

# CATALOG

COVER DESIGN

CAR ELECTRONIC ACCESSORIES UPGRADE

MAKE THE QUALITY MORE TRUSTWORTHY

#### THE PURSUIT EXCELLENCE ENDLESS ADVABOING WITH THE FUTURE

HONEST RELIABLE

HIGH-QUALITY FIRST-RATE

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# PRODUCT Brochure

Dongguan Kaimiao Electronic Technology Co., Ltd. was established in 2017 and is located in Chang'an Town, Dongguan. It is a professional auto supplies service provider integrating design, manufacture, sales and after-sales. Focus on the production of SUV electric pedals, automobile electric tailgate, automobile electric suction door, automobile emergency start power supply, outdoor energy storage power supply, vehicle portable air pump and other products. Products sell well in North America, South America, the Middle East, Southeast Asia and more than 30 domestic provinces and cities. Professional accessories win trust, sincerely welcome the future, adhere to the principle of "taking technology as the support, seeking development with quality, winning the market with integrity, and responding to market changes "quickly". Advocating the concept of "high quality and low consumption" for people and vehicles While bringing services, Wan Car Owner advocates the advancement of automotive technology with the times, so that consumers can truly experience the joy brought by Kaimiao products. Pragmatism, innovation and transcendence are the tenets of the company, people-oriented and honest management. In the future, we will continue to develop and manufacture more and power safety products to meet domestic and foreign customers.

Sincerely look forward to cooperating with domestic and foreign customers to achieve a win-win situation





# ELECTRIC

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## CATALOG





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COMPANY INTRODUCTION



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# **ELECTRIC TAILGATE**

The smart electric tailgate is a brand-new car intelligent modification system. The driver can control the closing of the tailgate through the remote control of the car key, pressing the vehicle tailgate key and the cab. In addition, it also has functions such as intelligent anti-pinch, high-level memory, etc., which integrates intelligence, convenience and humanization, making your car even more powerful in an instant.

The intelligent electric tailgate can solve the inconvenience caused by the usual tedious trunk operation to daily life, such as not limited to being out of reach, too many things on hand, and not closing tightly.

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#### **10 CORE TECHNOLOGIES**

Technology manufacturing pays attention to every detail



#### **ELECTRIC TAILGATE**





The intelligent electric tailgate lift kit can open, close and lock the luggage electrically, which can be triggered by key fob, the switch button at the trunk, the switch in the cab, the foot sensor switch, etc. It has the characteristics of anti-pinch, self-adjusting height, speed control, abnormal fault detection, non-destructive installation and so on.

Using the original car standard electric suction device, the door opening and closing process is smoother and quieter. The kit runs smoothly, elegantly and intelligently, without extra noise.



# **ADVANTAGES**





#### **Smart Sensing**

Independent setting of anti-pinch force/anti-collision force (After detecting the car owner's intention to manually open and close the door, the tailgate intelligently starts the auxiliary door opening and closing



## Perfect Exception Handling

The doublel-strut load is balanced, and the door is prevented from deforming when a single-strut fails; when the tailgate fails to close in special scenarios, the system automatically learns the closing force.



#### **Smart Speed Control**

Through intelligent control such as soft start and deceleration, it can ensure smooth operation, slow down the impact of the system, and prolong the life of the motor.



#### **Fault Detection**

When the drive circuit fails (low voltage alarm, overcurrent protection), the system will automatically cut off/automatic recovery to ensure the safety of vehicles and equipment.



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## **OPERATION METHODS**





Remote Control By Key Fob



Tailgate Switch Button



**Dashboard Switch Button** 



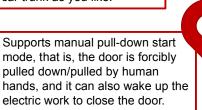
Foot Sensor (Optional)

A variety of opening methods, making opening more convenient and fast.





Control by original car key fob. Long press the unlock button / tailgate button, the tailgate can be easily lifted and loweres. Do not change your operating habits, let you control your car trunk as you like! (III) KAIMIAO





The height of the tailgate raised can be adjusted at will. You can set the final opening height according to your own height and usage habits, and say goodbye to the embarrassment of being out of reach. After manually pushing the tailgate to a reasonable position, press and hold the tailgate installation button for more than 3 seconds, and the setting is successful when you hear a beep



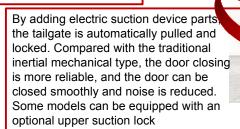


and the dashboard button to open and close the tailgate.

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Using intelligent algorithms. When the electric tailgate is opened or closed, it can quickly sense obstacles and realize the anti-pinch/anti-collision function. Effectively prevent children from being pinched or damage the vehicle and ensure safety.





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When the electric tailgate is opened or closed, the sound/light alarm can be used to remind you and friends next to you to avoid the tailgate rubbing. Difference description: The beeping sound of the tailgate can be turned on or off

independently. (Meet the different needs of users)

THE A. MESS.

With optional kick sensor parts, you can easily lift your foot to open and close the tailgate while carrying heavy objects in your hand.





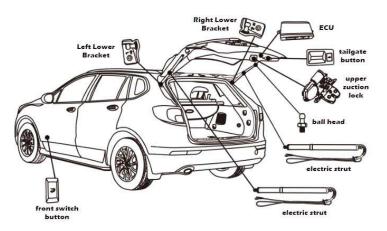
## **ACCESSORY INTRODUCTION**





#### Three Core Accessories:

- ◆ Electric struts ( Built-in Hall Sensor )
- ◆ Electric suction lock ( Latch/Upper )
- ◆ Control box mudule (ECU)



- (1) ELECTRIC STRUTS
- (4) BRACKET
- ② WIRE HARNESS
- **(5)** ELECTRIC SUCTION LOCK
- ③ CONTROL BOX (ECU) ⑥ SWITCH BUTTON



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## **ELECTRIC STRUT**





SUV



SEDAN

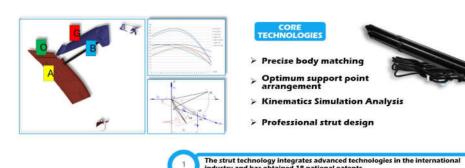
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#### The working principle of the strut:

When the motor is not working, the resistance of the screw rod, the resistance of the motor gear box, the spring force and the gravity of the door form a balance torque to keep the door hovering at any position.

When the motor is working, the motor torque breaks the balance. According to the motor torque direction, the strut performs telescopic movement to drive the door to open and close.







