



Solax Technology Limited

Transformer



Solax Electric Scooter Instruction Manual



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# Introduction

**Thank you for choosing the Transformer foldable scooter.**

Please read this manual carefully before using the Transformer Scooter. This manual is applicable to the manual and automatic version. If you do not understand all of the content completely or you need further assistance, please contact your Transformer dealer or Enhance Mobility at **800-296-4151** (email **info@enhancemobility.com**).

This manual covers the Transformer's characteristics, components, functions, safety requirements and instructions, battery, and maintenance.

The following symbols used in this manual are to indicate warning, therefore, it is important for you to fully understand and master the content.



Failure to note the warnings in this manual may cause personal injury.  
**NOTIFICATION:** Failure to note the notification from this manual will damage the Transformer.

Please note that all information and photos in this manual are for reference only and are subject to factory changes and modifications.

Before using your Transformer Scooter please be sure that the your delivery is complete. Your Transformer package should include the owner manual, battery, key (2), battery charger, Allen wrench(2). If you did not receive a complete delivery, contact your authorized Transformer agent.

If damage has occurred to the packaging or contents during transport, contact the delivery company immediately.



FIG.1-Transformer-foldable scooter

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**Children should not operate the electric scooter.**

**People with health concerns should consult a physician before use.**

# Transformer Scooter Feature Guide

The Transformer is composed of the following parts: Front and rear frame, Control panel, Front/Rear cover, Front wheels, Rear wheels, Handle switch, Handle, Drawtube, Release switch, Foldable seat, Seat supporting frame, Foldable armrest, armrest supporting frame, Footboard, Carry handle, Battery, Charger, Motor set.(FIG.2)



FIG.2

- ① Control panel
- ② Handle
- ③ Direction control lever
- ④ Drawtube
- ⑤ Handle switch
- ⑥ Release switch
- ⑦ Front cover
- ⑧ Battery
- ⑨ Front wheel
- ⑩ Footboard
- ⑪ Seat supporting frame
- ⑫ Rear frame
- ⑬ Rear wheel
- ⑭ Anti-tip wheel
- ⑮ Rear cover
- ⑯ Rotary locking knob
- ⑰ Armrest supporting frame
- ⑱ Armrest
- ⑲ Backrest
- ⑳ Seat cushion
- ㉑ Carry handle

The Transformer Scooter is safe and comfortable, easy to operate, convenient to fold and carry, lightweight and steady. It has the following features:

1. Advanced aluminum alloy Frame. Light, strong and durable.
2. Easy operation. It can be folded and unfolded without tools.
3. Easy to carry with a folding seat and front/rear frame.
4. Small size and light weight makes it easy to fit in the car trunk or travel on public transportation.
5. Battery is easy to remove, convenient for user to carry.
6. Comfortable - Ergonomic seat. Handle tube can be adjusted to a comfortable height.
7. 6 inch solid front tires and 7 inch solid rear tires.
8. Starts and Brakes Smoothly.

(FIG.3)



FIG.3

## Product Specifications



Folded size FIG.5

### Specifications

Model	Transformer S3021
Overall Length	0.93m(36.9in)
Overall Width	0.45m(18.1in)
Tires(Solid wheels)	Tire Size Front 6" x1.5"
	Tire Size Rear 7" x2.36"
Maximum Speed	6km(3.7mph)
Safe Gradient/Maximum Gradient	0-15°
Range Up To	20km(13.7mile )
Turning Circle	1.4m(55in)
Weight(without battery pack)	24kg(53lbs)
Color	Red, Yellow Blue ,Black
Brake	Intelligent ,regenerative and electromagnetic
Drive system	S-drive 45A
Handlebar	PU foam
Maximum weight capacity	136kg(300lbs)
Seat Width	0.43m(17in)
Seat Height(from the ground)	0.56m(22in)
Battery	Power Type/Lithium battery
Motor	24V 120W
Battery Charger	29.4V 2A

## Main Parts and Relevant Function

### Control panel

The control panel is used to power the scooter on and off, controls direction and speed and indicates the battery level. It consists of the rocker switch or key switch, speed control, direction control lever, battery level indicator. (FIG.6)



FIG.6

Notice: Be sure to always protect the Transformer control panel from humidity and water. If the control panel has been affected by moisture, be sure to dry before operation.

### Power Switch (In different regions, the power switch design is divided into the key switch and rocker switch)

#### 1. Rocker switch (FIG.7)

Turn on the power before driving.

[-] Power on

[0] Power off



FIG.7

#### 2. Key switch (FIG.8)

a. Turn the key switch clockwise to ON.

b. Turn the key switch counter-clockwise to turn OFF, Please turn the power off when you stop.



