TEVERUN

TEVERUN SCOOTER

U S E R / M A N U A L



NINGBO TEVERUN TECHNOLOGY CO.,LTD

Add:Xiwang Industry Zone,Hengjie Town, 315181,Ningbo,China
Email:info@teverun.com
Web:www.teverun.com

CONTENTS

Safety guidelines and restrictions ---- P2
Product structure ---- P4
Name of parts ---- P5
What in box ---- P6
How to use product ---- P7
How to fold ---- P8
How to use the instrument panel ---- P9
How to use build in TFT ---- P12
How to use charger correctly ---- P18
Safety guidelines before driving ---- P20
Check and maintenance ---- P21

Before Reading the Manual

This manual contains important information to help you to use your product more safely. For your safety, there are warnings of 'Danger', 'Warning', and 'Caution' depending on the degree of danger and the meanings are below.

⚠ DANGER	Indicates a hazardous situation that will result in serious injury.
⚠ WARNING	Indicates a hazardous situation that could result in serious injury.
⚠ CAUTION	Indicates a hazardous situation that could result in minor or moderate injury.

Before Reading Manual ⚠CAUTION

✔ Please read this manual carefully Before using this product

I General safety guidelines and restrictions

Even if the it is within the warranty period,you maybe liable for any accident caused by any of the following causes.



1.Be careful of water!

This product and components are not waterproof. Don't let the water get into the product and components.
*Never use it, if the road is wet due to the rain, snow, hailstone.
*If you wash or spread water to electric devices, it can result in malfunction or fire.



2.Beware of folding and spinning parts!

If parts of the body, as a finger or hair, get caught in the spinning or folding parts of the product, this may lead to severe injuries. Please be careful.



3.No acrobatics

Stunts and jumps such as jumping and dropping are prohibited as they can cause a great impact on the product and can cause of malfunction and accidents.



4.No companion boarding

This product is intended for one adult only, so children,infants, or two people are prohibited from boarding.



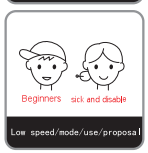
5.Don't tune by yourself

Do not open or tune the electric parts (battery, controller or motor system).



6. No companion boarding

Unlicensed, driving after drinking, loading cargo on the scooter is prohibited. (More than bike or bicycle license is required) Please comply with the Road Traffic.Act and related laws and regulations according to the place of use.



7. Beginners and seniors are encouraged to use at low speed

Beginners who are not accustomed to use the product, seniors and others should avoid high speed mode driving and recommend low speed driving. In addition, please use after practice how to ride safely in a wide place.



8.Do not sudden brake with front brake

If there is a risk of overturning, sudden deceleration should be done safely. Do not apply any unusual behaviors or artificial forces, such as stopping with your feet.



9.Do not drive on steep slopes

Acceptable gradeability is different for each product. Excessive hill roads exceeding the specification may cause damage to the product (parts) due to temperature cut, overcurrent, or low voltage cut, which may cause the product to malfunction.



10. Safety warning when lifting the product

Please always lift the product with at least one other person.
When lifting the product, please be careful not to damage your back or knees.



11. Safety warning when lifting the product

For the safety of passengers, be sure to wear a full face helmet and the other protective gear (for knees, elbows, hands, upper body) and do not wear shoes such as slippers or high heels that can interfere with driving.

❷ Precaution before driving

1 Night driving should be avoided at all times. Always wear helmets and other body guards and drive safely.

2 Select the mode that suits you and drive. In order to cope with sudden situations, be prepared to slow down by holding the brake at all times.

3 When turning left / right, slow down to avoid the danger of overturning or slipping, then slowly turn safely.

4 To go backwards safely, get off the product only after coming to a complete stop.

5 It is prohibited to use in any places that are slippery, crowded, have a steep slope, or are uneven.

6 When crossing a pedestrian crossing, get off from the product for pedestrian safety.

7 Do not drive in a way that threatens any other means of transport, such as animals, pedestrians, bicycles, motorcycles, cars, etc.turn safely.

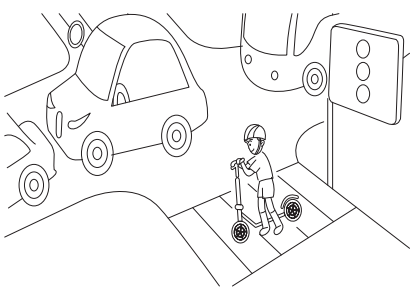
8 When passing speed bumps and road obstacles,be sure to slow down.be sure to slow down.