#### Features:

Low noise, stable and reliable. Combined with the controller, the height and anti-pinch functions can be set, and the installation is simple

Intelligent double Hall automatic fulcrum has adjustment protection to achieve comfortable and smooth door opening and closing

In the design stage, the arrangement plan of the strut is proposed, and the arrangement of the strut is checked and analyzed. Optimize the design of the tailgate system's high temperature, low temperature, normal temperature opening and closing force characteristics, balance angle characteristics, elastic characteristics of the built-in spring, positive and negative slope environment and other factors, and output the design verification.

## **ELECTRIC SUCTION LOCK**



#### **UPPER SUCTION LOCK**









#### Advantages of upper suction lock:

The mechanical strength has passed the national compulsory 3C certification, and the reliability is guaranteed. The main components are purchased from the OEM supply chain, which is more stable. The service life has been actually tested by many customers to meet the requirements of the car factory. If the electric suction function is not normal, the tailgate can also be unlocked manually.

When the tailgate is about to close, the strut can rely on the electric suction function to achieve the closing action without accelerating and afterburning, and the effect is very good.





#### **DRIVE LOGIC SIGNAL**

## Lock drive



Car board status signal





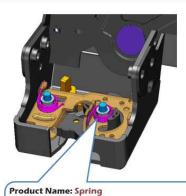
	7	8
LOCK	GND	+12V
UNLOCK	+12V	GND

	1 #	2 #	3 1	4 #
UNLOCK	Θ—	-0	Θ	-
HALF LOCK	Θ—	-		
FULL LOCK				

	5	6
LOCK		
UNLOCK	9	•

	9	10
UNLOCK	+12V	GND

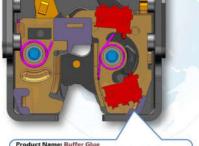
#### **ANATOMICAL ANALYSIS** - UPPER SUCTION LOCK



Material: Stainless steel Features: Designed according to the life requirements of more than 100,000 times to prevent the failure of the meshing system

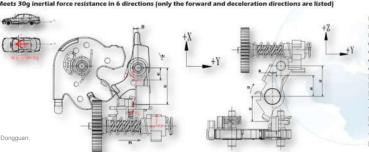
**Product Name: Waterproof Switch** Features: All-position status switch, unlocking, half-locking, full-locking, and locking mechanism reset. Full position sensing, which can directly determine the position status and make corresponding actions

KAIMIAO



Features: The card plate claws return to shock tion and noise reduction to prevent abnormal om left and right deflection after the door is

Meets 30g inertial force resistance in 6 directions (only the forward and deceleration directions are listed)



m1= 0.0116 kg m2= 0.011 kg m3=0.0014kg

d1=6.64 mm d2=2.64mm d3=13.05mm d4=2.54mm

L1=20.11mm L2=15.3mm L3=19.18mm

T1=49N.mm T2=37N.mm

F3=7N T1+m1"a\*d2=49+0.0116 \*294.2\*2.64=58.01

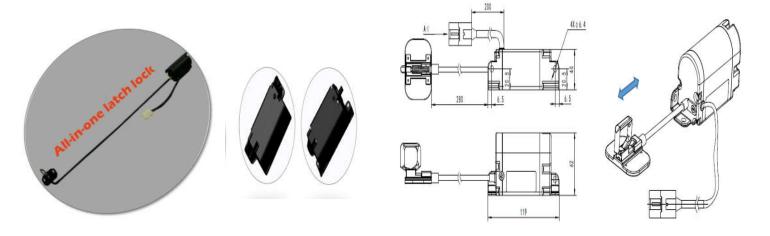


## **ELECTRIC SUCTION LOCK**



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#### **ELECTRIC LATCH LOCK**



**Features of the tailgate electric suction lock:** When the door is closed, the tailgate is automatically pulled and closed through the electric suction lock to reduce the closing gravity.

The tailgate locking actuator is directly driven by the intelligent electric tailgate controller and provides the tailgate unlocking status information.



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# **CONTROL BOX (ECU)**







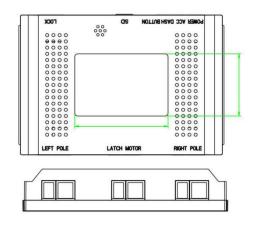


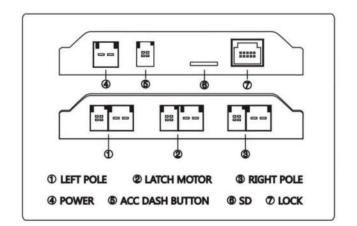
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## **CONTROL BOX (ECU)**



#### **CONTROL BOX (ECU) INTRODUCTION**





As the control core of the electric tailgate system, the control box provides suitable power for the electric struts on both sides when the tailgate is running in automatic mode, and at the same time judges whether anti-pinch occurs during operation. When the electric suction lock is driven to enter the half-lock position, the locking operation and the unlocking operation when the tailgate is opened are performed. The ECU can monitor other components of the system and provide system diagnostic information

By upgrading the control box, parameters can be adjusted independently for instant optimization.

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# CONTROL BOX (ECU) PRODUCT SAFETY DESIGN

Mismatched Model



The working current of the product is closely related to the degree of

matching between the tailgate system and the vehicle. According to the optimal fulcrum position of the original car body and tailgate parameters (center of gravity position, gravity), etc., the matching springs and other parts are customized, so as to achieve the optimal design of the strut and realize

the maximum conversion of electric

# The door closing peak current is about 18A Open door start peak current is about 17A The normal working current of closing the door is less than 12A The normal working current of opening the door is less than 3A The normal working current of opening the door is less than 2A

Relatively Balanced Model

When the product cannot work normally (electric system failure, car power loss, emergency situation during opening and closing), you can manually press the tailgate to lower and close the tailgate, or manually lift the tailgate to raise the tailgate to open. , without damaging the strut. (Hovering closing force ≤ 150N, hovering opening force ≤ 90N)

◆ The kit monitors the state of the central control lock; it does not change the design logic of the original car's tailgate opening. The kit takes the power supply near the main driver by means of insurance transfer (30A insurance). There will be no conflict between the original car parts and the electric tailgate in terms of working hours, ensuring that the power supply of the whole vehicle will not be affected, and at the same time meeting the needs of the product.