FIG.8

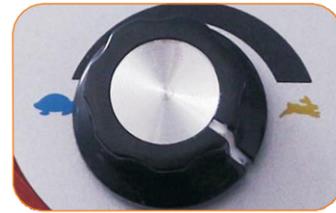


If the key is removed during use or the rocker type switched to of, the electromagnetic brake will be locked and your scooter will stop suddenly.

### 3.Speed controller (FIG.9)

The speed controller is used for controlling the speed when operating. You can set the speed from 0Km/h to 6Km/h. When you adjust the knob to the left (the tortoise), it's the minimum speed; when you adjust the knob to the right (the rabbit), it's the maximum speed.

FIG.9

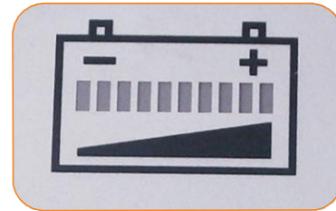


Do not adjust the speed to the maximum when turning or operating in reverse.

### 4. Battery Indicator (FIG.10)

The battery level indicator will show the battery level when the scooter is on. When green, yellow and red are showing the battery is fully charged, when yellow and red are showing the battery is half charged, red means it needs recharging.

FIG.10



### 5.Direction control lever(FIG.11)

The direction control lever is used to control the forward and reverse motion.



FIG.11

- Hold the handlebar with both hands.
- Pull the control lever on the right, the scooter will go forward.
- Pull the control lever on the left, the scooter will go in reverse.
- When the scooter moves backwards, the reverse horn indicator will sound.
- The control lever will return to the center position when released and the brake will be locked.

### 6.Horn button(FIG.12)

When you press the button, the horn will sound.

FIG.12



### Telescoping Handle

Unlock the bottom height adjustment level and pull up tiller until it reaches desired height. (FIG.13)



FIG.13



FIG.14

### Automatic Remote Control (FIG.15)

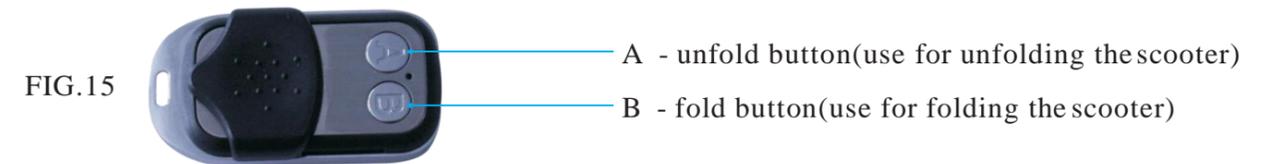


FIG.15

### 7.Remote control operation:

#### Folding operation

Press B button for 2 seconds and release. Scooter will begin folding automatic. (FIG 16-17)



FIG.17



FIG.16

#### Unfolding operation

Press A button for 2 seconds and release. Wait for scooter to unfold completely before use. (FIG 18)



FIG.18

Warning – Keep all body parts away from the scooter while automatic folding and unfolding function is in operation. Failure to comply can result in severe injury.

## Manually Folding and Unfolding the Transformer

When the remote control is broken or the automatic folding function is damaged you can operate as follows: transformers folding and unfolding operation:(FIG.19-22)



Release switch

FIG.19



Use your right hand and squeeze the release switch toward the silver steering column. Do NOT pull red lever.

FIG.20



1.Use one hand to hold the steering column, other hand hold the back of the seat.  
2.With Both hands pull open.

FIG.21



Press the footboard downward to completely open.

FIG.22

Note: If the scooter was closed by the remote control, than it must be opened by the remote control. The manual release will not work.

### Transformer folding operation:

At the center of the scooter pull the handle upward (FIG.24). The front and rear frame will draw close to the middle fold (FIG 25). Push the front and rear chasis together until they lock in place (FIG.26).



FIG.24



FIG.25



FIG.26



You will hear the “click” when the scooter is completely folded.

### Driving Surface

The Transformer has the best stability under the normal driving conditions (dry, level ground with concrete or asphalt). Extra care must be taken when riding on other surfaces (grass, gravel, etc).

- Check the physical condition before driving the scooter.
- Transformer Scooters can be used in the park and grass safely with caution.
- Avoid driving in the loose gravel, covered soil and sandstone.
- Do not drive the scooter in unknown road conditions.

- Transformer scooter can ride over small obstacles within a certain height, but you must minimize the speed and slowly drive over the obstacle(FIG.27)

Load capacity	Height
<136Kg	36mm



Do not exceed the specified climbing angle (0-15°). Please read the manual instructions before operation.

