kaabo

USER MANUAL

MANTIS KING PRO



Foreword

Company Introduction

Kaabo Co. LTD., is a company who manufacture high quality electric scooters and accessories at market-leading prices since 2013. Our scooter are about the joy of player. Each model has been handcrafted to give scooters true freedom. Take to the open road, or cross terrain which would be impossible on a normal scooter – Kaabo scooter push the boundaries of what ’s possible.

Our Story

Founded in 2013, Kaabo believed scooters were built for short urban trips on smooth roads. But real-world riding changed that view.

The world is not flat or predictable. Riders face wet roads, rough terrain, and constant change. In these moments, control matters more than anything.

Kaabo redefined what a scooter should be.

In 2018, we helped pioneer the all-terrain electric scooter category—focused not only on power, but on real-world control and stability.

We re-engineered the scooter as a system and introducing what would become Kaabo’s signature engineering system — where machine and rider work in unified harmony.

Today, Kaabo riders explore further and ride without limits.

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Before Reading Manual

This manual contains important information to help you to use your product more safely. For safe use, it is marked as '**Danger**', '**Caution**' and '**Warning**' depending on the degree of danger and the meaning is as below.

Danger: Indicates a hazardous situation that could be a result of serious injury.

Warning: Indicates a potentially hazardous situation that could be a result in light injury.

Caution: Indicates a potentially hazardous situation that could be a result in serious injury.

Caution: If the scooter is moved from low temperature environment (-20℃) to room temperature environment (10℃), don't power on it within one hour to prevent scooter is damage.

Safety Warnings

*Even if the scooter is within the warranty period, you may be liable for any accident caused by any of the following



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, hailstorm. *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 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 adjust by yourself ! Do not open or adjust the electric parts (battery, controller or motor system).



6. Comply with the related laws ! Unlicensed, drunk driving, 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 accelerate downhill ! Slow down at downhill. When reducing the speed, to prevent brake overheat, use the brakes properly to reduce the heat on



10.Do not drive on steep slopes ! Acceptable grade ability 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.



11. Safety warning when lifting the product ! If the product is lifted by holding only the handle, there is a possibility that the product may be damaged due to deformation of the folding part due to load or movement of the product. When lifting the product, be sure to hold the product's body (footrest) with one hand and hold the handle with the other hand so that you do not get hurt in your back or knees.



12. Be sure to wear safety equipment ! For the safety of passengers, be sure to wear a full face helmet and the other protective gear(knee, elbow, hand, upper body) and do not wear shoes such as slippers, high hills that interfere with driving.

Riding Guidelines

1. Night driving should be avoided in any case, be sure to wear helmets and other guards (knees, elbows, hands, upper body, etc.) and drive safely.

2. Select the mode that suits you and drive. In order to cope with the sudden situation, exercise to hold the brake to slow down at all times.

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

4. To go to backward, it is safe if you getting off from the product after stopping.

5. It is prohibited to use in a slippery place, a crowded place, a steep slope, roads with a risk of accident, uneven road.

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

7. Do not drive in threat any other means of transport, such as animals, pedestrians, bicycles, motorcycles, cars, etc.

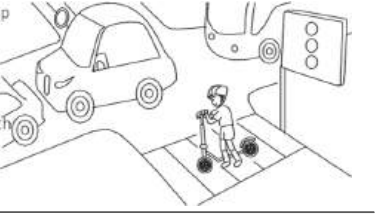
8. If you pass the speed bumps and obstacles, be sure to slowdown.

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

10. Be careful of the risk of burns due to heat from motor and brake (especially disk rotor) when driving.

11. It is prohibited to drive with all the way by holding the handle with one hand.

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



Name of each part



Instrument Style&APP download



7-key buttons



KAABO LCD



Thumb press throttle



App download QR code

*For the operation of the instrument, please refer to the instrument manual separately.

Product Size



* Value may vary with measurement method.

Battery Specification



Detachable portable battery	
Cell mode	DMEGA 45E 21700
Nominal voltage	60V(59.2V)
Nominal capacity	18Ah
Battery voltage range	48v~67.2V
Service temperature	-20℃~45℃
Input(Single)	Single： MAX 67.2V 5A
Input(Total)	Total： MAX 67.2V 8A
IP	≥IPX6

