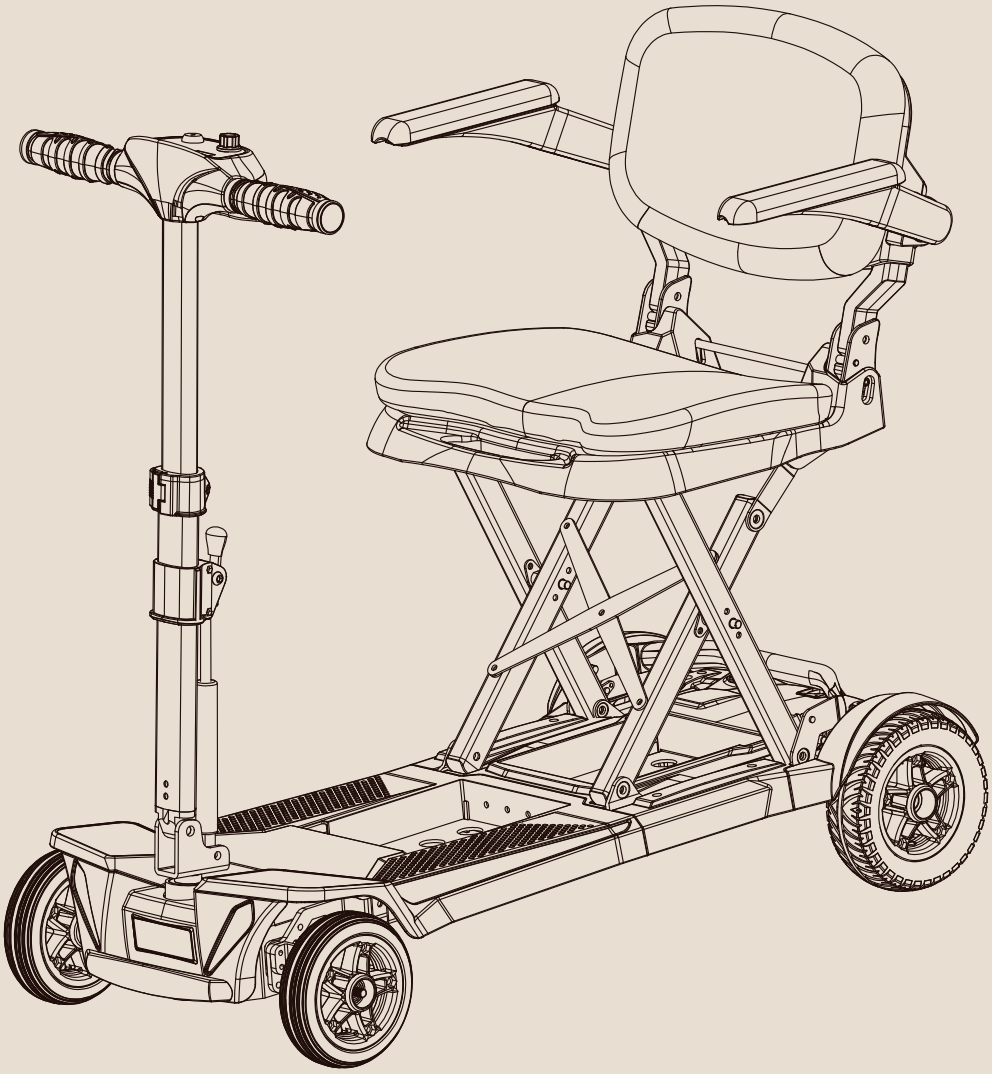
MOBIFREE

M2085(Light)
User Manual



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Important information

Dear users,
Thank you for selecting the Mobifree electric scooter! You must read and understand this operating instruction fully, especially the “safety instruction” part before you use it. The main purpose of going through this operating instruction is to be familiar with the functions and characters of the electric scooter and how to operate it smoothly. It also includes some important safety and maintenance information, as well as the description of the possible problems and solutions during driving.

Keep this operating instruction with the electric scooter, because you may look up the important information of use, safety and maintenance at any time, and you can also acquire the relevant information of products of Mobifree through the official website (www.solaxtech.com); or contact with the dealer or the maker
(TEL: +86-0769-8592-2501, E-mail: info@solaxtech.com).

All information, pictures, illustrations and specifications in this operating instruction are based on the product information provided when printing this manual, and are only general examples, but not exact descriptions of each part of the electric scooter. Due to continuous optimizing of the product, the company reserves the right to change without notice and advice.

Safety instruction - overview

2.1 Application

This scooter is used as a mobility aid for people who are disabled or feeble, and patients or seniors who need mobility supports or assists. The maximum safe loading of the electric scooter is 125 kg.

2.2 Instructions of safe driving

01) The user must be familiar with the operation of this scooter before driving. So please fully understand this chapter of the operating instruction.

02) Evaluate the personal physical health condition of the user before driving, and it is not appropriate to drive under the following circumstances: the patients with visual impairment, especially the patients with disabled upper limb, acute tumor and heart disease, pregnant female, children (under 12 years old), and the patients with slow perception, unconsciousness, coma or serious blood circulation or sensitive skin; the users who concern about their own health condition or equipped with the heart rate adjustor please consult the doctor before using.