# CAR DOOR SOFT CLOSE

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## **CAR DOOR SOFT CLOSE**



- ◆ The electric suction door is a safe and comfortable intelligent body control device in the car door lock system. When the door is not closed, the door touches the body, and the door will gently and automatically close. The door lock system automatically tightens the half-lock position to the full-lock position to complete the safe door closing action. The car owner only needs to gently close the car door elegantly, and then the car door can be easily closed, which is not only safe, but also has a very smart and comfortable experience.
- ◆ Electric suction door can solve the traditional car door using inertial gravity locking device. There is no need to use a lot of force to close the door to lock the door well, and reduce the impact force caused by the strong closing of the door. It is less likely to cause the door sealing parts to become loose and vulnerable than traditional door closing. It also solves the great noise generated by the traditional door closing mode, and the silent door closing makes the passengers more comfortable.





## **ADVANTAGES**

Feature	Description
Intelligent	Push the door to the half-locked state, and the system will automatically complete the remaining door closing actions.
Safety	The 6-9mm position automatically closes and locks. It will not be easily blocked during the closing process, and the door can be closed safely.
Comfortable	Gently close the car for increased comfort without any noise.
Elegant	Gently pull and close the door, making the closing action more elegant.
Noble	High-end configuration of luxury cars, get a distinguished car experience



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## **EXPERIENCE SCENE**





Elderly/Child

Pregnant Woman



Mute



Special Environmen



**Business Occasion** 



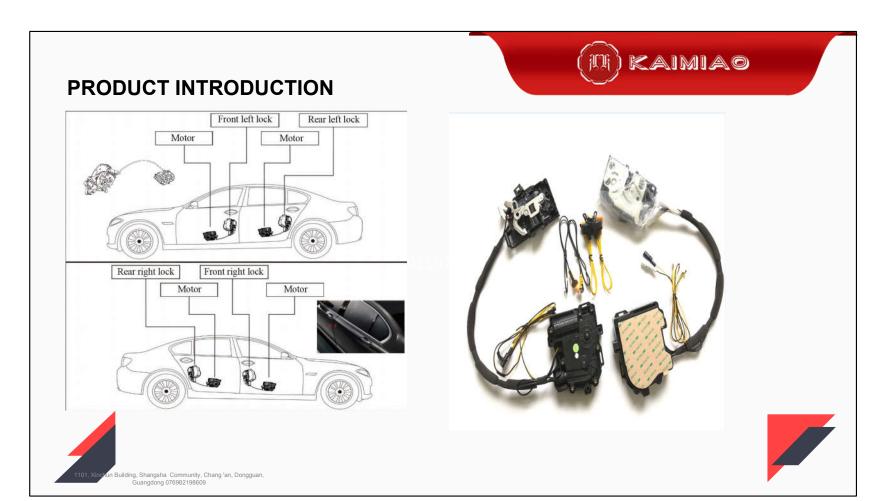
Car Lover

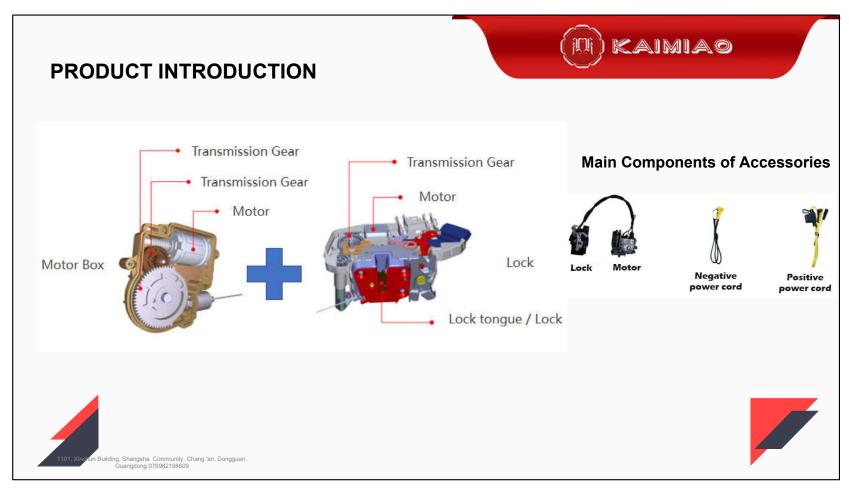
Close the door gently, care for the elderly and children. Close the door softly to create a quiet atmosphere and not frighten the baby. Sweet sleep, how can I bear to disturb. Difficult to close in a narrow parking lot

Close the door lightly for leaders, ladies and partners, showing elegance and dignity, and leaving a good impression. Gently close the door to extend the life of the car.









#### **CORE COMPONENTS AND PARAMETERS**



Component	Parameter	Component	Parameter
Motor	MABUCHI FK-280-5C	<b>Working Voltage</b>	DC 12V (9-16V)
Detection Sensor	HALL MT1101	Stand-By Current	≤3.0mA
<b>Detection Switch</b>	MARQUART/ALPS- SPVQ810801	Working Current	≤6.0A
MCU Main Chip	STC8A8K64S4A12	Stall Current	≤8.0A ( MAX )
Driver IC	DRV8701	Pull-in Noise	< 60dB ( A )
Transmission Gear	Power Metallurgy/Aviation Materials PM5.1	Suction Force	Half Lock 7-170N / Full Lock 150-250N
Latch/Lock	No.45 Steel Lagging	Temperature/Hu midity Range	-40℃/2% - +85℃/90%RH
Load Strength	Portrait 11000N , Horizontal 9000N	Product Life	≥50000 times

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ELECTRIC RUNNING BOARD

Guangdong 076982198609



## INTRODUCTION

- ◆ The intelligent electric pedal is simple, safe and firm to install so that more car owners can trust it. Combined with the ground clearance and door space, a stepped foot pedal structure is designed. The ground clearance between the pedals is between 130mm and 180mm, and the gap between the pedals and the body sill is between 50mm and 130mm, which is convenient for getting on and off the vehicle.
- ◆ For the matching of the body, the non-destructive installation method, the chassis height is not reduced, the passability is not affected, and the user experience details are modified, we have been working hard to improve. Dare to change and persevere, and impress users with sincerity. The super load-bearing and the body are closely matched to create a shocking appearance quality and perfect after-sales service, so that the owner can have a more perfect use experience every day.



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#### **ELECTRIC RUNNING BOARD**



#### > Working principle

When the door is opened, the electric foot pedal is automatically extended, and the foot pedal stops when it runs to the limit position;

The door is closed, the electric pedal is automatically retracted, and the pedal is retracted to the bottom of the vehicle.

