

**PULSE**



**Electric  
Wheelchair**



**USER MANUAL**



Please read all the instructions carefully before using!

After-sales service card

Distributor:			
Cardholder:	Telephone number:	Model:	
Address:			Date of manufacture:
Height:	Weight:	Controller location:	Ex-factory number:
<p>Warranty:</p> <p>The products you buy can enjoy the following maintenance services: 1. The warranty period for motor, controller, push rod and frame is one year; the maintenance is free during the warranty period.</p> <p>2. Life-long maintenance services, door-to-door maintenance needs to add charges, according to the cost of distance plus.</p>			
Service record	Time	Content	

Note:

- 1  If your contact information has changed, please inform US IN TIME!
- 2  The replacement parts belong to the company;
- 3  Batteries, tires, handrails and other vulnerable parts are not included in the warranty;

Packing list

Items	Quantity
Wheelchair model	1 Station
After-sales service card	1 copy
Battery Box	One
Cross your legs	Two

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One. Intended use

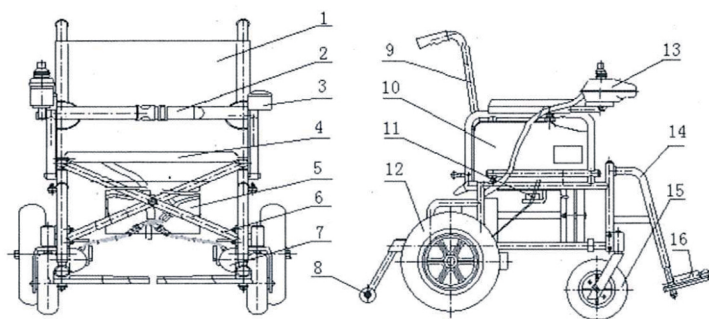
For people with disabilities or who can not walk properly (excluding obesity) .

Two. Type, specification and structure

1.The product model and description are shown in the table below.

Model	Maximum user quality	Driving form	Drive wheel diameter
WT-100W	100kg	rear-wheel drive	406mm (16 inches)

2. The structure of the wheelchair is shown in figure 1.



- |               |                |                |                 |
|---------------|----------------|----------------|-----------------|
| 1.Backrest    | 2.Seat belts   | 3.Handrails    | 4.Seat cushion  |
| 5.Batteries   | 6.Folding rack | 7.Motor        | 8.Anti Rollover |
| 9.Chair rack  | 10.Guard plate | 11.Brake       | 12.Rear wheel   |
| 13.Controller | 14.Pedal frame | 15.Front wheel | 16.Foot pedal   |

**Fig. 1 schematic diagram of electric wheelchair structure**

Three. Main performance indicators

- 1.Maximum speed: ≤6kmh.
- 2.Running braking performance.
  - a) Horizontal Road Braking: ≤1.5 M.
  - b) Maximum safe slope braking: ≤3.6m(6°).
- 3.Slope Holding Capacity: 9° .
- 4.Static stability: ≥9° .
- 5.Dynamic stability: ≥6° .
- 6.Obstacle Height: ≥40 mm.
- 7.Trench width: 100 mm.

Nineteen. Environmental Protection

In order to protect the Earth’s environment, please do not throw away the electronic waste, such as abandoned cars or unusable batteries, treat the waste according to the city’s regulations on environmental protection, or contact our company, so as not to cause pollution to the environment.

Twenty.Warning and reminder content

Please read this manual carefully before using this product.

Operating this product without a full understanding of the manual may result in accidental injury or damage.

If you have any questions about the contents of this manual, please contact our company.

**Note:**

The words “Caution” and “Caution” in this manual apply to potentially dangerous and unsafe operations that may result in personal injury or property damage.

Twenty-one. Identification

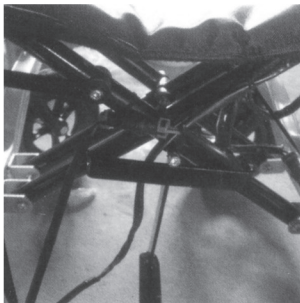
Warning Mark	Meaning
	Check for random files
	B type application section
	Should not be thrown away at will, should be professional recycling

9.As shown

When the two fixing screws of the handbrake are in a relaxed state, the tightness of the handbrake and the angle of the handle can be adjusted to an ideal position to tighten the screw to fix the handbrake (as shown) .