9 When decelerating or braking, do not stop with your foot, but by using the brake appropriately.

10 Be careful as there is a risk of burns due to heat from the motor and brake (especially disk rotor)after driving.

11 It is prohibited to drive by holding the handle with one hand; please use both hands at all times.

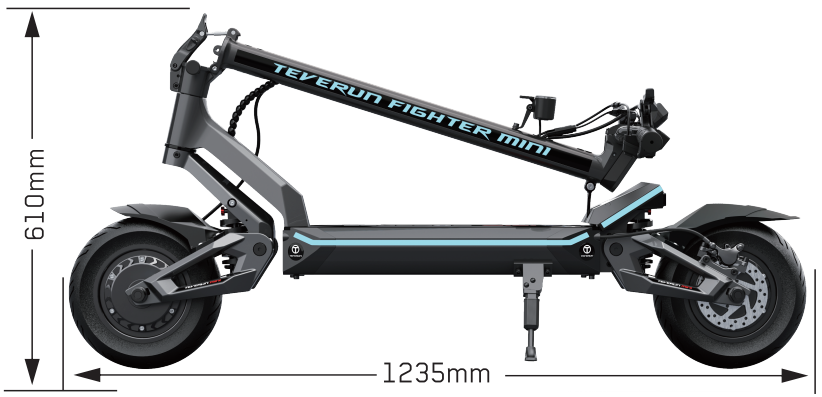
12 Do not ride or drive when the kick stand is down.

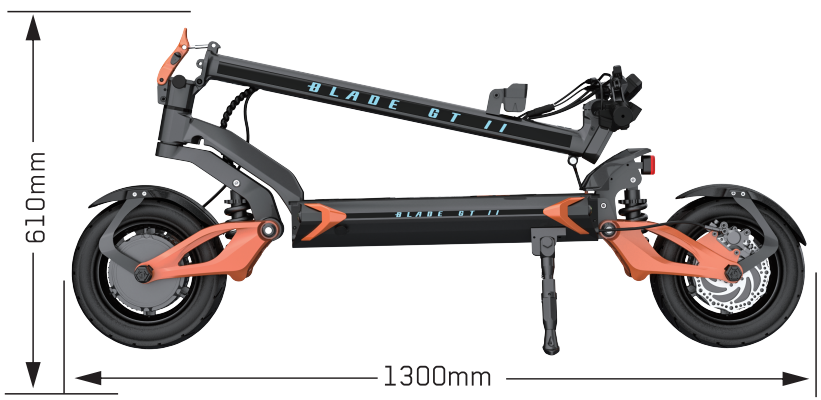


Product structure

Scooter size







Name of Parts



What's in the Box:



Scooter



Manual

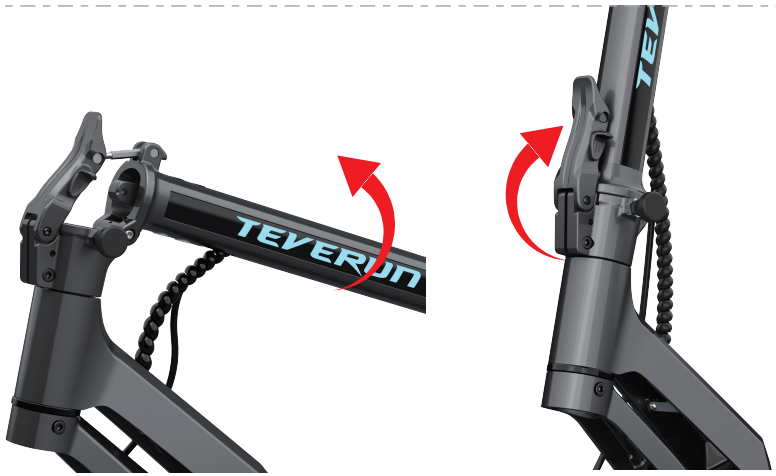


Charger



Tool

How to use products



Lift the handle post into a vertical position. And fasten handle.

Lock the handle bar



How to fold



Pull the lock pin



Pull out the folding level



Done

How to use the instrument panel

⚠CAUTION



1) Speed step setting Can adjust with button.

While the instrument panel is on, press to set the speed step.

The setting is completed when the selected speed step value is selected.

* Blinks 3 times per 10 seconds when the remaining battery power is 10%.
  It blinks continuously when the remaining battery power is 10%.

2) Functions and settings for each main screen mode can adjust with button.