03) Do not stop the scooter on the slope when driving; and please be aware the breaking distance on the slops will be significantly longer than flat grounds.

04) Drink driving or driving under drugs or certain medicine influence is strictly forbidden.

05) Avoid riding the electric folding scooter at night or extreme weathers.

06) Confirm that the power is off firstly when getting on and off the electric folding scooter.

07) Do not drive the electric folding scooter on the motorway.

08) Do not connect any mechanical or electronic devices on the electric folding scooter to avoid any possible danger.(except accessories provided by original manufacturer)

09) Do not drive at the gradient of more than 12°. Do not across the groove with the span is more than 100 mm; Do not forcibly across any obstacle that the height is more than 25 mm.

10) Do not drive on the water accumulated, frozen, moist or slippery grounds or saline-alkaline lands to avoid accidents.

11) Do not combine driving with vehicles to avoid danger.

12) The electric folding scooter will be affected by operating under some specific electromagnetic interferences, such as security or automatic door systems in general stores or buildings.

13) Do not use the electric folding scooter to transport heavy goods or take a second passenger.

14) It is forbidden to drive on the edges or curbs of the roads, otherwise the vehicle may be perpetually damaged.

15) Do not exceed the maximum loading weight 125kg.

16) Do not drive on the escalators to avoid overturning.
17) Do not make a S or U turn suddenly to avoid overturning.
18) Charge the electric scooter fully before using for the first time.

2.3 Instruction for safety precaution

01) Do not operate the scooter before the user does not fully read and understand this operating instruction.
02) Do not drive after drinking.
03) Do not leave the key on the scooter when it is not guarded.
04) The seat must be locked and fixed in place.
05) Be careful and slow down when driving at the curve turning and on the uneven rock or soft grounds, or close to the slope, bulged ground and zones such as curbsides, doorsills and stairs.
06) It is prohibited to change the initial setting or refit the scooter.
07) Be careful of driving on the busy streets, markets or shopping centers. Do not drive in unsafe areas and legally forbidden roads, and consult the local governments or national agencies regarding traffic rules for driving a scooter.
08) Hold the handle by both hands and place two feet on the pedal during driving.
09) Do not place the scooter on a moving vehicle as a seat.
10) When the scooter is transported by other vehicles, please ensure the safety of the battery.
11) Do not back up on the uneven ramps or grounds, and be careful when driving on the ramps.
12) Do not drive at night, in rainy days, snowfall days or haze days and strong windy days and also not on the bumping roads, uneven roads, etc.….
13) When the scooter is transported by a car or airplane, it is necessary to fold it and turn off the power and pull out the key to prevent accidently activated.
14) The surface temperature of the scooter will be raised when exposed in outer heat source for a long time, such as under the sun, and the direct contact with the heated parts might cause burn or other injuries.

2.4 Instructions for practicing using the scooter

01) Practice before using the scooter.
02) Practice in the wide and open areas to avoid danger.
03) Practice the following: Accelerate/decelerate/park/back up/turn/uphill and downhill, please take more practices and be skilled.
04) Adjust to the min. speed firstly, and speed up according to the proficiency in the initial practice.
05) It is suggested to be accompanied during the whole process to avoid danger and accident during the initial practice and use.
06) The scooter is controlled by the user by fingers to move forward backward turn left or right, and control the speed. So the user must be capable of: Reading and understanding the operating instruction, distinguishing and evaluating the danger, having safety awareness and rapid reaction abilities.

Specification of design and function

3.1 General overview of the product

The electric scooter is a power scooter powered by a battery and controlled and driven by electronic devices. The user can drive the scooter through the working of control devices.

Its main components are the motor, battery, control system, wheels, seat, armrests, etc...

The overall design is modern leisure style, safety and comfort, simple operation, folding and carrying, portability and durability.

The total gross weight of the electric scooter is 23.6 kg.

The standard requirement in ISO 7176、EN12184 are used in the technical requirement for performance.

3.2 Description of compositions and diagrams

The electric scooter is mainly composed of the following parts: Holding handle, control panel , front frame, seat frames, motor set, pedal cover, front/rear covers, folding seat, front/rear wheels, supporting wheels, a battery and a charger (as Figure 1).

Figure 1

3.3 Main technical parameters

Model	
Total length	970 mm
Total width	535 mm
Total height	895 mm
Folded length	970 mm
Folded width	460 mm
Folded height	345 mm
Weight of entire vehicle	23.6KG
Weight of vehicle (excluding battery)	21.8KG
Quality of battery	1.8KG
Tire size	Front wheel 6 inches Rear wheel 7 inches
Maximum driving speed	6km/h
Safety / maximum inclination	0-12°
Travel (indoor)	15km
Radius of gyration	1.4m
loading capacity	125kg
Battery type	10AH lithium battery
Motor	24V 120W
Charger	DC24V 2A (OUTPUT：29.4V 2A)

⚠ Notice: The final specification is subject to the actual vehicle .

Operating instruction

4.1 Necessary abilities of the operator(driver)

01) The electric scooter is controlled by the user by fingers to move forward and backward and turn left or right and folds and unfold, also control the speed.So the user must be capable of:
-Reading and understanding the operating instruction
-Distinguishing and evaluating danger
-Having the safety awareness or following the traffic rules of local laws
-Reacting quickly for any kinds of situation

02) Getting on and off the scooter
The operator shall get on and off the scooter according to the diagrams or be assisted by the carer: (as shown in Figure 2-3)

Figure 2

Raise the armrest

Figure 3

If needed, use the handlebars and backrest as support and lower the armrest after standing up.