### 10.Chargers and batteries



The Charger does not provide wheelchair charging, and the Charger connector is connected to the charging hole under the controller (as shown) .

Follow these steps to complete the charging

Step 1: check the Charger Jack to make sure there is no blockage.

Step 2: Make sure the wheelchair switch is turned off.

Step 3: insert the output plug of the charger into the slot under the controller.

Step 4: when the charger green light up, indicating that the battery has been charged.

After charging, the charger is connected to the charging hole for up to 24 hours, which ensures that the battery is fully charged. When the wheelchair is not in use, please charge it once a month in case the battery life is shortened.



The appearance color of the product is based on the real thing

8.Ability to climb hills:  $\geq 6^\circ$  .

9.Minimum radius of gyration: 1200mm.

10.Theoretical driving distance:  $\geq 20\text{km}$ .

### Four.Main functions

Serial number	Function	Description
1	Stepless speed regulation	After programming speed adjustment, press forward 4 gears, back 1 gear control.
2	Controller overvoltage protection	Protect the controller in case of battery overvoltage.
3	Motor block protection	The utility model can prevent the motor from overheating and causing damage when the obstacle is blocked.
4	Insulation	The application part is connected with the live part, and the DC current is between the two parts $\leq 5\text{mA}$ .
5	Circuit protection	The protective circuit is not affected by overcurrent of itself and external power supply.
6	Non-insulated electrical components protection	To ensure that the user is not exposed to non-insulating parts by the motor or burn.
7	The armrest can be raised	Convenient for users to get on and off the bus.
8	The body of the chair is foldable	Easy to transport and store.
9	Anti-roll wheel	To prevent the use of uneven road caused by wheelchair toppling.
10	Electromagnetic compatibility	It can be used in electromagnetic environment without electromagnetic disturbance.

### Five.Working Environment

1.Ambient temperature:  $-10^\circ\text{C} \sim 40^\circ\text{C}$  ;

2.Relative humidity: 25%~95%;

3.Internal power supply: DC24V.

### Six.Installation and debugging

The electric wheelchair has been tested before it leaves the factory. According to the transport requirements, parts of the products when leaving the factory using decomposition packaging, so users need to carry out a simple installation before use.

1.Open the electric wheelchair packing box, you according to the information bag packing list content to check whether there are missing parts.

2.Pull the frame to the right and left to keep the width of the vehicle normal, and push down the seat to make its left and right side bracket grooves (with the handle folding mechanism of the vehicle also need to pay attention to the coordination of its interface) .

3.Install the anti-turn wheel, hold the two impact beads on the post-insert bracket by hand, insert the bracket pipe diagonally until the impact beads enter the corresponding hole fixed so far.

4.Install the left and right pedal assembly, insert it into the iron column and rotate forward until the positioning mechanism is locked; then loosen the screws at the bottom of the pedal assembly and adjust the height of the pedal to the right position, re-tighten the screw (see figure below) .



5. Insert the controller with mounting bracket backward into the square tube under the armrest, adjust the distance between the front and back properly, and then screw the screw to fasten it (see Figure 3).
6. Check the position of the clutch handle of the electric mechanism, that is, when the handle is perpendicular to the wheel, it is "Off" (manual position); otherwise, it is "On" (electric position) position (see Figure 4).



Figure 4

7. Look at the cables under the vehicle; if you see cables hanging, use the straps to assemble them and keep them at a height above the ground.
8. Press "Power on button" controller power is turned on, while "Battery power display" and "Speed level display" lights are lit. The "Battery power display" lights on indicate that the power supply of the wheelchair has been connected, and the more lights on, the more sufficient the power supply. The "Speed Range Display" lights have five gears, and all lights indicate the highest speed, the less bright the lower the speed limit (see Figure 5).