MODE	Discription
PRIP	Current mileage (Press and hold mode button to reset to "0")
ODO	Accumulated mileage
CHA	Not in use
VOA	Current voltage
TIME	Drive time

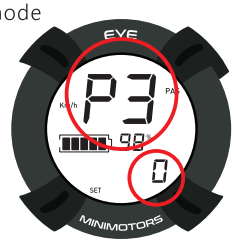
3) Instrument panel detailed function

You can change the setting mode by turning on the power of the dashboard and pressing for 2~3 seconds.

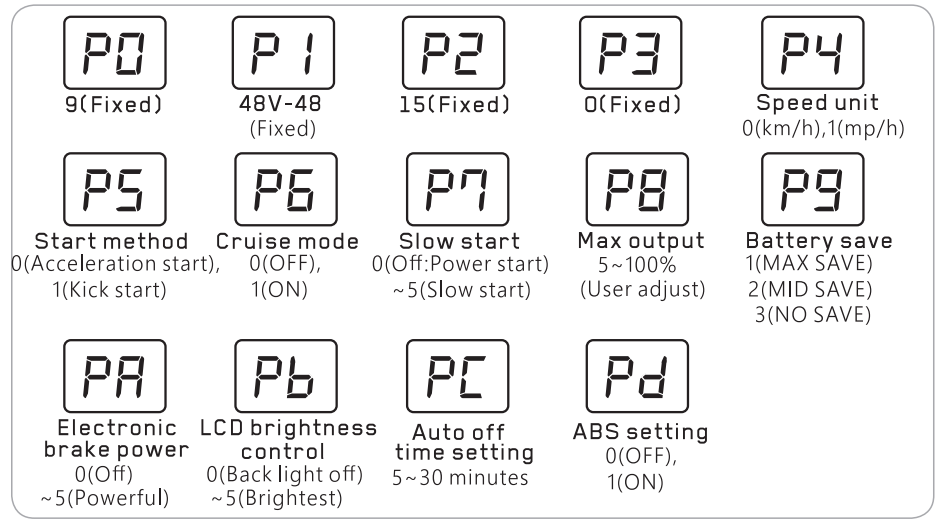
In the setting mode, press once to change the internal setting value

* If you change default setting value P0(13), P1(72), 3 P2(15), P3(0) the exact information is not displayed.

Setting mode



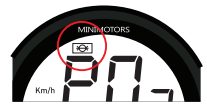
Setting value



4) Features of cruise mode (automatic driving)

The cruise control function allows you to maintain the driving speed automatically.
Take advantage of cruise features to reduce fatigue when traveling long distances and to increase mileage of driving due to constant speed driving.

- **The start of the cruise function**
  Select the Cruise function section of the dashboard under 'Settings' and maintain the throttle to the same Acceleration for 7 seconds the cruise function will start.



- **End of cruise function**
  When you hold and release the brake while cruise mode is in effect, the cruise mode is automatically released.

- **Precautionswhenusing the cruise function**

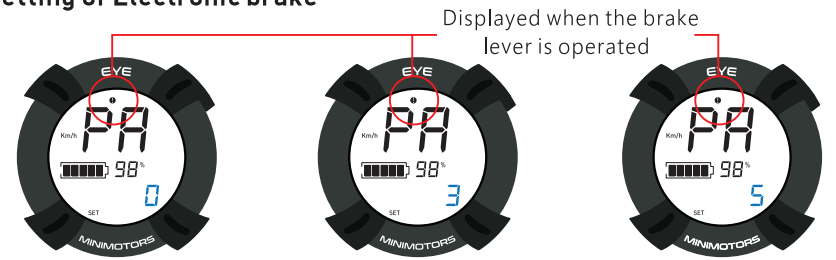
⚠CAUTION

1. In case of cruise function, please ride in a position where brake can be used immediately so that cruise function is canceled and braking is possible in preparation for safety situation while driving.
2. It is permanently dual drive mode and can be released via throttle and brakes.

* It is not recommended that cruise function is disabled via the throttle.

5) Setting of Electronic brake

Displayed when the brake lever is operated



Electronic brake off | Moderate intensity | Maximum intensity

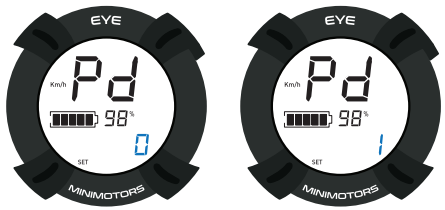
How to use the instrument panel

Precautions when using electronic brake after a full battery charge **⚠CAUTION**

The electronic brakes do not operate when the battery is fully charged, so be sure to check and operate this device.
When the battery is used a little, the electronic brake will operate normally.