Product Specification





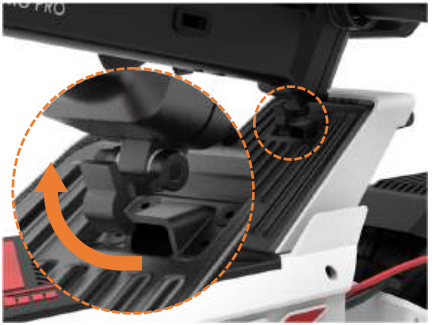


MANTIS KING PRO	
Version name	MANTIS KING PRO
Color	White/Black/Customized
Battery&Cells	60V18AH (16S4P) 64cells/ DMEGC 21700 45E
Controller	Kaabo Sine wave （FOC） 60V25A*2
Dual/Single Drive	Dual
Max power	3,360 W
Motor	1200W brushless motor
Max Speed	60KM/H
Max Range	≥80KM （80kg-25km/h）
Tyres	10X3.0-6
Climbing Angles	<30%(16°)
Max Load	120kg

Input	Single MAX: 67.4V 5A/Total MAX: 67.4V 8A
Charger	67.2V 2A/1.75A(Can charge simultaneously via both ports)
Charging time ordinary charger	2A：About 10hours 2*2A：About 5hours
Charging time fast charger	5A：About 4hours 5A+2A: About 3hours
Center Control Unit (With APP)	YES
Display	Kaabo LCD
Brake	Mechanical disc brake + 140mm Disk/Hydraulic disc brake + 140mm Disk
Shock Absorber	132mm Adjustable damping spring shock absorber
Light System	1.European standard headlight (two LED lamp beads)/ 2. European standard rear tail light/ 3.RGB decorative lamp
Reflector	1.European standard white front reflector, 1 piece 2. Side yellow European standard reflectors 2 pieces 3. Tail European standard red reflector 1 piece
Horn	Embedded horn in the headlight
N.W.(kg)	34KG
Open Size	128.5cm*131cm*62cm
Floding Size	128.5cm*57.6cm*62cm
Packing Box Size	134.2cm*64.5cm*28.8cm
Certificates	EN17128/UL2272/60335/DGT
Product Material	Handle and stem with 6061 aluminum alloy; frame connection,swing arm and rotating head with 6082 aluminum alloy; deck with 6063 aluminum alloy ; fender with ABS+PC;electric control box with ADC12 aluminum alloy.

How to use the scooter

1.Open the hock



2.Open the tube



3. The first-level self-locking safety lock is installed.



4.① Push the folding wrench to complete the folding process. ② The second-level insurance automatically locks.



How to use the scooter

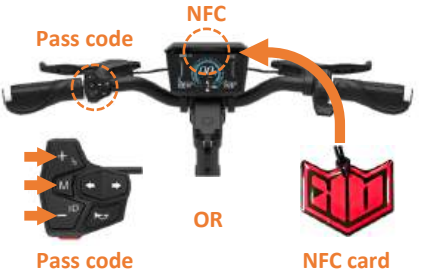
5.Unfold the kickstand.



6. Short press the orange power button for 1 second to turn on the scooter.



6.Insert the NFC card provided with the vehicle or enter the password (you can modify the password yourself), and then enter the normal interface.



7. ①Apply the brakes， Release P mode，② Choose the appropriate mode ， ③Push the scooter up the 6km/h， ④ Adjust the throttle according to individual capabilities ，start riding.



How to use the scooter

1.Stop the scooter steady，fold the kickstand.



2.Long press the power button，keep pressing for 2~3s，turn off，make sure the power off。



3.① Release the second-level safety lock,② And simultaneously pull the folding wrench.



4. ①One hand held the steering tube, while the other ②unlocked the first safety lock.



How to use the scooter

5. Hang the hook on.



1.①Insert the key,② Turn clockwise to unlock, Turn the lock counterclockwise



2.① First, pull the handle backward, ② and then pull out the battery upwards.



How to assemble the battery

1. Put the batter tail into the scooter body groove.



2. Holding the batter handle,Using the pedal groove, slide and push the battery to the rear.



3.Holding the battery handle, Centered on point ①, then press ② the head of the battery into the body.

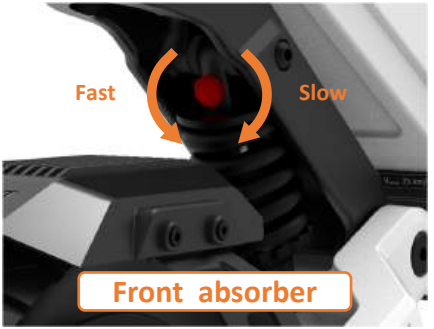


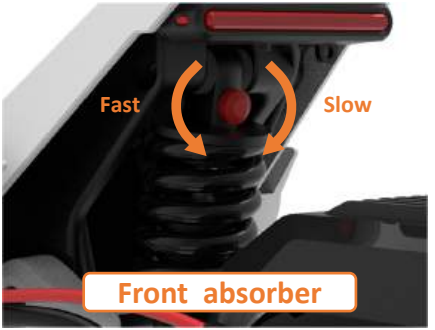
4. make sure the lock handle lock well. ① Use the key, Turn the key clockwise and ② lock it.