Controller panel

Function description:

1. Battery indicator
2. Wheelchair power start switch
3. Decelerating adjustment switch
4. Trumpet
5. Speedometer
6. Speed adjustment switch



Figure 5. The controller function key overlooks the schematic diagram

- ② Manual mode to electric mode: rotating the left and right wheel clutch handle, is the limit block sliding in the plane track and automatically spring into the groove (as shown).



8. The folding of the backrest

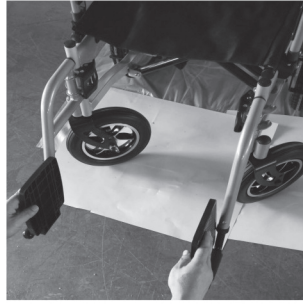


Pull the arm spanners on both sides of the backrest down and fold the backrest down. Hold the handle and lift the sleeve upward. When you hear a "Click" sound on either side of the handle, fold the back.

Make sure that the handrails and body are firmly installed before use.



5. Insert the straddle into the frame fixed chute (as shown)

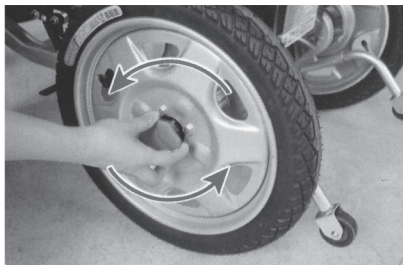


6. Hold the handlebar with both hands, lift it up until the backrest is fully extended, and make sure the pin is stuck in the hole of the handlebar tube (as shown) to ensure safe use.



7. Use of the clutch

When the electric wheelchair fails or the battery runs out, switch the wheelchair to manual mode and push it to a safe area, as follows:



① Electric mode to manual mode: pull the left and right wheel clutch handle out and rotate the handle to make the limit block stuck on the plane track (as shown), release the handle is manual mode.

9. After the power is connected, gently pull the controller lever in any direction to hear the sound of electromagnetic clutch and motor rotation in the electric mechanism. With the increase of the lever pulling amplitude, the motor speed also increases (the motor sound gradually increases); the left and right motor speed (that is, the sound of the left and right motor) will change when the lever is pulled, and the lever will be released, electromagnetic clutch will release and sound, motor stop.

10. Close the clutch handle of the electric mechanism (make the handle parallel to the wheel), the operator sits on the vehicle, turn on the power switch of the controller, and operate the vehicle. The test should be carried out in a flat, large space to avoid the operator's unskilled operation of the vehicle caused by the vehicle, goods and personnel damage.

11. Press the rear tire with your hand and check for adequate air pressure. If not, inflate immediately. Feel moderate inflation can be; not too much to avoid a flat tire (inflation pressure rating of 40 psi).

Seven. Use methods

1. For first-time users, it is recommended to drive at low speed to avoid accidents due to unskilled operation.

2. The front of the controller joystick is the speed control button, the operator can adjust the speed according to the situation which he adapts to, Adjust and determine the speed by pressing the left button (speed down button) for deceleration and the right button (speed up button) for acceleration. When the joystick returns to the middle position, it stops (see Figure 6).

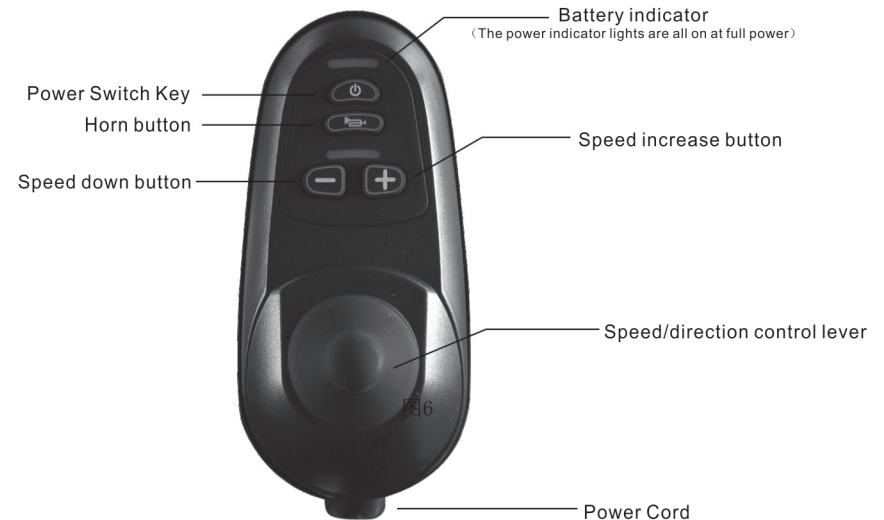


Figure 6

3. When the vehicle is too low power or other failure to carry out the electric drive, can be turned to the control rod and the wheels perpendicular to the direction (the clutch is in the "Off" position), the vehicle can be pushed by hand.