⚠ Note: The handle might sway . Please hold it steady

4.2 Description of the control panel

As shown in the Figure 4:

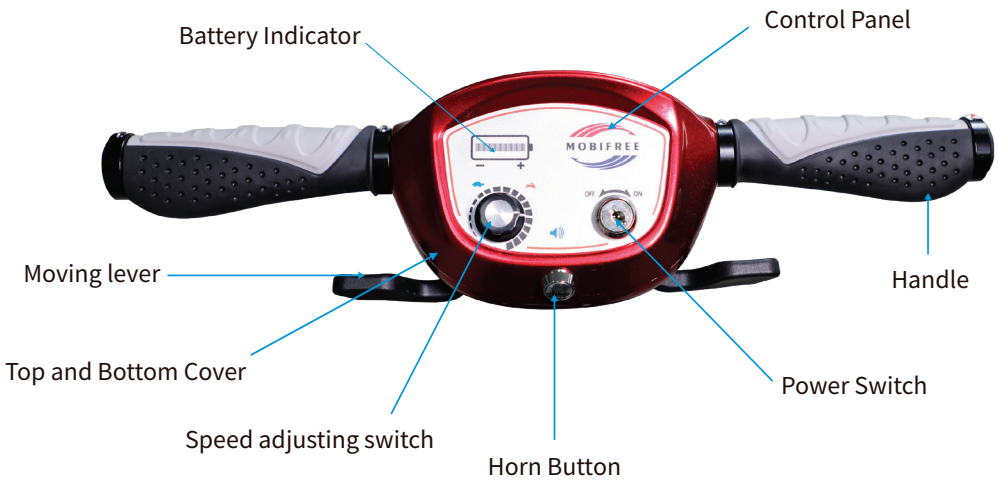


Figure 4

The control panel is an operation control module which mainly controls the power on and off, moving forward and backward during driving and display of battery power level.

⚠ Notice: Do not place the control panel in the wet areas. If the control panel is damped, please operate and use it after being fully dried.

4.3 Power switch

01) Turning the power on/off using the key (as shown in Figure 5)

02) Turn off the power after stop.

Figure 5

⚠ Notice: If the power is turned off during driving, the electromagnetic brake will work and the scooter will stop suddenly .

4.4 Speed adjusting switch

The speed adjusting switch is used to adjust the operating speed when moving forward or backward, which can be set within 0-6 Km/h. The slowest speed is set by turning the button to the left end. The fastest speed is set by turning the button to the right end (as shown in Figure 6)

Figure 6

⚠ Notice: Do not set to the maximum speed when turning or backing up.

4.5 Moving lever

Hold the rubber handle by both hands, and use the direction control lever to control forward and backward moving of the scooter (as shown in Figure 7 and Figure 8).

a. Push the right control lever forward by right finger, and then the scooter moves forward.

b. Push the left control lever forward by left finger, and then the scooter moves backward. There is warning beepings when the scooter moves backward.

c. After the moving lever is fully released, it will automatically stop in the "central" position, and the electromagnetic brake will automatically stop the scooter.

Figure 7

Figure 8

4.6 Horn button

In order to prevent from accident and damage, please use the horn button properly. The horn will sound after pressing the button (as shown in Figure 9)

Figure 9

4.7 Telescopic tiller

Firstly, unlock the tiller lock outward to loosen it , then you can press down the tiller by hand then lock up again. (as shown in Figure 10-11)

Figure 10

Figure 11

4.8 Controller and motor

The controller is fixed in the bottom to receive the signal from the control panel and send it to the motor, brake, charging port and other systems；The motor / transmission modules, which are electromechanical devices. convert the electric energy of battery to the driving energy of rear wheels.

⚠ Notice: Do not place it in wet areas. If it is damped, please dry it fully before driving, otherwise it will be damaged.

4.9 Brake

When the moving lever is fully released, the scooter automatically slows down and stops.

4.10 Manual folding and unfolding

A. Fold and unfold as shown in the following picture: (Figure 12-14)

⚠ Note: When pressing down, do not place your hand under the adjusting lever to avoid being hurt.

1. Fold the backrest, Press the backrest adjustment lever down, and fold the backrest with the other hand.
2. Unfold the backrest By pulling it up the backrest.

Figure 12

1. Fold the seat firstly, then pull up the rear folding handle.
2. Unfold the seat, then pull the backrest all the way up.

Figure 13

⚠ Note:1.Watch your hands when folding & unfolding the scooter.

1. Hold down the tiller angle adjusting switch and press down to fold.
2. Press the switch button again and pull the tiller to unfold.

Figure 14

Fold

⚠ Note:
1. Watch your feets and armrests position when folding.
2.When folding the scooters, it is completed only after the"click" sound is heard.