#### Safety precautions

- Do not operate your scooter before you have fully read and understand this manual.
- Do not carry additional riders on the scooter, armrest, chassis or lap.
- Do not operate while under the influence of alcohol or drugs.
- Ensure the seat is fixed and fastened.
- Slow down when operating on uneven or soft ground.
- Always slow down before turning.
- Do not park on slopes.
- Changing the initial setting or refitting your scooter is forbidden.
- Use caution when operating near busy streets, markets or shopping center. Do not operate in unsafe areas. Please consult local authorities about the traffic rules for scooters.
- Hold the handlebar with both hands and put both feet on the footboard when operating.
- Never sit on the Transformer in a moving vehicle.
- Do not exceed the maximum gradient when driving.
- Do not exceed the Transformers maximum weight capacity of 300lbs. This weight includes rider, accessories and baggage.
- Do not reverse on uneven slopes or uneven ground; be careful when passing over slopes.
- Never use the Transformer to go up and down stairs.
- Never take your Transformer on an escalator.
- Do not operate on frozen, slippery or salty ground.
- Always protect the battery in freezing temperatures.
- Never charge a frozen battery.

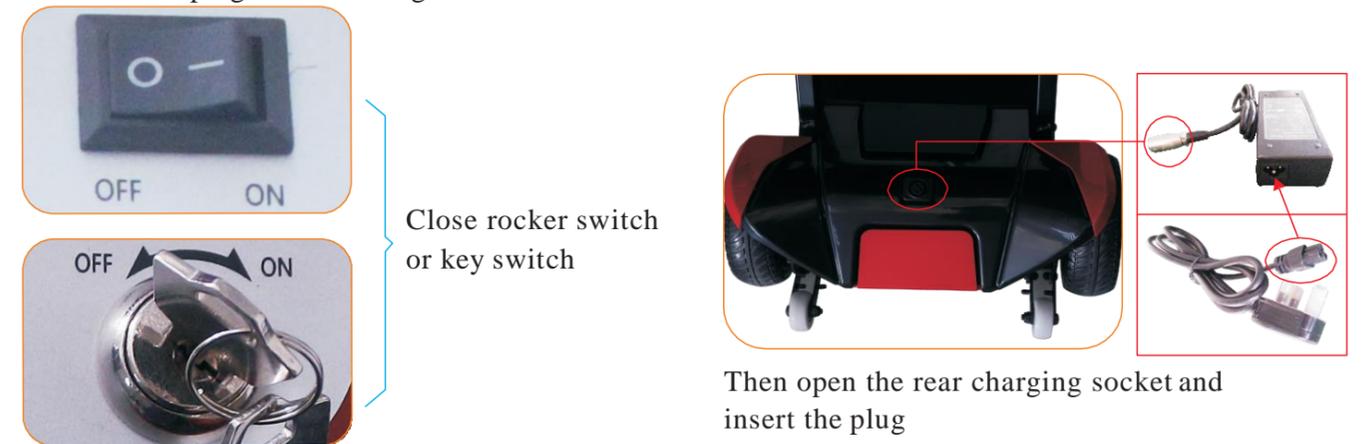
## Battery Maintenance & Charging

The Transformer Scooter is designed to use one (1) maintenance free 24V/10AH lithium ion battery. It comes with an easy to use 29.4V-2AH charger.

- **Charge the battery completely before the first operation. Not charging the battery completely prior to operating your Transformer for the first time can cause damage to the battery.**
- **Make sure key or rocker switch is in the off position before charging your Transformer.**
- Take battery off charger if storing Transformer for a long period.

#### Charging your Transformer

1. Turn off the Transformer and remove the key. Open the bottom charger cap in rear of scooter and insert the plug into the charge socket. FIG.28



Close rocker switch or key switch

Then open the rear charging socket and insert the plug

FIG.28



Match the charger socket and charger plug properly. Do not Force.

2. Plug AC power outlet into household power outlet (FIG 29). Red light on the charging block indicates power on and the unit is charging and the green light means fully charged.



FIG.29

3. Unplug the Transformer when charging complete.

Note: The scooter has a self-locking function to prevent driving when the battery is charging.

## Guide to safe and lasting battery

### How does charger work?

When the battery voltage is low, the battery charger outputs a large current to charge the battery. When the battery voltage is near full, the battery charger outputs a small current. When battery is full, the battery charger will output very little current which is almost zero. Therefore, the battery will continually charge after connecting the charger, but will not overcharge. It is better to charge the battery for less than 24 hours.

### How does the indicator light (LED) on the charger block display?

There are two LED indicator lights on the charging block. The red light indicates that the scooter is charging. The green light indicates that the battery is fully charged.

### Can other chargers be used?

In order to charge safely and efficiently, use the charger supplied by original manufacturer only.

### How often should you charge the battery?

The charge time depends on the use:

- If you're operating the scooter everyday, charge after each use so it will have a full charge the next day. Charging the battery should be vary from 8 up to 12 hours.
- If your operating the scooter once a week, then battery should be charged once a week. Charging the battery will vary between 12 – 14 hours.
- Make sure your battery is fully charged before operating.

