# **Electric Wheelchair**

Version:A/0



#### **Safety Guide**

- Be sure to read this Safety Guide carefully before use for proper use.
- If you do not follow the instructions in the "Safety Attentions", the product may be damaged, people may be injured, and even life may be involved.
- If the patient or his family needs to directly operate the wheelchair, the family should understand the use of the instructions and then use it.
- Please do not let the child and the person who cannot understand the operation operate the wheelchair.
- Users are strictly prohibited from being transported by wheelchair in any form by any means of transport.
- The user is not allowed to modify the wheelchair without authorization, and the company is not responsible for any accidents.
- It is strictly forbidden for the user to stand on the pedals, otherwise the wheelchair will fall over.
- Please do not explore your body while walking, otherwise it will affect the stability of driving.

Any one is important about safety, so be sure to follow it.

\* After reading the instruction manual, it should be kept in a safe place for future use.



- **1.**Electric wheelchairs are suitable for driving on more spacious indoors, garden paths and roads with good road conditions around the home. Do not approach motor vehicles and deep pit surfaces. When encountering obstacles in front, avoid driving around the road to prevent the risk of wheelchair tilt.
- **2.**It is not advisable to climb long slopes to avoid overloading the circuit and motor and consuming too much power.
- **3.**Do not use the inertia to drive the wheelchair up the steps, otherwise it will cause accident or damage to the wheelchair.
- **4.**The auxiliary wheel installed at the rear is used to prevent the wheelchair from tipping over when the angle of the uphill is too large,can not be removed.

- **5.**Unless otherwise specified, all wheelchair adjustments should be carried out without a ride.
- **6.**Before using the wheelchair, please check if the armrests, handles, etc. are loose. If so, please contact a professional technician.
- 7.Please do not change your posture when you lean back, otherwise the wheelchair will tip over.
- **8.**The wheelchair should not walk on the escalator, otherwise serious personal injury will occur.
- **9.**When the person in the wheelchair is to be transferred from the wheelchair to another place, first keep the wheelchair in the nearest and best position, point the front wheel of the wheelchair to the place where it needs to be transferred, and confirm that the wheelchair is in the brake state.
- 10. When transporting a wheelchair, please grasp the fixed connection part of the wheelchair, not the active part, such as the footrest device.
- 11. When parking is required during driving, simply release the controller handle to reset, and the electric wheelchair will automatically brake, electric wheelchair can automatically brake when parking on the slope; for safety, it is recommended to drive to a flat parking and tighten the brakes.
- 12. Always check if the electrical connector is well connected, if the solid screw is loose, adjust it in time.
- **13.**The rated load of the wheelchair is 100kg. The user weighs more than 100kg. Please contact the manufacturer for special order.
- **14.**When the wheelchair is driving on a sloping ground:the user must fasten the seat belt; When going downhill, if the slope is greater than 5 degrees, the assistant put the wheelchair back and move forward with careful confirmation; If you are facing forward when going downhill, it may cause the user to lean forward and fall.
- 15. During the use of the patient, routine cleaning once a day, when replacing infected

patients, must be thoroughly disinfected with disinfectant.

\*\*The product has a normal service life of 5 years from the date of delivery.

#### 1.Overview

This user manual is applicable to electric wheelchairs, including various types of safety precautions, function descriptions, and maintenance information.

The graphics in this manual are for user's reference only. Please refer to the actual product for actual use.

# 2. Application Scope

This product is used for the elderly walking, disabled people and other groups with weak walking ability (except for those who cannot judge the exercise environment). It is especially suitable for short-distance walks in indoor, courtyard, sidewalk and other environments. The ideal travel tool for the elderly and disabled.

#### 3. Product Brief Introduction

(1)Product Parameter, Part Name

This product consists of frame, I-shaped, front wheel, rear wheel of hub motor, remote control, battery box, control box, auxiliary wheel, seat back pad, foot pedal, etc., The structure diagram is shown in the following figure:

(2)Electrical Parameter

1.Motor: DC24V 180W 2PCS

2.Batter capacity: DC24V 6AH/10AH/20AH

3.Charger: AC110-240V 50-60Hz Maximum output current: 2A/5A

4.Controller: Maximum output current: 50A

Normal operating current: 2-3A

## (3)Performance Parameter:

1.Maximum speed: ≤6KM/H Braking performance:≤1.5m

2.Static stability:≥9° Dynamic stability:≥6°

3.Minimum radius of gyration:≤1200mm

4. Theoretical travel distance: 12KM/20KM/40KM

Name	Overall Length	Overall Width	Overall Height	Seat Width	Front Wheel	Rear Wheel
Parameter	95CM	55CM	94CM	41CM	7"	10"
Name	Seat Height	Seat Depth	Backrest Height	Folding Width	N.W.	Weight Capacity
Parameter	50CM	41CM	50CM	39CM	14.5KG	100KG



- 1.Controller
- 2.Seat Cushion
- 3.Battery
- 4.Footplate
- 5.Front Wheel
- 6.Rear Wheel
- 7.Motor
- 8. Backrest Cushion
- 9. Armrest Cushion
- \*The graphics in this manual are for user's reference only. Please refer to the actual product for actual use.