Unfold

Fold and drag

B. When the scooter is manually folded, the scooter can be operated as to the following picture: (Figure 15)

1. Tiny mode driving.
2. Lift the front handle the body after folded, and drag the car.

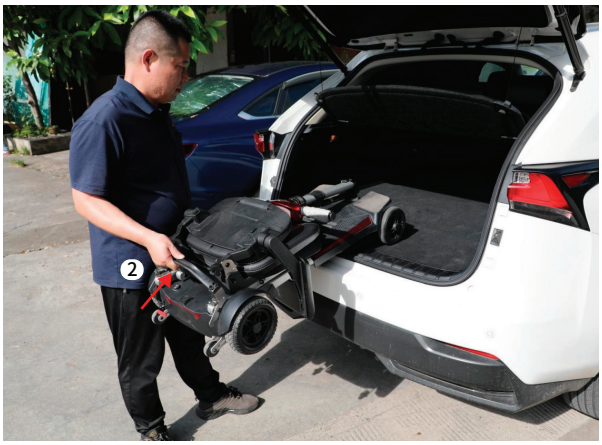
Figure 15

Armrest removal and installation

C. Press and hold the button to install the armrest.

4.11 Place the scooter in the car trunk by following processes:(Figure 16)

1. Lift the front handle and place the front part into the trunk.



2.Lift the rear handle and push the scooter into the trunk.

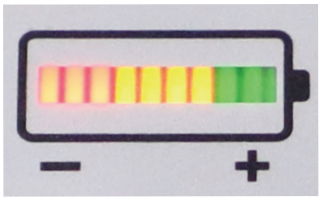
3. Adjust to the proper position.

4. Completed.(Removing by reversing the sequences 3-2-1).

Figure 16

4.12 Battery and charging

01) Battery power level display When the power is on, the battery power level display meter will display the power level, 3 colors mean full charge, red means insufficient power, and the travelling distance remains less than 1 km, please immediately stop driving and charge the battery.



02) Charging

a. Turn off the power , and then insert the charging plug into the charging socket as shown in Figure 17.

Firstly turn off the power

Figure 17

Insert the power plug into the charging socket.

Figure 18

b. Take AC power line and insert one end in the domestic power socket, connect one end to the charging socket of the charger, then the red light is on when the scooter is being charging, and the green light or orange light is on after the scooter is fully charged.

c. After the charging completed unplug the scooter power connector (1), and then unplug the power plug (2).

⚠ **Notice: The scooter has the auto system function to prevent from being activated during charging. After charged, the user shall firstly turn off the power switch first, then unplug other plugs, otherwise will lower the product life of the charger.**

Instructions for charging:

a. During charging, if the red light is not on, the user shall check whether all plugs are inserted in the right place

b. The charging time is generally 6-8 hours, and cannot exceed 12 hours.

c. The lithium battery needs to be charged when it is used for the first time; It is suggested that the battery is charged within 3 months from the date of purchase or not using.

d. If the battery is not used for a long period of time, it must be fully charged and then take out from the scooter, Do not store in the scooter. Take out the battery when the scooter is not used.

e. In order to ensure the safe and efficient charging, we suggest using the original charger from the manufacturer.

f. If the scooter is used all day around, it shall be charged after being used every day. If it is used once a week, it needs to be charged once a week.

g. If the user drives the scooter on the hill, sidewalk ditch, uneven and soft grounds, at the turning curve or against the wind, etc.…, the driving distance and time after full charge will vary.

⚠ **Notice: Do not open the upper cover of lithium battery, and do not contact water. The warranty and guarantee will expire if the lithium battery is disassembled, and the lithium battery and scooter may be damaged. The over-discharging for too many times, rarely charging and undercharging will affect the battery, and the service life of the battery will be shortened.**

4.13 Description of wrong operation

01) The connection of battery electrode is not tight.

02) The manual electromagnetic brake levers are not locked.

03) The power socket and plug are connected reversely.

04) Wash the scooter directly by faucet.

05) Scrub it with oil or chemical liquid.

06) Fold and unfold the scooter on the slope.

Maintenance and care

5.1 Maintenance

01) Place the scooter in the dry and ventilated places and avoid contacting oil, acid, alkaline and other corrosive chemical substances.

02) Keep the body clean: The control panel, covers, etc., are made of the durable ABS plastics, and the surface is pain coated. The scooter cannot be wiped with oil or other chemical liquids; The scooter cannot be scrubbed with a sharp brush to prevent the surface from being scratched; The scooter cannot be directly washed by the faucet to prevent from damages to the electrical modules. The scooter can be directly wiped with clean rag, or wiped after the clean rag is stained with clean water and wrung.

The wheel cannot be wiped with oil or other chemical liquids and be directly washed by a faucet, but the surface can be directly wiped with clean rag or soft brush, or wipe after the clean rag or soft brush dipping with clean water and wrung or dried.

The surface of the seat is only wiped directly with the clean rag, or wiped after the clean rag is stained with clean water and wrung.

03) The scooter shall avoid from being exposed under the sunshine and rain, and shall be dried after drenched by water, and add lubricating oil to the bearing mechanisms from time to time.

04) The scooter is electricity powered and it is prohibited to use it in ball games, racing and other sports activities.

05) The user shall often check the tread patterns of tires and replace tires when necessary.

06) Often check the screws, and tighten it if the screw is loosened.

07) Often clear the alien objects in wheel bearings (such as hairs and thread residues, etc.…).