6) ABS function setting guide

All electric scooters are subject to sudden braking, causing the wheels to stop spinning (Tire Lock).As a result, the slip of tire can cause the driver to fall down, which can cause accidents. This productis equipped with ABS brake function to reduce the tire lock, enabling more secure braking.



ABS OFF

ABS ON

(1) ABS function ON

Set the ABS function part Pd of the dashboard to 1.

(2) ABS function OFF

Set the ABS function part Pd of the dashboard to 0.

※ If Pd - ABS function 1 (ON), PA - electronic brake function will operate maximum,when the ABS function is disabled, the previously set electronic brake actuation value is applied.

※ ABS brake is an abbreviation of Anti-Lock Brake System. It uses the principle that maximum static friction force is larger than kinetic friction, so that braking distance (distance from breaking to stopping)is shorter than the normal brake. It has the advantage that the vehicle does not slip well when wheel is rotating. And it is a brake assist system that can stop more safely without tire lock and slip.

Electric scooter Anti-Lock Brake System Patent pending : 10-2018-0045825

＊ Precautions when using the ABS function **⚠CAUTION**

ABS has the advantage of being able to stop at the shortest braking distance that can be obtained from the tires and road conditions.
However, due to the principle of repeatedly holding and releasing the brake several times in a second, a lot of vibration occurs in the motor and the body.
Repetitive vibration caused by this may cause frequent loosening of the motor, rim, fixing part, and body fixing bolt.

7) Self-diagnosis through dashboard



Fault type	Diagnosis	Solution
❷	System error	If the error information appears, immediately stop using the product and take the scooter to the service center before use.
❹	Motor error	
❺	Accelerator error	
❻	Controller error	Excessive use can result in damage to the product and safety accidents.
❼ ❽ ❾	None	

*The number ❶ is displayed when the cruise function is executed at a constant speed.

* The number ❸ is displayed when the brake lever is operated. (When the indicator lights, the accelerator does not operate.)

BUILD-IN TFT

1. Overview

This instrument mainly made for the display of the vehicle status (speed, mileage, power, etc.), different parameter setting;
Anti-theft password management;
Communication with the vehicle and other functions;
To provide users with a more intuitive and beautiful user display interface, real-time vehicle status monitoring and friendly human-computer interaction, to escort the user's travel.

2. Statement

This document describes the functions, parameters and related precautions of the product. Users should read this document in detail and comply with the relevant industry specifications before operating the product. We are not be responsible for the product damage caused by improper operation or exceeding the use conditions specified in this manual.

Due to the update of the product, this document may modify the content without notifying the customer. If you want to know the latest product information or technical parameters, please contact your sales.

3. Product function **⚠CAUTION**

- Display the main data: the percentage of power supply, the current speed, maximum speed, average speed, single trip distance, total mileage, etc;
- Various function indications: Bluetooth connection, left and right side lights, drive, automatic cruise, zero start, etc;
- Real-time alarm prompt to display the current fault status;
- User custom Settings: display brightness, unit, etc;
- Multiple color themes can be adjusted;

