

# Q Chair Manual

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**The scooter is driven by a DC motor, which can be used indoors and outdoors (Although its better not to use outdoors for long periods of time). It is transportation for the disabled and elderly. It is small , light weight, foldable and easy to carry. As well as a safe & comfortable electric scooter.**

The signs below can help you identify some warnings, mandatory operation and prohibitive operation of the electric scooter.

Identifying and understanding them completely is very important.



Read and follow the manual.



The safety warning sign: or a suggestion for a dangerous operation that may hurt you or others.



The second class(auxiliary) equipment



The main application part



When using please don't use mobile phones, interphone, laptops or other radio transmitters.



Easy extrusion/grinding points



Avoid the rain, snow, ice, salt, and placing in the water, it should be maintained in a clean, dry condition.



The product has passed the test of the electromagnetic/RF resistance to 20 V/M.



The battery contains corrosive chemicals.



Explosive



Don't use the battery with different capacity and models at the same time, don't mix up the old and new batteries when replacing, please change it entirely.



Keep tools and other metal objects far away from positive and negative Ends of battery, if exposed to the both ends, it can cause a short circuit and electric shock.



It means this is flammable material, do not expose to flame or spark and so on in the heat source.



Disposal and recycling--

the right to recycle, the company manufacturer authorized will recycle and pack the products after receiving the user's requirements.

fold size	61cm*26cm*77cm
unfold size	87cm*61cm*92cm
the largest bearing	120 kg
<b>motor</b>	
type	brushless DC motor
rated power	180 W
the input power	DC 24V
number	2
brake system	intelligent type electromagnetic brake
braking system	1.5 m (59") at highest speed
<b>battery</b>	
type	lithium battery
standard capacity	8 Ah/16 Ah
output voltage	DC 24V
number	One or two
<b>controller</b>	
type/plug type	assist type/European standard, 2 core
input power	AC 100-220 V, 50-60Hz
output voltage/current	DC 24V, 2A
<b>front wheel</b>	
outer diameter/tire width	6" × 2"(150 mm x 38 mm)
type	solid tire

material	PU
quantity	2 PCS
<b>back wheel</b>	
outer diameter/tire width	8" × 1.96"(200 mm x 50 mm)
type	Solid tire
material	PU
number	2 PCS
self weight	19 kg
maximum grade ability	12
Running distance	16km-32km
highest speed	6 km/h (3.75 mph)
turning radius	800 mm (31.5")
highest barrier height	30 mm (1.20")

## Operating Environment



This scooter is not suitable for use in heavy rain, snow or ice conditions.

1. Contact with water or excessive moisture can cause electrical failure. Frame, motor and other electric scooter parts are not waterproof, it may rust or corrode.

- Try to avoid direct contact by water (such as heavy rain)
- Please don't use this kind of electric scooter in the bath, sauna or swimming pool.
- Please don't use the electric scooter near water (such as rivers, lakes or ocean).
- Please make sure that the battery cover is closed
- If the joystick is broken, please replace
- Make sure that all the electrical connections are safe.
- Rinsing the electric scooter is prohibited. If electric scooter has been wet, please take out the battery as soon as possible and try to dry the electric scooter , and make sure that the battery is dry when used again.

2. If you must operate in wet or a slippery surface, please be careful and move slowly.
  - You must make sure that it is safe to do so.
  - If one or two main wheels lose traction, you must stop immediately, to prevent the scooter from losing control.
  - If there is snow, ice, water or oil on the slopes or ramp , please don't through the road
  - When you have doubts and cannot be sure if it is safe, please let others help you.
3. Please turn off the power supply when not using, and put in a dry and clean place after fully charged



1. The electric scooter is only suitable for concrete, asphalt and indoor floor surfaces.
2. Don't use in the sand or coarse dirt rugged terrain. It may damage the wheels, bearings, shaft or motor parts, as well as the loose fasteners.

### **Load Capacity**



1. The maximum load of this electric scooter is 120 kg (264 pounds), when using it, the load should not exceed the maximum bearing.

## **Safety Belt Installation**

The safety belt is used to fix user's body and prevent the user sliding from the seat.

1. The user needs to ensure that the safety belt binds to the waist and the bottom part of scooter backrest together.

2. Adjust the safety belt according to the user's comfort.

2.1 After sitting down, please insert the plastic card to the other side of the plastic shell, until you hear a clicking sound.

2.2 Adjust the plastic safety belt to the appropriate length, do not over tighten which will cause discomfort.

Unfasten the safety belt:

Press the button of the plastic shell side, pull out the plastic card.

Before each use, ensure that the safety belt is fixed in the electric scooter correctly and properly, and adjust to the most comfortable state of the user.

Before each use, check whether the safety belt is loose or damaged. If you find there is a problem, Please contact supplier to maintain and repair.

## **Joystick Installation**

The control panel can be installed on the left or the right arm according to the users' different requirement .