### How can you get the maximum operating distance ?

Some driving conditions such as hills, uneven and soft surface, temperature and user weight will affect the distance or running time for battery life.

### Several methods for obtaining the maximum driving distance.

- Fully charge your battery before operating the Transformer.
- Maintain a constant speed when possible.
- Only carry the necessities to reduce any extra weight.
- Avoid intermittent driving.



Please do not dismantle the Li-polymer battery and do not add water. Failure to observe this note will void the warranty, and damage the battery and scooter.

### Why is the power of the new battery weak?

Deep-cycle batteries use unique chemical technology and design. It can be charged quickly and can be used for a long time after full-charged. The battery is fully charged before leaving the factory, but may change its initial performance during the transportation due to the temperature. The power of the battery will lessen in high temperature and it will extend the charging time in low temperature. The battery requires a few days to adapt to the surrounding environment before it gets stable performance.

More importantly, deep-cycle battery will get higher performance after several charging-discharging cycles.

### Please follow the steps to improve the battery performance as below:

1. New battery must be fully charged before using.
2. Low speeds are recommended for the first time. Do not travel too far until you are familiar with the operation of the scooter and the battery.
3. Fully charge the battery after operating the Transformer the second time.
4. The battery capacity will reach 100% and extend the driving time after four to five charging and discharging cycles.

### How to ensure the battery life?

A fully charged battery will provide better performance and extend battery life.

### How to store scooter and battery?

- Charge your battery fully before you store it.
- Remove the battery from your Transformer.
- Store your scooter and battery in warm, dry place.
- Avoid storing scooter in area with temperature variation.



If battery is frozen, warm for several days before charging.

## Maintenance

With care and maintenance the Solax Transformer is designed to provide years of enjoyment. The following items will keep your Transformer running at optimum levels:

### Battery

- Make sure battery is fully charged.
- Store the battery in a dry environment.
- Check electrode connections for corrosion.
- Never charge a frozen battery (warm for a couple days before charging).

### Seat

- Clean seat cover with damp cloth

### Chassis

- The control panel, front cover and back cover are made of durable ABS plastic with a high quality paint finish. Do not use oil or other chemical liquids to clean or wipe these surfaces.
- A damp, non-abrasive cloth works best to wash and clean the Transformer.
- Do not wash your Transformer with a water hose as this may create an electrical short and damage the electrical system.

### Wiring

- Check all wire connections and wiring insulation for wear and damage regularly. This includes the charger power cord.

### Motor, Bearings and Transmission parts

- These components have been lubricated and sealed by the factory.
- There is no need to lubricate these parts.
- Store in dry environment. Make sure electronic components avoid
- Moisture. If these components come into contact with moisture, dry before use.

## Basic Troubleshooting

### Power stops while operating

- Make sure key/rocker switch is in the ON position.
- Make sure battery is properly inserted
- Make sure battery is properly charged

### Slow Speeds while driving

- Make sure battery is properly charged

If you continue to have trouble with your Transformer, contact your authorized Transformer dealer.

**SOLAX ELECTRIC SCOOTER  
Warranty Card**

<b>User Name</b>		<b>ID No.</b>	
<b>Address</b>		<b>Phone No.</b>	
<b>Model</b>		<b>Item No.</b>	
<b>Purchasing Date</b>	<b>YY</b>	<b>MM</b>	<b>DD</b>
<b>Guarantee Time</b>	<b>12 months warranty from purchase date ( Battery is 6 month warranty )</b>		
<b>Manufacturer</b>	<b>Dongguan Prestige Sporting Goods Co. Ltd.</b>		
<b>Dealer ( Stamp or Sign)</b>			
<b>Phone No (or Address)</b>			

**Warranty Statement :**

Dealer is responsible for the repair or replacement from the parts when quality problems of Materials, manufacture or assembling comes out under the normal usage.

**Warranty Exclusions:**

- a. Damages caused by improper operation and maintenance;
- b. Damages caused by irregular spare parts;
- c. Damages caused by accidents;
- d. Consumables are not covered by warranty such as the tires, bearings, bulbs etc.
- e. Damages caused by unauthorized refit of the scooter;
- f. Damages caused by natural disasters such as hurricanes, floods and earthquakes;

Warranty stub for dealer

**SOLAX ELECTRIC SCOOTER  
Warranty Card**

<b>User Name</b>		<b>ID No.</b>	
<b>Address</b>		<b>Phone No.</b>	
<b>Model</b>		<b>Item No.</b>	
<b>Purchasing Date</b>	<b>YY</b>	<b>MM</b>	<b>DD</b>
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- e. Damages caused by unauthorized refit of the scooter;
- f. Damages caused by natural disasters such as hurricanes, floods and earthquakes;

Warranty stub for customer