How to adjust the damping coefficient of the shock absorber

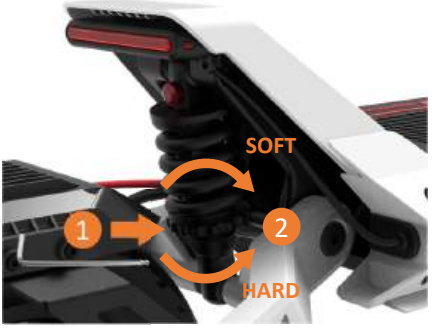
1. Shock absorber damping adjustment





2. Adjustment of pre-tension of shock absorber springs

①Find the screw hole, and use the 2mm hex key to release it.
②Adjust the tightness using a wrench. Clockwise rotation means tightening, while counterclockwise rotation means loosening.
The factory default setting is the recommended maximum travel distance. If necessary, the travel distance can be reduced.
After adjusting the travel properly, it is recommended to position the locating screw hole towards the outer side and then secure it with an internal hex socket wrench.



How to use a charger correctly

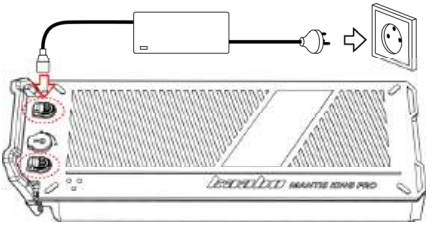
1)Basic charging method

1.Open the chargingport cap and connect it to the connector of the charger and connect it to the household outlet.

2. Charging status indicator

3. Be sure to close the charging port cap when driving or storing except when charging.

4. When connecting the connector to the charging port, metallic sparks due to voltage difference may be splashed, but this is normal



- (Red) Charging
- (Green) Charging complete

* 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, 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 of time.

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. 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.

***Short-circuit Caution:**
Be careful not to short-circuit the battery because short-circuiting of the battery is very dangerous.
***Over current Note:**
The battery of this product is designed to automatically shut off the power supply to protect the battery when the over current is over 100A.
***Low Voltage Caution:**
The battery of this product is designed to be automatically shut off when the voltage drops below 48V. Do not use the product in the low voltage state.

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 winter, when the temperature is low, the performance of the battery is 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 inflammable material.
   ④ Lithium battery should be charged at 0 ~ 45 ℃ and discharged within -10 ~ 60 ℃. 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 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 leakage of battery, sour odor, appearance deformation, etc., and 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 evolve. Do not spray water or immerse the product in order to evolve, which is more dangerous.

   ③ Lithium battery pack has very high energy density, so if you charge the battery for a long time in case of short-circuit, leakage, bad battery, etc, there is a possibility of ignition. Therefore, you should avoid charging for a long time withoutaperson, and charging must be done while the person is aware that the risk of unexpected fire can be avoided.

6.Misuself the lithium battery is short circuited or the polarity is changed, or f the battery isimpacted, malfunction or fire may result lf you think that the battery has beenimpacted, you should stop charging and using it and visit the nearest point for inspection.

7.Water infow t should be controled to prevent water infow into the lithium battery. There is a risk of free or electric shock if the charger is connected while moisture is present.

8.Cauton Disconnect the battery from the main unit and prohibitre charging reinstalling, or using other applications.

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

Safety precautions

Tips:Check for safe braking

• For safe braking, check whether the brake lever and disc caliper connection (wire damage, external breakage, etc.) are damaged before and after driving, and check brake wear and looseness of brake inner core(Inner wire). In the case of hydraulic brakes, it is also necessary to check the oil leakage or deficiency and always check that the braking force is sufficient.

• Due to various factors such as road surface condition and speed, it may not be possible to stop when brake is operated as expected. The electronic brake and ABS functions are auxiliary functions to further increase the braking force and used. The user should understand the function and expect the operation timing when use this function.