1. As shown, insert the joystick to the armrest tube hole, and make sure it has been inserted in the



right place, then fix the joystick by knob lock.

2. As shown, aim at the socket, and insert the four-core plug into the left socket.



1. Switch on button:

Press this button, turn on and turn off the power of the electric scooter.

2. Speed up button:

Press this button and speed up. The max speed is 6 km/h (3.75 miles per hour)

3. Slow down button:

Press this button, reduce the speed.

4. Horn button:

Press this button, the horn will ring.

5. Battery power indication light:

Show the battery power state.

6. Joystick:

The joystick control the direction and speed of the electric scooter, push the joystick to the direction you want to go.

7. Lamp button:

Press the little lights up, then shut down.

8. Speed/information diagnostic indicator light: When the light is on, it means it does work ,the light shows the meaning of display, there are 10 lights in total.

## Use of Joystick

When at high speed, please don't do any sharp turns.

If the user doesn't observe the warning, it may cause the electric scooter to tilt, and may cause damage or injury to the user.

The joystick, which is in the back of the control panel, can control the speed and direction smoothly. It is equipped with 360 - degree mobility and is easy to operate. There is spring in the joystick, so it can return to the center of the initial state automatically.

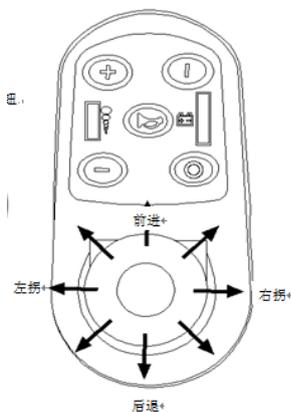
Push the joystick to the direction you want to go, Joystick has proportional control ability to drive, the greater range, the faster speed. The fastest speed is limited to 6 km/h (3.75 miles per hour).

If you want to slow down, just release the joystick. The scooter will automatically slow down and correct direction in the minimum range.

When first using this electric scooter, you should choose a slow speed to try, push the joystick forward slightly. This exercise will help you to learn how to control the electric scooter, let you know and be familiar with how to control, and successfully master the methods of starting and stopping the electric scooter.

Drive the electric scooter, please do as the followings:

- 1.Adjust the control panel to the appropriate settings.
- 2.Turn on the power supply. Please refer to the previous section on "press the power on/off button".
- 3.Move the joystick as followings :



Movement	Operate the joystick
Forward	Move the joystick forward
Backward	Move the joystick backward
Right	Move the joystick to the right
Left	Move the joystick to the left
Stop	Release the joystick (scooter will slow down soon)

## Brake Instruction

After any adjustment, repair or maintenance or before using, please make sure all additional parts are screwed tightly , otherwise it may cause harm or damage.

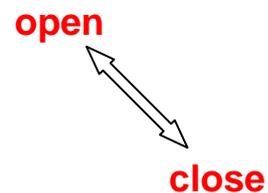
Please do not open or close the electromagnetic brake when the power is on..

Through the operation of the joystick to open the electromagnetic brake (Refers to the electromagnetic brake, lock the free rolling of the wheels) or close (Refers to the electromagnetic brake is released, the wheels are free to roll), the escort can easily push the electric scooter when power off.

### Close/open the electromagnetic brake

Find the motor electromagnetic brake joystick and do the following operations:

Electromagnetic  
brake switch



Open the electromagnetic brake (lock) : push backward electromagnetic brake switch.

Close the electromagnetic brake (free) : push forward electromagnetic brake switch.

## Battery Instruction



Don't use the batteries with different capacity, different brands and different types. Replace the battery completely, don't mix up the old and new batteries.



Metal or other conductive material can not be used to connect the positive and negative of the battery, if the connection leads to short circuit, it may get an electric shock causing some accidental damage.



Don't use next to flammable materials. Don't use next to exposed heat source, such as fires or sparks, etc. Don't transport the battery with flammable or combustible materials together.



There are some corrosive chemicals in battery box, disassembling the battery is prohibited.



Do not short circuit batteries or throw battery into the fire, so as to avoid explosion accidents.



1. Don't try to use pliers or cable wire to connect the ends of battery directly.
2. Don't use electric scooter when it is charging.
3. Don't use non-standard power supply (for example: generator or inverter), even the voltage and frequency seems meeting the requirements.
4. To prevent the power wire tangled, bent and especially in the port. To prevent the power wire yanked and knotted.
5. Keep children and pets far away from the power wire, don't let them bite and chew it. When pulling out the power wire, please hold the plug.
6. If the breaker (circuit insurance brake) tripped many times when charging, please unplug chargers immediately and contact the dealer or professional technical personnel.
7. In this guide, all the warranty and performance, etc are referring to lithium batteries.

8. Don't smoke near the battery.

9. It is forbidden to use battery in hot or cold environment.



1. When first using the new battery, it must be fully charged (about 24 hours), make sure the battery is fully activated.

