SOLAX MOBIFIRE USER MANUAL









01. Important information	02
02. Safety instruction - overview	03
Application scope	03
Instruction on driving safety	03
Instruction on safety precaution	04
Instruction on practice	04
03. Specification of design and function	05
General overview of product	05
Description of structural composition and diagram	05
Main technical parameters	06
04. Operating instruction	07
Description of necessary abilities of the operator(driver)	07
Description of the control panel	07
Power switch	
Speed adjusting switch	
Direction control lever	
Horn button	09
Telescopic Tiller	09
Controller and motor	10
Brake	10
Manual folding and unfolding	10
Battery and charging	12
Description of misoperation	14
05. Maintenance and care	
06. Instruction and precaution of battery	17
07. Transportation condition and storage	18
08. Environmental protection	18
09. Description of replacement of vulnerable parts under normal use	environment
10. Circuit diagram and key component list	19
11. Packaging and sccessories	
12. Troubleshooting Guideline	
13. Contact information of technical support	
14. Warranty card and warranty specification	
15. Interpretations of graphics, symbols, abbreviations and other co	
for the labels of medical devices	21
16. Contact information of technical support	22
Appendix-Warranty Card	



Dear users,

Thank you for selecting the MobiFire electric scooter! You must read and understand the operating instruction fully, especially the "safety instruction" part before you use it. The main purpose of going through the 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.

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 exactly descriptions of each part of the electric scooter. Due to continuous improvement of the product, the company reserves the right to change without notice and advice.

Safety instruction - overview

2.1 Application scope

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 usage and 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 physician before using.
- 03) Do not stop the scooter on the slope when driving; and please be aware the barking distance on the slops will be significantly longer than flat grounds.
- 04) Drink driving or driving under drugs or certain medicine affected 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.
- 09) Do not drive at the gradient of more than 6°. 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 drives on the water accumulated, frozen, moist or slippery grounds or saline-alkaline lands to avoid accidents.
- 11) Do not combine driving with the 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 taking second passenger.
- 14) It is forbidden to drive on the edges or curbs of the roads, otherwise the vehicle will 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.

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 chang 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 of 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 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 wind days and also not on the cramp roads, uneven roads, etc.....
- 13) When the scooter is transported by a car or airplanes, 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 of the heated parts might cause burned or other injuries.

2.4 Instructions for practicing using the scooter

- 01) Take practice firstly before using the scooter.
- 02) Take 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 through fingers to move forward and backward and turn left and 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

Working principle: The electric scooter is a power scooter powered by 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 firmness.

The total gross weight of the electric scooter is \leq 21 kg.

The type of the electric scooter produced by the company is CLASS I (indoor), and the applicable 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, upper and lower control panel covers, flexible riser, front frame, pedal tube set, 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

	Minimum	Maximum
Total length		969 mm
Total width		530 mm
Total height		950 mm
Total length after folding		343 mm
Total width after folding		530 mm
Weight of entire vehicle		22.3 kg
Weight of vehicle (excluding battery)		20.5 kg
Maximum forward driving speed		6 km/h
Maximum user's weight		125 kg

Notice: The final specification is subject to the vehicle provided.

4.1 Description of necessary abilities of the operator(driver)

- 01) The electric scooter is controlled by the user through fingers to move forward and backward and turn left and right and folds and unfold, and 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 follow the traffic rules of local laws
 - -Reacting quickly for any kinds of situation
- 02) Description of 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:



Figure 2
Raise the armrest



Figure 3
Use the control panel and backrest as supporters if needed, then stand up and put down the armrest.

4.2 Description of the control panel

As shown in the figure:



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)
 - a. Turning to ON clockwise.
 - b. Turning to OFF anticlockwise.
- 02) Turn off the power after stopping



Figure 5

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

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 leftmost end. The fastest speed is set by turning the button to the rightmost end (as shown in Figure 6)



Figure 6

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

4.5 Direction control lever

Hold the rubber handle by both hands, and switch 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 sound beeps when the scooter moves backward.

c. After the direction control 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, open the tiller lock switch outward to loosen it, then you can press down the tiller by hand and lock the switch. (as shown in Figure 10 and Figure 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 direction control lever is fully released, the scooter slows down and fully stops, then it brakes automatically.