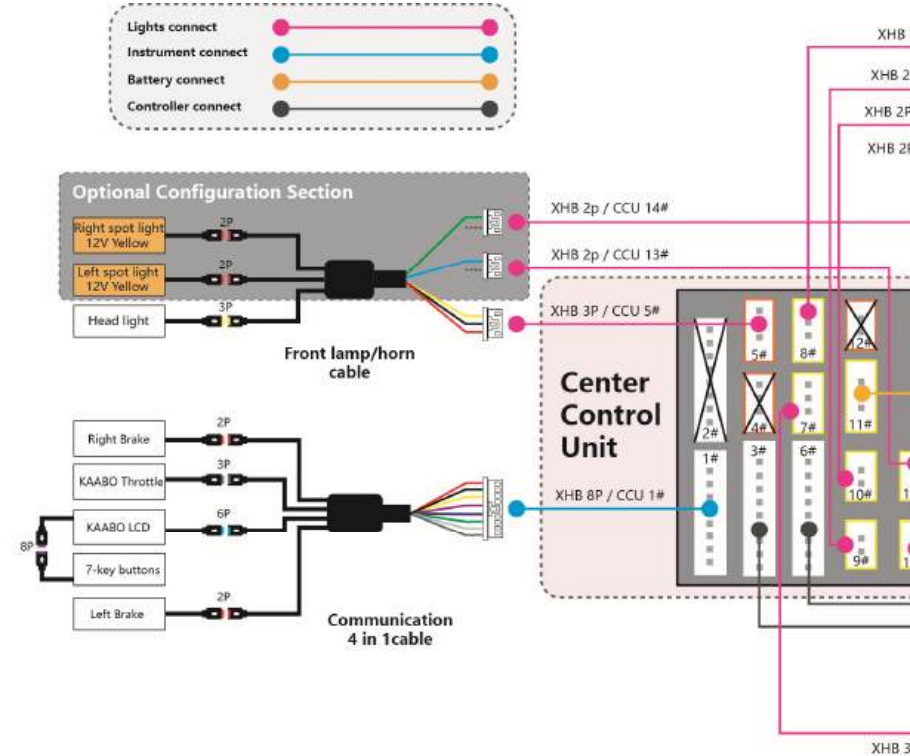
Tips:Check for safe riding

•Before driving, be sure to check the folding part, the handle part, the part where the main fixing part of the product is fastened well. And check the position of the fixing slide, the QR lever locking status and the folding part fixing status.

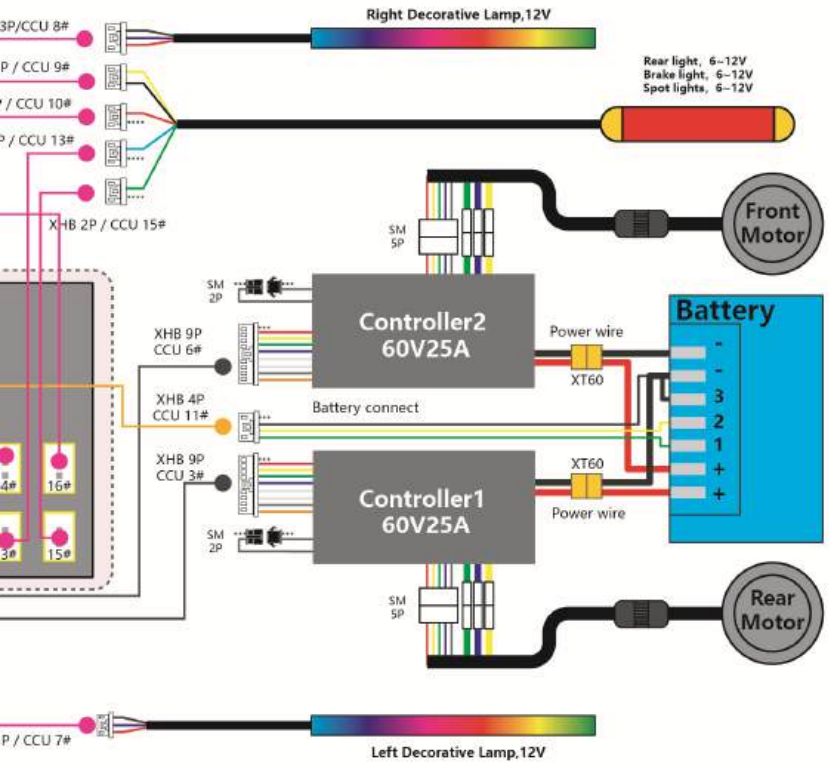
•Throttle malfunction caution

•Regardless of whether the throttle is operated or not, the motor sensor may continue to operate, causing malfunctions such as sudden acceleration. In this case, holding the brake lever to cancel the operation. This phenomenon may be caused by corrosion of the throttling,immersion of the throttle, disconnection of the magnet, broken off levers, and breakage of thespring. Do not bounce the throttle lever strongly.

MANTIS KING PRO wiring diagram



Non-professionals are strictly prohibited from modifying or adjusting the electrical system at will, as this may cause damage to the electrical appliances and even affect the safety of riding. Once the circuit is modified, warranty will no longer be provided.



24-Hour Hotline

400-878-1500

App download QR code

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