2. Before the first using, charging battery will reduce the life of the battery (The battery should be used up at the first time, then start charging, so it can be activated fully.)

3. Before using, the user should check if the power supply is enough or not, when the power is shortage, recharge in time. After the first time use, the charging time should be about 5 hours; When the power is run out, charging time should be 6 to 8 hours, until the light on the charger turns from red to green.

4. The recommended charging time is about 6 to 8 hours.

5. Charge the battery often, as long as the electric scooter is used, Please charge the battery after using until it's full. If you do not use the electric scooter for a long time, please recharge it every 2 months, each time at about 80% of the electricity. It will damage the battery if there is no electricity for a long time, the battery will not be able to use, and it will damage the electric scooter seriously.

6. If you use the battery with incorrect specification, voltage and capacity , it will damage your electric scooter, and the electric scooter cannot play the best performance and effect.

## Charge the Battery

1. Use available standard alternating current (AC 110-220 V, 50-60 Hz) for charging, the charging mouth is in front of the control panel below.
2. Make sure that the power is off before charging .
3. Insert the charging port of the charger into the charging port in front of the control panel below.(As shown in figure G1)
4. Insert the other side of the charger into socket. If the red indicator is light, it shows it's charging.
5. After the charger indicator light change from red to green, then keep charging for 30 minutes, so as to ensure the full charge. Unplug the external power supply socket of the charger first, then unplug the socket of the control panel.
6. It is forbidden to use the battery in the hot or cold environment.

## Fold and Unfold

### Step:

1. Shut off the power, loosen the lever lock knob, remove it from the control panel and put it in the back of the chair pad.
2. Rotate both sides of the PU to seat level.
3. Take down the seat cushion.
4. Pull steel wire under the backrest.
5. Push the backrest forward to the tube of all-direction wheel (need pushed in the right place).
6. lift the connecting rod by hand to be parallel with the support bar and the back of motor frame.
7. The scooter folding is completed.



## Unfold

### Step:

1. One hand holds the scooter backrest frame, the other hand grabs at the battery tube to the outside, and at the same time presses the connecting rod to the largest extent, open the back parts of the electric scooter. (when you press the connecting rod group, make sure that fixed card in stuck range)
2. Push the backrest back to the largest extent, at the same time, make sure that if the wire is bounced to the hole location of the backrest frame. ( Before use the scooter, the user must make sure that the thread locking pin had bounced the fixed hole location, otherwise, it can cause harm to user)
3. Install the seat cushion and make sure that the felt has aligned and mated.
4. Adjust the PU to the appropriate angle.
5. Install the control panel (see the page of install control panel)



## **Diagnostics**

There is a diagnostic indicator in the control panel. When the light is green, it means the electric scooter has no problem. When there is something wrong with it, it will report by flickering.

If the indicator light indicators there is something wrong, the user should turn off the power and then open it again.

If after opening again, the malfunction is not eliminated and the light repeats this error, please refer to the diagnostic information, it can help you find the possible problems and corresponding solutions.

If the above methods still can't help you troubleshoot, please contact the dealer.

### **✘ The diagnostic system**

#### **1. Introduction**

When maintenance LED light flickers, it means that there is something wrong with the scooter. And the alarm may generate from motor, brake, battery, wire connection, or the scooter itself. The problem can be classified according to the diagnostic code. According to the times the LED light flickers, pauses, flickers several times again repeatedly. The times that the light flickers is the diagnostic code. For example, the LED light flickers four times, pause, and flickers four times again, such repeatedly, it means that there is something wrong with the light motor. If it's five times, it means there is something wrong with the right motor.

According to the situation is serious or not, the scooter may stop working. Under some situation, the scooter is not allowed to used.

## 2. Flashing code

<b>Diagnostic code</b>	<b>Diagnosis Description</b>	<b>Recommended solving methods</b>
Flicker one time slowly	Hall malfunction of left motor	Check the the welding situation of connection device of the left motor or check the internal hall component
Flicker two times slowly	Hall malfunction of right motor	Check the the welding situation of connection device of the right motor or check the internal hall component
Flicker three times slowly	Malfunction of battery or charger	Try to charge. Maybe need to replace the battery or the charger. Check if the battery or power wire is loose.
Flicker four times slowly	malfunction of left motor	Check the left motor, connection device and power wire is loose or not.
Flicker five times slowly	malfunction of right motor	Check the right motor, connection device and power wire is loose or not.
Flicker six times slowly	malfunction of left brake	Check the left brake, connection device and power wire is loose or not.
Flicker seven times slowly	malfunction of right brake	Check the right brake, connection device and power wire is loose or not.
Flicker eight times slowly	Malfunction of controller	Please contact the manufacturer
Flicker nine times slowly	Communication error	Check the electrical coupler ,connection and circuit is loose or not.
Flicker four times quickly	Over current of left motor	Releasing the rocker can eliminate the malfunction.
Flicker five times quickly	Over current of right motor	Releasing the rocker can eliminate the malfunction.