4. The handrails on both sides of the vehicle can be turned up; that is, the positioning handle at the front end of the upper wrench can make the handrails turn up so that the operator can get up and down the vehicle.

#### Eight. Charge the battery

1. To charge the battery, insert the charger plug into the charging socket at the bottom of the controller for charging (Figure 7)

Note: charging at the location (Figure 8) is prohibited



The correct charging position (Figure 7)



Wrong charging position (Figure 8)

2. Should use 24V, 3A automatic charger (It is suggested to choose the charger produced by Super Power Supply Co., Ltd.), will be fully charged after the automatic stop. If the charging light on the charger does not turn green after the charging time exceeds 8 hours, it means that the battery has reached its lifetime and needs to be replaced.

3. Charging should be avoided in direct sunlight or high temperature; battery should be stopped immediately if the temperature exceeds 40 °C. It is best to charge the vehicle after each use. If you do not use this product for a period of time, you should take out the battery and store it separately.

#### Nine. Troubleshooting

The product will alert the abnormal state of the vehicle through the LED lights flashing on the controller and the alarm sound of the horn cycle. The first two high-frequency sounds of the sound signal are the guiding sound, followed by the alarm sound, according to the number and length of alarm sound, can be based on the following table to determine the fault and timely removal. The following table describes the various voice alarm states for the battery charge indicator and the speed/fault indicator.

#### Eighteen. Assembly and adjustment of wheelchair

1. The product packing box contains a set of car body, a battery, a pair of straddle.

2. Press down hard with both hands until the vehicle is fully open (as shown).

3. Insert one end of the manual controller expansion tube into the right armrest and the manual controller fixing tube at the lower end of the vehicle, adjust the manual controller to the proper position, and then lock the knob. Push the power cord back to a straight line. (as shown)



4. Hang the battery box on the battery hanging rod of the vehicle, and tighten the power plug, pay attention to the fastening. (as shown)



2) Keep this device as far away from other electronic devices as possible.

3) Be sure to use the power cord supplied or specified by the company.

4) Follow the steps to connect the power cord.

General points to note

1) Specifies that the power cord can be connected to this product.

The power cord supplied by this company will not damage the EMC performance of this product.

The use of unspecified power lines may result in a significant reduction in the EMC performance of the equipment.

2) Cautions against user modification

The user may not modify this product, otherwise it may cause the performance of EMC of this product to reduce.

Product modifications include the following changes:

a) Power cord (length, material, wiring, etc.) ;

b) Installation/layout of equipment;

c) Equipment Configuration/components;

d) Protective components (cover opening/closing and cover fixing) .

3) All covers shall be closed when operating the equipment. If for some reason the cover is not closed, be sure to turn off the system before starting/continuing operation.

4) The operating system may affect the EMC performance of the system with the cover open.

The electric wheelchair is expected to be used in the following electromagnetic environment.

The purchaser and user of the electric wheelchair shall ensure that it is used in such electromagnetic environment.

