
  - 10.1 CONTROL PANEL
- 11 PARAMETER SETTINGS
  - 11.1 FOR EXAMPLE
  - 11.2 COMMON ISSUES AND SOLUTIONS
- 12 MAINTENANCE & FAQ
- 13 CUSTOMER SUPPORT
- 14 WARRANTY GUARANTEE
  - 14.1 EXCHANGES (IF APPLICABLE)
- 15 Documents / Resources
- 16 Related Posts



## REQUIRED CHECK BEFORE RIDING



### WARNING!

**Please read this manual carefully before using the product.**

#### CHECK THE SCOOTER BEFORE RIDING

1. Check that the control panel turns on.
2. Ensure that the brakes are working properly.
3. Check that the brake pads are not damaged or need replacing.
4. Make sure the seat is stable and secure.
5. Check that the horn is operating correctly.
6. Ensure the switch for Eco and Turbo mode switch are working normally.
7. Make sure the voltage value is within the normal range of 42V-54V.
8. Make sure the folding mechanism is in good condition and operational.



## SAFETY GUIDELINES

### SAFETY PRECAUTIONS

1. Always wear a helmet and knee and elbow pads when riding.
2. When first riding the scooter maintain a low speed and slowly increase speed as riding skills improve.
3. Do not ride the scooter on rainy days.
4. Riding through puddles is not recommended.
5. Children under the age of 16 are prohibited from riding.
6. The handlebar should be adjusted to an appropriate and comfortable position.
7. When going downhill, ensure you are driving slowly to avoid accidents.
8. Obey all traffic rules.
9. Ensure all screws are in condition and appropriately fastened.



## PRODUCT SPECIFICATIONS

NANROBOT LIGHTNING SPECS	
NET WEIGHT	65 LBS
SIZE	49*46*24 INCH
CHARGING TIME	8-10H
WHEEL DIAMETER	8 INCH WIDE WHEEL
RANGE	18-20 MILES
MAXIMUM SPEED	30 MPH
LOAD CAPACITY	MAX 280LBS
LITHIUM BATTERY	48V 18AH
MOTOR	1600W



## PRODUCT COMPONENTS

# NANROBOT **LIGHTNING**



- 1-Control panel
- 2-Front brake lever
- 3-Power lock
- 4-Light/Horn buttons
- 5-Grip
- 6-Rear brake lever
- 7-Folding knob
- 8-Head light
- 9-Front shock absorber
- 10-Front fender
- 11-Brake calliper
- 12-Front motor
- 13-Brake disc
- 14-Fisheye light
- 15-Charging port
- 16-Kickstand
- 17-Rear shock absorber
- 18-Rear fender
- 19-Brake calliper
- 20-Brake disc

- 21-Rear motor
- 22-Taillight

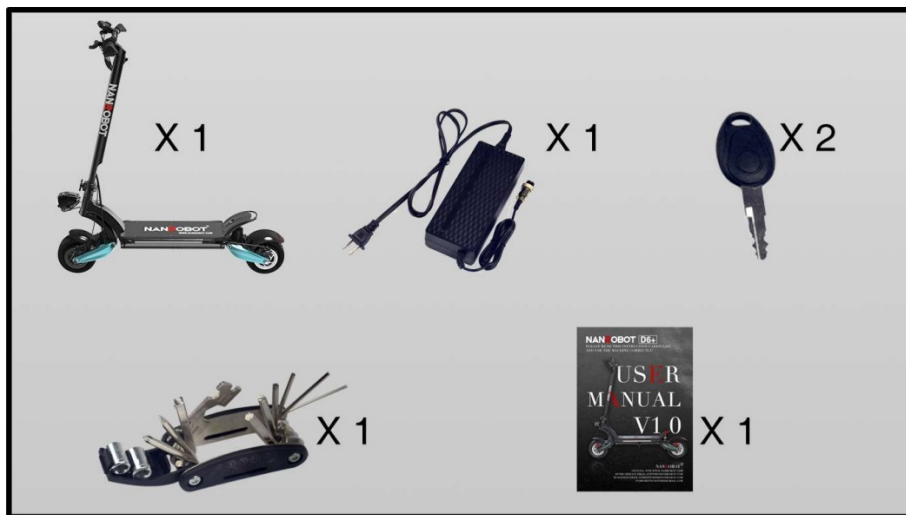


## SAFETY GUIDELINES BEFORE RIDING

### CHECK THE FOLLOWING PARTS OF THE PRODUCT AFTER UNBOXING

1. Check if there is a tool kit.
2. Check for a charger.
3. Check if there is a voltage lock key.
4. All nuts and screws should be tight.
5. Seat (if available).
6. Test the brakes.