#### > Design Concept

- 1. In order to facilitate users to get on and off, especially women and children;
- 2. After installing the electric foot pedal, the whole vehicle can be more beautiful and harmonious;
- 3. Compared with the fixed pedal, it will not reduce the passability of the car body.

#### > Applicable models

Commercial vehicles, off-road vehicles, SUVs, pickups and other models with higher chassis.

#### > Market position

In the electric pedal industry, it is in a leading position in technology and has a number of patents.

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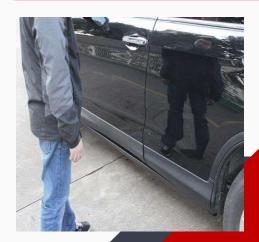


Auto Scaling

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# **ELECTRIC RUNNING BOARD**- FUNCTIONAL CONFIGURATION

System	Function Description
Door Control	The door is opened and the pedals are automatically extended.
System	Doors close, pedals retract automatically.
Smart Key Control System	The remote control key unlocks, the pedal automatically extends.
	Remote control key off, pedals retract automatically.
Intelligent Safety Monitoring System	When it encounters an obstacle when unfolding, it will automatically retract and stop.
	When an obstacle is encountered during extending, the extend will stop automatically.



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#### INTRODUCTION OF CORE MAIN COMPONENTS

04





#### 1 MOTOR

60NM torque motor, stable, precise, ultra quiet, fast response of experience, without fear of, rain and snow, unimpeded.

4 ECU

Independent intelligent control system, nondestructive installation, does not affect the structure of the original car, HALL sensor, speed ECU, the reaction is flexible, so that the operation is more stable.











#### **2** ALUMINUM BRACKET

High strength aluminum diecasting, load-bearing capacity, up to 300kg, solid solid and durable.

#### 3 ABS WIRE

ABS wire harness is composed of copper core wire, external insulation, adhesive, terminal, wire and insulation material. Extremely high temperature resistance, oil resistance, corrosion resistance, antiaging.





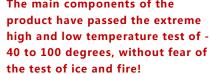


## **TEST EQUIPMENT**





The main components of the product have passed the extreme



All aging tests are carried out before shipment.









The main components of the product simulate the real vehicle environment and are tested by the vibration test bench.















## **4 ADVANTAGES**



1 Seiko Material

04

2 Perfect Fit

4 Non-Destructive Installation

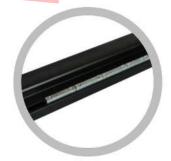


3 Strong Load Bearing



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## **SHOW DETAILS**



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#### End Design

Beautiful arc design, so that the pedal is more attached to the body, the appearance of more beautiful.

#### • Reinforcement screw

Alloy die casting reinforcement nut, reinforcement more secure, strong. Adopted advanced row 4 Neckar nut reinforcement design technology, effectively ensuring the pedal force uniform and strong Neckar screw fixation and make the pedal never loose



#### Thickened End

The pedal end uses the high quality ABS engineering material, cold resistant, high temperature resistant, anti bump etc.. To avoid the body is not necessary to scratch, toeffectively protect the safety, but also play a beautiful role.



#### Aviation Aluminum

Using high-quality thick antioxidant aviation aluminum, die-casting aluminum frame collocation, hale and hearty structure, high strength aerospace aluminum frame, unilateral bearing up to 300kg, there is no need to worry about the load problem.



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## INTRODUCTION

> Car jump start is a multi-functional portable power bank developed for car lovers and business people who drive. Its special function is to start the car when the car is out of power or unable to start the car for other reasons. At the same time, it supports charging of electronic digital products such as mobile phones, drones, cameras, and ipads. The USB output charging power is as high as 18W, which greatly shortens the charging time of electronic digital products. The product comes with emergency rescue functions such as safety hammer, compass, and lighting, and is a musthave product for outdoor travel. The product itself has seven protection functions such as anti-over-temperature, anti-overload, antiovercurrent, anti-short circuit, anti-overrush, anti-reverse connection, anti-high voltage, antilow voltage, which are safer and more reliable





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- 1. It can fire all cars with 12V battery output, but the applicable product range of cars with different displacements will be different. Able to provide field emergency rescue and other services;
- 2. Standard LED super bright white light, flashing warning light, and SOS signal light, a good helper for travel;
- 3. It also supports a variety of outputs, including 5V output (supporting various mobile phones and other mobile products), 12V output (supporting routers and other products), 19V output (supporting most notebook computer products), increasing the wide range of applications in life;
- 4. The car emergency starting power supply has built-in maintenance-free lead-acid battery, and also has highperformance polymer lithium-ion battery, with a wide range of choices:

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#### 9 PROTECTIONS

**Short Circuit Protection** 



**Voltage Regulation Protection** 



**Temperature Protection** 



**Anti-Reverse Protection** 



**Constant Current Protection** 



**Magnetic Field Protection** 



Kaimiao Overcharge



**Protection** 

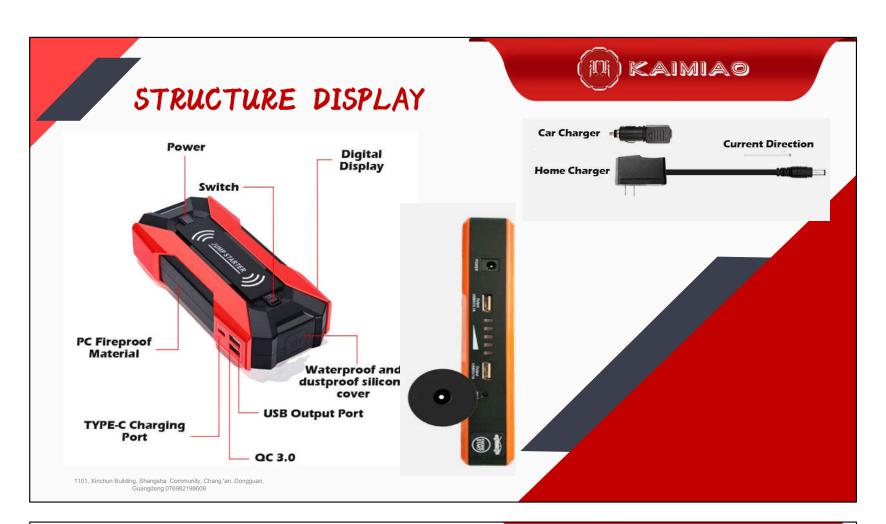
**Over Discharge Protection** 



Lithium Polymer **Battery** 







## PRODUCT DETAILS



Model	A15
Features	Display / Wireless Charge / Quick Charge
Cell Type	High rate polymer ion battery
Capacity	18000MAH
Charging Inpug	TYPE-C5V2A/9V2A
USB Output	5A/2A 9V/2A
Suitable for Car Type	12V Battery / 7.0L Gasoline / 4.0L Diesel
Starting Current	500A
Peak Current	1000A / 2000A
LED Lighting	Flashlight
Package Size	25*13.2*9.5cm
Fully Charged Time	4-5 hours
Shell Material	PC
Shell Flame Retardant Grade	VO