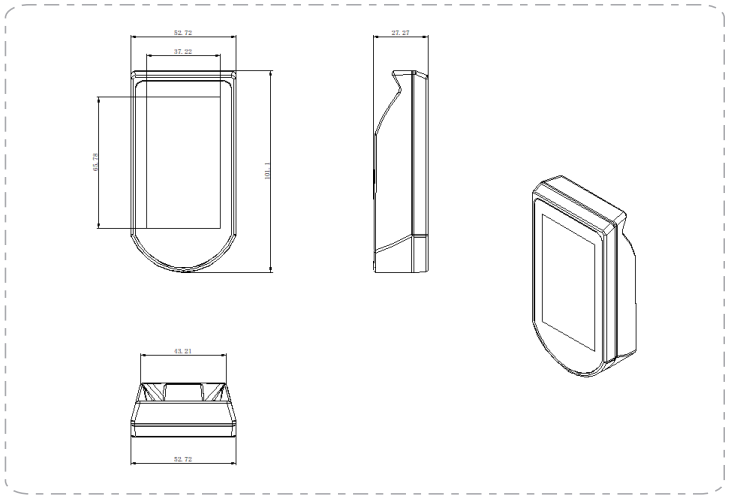
4. Basic Information

1.1 Material and color

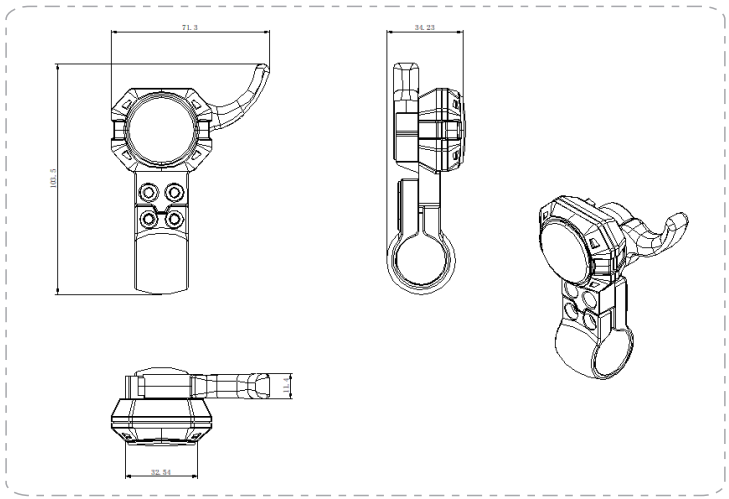
3inchTFT The overall instrument shell is black, made of PC material, waterproof grade IP67, can ensure good mechanical performance, waterproof performance, have excellent use performance.

4.2 size

(1) TFT instrument dimensions

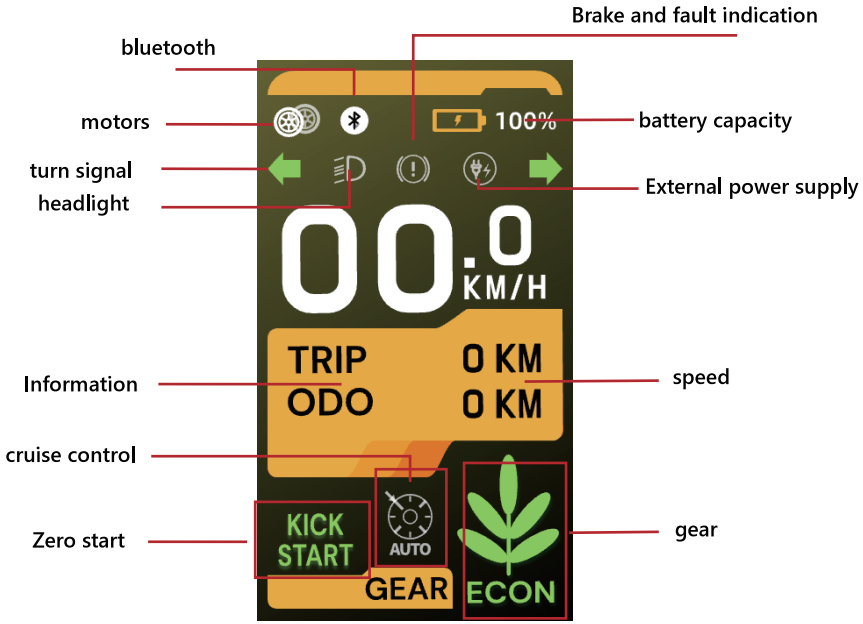


(2) Accelerator size



4.3 Interface content interpretation

⚠CAUTION



* by click ‘M’ button , The information bar could show the single mileage, the total mileage, the motor current, the front and rear motor temperature, the front and rear motor, the average speed and the maximum speed .

5. Icons and key button definition

1.1Button definition

Key icon	Key name	Description of key (check operation description and user setting for specific key function)
	"+" key	Switch up the gears or options
	"–" key	Switch down the gears or options
	Open / shut down key	Turn on or off
	"M" key	Mode key, enter the mode settings or determine the options

5.2 Main interface icon definition

Function icon	Function name	function declaration
	Left signal	The icon lights up when the left light is turned on
	Right signal	icon lights up when the right light is turned on
	headlight	The icon lights up when the headlights are on
	PDA	When Bluetooth is not connected, the icon flashes; When Bluetooth is connected, the icon is on
	motors	Long press "M" key to switch single motor / dual motors
	External power supply	Long press the "+" key to turn on / off the external power supply; The icon lights when turned on
	gear	Press + or- -to adjust gears (1-5, ECON)
KICK START	Zero start	The icon lights when zero start mode is on
AUTO	Automatic cruise	The icon appears when the automatic cruise mode is turned on
	brake	he icon lights when braking

* Automatic cruise and zero start function must be turned on in the APP (in Settings)

5.2 Main interface icon definition

Fault icon	Fault name	Troubleshooting
F	Front controller failure	The icon lights when the front controller fails
R	Rear Controller Fault	The icon lights when the rear controller fails
FM	FM hitch	Icon is lit up when the front motor hall is faulty
RM	RM hitch	Icon is lit up when the rear motor hall is faulty
	Battery failure	Icon lights when battery fails
	Accelerator fault	Light the icon during the fault
	System low voltage failure	Icon is lit up during the system low-voltage failure
	display failure	The icon is turned on during an display failure
	The system is too warm	The icon rises when the system is over warm

6. Installation instructions

6.1 Install the dashboard

After the scooter is power off, insert the corresponding connecting line, adjust the display screen to a convenient use Angle, and check whether the instrument panel can be used normally after power-on.