4.10 Manual folding and unfolding

a. When the scooter is manually folded, unfold it according to following diagrams (see Figure 12-15)



Figure 12



Press down the manual folding handle, and pull towards the seat (the scooter will be automatically unfolded a bit)

Figure 13



- Hold the tiller by one hand, and grasp the edge of seat cushion by the other hand
- Pull both sides to open by two hands

Figure 14



Forcibly press down the manual folding handle, until it locks.

Figure 15

Notice:

- 1. When the body is unfolded, do not put your fingers in any joints on the scooter to avoid injuries.
- 2. When the locking switch is not opened, do not forcibly unfold the scooter.

b. The user shall firstly press down the manual folding handle and lift upward by hand (as shown in Figure 16), then the front and rear frames will be folding (as shown in Figure 17), after they are folded to a certain degree, the user shall push forcibly by both hands (press the edge of frame by one hand, and press the seat cushion by the other hand) (as shown in Figure 18), until the front and rear frames are fully folded in place.







Figure 16

Figure 17

Figure 18

Notice: When the scooter is folding, it is fully folded only after the "click" sound is heard.

4.11 Battery and charging

O1) Battery power level display

When the key switch is turned to "ON", the power is on, the battery power level display meter will display the power level, five lattices mean full charge, one lattice means insufficient power, and the travelling distance remains is less than 1 km, so it is suggested to immediately stop driving and charging the battery.

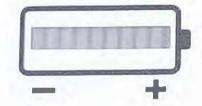


Figure 19

02) Charging

a. Turn off (key switch) the power of electric scooter firstly, and then insert the charging plug into the charging socket as shown in Figure 20 and Figure 21.



Firstly turn off the power of the key switch



Then insert the power plug into the charging socket.

Figure 20

Figure 21

Notice: When the charging plug is inserted in the charging socket, its position and direction cannot be inverse.

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 turn on the power switch after connecting, and 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 (see Figure 22-24).



Figure 22 Figure 23 Figure 24

c. Turn off the power switch after being fully charged, firstly unplug the DC charging plug, then unplug the AC input power plug, and complete the charging.

Notice: The scooter has the self-locking function to prevent from being activated during charging. After charged, the user shall firstly turn off the power switch, then unplug other plugs, otherwise the life of the charger will be affected.

Instructions for charging:

- a. After the main power switch is turned on, if the red light is not on, the user shall check whether all plugs are inserted in 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 once within 3 months from the date of purchase.
- d. If the battery is not used for a long period, it must be fully charged and then take out from the scooter, not be stored 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.
- 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 being charged each time will be affected.

Notice: Do not take down 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 usability of battery, and the service life of the battery will be shortened.

4.12 Description of wrong operation

- 01) The connection of battery electrode is not tight in place.
- 02) The manual electromagnetic brake switches are not closed.
- 03) The power socket and plug are connected reversely.
- 04) Do not wash the scooter directly by faucet.
- 05) Do not scrub it with oil or chemical liquid.
- 06) Do not 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 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 faucet, but the surface can be directly wiped with clean rag or soft brush, or wiped 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 electracy 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 is 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,

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



Instruction and precaution of the battery

- 6.1 25.2V 10AH * 1 PCS 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 the 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 be occurred.

- 02) If the internal battery is replaced, contact the manufacture.
- 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.



The scooter is packaged with the kraft box to prevent it from water, pressing, and be transported by sea.

It can be transported by air, sea or land.

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



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.



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



Circuit diagram and key component list

Consult the manufacturer about the circuit diagram and component list. 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 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 remote control & key.
- 11.2 The model of the charger of this electric scooter and manufacturer's information is.