- Rated capacair transport requirement
- Low temperates resistance: -
- High temper resistance:



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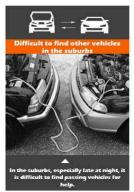
# COMMON REASONS FOR FAILURE TO START



#### TRADITIONAL SOLUTION

(Encountered the above problems, what should we do)











## CAR JUMP STRATERS - SOLVE







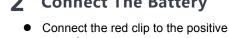




**1** Connect Emergency Power

Insert the DO plug into the DO terminal of the emergency power supply





**Connect The Battery** 

pole of the car power supply. Connect the black clip to the

negative pole of the car power supply.

4 Remove The Battery Clip

After starting the car, please remove the battery clip within 30s.





#### **Start The Car**

Get in the car and start the car.





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OUTDOOR ENERGY STORAGE POWER

## OUTDOOR ENERGY STORAGE POWER

The outdoor power supply is equivalent to a small portable charging station, not only equipped with multiple USB ports. It can not only meet the charging of digital products, but also have AC 220V AC output, which can supply power for laptops, drones, photography lights and other equipment. Our outdoor energy storage power supply is also equipped with a car charger interface. After the self-driving tour reaches the destination, it can continue to supply power to the on-board equipment. As a professional energy storage device, the outdoor power supply is stable and safe in voltage. It is suitable for scenarios with high power consumption, such as selfdriving travel, camping, outdoor small music parties, and household emergency power consumption.

KAIMIAO



## INTRODUCTION

160W / 220V

204WH

#### **Lightweight Portable Outdoor Power Supply**

Support AC/DC/USB/TYPE-C four outputs

- Compatible with a variety of power devices
- Sine wave output
- Automotive grade lithium iron phosphate batteries
- Type-C two-way fast charging

































Multi-Port





## PRODUCT PARAMETER



AC Output	220V 50Hz	Battery Type	LiFePO4 battery
DC Output	12V / 10A	DC Input	15V 2A
Type-C1 Output	PD5V 3A / 9V 3A / 12V 2.5A / 15V	2A / 20V 1.5A (PD30W)	
Type-C2 Output	PD5V 3A / 9V 3A / 12V 3A / 15V 3	A / 20V 3A (PD60W)	
USB1 Output	5V 3A / 9V 2A / 12V 1.5A	Power Display	LCD
USB2 Output	5V 3A / 9V 2A / 12V 1.5A	LED Lighting	3W
Cell Capacity	24000mAh 88.8Wh	Output Waveform	Pure sine wave
Charging Method	AC / Car charger	Product Weight	≈2.4kg
<b>Product Size</b>	28.4*25*14cm		

## PRODUCT DETAILS

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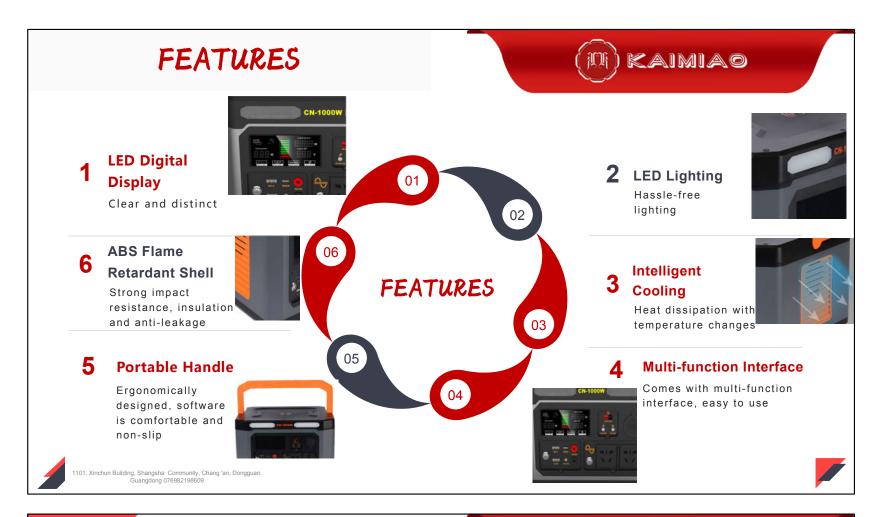


Protection Discharge Circuit
Protection Protection

Overcurrent Overvoltage Temperature Protection Protection







## APPLICABLE SCENE



- When shooting outdoors, the high-power fill light cannot be connected to the power supply. To keep your camera, monitor, and microphone from running out of power, you need to carry a lot of spare batteries of different types with you.
- ◆ When traveling by car, camping, and camping in the wild, when cooking and eating with the ingredients you bring, you can supply power to the kitchen appliances.
- ◆ In the event of a sudden power failure at home, it acts as an emergency power supply to ensure temporary power consumption.
- ◆ At a critical moment, as an emergency power supply for the car, supply power to the car







# VARIOUS POWER SOCKETS CAN BE CUSTOMIZED





#### **TYPE-C Port**

PD60W/18W fast charging smartphone, etc.

#### DC12/10A Port

Car refrigerator, navigator, car adapter, etc.



#### QC3.0 Port

Mobile phones, tablets, lights, SLR cameras, etc.

#### AC500W Port

Laptops, TVs and other 500W electrical appliances



DC Voltage	24V MAX	Load Current (Range)	2A max		
Peak Power	48W max	Linear Adjustment Rate	±1%	Voltage Range	±5%
Voltage Accuracy	90%	Work Efficiency	90%	Operaing Temperature	-10℃~50℃

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(II) KAIMIAO



#### INTRODUCTION

- Directly connected to the portable reciprocating piston air compressor, the high-quality model structure of similar products at home and abroad is used for reference, and the computer threedimensional modeling is used to optimize the design, and the structure is more reasonable. Better performance.
- ➤ The motor is equipped with a thermal protector to ensure that the air compressor motor will not burn out due to overload. The main parts are processed in strict accordance with national standards by CNC machine tools.
- ➤ The product has stable mechanical properties, reliable internal quality, beautiful appearance and small size. , light weight, simple operation, easy to carry.