### PACKING LIST



## UNBOXING

### IMPORTANT CHECKLIST



Check whether the LCD control panel screws are tightened.



Make sure the voltage lock and light button screws are tightened.

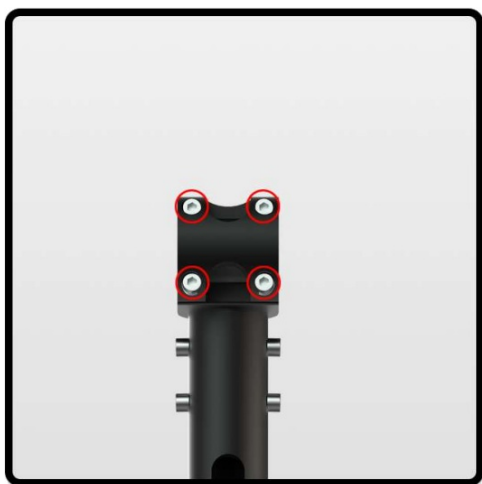


Check whether the brake lever screws are tightened.



Check whether the SINGLE/DUAL button screws are tightened.

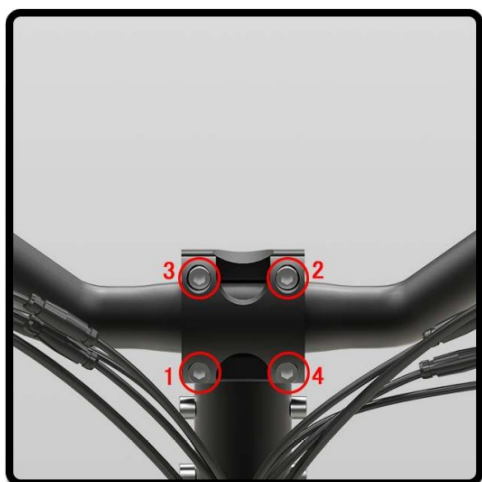
## **HANDLEBAR ASSEMBLY**



(1) Loosen the screws on the handle mount with a 4mm hex wrench, which is included in the basic tool kit.



(2) After aligning the handlebar with the center mount, replace the cover mount, and tighten the fixing bolt.



(3) Progressively tighten the bolts in sequential order (1 to 4), ensuring equal tension balance between the mount and handlebar.





(4) check whether the bracket screws are tightened.  
Installation complete.

## SCOOTER UNFOLDING

### HANDLEBAR UNFOLDING



(1) Push the handlebar in the direction of the arrow.



(2) Align the **J**-shaped buckle with the grooves, then tighten the folding knob.



(3) Make sure to perfectly align the **I**-shaped buckle.



(4) Unfolding complete.

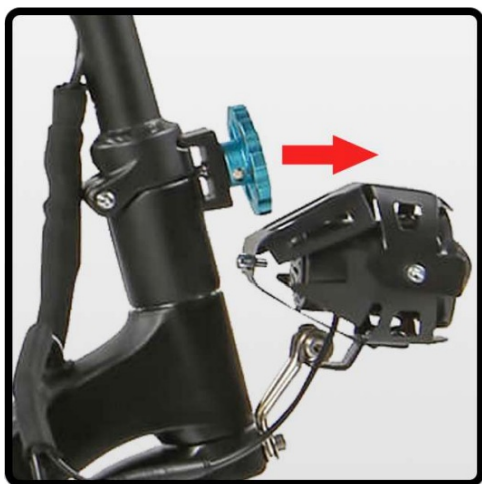


## SCOOTER FOLDING

### HANDLEBAR FOLDING



(1) Loosen the knob in the direction of the arrow.



(2) Keep loosening the folding knob until the I-shaped buckle completely leaves the grooves



(3) Lower the handlebar.



(4) Folding complete.