6.2 Install accelerator

After the scooter power off, insert the corresponding connecting line, adjust the accelerator to the convenient use, and check whether the accelerator can start the scooter normally after the power.

7. Operating instructions

7.1 Turn on / off

Long press the Open / shut down key to turn on , entering the password for startup; long press the Open / shut down key to shut down.

7.2 gear

There are 6 gears in total, and the speed of 1~5 gears increases successively, in which 1 gear is pedestrian gear and "ECON" is low speed gear

Click "+" to increase from "ECON" to 5, and click "-" to decrease from 5 to "ECON";
The speed limit of 5 gears except "ECON" can be freely adjusted within the APP.

7.3 Password setting and input

When setting the input password: you can click the "+" key to add one value of the current password bit, reduce the current password bit by clicking the "-" key, jump to the next bit by clicking the "M" key, after setting, you can click the switch key to confirm the password;

With wrong password, the password will be automatically empty and return to the first place, you can re-enter the correct password.



7.4 Accelerator usage method

Push the accelerator down, and drive the scooter.

7.5 Theme color

Press the switch button for two times to set the four theme colors.

8. User settings

8.1 mode of entrance

Press the "M" mode key twice to enter the setting password interface, enter the password to confirm and enter the setting page.

8.2 Brightness

Press the "M" key, and when the word "Brightness" is beating, it is selected; You can adjust the display brightness through the "+" button up or "-" button down, a total of 10 gears;
After adjusting to the appropriate gear, press the "M" key to confirm .then word "Brightness" is no longer beating.

(The following specific selection, switching, and determination options are the same as 8.2)

8.3 Unit System

Press "+" key or "-" key to switch up or down to "Unit" option and press "M" key; switch up or down, and the main interface will switch to Km/h or MPH.(You can also switch in the APP)

SETTING	
>Brightness	10
Unit	Metric
Auto off	10Min
SysVol	48 V
Diameter	11inch
PackVol	50.0V
PackTmp	24deg
Chargecnt	2
SetSyspwd	>
SysPwdEn	ON
Exit	

8.4 Automatic Shutdown

Switch to Auto off , select automatic shutdown (can be adjusted between 1-10 minutes) or OFF (no automatic shutdown).

8.5 System voltage

Display the system voltage, and the parameters can be set through the APP.

8.6 Wheel diameter

Displays the wheel diameter of the product, and the parameters can be set through the APP.

8.7 PACK Voltage

Displays the current battery voltage.

8.8 PACK temperature

Displays the current battery temperature.

8.9 Charging cycles

Displays the number of battery charging cycles.

8.10 Set the system password

After selecting "SetSyspwd", you will jump to the password modification interface. You can change the system password according to the password setting and the input operation mode. You can use the new password after entering the next time.

8.11 System password switch

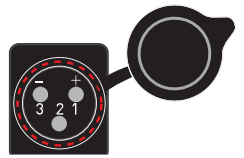
After selecting "SyspwdEn", you can set the system password switch. After opening, the password can enter the system, and it can enter without the password.

8.12 Exit method

You can select Exit down or press M twice in a row to exit the Settings page directly.

How to use the charger correctly

3P charger connector



1) Basic charging method

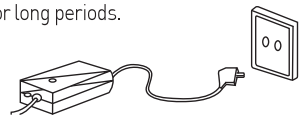
1. Open the charger port cap and connect it to the connector of the charger and connect it to the household outlet.
2. Charging status indicator ● (Red) Charging ● (Green) Charging complete



3. Be sure to close the charger port cap when driving or storing except when charging.
4. When connecting the connector to the charger port, there may be metallic sparks due to voltage difference, but this is normal.

2) Basic charging method

*** Failure of the charger and abnormal conditions can cause electric shock and fire. Learn the correct usage and prevent safety accidents in advance.**

1. Manufacturers and sellers are not responsible for any problems arising from any disassembly, modification, or mixing with other chargers. 	2. The charger is forbidden to be used in places subject to high humidity, heat, flammable materials, confined spaces, or where there is no ventilation such as in a car. 
3. The charger is not waterproof. It is thoroughly controlled to prevent moisture from entering the charger. 	4. Children and pets should not be allowed to approach the charger when they come into contact with them, as they may cause an electric shock. 
5. If the charger lamp does not light, charger fall down, strong external shock, long time charge, or cable cover damage, discontinue use immediately and contact the service center 	6. Unplug the charger when you are away from the home for long periods. 