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## WORKING PRINCIPLE

- The working principle of the reciprocating piston compressor is to use the drive to drive the crankshaft to rotate, and the crankshaft drives the piston to reciprocate through the connecting rod.
- The reciprocating motion of the piston makes the volume of the cylinder change periodically: the air sucked in by the suction valve is compressed by the piston, and when it reaches the exhaust pressure, it enters the air storage tank through the exhaust valve, exhaust pipe for the user to use.





## ADVANTAGES





Stop when full



Permanent magnet motor 15000+, strong air supply for double cylinders



Built-in intelligent noise reduction shock absorber, noise reduction and shock resistance



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30 cylinder <sub>guan,</sub>permanent magnet motor



20 Seconds Quick Replenishment



Tire pressure monitoring



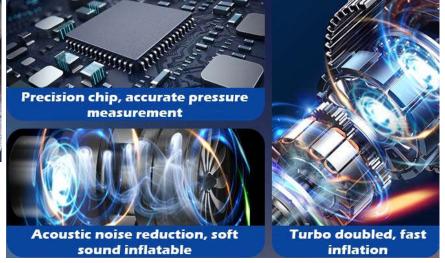
Shock-absorbing mute



## **FEATURES**









## APPLICABLE SCENE







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## USING STEPS





Start the car



02

Connect to Connect to in



03





04





05





06

One-click inflation







## SCOPE OF APPLICATION











30 cylinder powerful power cha

Express full of four wheels

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## FLEXIBLE STORAGE



## (II) KAIMIAO

- ◆ Small volume
- ◆ Small and portable
- ◆ Flexible storage
- ◆ Does not take up space

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## **PRECAUTIONS**

- It is not allowed to use in the case of exceeding the rated working pressure of the air compressor
- When there is air pressure in the air tank, do not loosen any connecting parts
- Do not disassemble any electrical parts without pulling out the power plug
- After shutdown, the power must be turned off and unplugged
- Do not use it when the rated voltage is over +5%, -10%
- The working pressure of the safety valve has been adjusted before leaving the factory. Users should not adjust the safety valve at will to avoid danger.
- The user should pull the safety valve snap ring once a month to avoid clogging or jamming
- Do not use the method of pulling the plug to replace the air pressure switch
- If abnormal sound is found during the operation of the air compressor, it should be stopped immediately for inspection and troubleshooting
- It is strictly forbidden to weld any accessories on the gas tank
- In order to prevent the motor from burning, the motor is equipped with a thermal protector. Thermal protectors are divided into two types: built-in and external. The built-in thermal protector can be reset automatically, while the external thermal protector needs to be manually pushed in the red contact of the protector to reset













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## SHOW DETAILS

01

Wear-resistant nylon braided inflatable tube, Anti-freeze without breaking, Explosion-proof and high temperature resistance



05



02

TYPE-C fast charging universal interface Recharge in time













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## BASIC PARAMETERS





Product Name	Car Air Pump
Rated Voltage	12V
Rated Power	60W
Battery Capacity	6000mAh
Charging Method	TYPE-C
Features	Inflatable, flashlight, power bank
Maximum Pressure	150PSI



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"4 IN 1"

-- INTERGRATED WITH CAR JUMP STARTS, CAR AIR PUMP, LED LIGHT, EMERGENCY POWER

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## 4 IN 1

#### PORTABLE JUMP STARTER. POWER BANK, AIR PUMP

4 IN 1 is a car convenience product that integrates car emergency starting power supply, outdoor energy storage power supply, on-board portable air pump, and lighting. It can be charged and inflated.

It is suitable for self-driving travel and field camping. to avoid the troubles that you may have when traveling. More than you think, comprehensive protection for emergency travel, covering all needs, it is an indispensable home product for travel.

Kaimiao

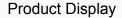


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#### 4 IN 1

#### PORTABLE JUMP STARTER, POWER BANK, AIR PUMP

















## PRODUCT PARAMETERS



Model:	BM600
Battery Capacity:	24000mAh, 88.8Wh
Jump Start Output:	12V
Peak Current:	3000A
DC Output:	12V-16V/10A
Type-C Input:	5V/3A, 9V/2A, 12V/1.5A
USB1 Output:	5V/3A, 9V/2A, 12V/1.5A
USB2 Output:	5V/3A, 9V/2A, 12V/1.5A
Air Compressor:	150 PSI
Certification:	CE, ROHS, FC





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## PRODUCT STRUCTURE







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#### ADVANTAGES







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#### **FEATURES**



After the connection is correct, start the engine of the vehicle.

**Output: 12V** 

Peak current: 3000A





## Air Pump

150 PSI fast inflation

There are three inflatable nozzles.





#### **L**ed Lighting

It is very convenient for you to use at night. Scientific and Humanized Design



#### Power Bank

Battery Capacity: 24000mAh 88.8Wh DC Output: 12-16V / 10A

Type-C Input: 5V/3A, 9A/2A,

/12V/1.5A

**USB1 Output: 5V/3A, 9A/2A,** 

/12V/1.5A

USB2 Output: 5V/3A, 9A

/12V/1.5A



## APPLICABLE SCENE



# Multifunctional power supply, beyond your imagination





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#### SCOPE OF APPLICATION



## It is generally applicable to vehicles with an inflation range within 3.0BAR









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# CAR FRAGRANCE PURIFICATIN SYSTEM

The car intelligent fragrance system adopts the two-fluid atomization technology. The ultra-quiet air pump compresses the air to completely separate the molecules of the high-purity essential oil into particles, so as to maintain the lasting stability of the original composition and fragrance of the essential oil, and then use the positive and negative ion generator to generate The positive and negative ions neutralize the positive and negative charges in the air and release huge energy instantly, leading to the death of bacteria and achieving the effect of rapid sterilization and purification.

At the same time, it can effectively improve the odor in the car and enhance the comfort and luxury of the whole vehicle. The fragrance brought by pure plant essential oils gives people comfort, tranquility, anxiety relief, comfort and pleasure





## (II) KAIMIAO

## WORKING PRINCIPLE

#### > Fragrance device

Using two-fluid technology and the principle of compressing air with an ultra-quiet air pump, the molecules of essential oils are sprayed out through the fragrance delivery tube to achieve the effect of emitting fragrance and cleaning the air.