08) Often check the sensitivity of the brake, and pay attention to whether the cushions are broken to ensure safety.

5.2 Care

01) Basic care every day: Check if the appearance of the scooter is normal and good.

02) Monthly or yearly basic care

Connection of battery electrodes: The electrodes on the battery box are closely connected with the electrodes on the body, and are not corroded (Monthly); the battery must be placed in the battery box accordingly and the electrodes are closely connected (do not open the battery box to check) (Yearly).

Electric wire connectors: regularly check all exposed electric wire connectors; (Monthly)
Regularly check the insulations of all exposed electric wires, including the power plug of charger (Monthly); repair or replace the damaged fittings and connectors (Yearly).
All major screws or nuts
Regularly check if all exposed screws or nuts are loosened (Monthly).
Bearing and motor/transmission parts of the electric scooter:
If the module has been filled with the lubricating oil and used in a close section, it is not necessary to fill it again (Yearly).

⚠ **Notice: Avoid all electrical modules from damp such as control panel, charger and electrical controllers. If some parts are damped, dry them before use.**

Instruction and precaution of the battery

6.1 25.2V 10AH * 1 PC lithium battery is used.

6.2 **Before the batteries are used for the first time, the power in the batteries must be fully charged.**

01) To ensure smooth driving, the scooter must be fully charged before travelling;

02) The scooter is charged according to the voltage of the country and region and plugs. Too low or too high voltage or unmatched plugs cannot be used to prevent the charger from damage.

03) If the scooter is not used for a long time, turn off and take out the batteries.

6.3 **How to charge the batteries**

After the batteries are used for a period of time, the power of the batteries shall be timely checked. When the power is unsaturated or less, the batteries shall be timely charged, otherwise the scooter could not be opreated normally.

Charging steps:

01) The user shall make sure that the power of the electric scooter is turned off. Then insert the charging plug of the charger into the charging socket, insert the other end in the domestic power socket, the red light is on, it means that the charger has entered the charging mode, The red light turns to green light when it is full charged.

⚠ **Notice:** Do not charge the frozen battery under -20 degrees, otherwise the battery will be damaged, and the personal injury might occur.

02) If the internal battery is replaced, contact the manufacturer.

03) After the battery is fully charged, unplug the AC power plug, and then unplug the DC charging connecting plug, then complete the charging.

6.4 **During charging , if the red light is not on, the user shall check if the power plug is loosen, otherwise, please check if the fuse is burned.**

6.5 **The charging time is 6-8 hours in general.**

Transportation and storage

7.1 The scooter is packaged with the kraft box to prevent it from water, pressing. It can be transported by air, sea or ground.

7.2 The product can be stored in: (-20°C to 45°C, 10%-80% humidity) shady, cool, dry, ventilated and corrosive gas free places.

7.3 It cannot be exposed under the direct sunlight and stored with the flammable and explosive substances, otherwise the product performance may be reduced or damaged.

Environmental protection

8.1 Disposal: The batteries shall be properly treated according to the local laws and regulations after the end of service life, such as solidification and deep burying, storage in the wasted mine well or recycling, and cannot be arbitrarily abandoned.

Description of replacement of vulnerable parts under normal use

9.1 The damaged materials are provided and replaced by the manufacturer and the dealer under normal use.

Circuit diagram and key component list

10.1 Consult the manufacturer about the component list.

10.2 If the circuit failure occurs, the user shall immediately stop using the scooter and contact the after-sales service personnel for professional judgment and maintenance in order to ensure the safe operation.

Packaging and accessories

11.1 The product is packaged with the kraft carton, and the accessories includes: One operating instruction (including warranty card); A set of battery (installed on scooter/separately packaged according to the client’s requirement); A set of key.

11.2 The model of the charger of this electric scooter and manufacturer’s information.

Name	Specification/model	Manufacturer
Charger	Input 100-240V~50/60Hz 1.4A MAX Output DC 29.4V/2A	Shenzhen Teka Technology Co., Ltd. OR Powsun Electronic Co., Ltd

Troubleshooting Guideline

12.1 When turn on the power switch, but the power indicator is not on, please check whether the power line and the control line are correctly connected or not; if the contacts are loosened, and the battery’ s power.

12.2 When the user drives the electric scooter, if the speed is inconsistent and the scooter stops and goes, the user shall check if the motor is overheated, noisy or with other abnormal phenomena, or the power line is loosened or not. If the controller is damaged, contact your dealer for repairing.

12.3 Do not repair or fix any problem by not qualified persons.

12.4 When the scooter cannot be normally charged:

a. Check whether the charging voltage is matched.
b. Check whether the cooling fan of the charger normally runs.
c. Check whether the joint of the charger contacts with the interface of the controller well.
d. Extend the charging time, if the battery cannot still be charged fully, please replace it. The battery may be broken or aged, please replace it.

Contact information of technical support

Manufacturing address: No. 8, Road.1, 3rd Ind. District, Houjie Qiaotou, Houjie Town, Dongguan City, Guangdong Province, China
Contact number of manufacturer: +86-0769-8592-2501
info@solaxtech.com
After-sales service : Guangdong Prestige Technology Co., Ltd.

Warranty card and warranty specification

14.1 The warranty card is shown in Appendix C.

14.2 Warranty scope specification:

If the quality problem occurs to the parts on the material, manufacturing or assembly under normal use, the agent is responsible for maintaining or replacing the parts.