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



- 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.
 If the fuse in the battery box is broken, please replace it.
- 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, and the fuse is normal.
 - 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.No. 3 Qiaotou Industrial Park, Houjie
Town,Dongguan City

Contact number of manufacturer: 0769-8592 2501

Fax: 0769-8592 2505

After-sales service unit: Guangdong Prestige Technology Co., Ltd.



Warranty card and warranty specification

14.1 The warranty card is shown in Appendix

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 and accessory parts produced by the regular manufacturer;
- 03) Accident;
- 04) Privately alter the design of the electric scooter without approval of the company (such as programming of controller);
- 05) Damage caused by typhoon, flood, earthquake and other natural disasters.



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

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



Contact information of technical support

The production date is shown on the label, and the service life is 5 years. The label format is attached.

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 (b	pattery 6 months)
Manufacturer	Guangdong Pres	stige Technology Co., L	td.
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	

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



Medical Device



Serial Number



Catalogue Number



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.



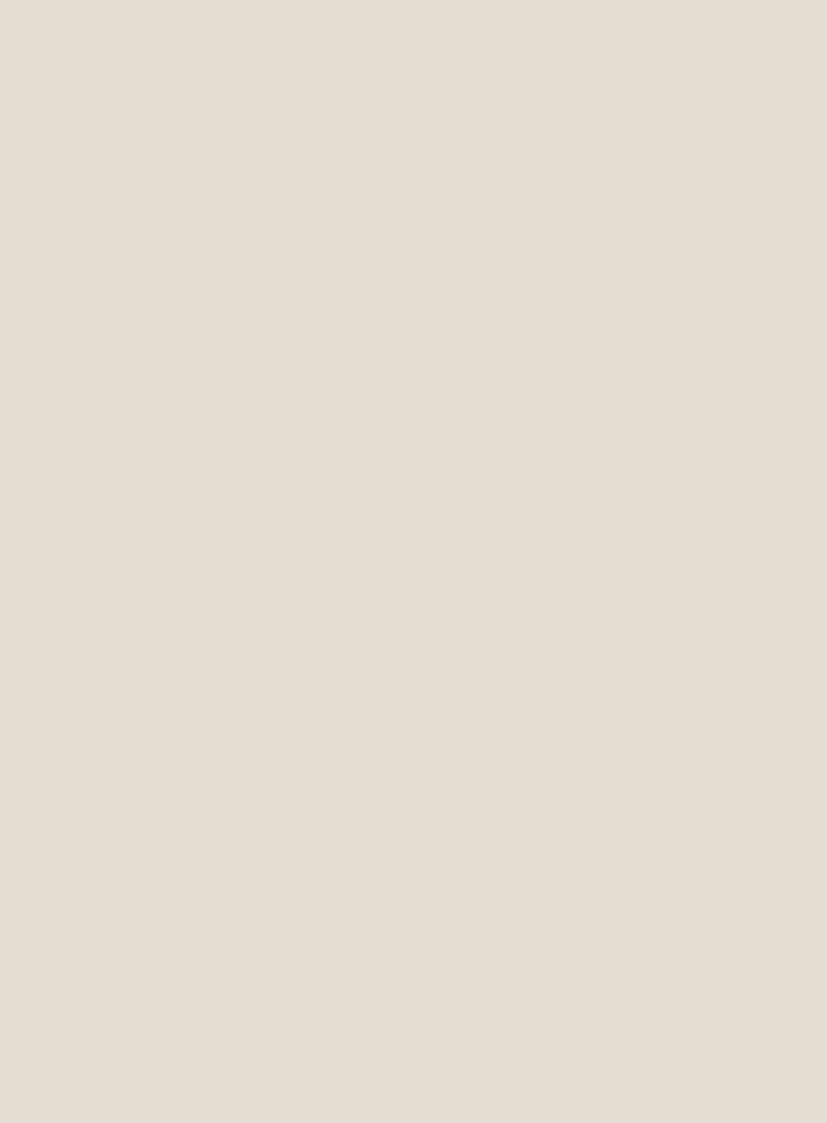
Warning. Beware of potential hazard



Warning. Pinch hazard



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



www.solaxtech.com