## CHARGING & RANGE

When charging, connect the charging cable in this order:

1. FIRST to scooter's charging port
2. THEN to the power outlet

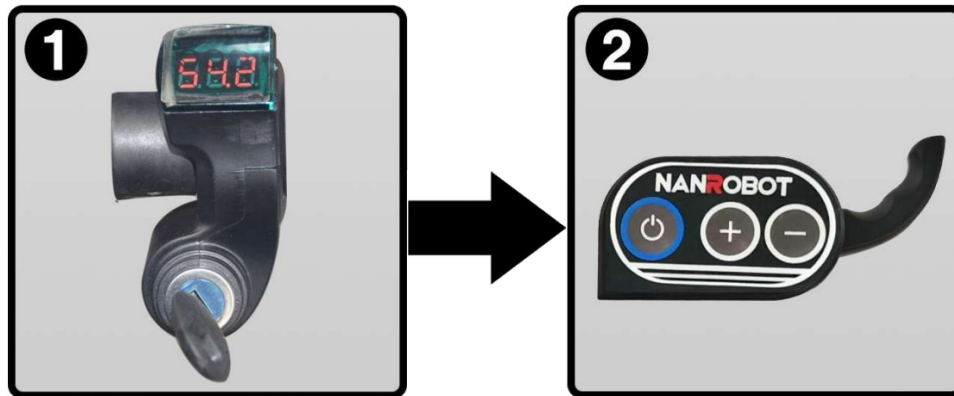
NOTE: When connected to the charger, the red light indicates that the scooter is charging. The light will turn green when fully charged.

Be sure to close the charging port cap when driving or storing except when charging. Use only genuine chargers.

Range: 18-20 miles. The range of the scooter depends on many factors: road conditions (off-road, uphill), weather, rider's bodyweight, frequent braking and acceleration, single/dual drive, gears 1/2/3 etc.

#### POWER TURN ON/OFF

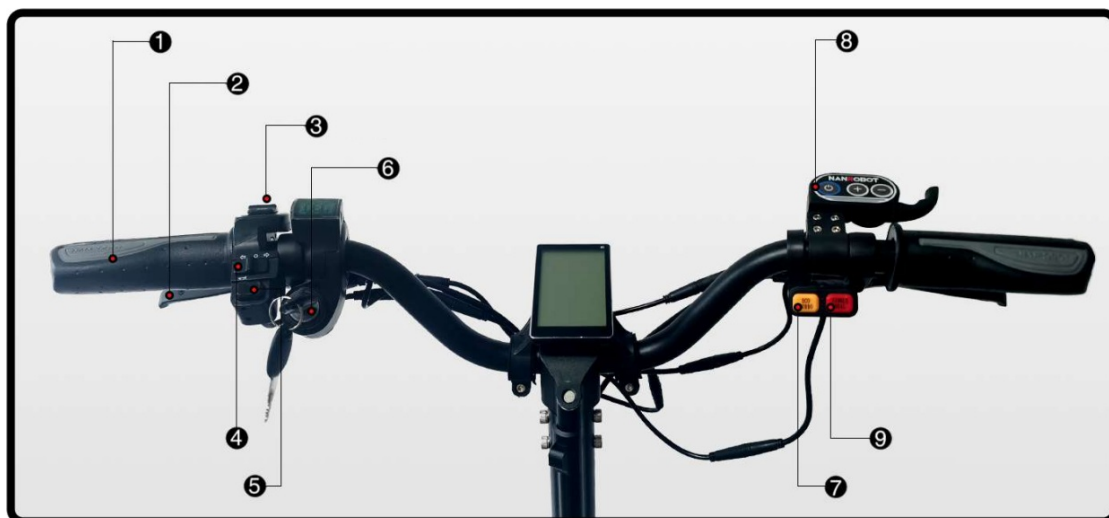
(1) Insert the key into the power lock and turn to unlock your scooter. (2) Press the POWER key for 3 seconds to turn on.



You can turn off power either directly via the power lock or turn it off by pressing and holding the POWER key on the control panel for 3 sec.