The product will not be warrantied under the following circumstances:

01) Not correctly operate, use and care according to the operating instruction;

02) Not use the spare parts and accessories produced by the manufacturer;

03) Accident;

04) Privately alter the designs of the electric scooter without approval the manufacturer (such as programming of controller);

05) Damage caused by typhoon, flood, earthquake and other natural disasters.

⚠ For a scooter that is not expected to be used as a seat on a motor vehicle, the sign "Symbol for scooters not intended to be used as a seat in a motor vehicle" can be observed.

Interpretations of graphics, symbols, abbreviations and other contents used for the labels of medical devices

	Type B application part
	Separate treatment sign of waste electrical and electronic equipment (Please follow the local laws and regulations)
	Note, refer to the attached documents
	Battery
	Warning on clamping hands
	Keep away from the sunlight
	Keep away from the rain

Appendix A Electromagnetic Compatibility Information

Notice:

- M2085 electric scooter complies with IEC60601:2005+A1:2012+A2:2020，ISO7176-21:2009 standard electromagnetic compatibility requirements.
- Users should install and use it according to the electromagnetic compatibility information provided in the accompanying documents.
- Portable and mobile RF communication equipment may affect the performance of the M2085 electric scooter. Avoid strong electromagnetic interference when using it, such as close to mobile phones, microwave ovens, etc.
- Guidance and manufacturer's declaration are detailed in the attachment.

- M2085 electric scooter generates, uses, and radiates radio frequency energy. The equipment may cause radio frequency interference to other medical or non-medical devices and to radio communications.
  If this equipment is found to cause interference, which can be determined by turning on and off the equipment, the operator or qualified service personnel should take following actions:
- Reorient or relocate the affected device;
- Increase the distance between the equipment and the affected device;
- Power the equipment by another source;
- Consult the service engineer for further suggestions.

Warning:

- M2085 electric scooter should not be used close to or stacked with other equipment. If it must be used close to or stacked, it should be observed and verified that it can operate normally under the configuration it is used in.
- Warning: Even if other devices comply with the emission requirements of the national standards, the M2085 electric scooter may still be interfered by other devices.
- Wireless information
- Each transmit frequency: 2.4-2.5G
- Frequency band: 2.4-2.5G
- Modulation type and frequency characteristics: GFSK
- Effective radiated power: 12dbm

Caution: It is customer' s responsibility to assure that this equipment and vicinity equipment comply with the contents of IEC 60601-1-2 4th Edition.

Caution: Do not use any device that might send out RF signals, including cell phone, radio transceiver and radio control products, which might cause operation parameters beyond the standards. Please shutdown these devices when you are near the equipment. Operator has the responsibility to warn user or any others to comply with this rule.

Caution: Manufacturer will not responsible for any unauthorized actions that cause interference.

Table 1

Guidance and Manufacture's Declaration – Electromagnetic Emission		
The M2085 electric scooter is intended for use in the electromagnetic environment specified below. User should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment - Guidance**
RF emissions CISPR 11	Group 1	M2085 electric scooter uses RF energy only for its internal function. Its RF emissions are very low and are not likely to cause any interference in nearby electronic.
RF emissions CISPR 11	Class B	M2085 electric scooter is suitable for domestic establishments and those directly connected to the public low-voltage power supply network.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	/	

Table 2

Guidance and Manufacture's Declaration – Electromagnetic Immunity			
The M2085 electric scooter is intended for use in the electromagnetic environment specified below. User should assure that it is used in such an environment.			
Immunity Test	**IEC60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±8kV contact ±2kV, ±4kV, ±8kV, ±15kV air	±8kV contact ±2kV, ±4kV, ±8kV, ±15kV air	Floors should be wood, concrete or ceramic tile. Humidity should be at least 30% if it is synthetic materials.
Electrical fast transients/bursts (EFT) IEC 61000-4-4	±2kV 100kHz repetition frequency	±2kV 100kHz repetition frequency	Main power quality should be that of a typical commercial or hospital environment.
Surges IEC 61000-4-5	±0.5kV, ±1kV line-to-line ±0.5kV, ±1kV, ±2kV line-to-ground	±0.5kV, ±1kV line-to-line ±0.5kV, ±1kV, ±2kV line-to-ground	
Voltage dips IEC 61000-4-11	0 % UT; 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315°	0 % UT; 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315°	Mains power quality should be typical commercial or hospital environment. UPS power is recommended if this device needs to be used continuously.
	0 % UT; 1 cycle and 70 % UT; 25/30 cycles Single phase: at 0°	0 % UT; 1 cycle and 70 % UT; 25/30 cycles Single phase: at 0°	
Voltage interruptions IEC 61000-4-11	0% UT; 250/300 cycle	0% UT; 250/300 cycle	
RATED power frequency magnetic fields IEC 61000-4-8	30A/m 50Hz or 60Hz	30A/m 50Hz or 60Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
IMMUNITY to proximity magnetic fields IEC 61000-4-39	65A/m, Modulation: Pulse modulation, 2.1KHz Test frequency:134.2KHz; 7.5A/m, Modulation: Pulse modulation, 50KHz Test frequency:13.56MHz; See Table 6	65A/m, Modulation: Pulse modulation, 2.1KHz Test frequency:134.2KHz; 7.5A/m, Modulation: Pulse modulation, 50KHz Test frequency:13.56MHz; See Table 6	--
Note: UT is the A.C. mains voltage prior to application of the test level.			