#### > Way of delivering aroma

The aroma gas enters the air transmission pipe of the automobile air conditioner through the aroma pipe, and the aroma is then discharged from the automobile air conditioning system, thereby driving the aroma

#### Positive and negative ion purification module

Using the generated positive and negative ions to neutralize the positive and negative charges in the air instantly releases huge energy, resulting in the change of the surrounding bacterial structure and the transfer of energy, resulting in the death of the bacteria and the realization of sterilization.

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#### **FEATURES**

- ➤ Air Purification: Using two-fluid atomization technology, the ultra-quiet air pump compresses and accelerates the air, and completely separates the molecules of high-purity essential oils into particles, and then uses the positive and negative ions generated by the positive and negative ion generator to neutralize the positive and negative electric nuclei in the air. Instant release of huge power, leading to bacterial death, to achieve rapid sterilization and purification
- ➤ **Aromatherapy Function:** Ultrasonic atomization technology can make essential oils more evenly distributed, bring out the natural fragrance of essential oils, and make the skin more comfortable.
- ➤ Auto Power Off Function: Protected by the Auto Power Off function. Automatic power off after 2 hours of continuous work. Eliminate the potential hazards of waterless operation.
- ➤ **Simple Installation:** this one only needs to connect the positive and negative poles and the air conditioning system





# OPERATION INSTRUCTIONS

Short press the button to adjust 1-3 gears. When adjusting the gear, the buzzer will beep once every time the button is pressed.

**1st Gear:** work for 20 seconds, pause for 30 seconds;

**2nd Gear:** work for 10 seconds, pause for 120 seconds;

**3rd Gear:** work for 10 seconds, pause for 600 seconds.

Time-out automatic shutdown function:

You can set the machine to stop working automatically after a period of time through the APP.











#### **9** Gear position indicator description:

When the 1st gear is working, 1 green light is on;

When the 2nd gear is working, 2 green lights are on;

When the 3rd gear is working, 3 green lights are on

#### **Tilt alarm indication:**

When the fuselage is tilted more than 45 degrees, the red and green lights of the alarm indicator flash alternately, and the buzzer will have an alarm sound. When the fuselage returns to normal, the machine automatically cancels the alarm.



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## ADVANTAGES

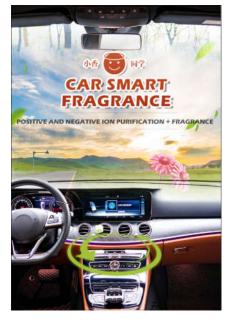


## WE NEED TO PAY ATTENTION TO AIR POLLUTION IN CARS AN INVISIBLE THREAT DOESN'T MEAN IT DOESN'T EXIST









Reports issued by various environmental monitoring agencies show that the current situation of pollution in automobiles in my country is very serious. The China Indoor Environmental Monitoring Center surveyed 100 cars and found that 90% of them had air pollution in the cars. Among them, more than 80% of car owners have no clear concept of odor control, while 65% of car owners have symptoms such as dizziness, drowsiness, depression and irritability, and inability to concentrate.





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#### ACCESSORIES DISPLAY









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#### CHOOSE FROM DIFFERENT SCENTS





## WHITE TEA

Top Notes: Bergamot, Narcissus, Ylang Ylang

Middle Notes: Rose, Jasmine Base Notes: Amber, Cypress

The smell of white tea is a light fragrance, if there is no fragrance and elegance, the floral fragrance is pure and pleasant. Its scent soothes indigestion, relieves anxiety and elevates mood



## PARADISE COVE

**Top Notes:** Lychee, Peach, Pineapple **Middle Notes:** Magnolia, Rose, Jasmine **Base Notes:** Vanilla, Sandalwood, Amber

Refreshing lychees and sweet and tart peach kick off the journey with a tropical fruity aroma. Then, the rich jasmine and roses bring out the mysterious and feminine characteristics of low-key and unobtrusive women. Finally, the mysterious veil is outlined with vanilla, sandalwood and amber, exuding a calm and intellectual masculinity.



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#### INSTALLATION STEPS



1. Remove the storage compartment. Be careful to remove the screws and concealed buckles first.

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2. Remove the passenger compartment storage box.



3. Connect the ion generator plug. Fix the plug to the position shown in the picture of the air compressor inside the storage box.



#### INSTALLATION STEPS



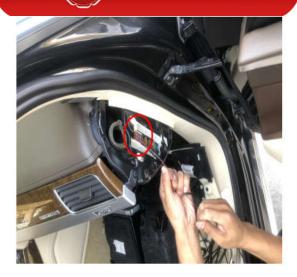






4. Use an 8mm drill to drill a hole on the inside of the air outlet of the air conditioner as shown in the figure. Install our special plug and then insert the fragrance output pipe of the product into the inside of the air conditioner outlet.





5. Positive is connected to ACC, negative is connected to ground wire.



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## INSTALLATION STEPS



6. Connect to the ground wire.



8. Connect the pipe and power cord.

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7. Pass the wire through storage.

## INSTALLATION STEPS



9. Insert the perfume bottle.





10. Place the fragrance unit inside the storage compartment. The placement location depends on the car



#### INSTALLATION STEPS





#### POSITIVE AND NEGATIVE ION GENERATOR





11. The black button shown in the figure is the 3-speed adjustable button

Installation location depends on the car. This car is Audi A8



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#### APP CONTROL METHOD DESCRIPTION



In order to make the setting easier, this product supports Bluetooth communication, and the APP can be used on the mobile phone to set the operating parameters of the device.

01

First open the Bluetooth of the mobile phone, run the APP, select "Bluetooth" on the first interface, it will automatically search for the device and display it in the list.

02

Click the device name to jump to the setting interface (as shown in the figure, we will have an English version of the APP).