⚠WARNING

7. Use only genuine charger.
8. Do not insert conductors into the charging port.
9. Do not touch the plug for about 10 seconds after unplugging the charger. There is a risk of electric shock from instantaneous discharge.
10. Do not remove the terminal during charging. Otherwise you may charge the internal circuit of the charger and cause malfunction.
11. Do not operate the product during charging.
12. Charging terminals should be firmly contacted during charging and should not be used if terminals are corroded or damaged.
13. When disconnecting the charger from the product, it is safe to hold the terminal without holding the wire.
14. Be sure to keep the charger disconnected from the product after the charging is complete. The charger must be disconnected if it is not used for longer than a few days, as there is a risk of overcharging when charging more than the time indicated on the product specifications.

Safety precautions for Lithium battery



1) Care Lithium batteries should be protected from direct exposure to children and pets.

2) Performance 1. Lithium battery is affected by external temperature. In the winter, when the temperatures are low, the performance of the battery may be temporarily deteriorated and the mileage and power output is reduced.

2. Lithium battery has a characteristic that discharge performance is reduced by more than 15% when charging / discharging 300 times or more. If usage time is shortened due to long usage, it should be replaced with a genuine one through the nearest point.

3) Charging 1. Lithium battery should be used only with genuine battery and charger supplied from the manufacturer. Any problems caused by use of battery made by the manufacturer, mixed use, or using the charger are not covered by the manufacturer.

2. Charging the lithium battery with a non-genuine charger may cause malfunction or fire.

3. The lithium battery should be charged in a well-ventilated, dry place and around the charger in a place where there is no flammable material.

4. Lithium battery should be charged at 0 ~ 45°C and discharged within -10 ~ 60°C .

The sub-battery must be charged at 0 to 50°C and discharged within -20 to 75°C.

Charging or discharging at a temperature outside this range may cause malfunction, fire or explosion.

5. In case of moving from cold outside to warm indoor, please charge it after 1 ~ 2 hours.

This is to prevent condensation from occurring inside the product due to the temperature difference.

4) Storage 1. Lithium batteries should be kept away from snow, rain and direct sunlight.

Do not store or charge them in a trunk or hot room.

Select a dry place and store at room temperature (10 ~ 20 ℃).

2. When storing for more than 3 months, charge the remaining battery level to 70 ~ 80% (do not store full charge).

5) Trouble symptom, safety 1. Lithium battery should be discontinued immediately if it is damaged or there is leakage of battery, sour odor, appearance deformation, etc. Please contact the place of purchase to get technical support and service.

2. If overheat, smoke, or ignition is detected in a product with lithium battery, immediately stop charging and use, move the product outdoors as soon as possible, and then use a fire extinguisher to extinguish flames. Do not spray water or immerse the product in any situation, which can lead to more danger.

3. Lithium battery pack has very high energy density, so if you charge the battery for a long time and there is a case of short-circuit, leakage, bad battery, etc., it can lead to ignition.

Therefore, you should avoid charging for a long time without a person being present to avoid the risk of unexpected fire.

6) Misuse If the lithium battery is short-circuited, the polarity is changed, or if the battery is impacted, malfunction or fire may result.

If you think that the battery has been impacted, you should stop charging and using it and visit the nearest service center for inspection.

7) Water inflow It should be controlled to prevent water inflow into the lithium battery.

There is a risk of fire or electric shock if the charger is connected while moisture is present.

8) Caution Disconnect the battery from the main unit except when recharging and reinstalling.

Do not use for any other purpose.

9) Disposal When disposing of the lithium battery, the battery should be separated from the product at the point of purchase or near the service center and the charge and discharge terminals are not short-circuited. Dispose of it as industrial waste.

⚠DANGER **Battery disassembly prohibited**

Battery disassembly, modification, and repair are not covered under warranty.

Safety guidelines before driving

1) Required checking before use

1. Check throttle and handle



- Operate the accelerator throttle lever about 2 ~ 3 times to check whether it returns to the home position.
- Be careful that excessive throttle leaning and manipulation of the throttle can cause malfunction due to internal parts damage.
- Check for free gap in the handlebars before using.