Appendix B Electromagnetic interference information

Table 3

Guidance and Manufacture's Declaration – Electromagnetic Immunity			
The M2085 electric scooter should be used in the electromagnetic environment specified below. User should assure that it is used in such an environment.			
Immunity Test	**IEC60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Conducted RF IEC 61000-4-6	3Vrms 150 kHz to 80 MHz	3Vrms	Portable and mobile RF communications equipment should be used no closer to any parts than the recommended separation distance that calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1.2\sqrt{P}$ 150 kHz to 80 MHz $d = 1.2\sqrt{P}$ 80MHz to 800 MHz $d = 2.3\sqrt{P}$ 800MHz to 2.7GHz $d = 6\sqrt{P}/E$ at RF wireless communications equipment bands (Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the device). Where "P" is the maximum output power rating of the transmitter in watts according to transmitter manufacturer and "d" is the recommended separation distance in meters. Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey (b), should be less than the compliance level in each frequency range (c). Interference may occur in the vicinity of equipment marked with the following symbol:
	6Vrms in ISM and amateur radio bands between 150 kHz and 80 MHz (a) 80 % AM at 1 kHz	6Vrms 80 % AM at 1 kHz	
Radiated RF IEC 61000-4-3	10 V/m 80MHz to 2.7GHz 20 V/m 26MHz to 2.7GHz 80 % AM at 1 kHz	10 V/m 80MHz to 2.7GHz 20 V/m 26MHz to 2.7GHz 80 % AM at 1 kHz	
Immunity to Proximity fields from RF wireless communications equipment IEC 61000-4-3	See Table 4 for test level	See Table 4 for test level	
Note1: At 80MHz and 800MHz, the higher frequency range applies. Note2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and refection from structures, objects and people.			

a) The ISM (industrial, scientific and medical) bands between 0.15 MHz and 80 MHz are 6.765 MHz to6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz. The amateur radio bands between 0.15 MHz and 80 MHz are 1.8 MHz to 2.0 MHz, 3.5 MHz to 4.0 MHz, 5.3 MHz to 5.4 MHz, 7 MHz to 7.3 MHz, 10.1 MHz to 10.15 MHz, 14 MHz to 14.2 MHz, 18.07 MHz to 18.17 MHz,21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99 MHz, 28.0 MHz to 29.7 MHz and 50.0 MHz to 54.0 MHz.

b) Field strengths from fixed transmitters, such as base stations for radio (cellular / cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which this is used exceeds the applicable RF compliance level above, this should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating.

c) Field strengths should be less than 3V/m in the frequency range of 150k~80MHz.

Table 4 -Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment

Test frequency (MHz)	Band [a] (MHz)	Service [a]	Modulation	IMMUNITY TEST LEVEL (V/m)
385	380 to 390	TETRA 400	Pulse modulation [b] 18 Hz	27
450	430 to 470	GMRS 460, FRS 460	FM [c] ± 5 kHz deviation 1 kHz sine	28
710	704 to 787	LTE Band 13, 17	Pulse modulation [b] 217 Hz	9
745				
780				
810	800 to 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation [b] 18 Hz	28
870				
930				
1 720	1 700 to 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation [b] 217 Hz	28
1 845				
1 970				
2 450	2 400 to 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation [b] 217 Hz	28
5 240	5 100 to 5 800	WLAN 802.11 a/n	Pulse modulation [b] 217 Hz	9
5 500				
5 785				

If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

[a] For some services, only the uplink frequencies are included.

[b] The carrier shall be modulated using a 50 % duty cycle square wave signal.

[c] As an alternative to FM modulation, the carrier may be pulse modulated using a 50 % duty cycle square wave signal at 18 Hz. While it does not represent actual modulation, it would be worst case.

Table 5

Recommended separation distance between portable and mobile RF communications equipment and the nerve and muscle stimulator			
The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Nerve and Muscle Stimulator as recommended below, according to the maximum output power of the communications equipment.			
This device can be used under the environment that radiated RF disturbances are controlled. User should maintain a minimum distance between portable and mobile RF communications equipment to prevent electromagnetic interference. Following recommended distance is calculated according to the maximum output power of the communication equipment.			
Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150kHz -80MHz $d = 1.2\sqrt{P}$	80MHz -800MHz $d = 1.2\sqrt{P}$	800MHz -2.7GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.79	3.79	7.27
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance “d” in meters can be estimated using the equation applicable to the frequency of transmitter, where “P” is the maximum output power rating of the transmitter in watts according to the transmitter manufacturer. Note1: At 80M and 800MHz, the separation distance for the higher frequency range applies. Note2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and refection from structures, objects and people.			