#### **4. Function Overview**

The wheelchair is designed for both safety and convenience. Its main features are:

- (1). Foldable aluminium alloy frame;
- (2). The overall structure is simple and novel & lightweight;
- (3).Brushless motor;
- (4). Upgradeable rear control nursing mode
- (5). Can be taken on the plane

# 5. Wheelchair unfolding steps

(1)Wheelchair folding state



# (2) Wheelchair unfolding

Pull the backrest back and press the front of the seat until the wheelchair is fully opened.



## (3) Switch lock operation

First put the lock ring in the card slot, and then press down the switch lock plate firmly. (Note: When the switch is not locked, the wheelchair cannot be used)



# (4)Wheelchair unfolding completed



# 6. Wheelchair folding steps

# (1)Switch lock operation

First lift up the switch lock plate forcefully, then take out the lock ring and place it below, which can be folded.



# (2)Wheelchair folding

Hold the backrest tube and the lower front of the seat, pull up to the middle at the same time, and close it.





# 7. Controller connection plugin

When you receive the wheelchair, you need to first plug the battery connector and the controller connector into each other, then the two red terminals are aligned and firmly clamped.



# 8. Armrest function operation

To open the armrest, first press the red round button key, and at the same time, lift the armrest up.





# 9. Wheelchair Standing Steps

Take out the buckle of the rear tilting wheel, flip the rear tilting wheel and put on the buckle to stand.







## 10.Motor mode switching

Manual mode: Turn off the power of the wheelchair controller, at this time the wheelchair is in manual mode and can be pushed manually.

Electric mode: Turn on the wheelchair controller. At this time, the wheelchair will be in the electric mode, and then it can be driven electrically (the electric mode cannot be pushed manually)

# 11.Battery removal operation

Press the small red button on the right side of the battery box and pull the handle forward to remove the battery. (Remove the battery, easy to charge the battery independently)



# 12.Rear control operation

(This function is only available in the dual-controller upgrade version)



# 13.Operation

- Controller: is an indispensable electronic device. The controller is usually installed on a handrail, and is connected to the power box together with the motor and battery.
- Power switch: It is the switch that supplies power to the control system, and the power is supplied to the motor of the wheelchair after passing through the switch. Do not use the switch button to stop the wheelchair unless an emergency occurs, as this may shorten the life of the wheelchair drive components.
- **Joystick:** The main function of the joystick is to control the speed and direction of the wheelchair. The farther you push the lever from center, the faster the wheelchair moves, resets itself and brakes automatically when the lever is released.
- Horn button: The horn will sound when this button is pressed.
- Deceleration button and acceleration button: When the power is turned on, the speed display table will display the current driving speed. Each time the acceleration key or the deceleration key is pressed, it will increase or decrease by one grid. The displayed grid number represents the current speed, and the range can be determined by the user adjustment.
- Charger socket: This socket is only used to charge the wheelchair. This socket should not be used as a power supply for any other electrical device. If other electrical devices are connected, the control system or the EMC (Electromagnetic Waves Tolerance) performance of the wheelchair may be damaged

### 14.Battery use

Fully charge your new battery prior to its initial use. This brings the battery up to about 90% of its peak performance level; Give the battery another full charge of 8-14 hours and operate your wheelchair again, the batteries will perform at over 90% of their potential; After four or five charging cycles, the batteries will be used by 100% and the life time will be extended. Please replace replace the battery when the battery fails. The old battery must be returned to supplier because of environmental pollution.

# 15.Charging

- (1). You must use the special charger provided with your electric wheelchair to ensure safe use. Plug the charger's charging output plug into the charging socket on the back of the controller;
- (2). The charger power plug is plugged into a voltage and frequency matching power supply;
- (3). When the charging indicator on the charger turns green, it indicates that the power is sufficient, unplug the charger and the charging output plug when sufficient.
- (4). Charging method: Insert charging head of the charger into the charging port on the bottom of the controller.

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#### WARNING!

If your wheelchair moves accidentally, please immediately release the joystick so that the wheelchair will stop moving automatically unless the joystick is out of order.



#### CAUTION!

If you connect any device other than the supplied battery charger into the charger socket on the wheelchair. It could cause permanent damage to the product.



#### CAUTION!

The wheelchair won't work optimal when the environment temperature is less than minus 10 C° or above 50 C°.



#### WARNING!

Never let the battery freeze, do not charge the frozen battery, which may cause personal injury and the battery damaged.

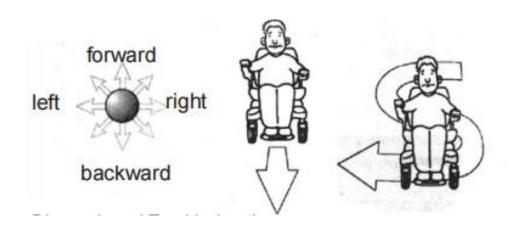
### 16.Circuit breaker

The circuit breaker, which is located in the battery box, is set for the wheelchair's safety. Once motors or batteries overloaded, the circuit breaker will trip to cut off the power. After one or two minutes, it will automatically reset and then you can continue to drive the wheelchair.