#### HANDLEBAR CONTROLS



- (1) Grip
- (2) Brake lever
- (3) Light button

- (4) Turn signal button
- (5) Horn button
- (6) Power lock
- (7) Eco/turbo button
- (8) Control panel
- (9) Single/dual button



Lcd Control Panel

Horn Button

Light Button

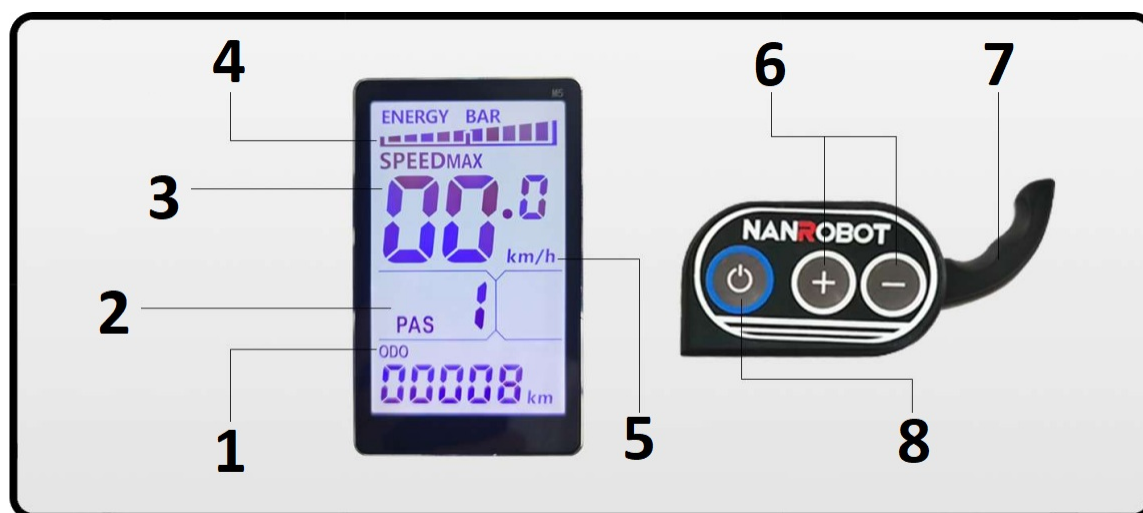


Turn Signal Button    Power Lock    ECO Turbo Single/Dual Drive Switch



## CONTROL PANEL INSTRUCTIONS




### CONTROL PANEL



- 1. Multi Function Area
- 2. Gear
- 3. Speed
- 4. Battery Indicator
- 5. Speed Unit
- 6. Mode







7. Accelerator

8. Power

- POWER: long presses will either start or shut down the scooter)
  - MODE: parameter setting key
  - Gear: current gear (gears: 1, 2, 3)
  - Switch Gears: Pressing the key (  ) allows you to change gears, shifting from level 1 (slowest) to level 3 (fastest).
  - Short press the key (  ) to switch between:  
TIME, TRIP, ODO, VOL.
  - N-Soft: A hard start requires greater momentum to start the scooter into motion.
  - Speed Unit: MPH, KMH.
  - Battery Indicator: current battery capacity.
1. The panel will automatically turn off after three minutes of inactivity.
  2. A short press of the POWER key(  ) allows the user to change the display content of the instrument (TIME. TRIP. ODO, VOL, etc.) When 00 00 is displayed, the panel is indicating current run time (TIME display). When TRIP is displayed, it indicates the mileage for that particular trip. When ODO is displayed, the total mileage of all trips is shown. The VOL display indicates the battery voltage.









## PARAMETER SETTINGS

Press and hold both MODE(  ) and MODE(  ) keys at the same time to enter the mode settings menu. Short pressing MODE (  ) will change parameter items. Once at the desired parameter, holding MODE(  ) will change the value to flashing and all for that parameter to be modified. A short press to the MODE(-) key will decrease the value, and a short press on MODE(+) increases the value. After the modification is completed, holding both MODE(  ) and MODE(  ) keys at the same time to save the value, the flashing will also stop.

Note: Please keep the default values of the parameter settings;  
please do not change these values.

### FOR EXAMPLE

How to disable EBS (Electric Braking System)

Press and hold both the MODE(  ) and MODE(  ) key simultaneously to enter the settings, and short press MODE (  ) until P9 is displayed. Then hold MODE (  ) to select P9, short press MODE ( + ) or ( - ) to change it to 1. Then long press both MODE(  ) and MODE (  ) keys at the same time to save the changes.