2. Check brake and cable



- The brake braking force is sufficient to check the operating condition.
  If the braking force is significantly lowered, use it immediately after inspection and action.
- Check that the brake pad is not worn, that the cable is not loose, that the cable is not damaged, and that there is no leakage in the case of hydraulic brakes
- If there is an unusual feeling or noise during operation, check for breakage, wear, and deformation of the inner wire of the brake cable.
- Check that the bolts and nuts of the brake fixing parts are not loose and that the disc is not deformed or damaged.

3. Check tire pressure and abnormal tread wear



- Check the front and rear tires for wear and punctures and check the value marked on the surface of the tire.
  When the air pressure is shortened, the possibility of puncture increases, so check always.
- It is necessary to judge the replacement time by observing the appearance of the tire such as tire damage, uneven wear.

4.Tightening check such as folding part and handle part



- Make sure that the bolts and nuts of all parts of the product are tight and safe from loosening. Check the fastening condition and clearance of the folding and fixing parts of the handle (folding knob, swing arm, etc. folding related parts, suspension arm bolt, swing arm bolt).

* In these cases, stop driving im mediately.

⚠DANGER

If you encounter any of the following situations while driving, stop driving immediately and contact your nearest branch or service center for proper measures.

If you provide pictures and videos to get an accurate diagnosis, professional counseling is available.

- Unusual heating of the motor
- Brake braking status error
- Error messages on the instrument panel
- When the throttle is not returned to its original position
- Abnormal noise is generated
- Product smoke, ignition, sour odor
- When rain or wet with water or in a similar situation
- When other driving is judged to be unreasonable
- When the battery doesn't fully charge and shorter riding distance after a full charge (Battery explosion may cause due to faulty battery cell or battery cell breakdown)

Check and Maintenance

Maintenance and self–maintenance

Electric products can be damaged by various factors.
The life span of each part varies depending on driving habits and driving environment.
Parts that exceed the service life may cause accidents.Let's manage various parts and prevent safety accidents in advance.

Check the replacement timing of consumable parts

The components and suspension parts of the swing arm, tires, wheels, bearings,discs,brakepads,cables and folding parts, various brackets and other consumable parts require periodic inspection and must always be checked.





Parts Replacement Schedule	
Blade mini/ Fighter mini/ Blade gt ii	
Parts name	Replacement cycle/km
Handle bar	2 Years/20,000
Steering tube	3 Years/20,000
Battery	2 Years/20,000
Other chassis	If the exterior is damaged or deformed

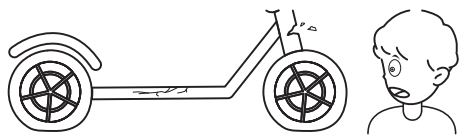
External damage inspection by driving environment ⚠CAUTION

① Replace parts that may be damaged by the external driving environment, such as deformation of parts or tiny cracks due to pressure.

② If the product is exposed to strong sunlight for a long time,discoloration may occur.

③ Incase of jumps, slight impacts such as turning, collision,etc.,when driving frequently or for a long time in a poor road condition or driving for thousands of kilometers or more, fatigue breakdown phenomena may happen so please check the parts replacement schedule for each product and replace accordingly for safety.

④ Fatigue breakdown and maintenance parts may differ from the example conditions depending on the driving environment and the operating conditions. Also check parts other than the replacement cycle (maintenance parts) at all times to check for any signs of abnormality.



Important check list

※ Metal vibration may occur due to motor vibration and the vibration of the brake disc and pad during the load section that accelerates during driving. (About 15 ~ 30Km, different for each product)

This is a phenomenon in which all rotations (fans,automobiles, ships, etc.) are vibrating at a specific rotational frequency (rpm) rather than the product.However, if the continuous noise or metal noise is large, there is a possibility that the disk will become bent and deformed.

※Please note that after running, there is a risk of burns due to the heat on the motor and brake (especially disk rotor) side.

※ Be careful that the bolts of the motor, rim, and motor shaft may become loosened due to the ABS function.

※For inspection and repair, remove the side cover, attach the power switch, and attach it with the product's standard bolt. When tightening, carefully remove the cover of the wiring.
Bolts other than the rule bolts (long bolts) can cause serious damage to the battery casing (battery cells), which can cause fire or safety accidents.

※ Folding parts and joints where movement occurs due to product characteristics can naturally damage the surface or paint surface during use, especially when operating in incorrect operation and form.

※ Folding parts and joints where movement occurs due to product characteristics can naturally damage the surface or paint surface during use, especially when operating in incorrect operation and form.

※ When inspecting the product, keep two wheels away from the ground and work on a safe workstation

MEMO