For your safety, the lap belt must be fastened before you drive the wheelchair.

## 17. Precautions for operation

- .•Find a spacious place like square and have an assistant to help you practice until you have enough confidence to operate it by yourself.
- •Be certain to shut down the power when you transfer in- or out of the chair, and adjust the speed through speed adjustment button.
- •We recommend you set the lowest speed until you can operate the electric wheelchair skillfully.
- •To Practice the stop operation, forward and backward. Push the handle, the wheelchair move to anywhere you want.
- •Firstly, ensure that it is the lowest speed when practice forward operation. After Skilled, you can practice "S" shaped turn. After you are familiar with "S" shaped turn, to practice backward operation, and pay attention to the speed control setting. And the backward speed should lower than forward speed.



#### WARNING!

Do not use your wheelchair unless getting help from your assistant when the wheelchair is in manual mode. Otherwise it may result in personal injury.



Do not set your wheelchair in manual mode by yourself while you are seated in the wheelchair. Otherwise it may result in personal injury. In this case, please ask your assistant to help you. Do not set your wheelchair in manual mode when it is on an incline. Otherwise, the wheelchair could be out of control to roll down by itself, and result in personal injury.

#### 18. Maintenance

#### (1) Maintenance

Your power wheelchair also requires routine maintenance like other motorized vehicles. Some checks can be performed by yourself, but others require assistance from your service agent. Preventive maintenance is very important. If you follow the maintenance and checks in this section, your wheelchair will offer you trouble-free operation for years. If you have any doubt for your wheelchair's care or operation, please contact your service agent.

#### (2) Humidity

Your wheelchair, like most electrical and mechanical equipment, is susceptible to external conditions. In any case, you should avoid the damp environment. Direct or prolonged exposure to water or dampness could cause the wheelchair to malfunction electronically and mechanically. Water can cause electrical components and the chair's frame to be corroded.

#### (3) Temperature

- •Some parts of your wheelchair are susceptible to temperature.
- •In extremely cold temperature, the battery can be frozen.
- •Temperature above 55° may cause your wheelchair's speed to be reduced.

### (4) General Guidelines

- Avoid beating the controller, especially the joystick.
- Avoid the exposure of your wheelchair for long time to extreme conditions, such as hot, cold or moisture environment.
- •Keep the controller clean.
- •Check all electric connections, including the cable and connectors of the charger, and ensure that they are all tight and secure.
- •If only red LEDs on the Battery Gauge are lit, the batteries are almost out of charge. You should recharge the batteries as soon as possible.
- The frame surface has been sprayed with a clear sealant coating. You can apply a light coat of car wax to make the surface keep a high gloss.
- •Check all cables. Make sure they are in good condition and are not corroded. The battery must be fully inserted in the end of the battery box.
- •All wheel bearings are lubricated and sealed. There is no need to lubricate them yourself.
- Check if there are loose parts for wheel hub, drive device, and chair itself.

If loose, tighten them in time.

- (5) Maintenance after use
- Turn off the power(It is the best to disconnect all the connectors.)
- Prevent children and unfit people from using the wheelchair.
- •Store the wheelchair in normal temperature to prevent reformation so that it keeps its performances for long period.
- •Clean the wheelchair with a clear and soft cloth and dry it. Never use any chemicals to clean it.(to prevent reformation and discoloration).

Inspection Items	At any time	Weekly	Monthly	Six monthly
All parts	J.	13	0	33
Joystick function	0		Į.	
Brake System	0			(3)
Connection		0		
Battery Condition	0		7	(8)
Tire Condition	Ť		0	- 24
Frame Condition	Ť			0
Front Wheel Condition	ji	0	j	92.
Pureness	0	-		

#### (6)Cleaning

- •Never wash your wheelchair with water or expose directly to water.
- •Surface of wheelchair frame is coated with a protective coating. Therefore, it is very easy to wipe it clean with a damp cloth. Never use any chemicals to clean the vinylon seat and armrest, as they may cause the latter slip or chapped. You can use a damp cloth and neutral soapy water to clean them, and then dry thoroughly.

# 19.Storage

Your wheelchair should be stored in a dry condition free from sources of extreme temperature and dampness. Remove the batteries from the wheelchair prior to storage. Otherwise, the frame may be rusted and the electronics may be damaged.

# 20. Quality Assurance

(1)Warranty

Chair frame will have 5 years warranty service.

- (2) Within 1 year from the purchase date, for the following parts, we will supply free maintenance and replace service for original customer after the dealer has checked for material and production defects.
- Electrical control or lever system
- Motor/Drive System
- •Bearing and shaft sleeve
- (3) Six-Months warranty for the batteries.

Please note the warranty service is provided by your dealer, and finally finished by our after-sales department and dealer together.

Out of warranty:

- ■ABS plastic cover shell and rubber pad
- **■**Tires
- ■Interior decoration
- ■Damage by abuse, wrong operation, accidents and negligence
- ■Abnormal use