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# COMPANY OVERVIEW

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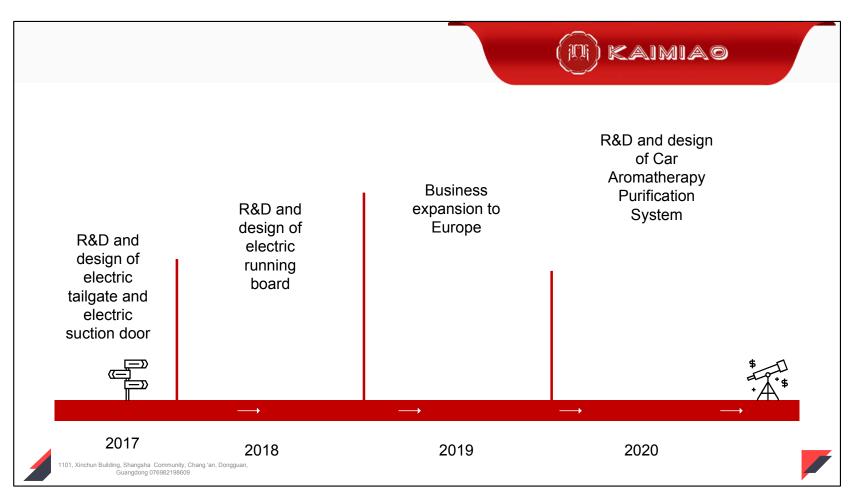
## **COMPANY PROFILE**

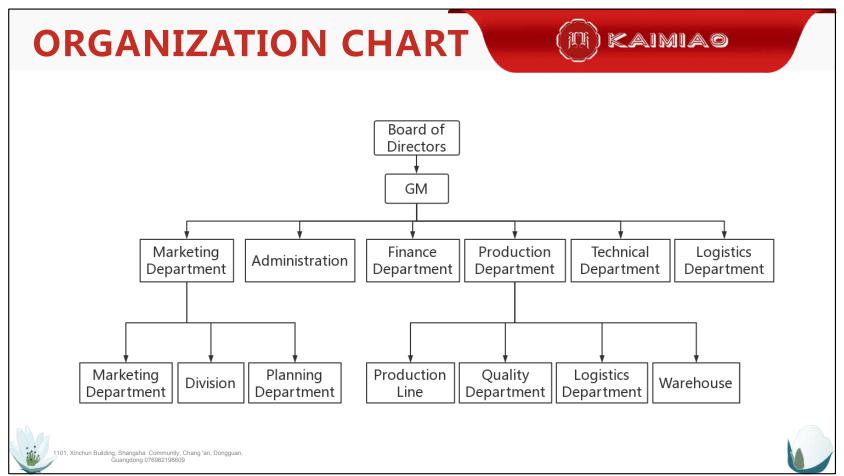


- ➤ Dongguan Kaimiao Electronic Co., Ltd. are specialized in auto parts business for years, which is a high-tech company integrating R&D, production, sales and service. Mainly exporting automotive intelligent electronic products.
- ➤ Our company's electric tailgates (power liftgate), car door soft close (electric suction doors), electric running board, car jump starter, car air pump, "4 in 1" power bank and Car Aromatherapy Purification System are among the leading in the country. There are more than 500 models for your choice. All products are in line with industry quality standards and are well-known in many markets at domestic and abroad.
- ➤ Our factories are located in Dongguan and Shenzhen, Guangdong Province, with more than 80 employees. In order to ensure customer satisfaction, we use advanced equipment and facilities, and implement quality inspection measures in all aspects of production. At the same time, we have passed ISO9001193, TS16949, CROHSquCE, 3C and other certificates.









## **BUSINESS SCOPE**







It is sold well in more than 30 cities including Taiwan, Shanghai, Shenzhen, as well as in New Zealand, Turkey, Iran, Dubai, Australia, Singapore, Vietnam, Myanmar, Laos, South Korea, Japan, Thailand, Malaysia and other countries.

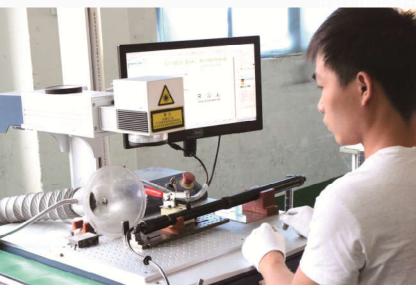


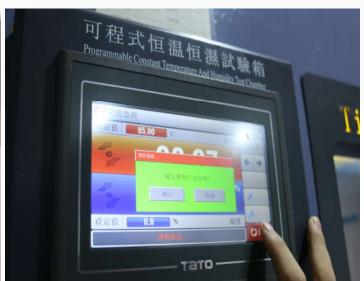
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## **PRODUCT TEST**









## **PRODUCT TEST**











## **PRODUCT LINE**





# TESTING EQUIPMENT DISPLAY





**Electronic Universal Testing Machine** 



Vibration Test Bench



Door Lock Function Test Bench



Salt Spray test chamber



Automatic image measuring instrument



Vehicle Aging Test Bench



High/Low temperature **Humidity test** 



Stroke/Length Measurement

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## **CERTIFICATION**





**CCC** Certificate

计算机软件等作权登记证书



IATF16949 Certificate



Utility Model Patent Certificate



Depot Excellent Supplier Award





E - S 检验报告 ○ 广东产品质量监督检验研究院

Product Tripartite Inspection Report



**Product Insurance** 



Industry Inn

Software Work Patent Certificate

#### **BUSINESS PHILOSOPHY**





#### CUSTOMER SATISFACTION

Customers are the lifeblood of an enterprise, and an enterprise exists because of the trust and needs of customers. We should win customers, accumulate customers, and make every grateful customer 100% satisfied with us with excellent quality and perfect service.

CORPORATE VISION — to comfortable car experience for global car owners



#### **SOCIAL SATISFACTION**

Legally operate, create employment opportunities, establish a good reputation, create a good business style, establish a stable market position and excellent business performance, attach importance to long-term development and social contribution, participate in social welfare undertakings with appropriate profits, and jointly create a sustainable enterprise operate. Only the healthy development of the enterprise and the continuous value creation can satisfy the society

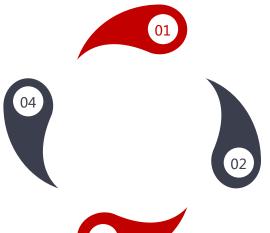




## QUALITY MANAGEMENT ASSURANCE

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- 1 Planning Management
- 4 Production Quality



- 2 Parts Quality Control
- 3 After-sales continuous improvement





## **SERVICE PLATFORM**



Youtube

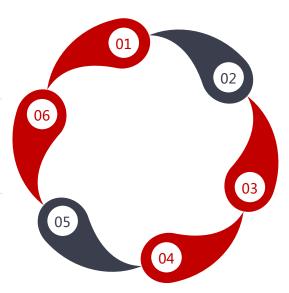
https://www.youtube.com/ch annel/UCLVyZV4gPAoctEew6 mDwCGA

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#### **AVAILABLE FOR CAR BRANDS**

















































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# THANKS

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