Parameter settings and definition		
P00	Wheel diameter:Unit:inch; Precision:0.1	Default=8
P01	Voltage cut off. When the voltage drops to 42.0V, undervoltage protection will be started and the power supply will be cut off automatically.	Default=42.0
P02	Magnetic poles in hub motor. Do not change it.	Default=28
P03	Speed sensor function. Do not change it.	Default=0
P04	Speed units: 0=km/h 1=mile/h	Default=0
P05	Non-kick start / Kick start 0=Non-kick start 1=Kick Start	Default=0
P06	Turn on / off cruise control 0=Non-cruising 1=Cruising	Default=1
P07	Start: 0=Slow start 1=Power start	Default=0
P08	Max output (max speed) 1-100%	Default=100
P09	EBS brake settings: 0 = EBS off 1 =weak EBS 2 = strongest EBS	Default=1
P10	—	Reserved function

## COMMON ISSUES AND SOLUTIONS

Issue 1: Both the headlight and horn are not working. This happens when the headlight is defective and is solved

by replacing the headlight.

Issue 2: The scooter is not charging. The issue may be with the charging port. If the charging port is burned out, it will require replacing. The other may be that the charger is damaged. In either case, please contact customer service via e-mail to receive a solution.

Issue 3: The brake pads produce abnormal sounds. Generally, this is due to malposition. Please use the tool kit and adjust to the correct place.



## MAINTENANCE & FAQ

The screws should be regularly maintained, inspected and tightened. Especially the screws on the folding mechanism, brake system and motors (axle nuts).

1. Tighten the folding mechanism screws, handlebar, front & rear shock absorbers, front & rear wheel axle nuts.
2. Brakes: if you find rust or excessive wear on the brakes, which will occur with regular use over time, the brake pads and brake discs should be replaced.
3. Motor: Check the motor wires regularly. All exposed wires should be wrapped with electrical tape.
4. Tires:
  - (1) Do not inflate the tires beyond the recommended air pressure range.
  - (2) The tires will slide easily in wet conditions. Avoid rain, snow, icy road, wet dirt road, water, poor visibility.
  - (3) Replace the tires on your scooter once wear patterns become evident. This will prolong the use of the scooter.
5. Speed limit removal: please go to P8 and then press the "M" button for 1 minute until you go back to the main menu.
6. Battery & overheat protection: the controllers and the battery has temperature sensors and the scooter stops working when it gets too hot. Please wait about 0.5-2 hours to cool down the scooter or use Le co/1st gear to continue riding after 5-10 minutes.



## CUSTOMER SUPPORT

Scooters manufactured by Nanrobot are pre-assembled, though some of the parts may require assembly by our customers. To help ensure the safety of your scooter and driving, please check and test everything before using your scooter. If your inspection finds an issue with the scooter, please contact your seller. You can also contact your seller if you need assistance with any of the assembly

## SHIPPING

To avoid damage during transport, we have safely packed all of the electric scooter components in foam and cardboard. If there is something broken upon arrival, please take photos of the damaged parts and contact the seller, they will be able to offer you a solution.

## MECHANICAL DAMAGE OR MODIFICATIONS

If your scooter is damaged due to an accident or misuse, you can buy replacement parts [nanrobot.com](https://nanrobot.com), the distributor or seller you made your purchase from, or you can send the scooter to be repaired. The buyer bears all repair costs. If there are other after-sale problems or questions, please send an e-mail to us at [support@nanrobot.com](mailto:support@nanrobot.com).





## WARRANTY GUARANTEE



## WARRANTY GUARANTEE

We do provide a warranty and offer customer service for our products if you find there is a quality issue. You can do this by contacting us, and we will offer professional instructions and solutions timely.

For the entire scooter, vulnerable parts like tires, brake discs, horn, dash board, light etc. are within the warranty of 90 days Battery and controllers are within the range of 180 days. The frame is within 365 days repair warranty. If the problem is caused by non-human factors, we will provide new replacements for free.

We are not responsible for wrong return and refund loss, the buyer should be responsible for more than 20% return charge, and double-way transportation charge.

### EXCHANGES (IF APPLICABLE)

We only replace items if they are defective or damaged. We do not accept returns but do offer exchanges; all inquiries can be directed to us via an e-mail at [support@nanrobot.com](mailto:support@nanrobot.com).

# NANROBOT



## Documents / Resources



[NANROBOT LIGHTNING Electric Scooter](#) [pdf] User Manual  
LIGHTNING, Electric Scooter, LIGHTNING Electric Scooter, Scooter