Table 6 - Test specifications for ENCLOSURE PORT IMMUNITY to proximity magnetic fields

Test frequency	Modulation	IMMUNITY TEST LEVEL (A/m)
30 kHz [a)]	CW	8
134,2 kHz	Pulse modulation [b)] 2,1 kHz	65 [c)]
13,56 MHz	Pulse modulation [b)] 50 kHz	7,5 [c)]
a) This test is applicable only to ME EQUIPMENT and ME SYSTEMS intended for use in the HOME HEALTHCARE ENVIRONMENT. b) The carrier shall be modulated using a 50 % duty cycle square wave signal. c) r.m.s., before modulation is applied.		

Guidance and Manufacturer' s Statement – Electromagnetic Immunity

The M2085 electric scooter is expected to be used in the electromagnetic environment specified below. The purchaser or user of the M2085 electric scooter should ensure that it is used in this electromagnetic environment:

Immunity test	IEC60601 test level	compliance level	Electromagnetic environment – guidance
RF conduction GB/T 17625.6	3 Vrms 150 kHz to 80 MHz	/	Portable and mobile RF communications equipment should not be used closer than the recommended isolation distance to any part, including cables. This distance should be calculated by the formula corresponding to the frequency of the transmitter. **Recommended isolation distance** $d = 1.2\sqrt{P}$
RF radiation GB/T 17626.3	20 V/m 26 MHz to 2.5 GHz	20 V/m	$d = 0.2\sqrt{P}$ 26 MHz to 800 MHz $d = 0.2\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer, and d is the recommended isolation distance in meters (m). [b] The field strength of fixed RF transmitters is determined by [a] survey of the electromagnetic field a and should be lower than the compliance level in each frequency range [b]. Interference may occur in the vicinity of equipment marked with the following symbol.

Note 1: At 80MHz and 800MHz frequencies, the formula for the higher frequency band is used.
Note 2: These guidelines may not be suitable in all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects and human bodies.

a:The field strengths of fixed transmitters, such as base stations for wireless (cellular/cordless) telephones and land mobile radios, amateur radio, AM (amplitude modulation) and FM (frequency modulation) broadcasts, and television broadcasts, cannot theoretically be Accurate prediction. To assess the electromagnetic environment of fixed RF transmitters, a survey of the electromagnetic field should b considered. If the measured field strength in the location is higher than the RF compliance level for the above application, observations should be made to verify normal operation. If unusual performance is observed, supple-mentary measures may be necessary, such as redirection or relocation.
b:In the entire frequency range of 150KHz ~ 80MHz, the field strength should be less than 3 V/m.

Recommended isolation distances between portable and mobile RF communications equipment

M2085 electric scooter is intended for use in an electromagnetic environment where radiated RF disturbance is controlled. Based on the maximum output power of the communication device, the purchaser or user of the M2085 Electric Scooter can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitters) and the M2085 Electric Scooter as recommended below.

Rated maximum output power of the transmitter/W	Isolation distance corresponding to different frequencies of transmitter/m		
	150 kHz ～ 80 MHz $d = 1.2\sqrt{p}$	26MHz ～ 800 MHz $d = 0.2\sqrt{p}$	800 MHz ～ 2.5 GHz $d = 0.4\sqrt{p}$
0.01	/	0.02	0.04
0.1	/	0.06	0.13
1	/	0.2	0.4
10	/	0.63	1.26
100	/	2	4

For transmitters with rated maximum output power not listed in the above table, the recommended isolation distance d, in meters (m), can be determined using the formula in the corresponding transmitter frequency column, where P is provided by the transmitter manufacturer Transmitter maximum output power rating in watts (W).

Note 1: At frequencies 80 MHz and 800 MHz, the formula for the higher frequency range applies.

Note 2: These guidelines may not be suitable in all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects and human bodies.

Appendix C Product Electrical Characteristics

1.0 Classification by type of protection against electric shock: internal power supply equipment.
1.1 Classification according to the degree of protection against electric shock: Type B applied part.
1.2 Classification according to the degree of protection against liquid intrusion: IPX4.
1.3 Classified according to the degree of safety when used with flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide: non-AP/APG type.
1.4 Classification by operating mode: continuous operation.
1.5 Internal power supply voltage: DC 24V;
1.6 There are no applied parts protected against the effects of defibrillation discharges.
1.7 No signal output part.
1.8 Products not permanently installed.
1.9 Electromagnetic compatibility is grouped according to GB 4824: it belongs to Group 1, Category B

Appendix- D Warranty Card

User name		ID card No.	
Address		Contact number	
Model		Vehicle number	
Purchase date	year	month	day
Warranty period	12 months from the date of purchase (battery 12 months)		
Manufacturer	Guangdong Prestige Technology Co., Ltd.		
Agent name (seal or signature)			
Contact number (or address)			

Packing list

Scooter	1PC
Tool box	1PC
Armrests	2PCS
29.4V 2A Charger	1PC
10AH lithium battery	1PC
User's manual	1PC
key	2PCS

Symbol Definitions

The following symbols are found on the Scooter:

Manufacturer

Importer

Authorised Representative of the European Union

Date of Manufacture

Refer to The Instruction Manual

MD Medical Device

SN Serial Number

REF Catalogue Number

LOT Batch Code

Model Number

Item is recyclable

Do not drive in rain or snowy weather

keep loose clothing clear of the scooter

Do not operate cell phones while the scooter is powered on.

Warning. Beware of potential hazard

Warning. Pinch hazard

WEEE Label. Do not discard the item in general waste. Follow the local recycling policy.

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