Voice status	Meaning	Process prompts
All LED lights are silent	The power is off or on standby or the system is in sleep mode. Poor contact with power cord, fuse jump or burn out.	Check that the power cord and the fuse are connected properly
All leds are lit	The power is on. The product can be used normally after self-check.	—
The Power Indicator Light is green	Indicates a sufficient amount of electricity.	—
The power indicator light is yellow	Represents a power consumption of more than half	Should consider forming not too far
The power indicator light is red	Indicates that the power supply is about to run out	The battery should be charged as soon as possible
Speed/first indicator blinks	Indicates a failure of the left motor	Poor contact with the left motor or broken cable
Speed/second indicator blinks	Indicates a failure of the right motor	The motor on the right is not in good contact or the cable is broken
Speed/fourth indicator blinks	Represents a joystick failure	The joystick is not reset or the wire is broken

#### Ten. Daily Maintenance

1. The vehicle is used in normal temperature environment; must not get wet, lest cause short circuit.
2. Always use a soft cloth to keep the vehicle clean. If you need to wash, you can first use a neutral detergent to scrub the surface, then use a soft cloth dipped in water to clean, dry after use.
3. The controller and the electric mechanism are the core parts of the vehicle, which should avoid collision and dampness.
4. Regularly check whether the screws and nuts on the vehicle are tightened, whether the electrical connector is off, whether it is too close to the ground; if in doubt, should promptly consult the local dealers or after-sales service telephone consultation to ensure driving safety.
5. Pay attention to the vehicle before each start should check whether the electricity is sufficient, so as not to give you inconvenience out activities.
6. Always check the tire pressure to make sure the vehicle is in good working order.

#### Eleven. Service life

The battery life is one year.

#### Twelve. Safety precautions

1. It is strictly forbidden to pull the clutch handle when the motor rotates in order to avoid serious wear of motor parts.
2. Control the controller handle when the action should be gentle, remember to force too much, so as not to damage the controller.
3. The use of wheelchairs beyond the scope of the ban, such as carrying heavy loads or towing other vehicles.
4. Do not disassemble the controller and motor at will. If there is any problem, please ask professional to repair it.
5. When using a wheelchair to fasten the seat belt, as far as possible to maintain a constant speed, not on the inclined road, so as not to cause the wheelchair rollover.
6. In the use of the process, do not stand on the pedals, in order to prevent wheelchair tipping, dangerous.
7. Always check the performance of the brake to ensure that it is safe and reliable, if necessary, to entrust professional maintenance or adjustment.

8. This product is limited to carry one person, many people and the quality of users more than 100kg of personnel shall not use.
9. If the wheelchair breaks down or is damaged, it must be repaired by professional personnel or returned to the manufacturer for repair.
10. Over the life of the battery can not be used properly should be sent back to the manufacturer to deal with, or buy a new battery back to the old battery, strictly prohibit self-treatment, so as not to pollute the environment.
11. It is forbidden to drive in the motor vehicle lane.
12. It is forbidden to modify a wheelchair without permission.

Thirteen. Contraindications

1. Corrected Vision less than 0.6 is disabled.
2. Not used in patients with upper limb disability or behavioral disorders.
3. Not for children or pregnant women.

Fourteen. Transportation and storage

Electric wheelchair should be stored in dry, well-ventilated, ambient temperature in -20 ° C ~ + 55 ° C, relative humidity not more than 90% , indoor should avoid strong sunlight, the surrounding non-corrosive substances.

The packaged electric wheelchair can be transported by ordinary means of transportation, should avoid rain and snow splashing and mechanical collision, not mixed with corrosive goods.

Fifteen. Quality assurance statement

1. Within one year after the purchase of this product, the company can enjoy free maintenance services.
2. Free maintenance is not provided in any of the following cases:
  - a) Failure to use or damage caused by improper maintenance or storage as specified in the specification.
  - b) Failure or damage caused by self-assembly or disassembly repair.
  - c) Other accidental or man-made damage.
3. Please show the purchase voucher and warranty card before repair. If the procedure is not complete, the company refuses to repair.
4. After the product exceeds the warranty period, the company is still for your free service, maintenance only charge for replacement parts.
5. If users request the company can provide circuit diagrams, lists of components and other maintenance equipment required information for professional repair equipment for reference.

Sixteen. List of critical and vulnerable parts.

Serial number	Name	Specifications	Quantity
1	DC motor	24V、250W	2
2	Controller	50A	1
3	Batteries	12Ah	1
4	Fuses	0.5A	1
5	Tires	WT-100W	Two each

Seventeen. Electromagnetic compatibility statement

This product has passed the electromagnetic compatibility test, to meet the YY 0505 standard of medical devices and equipment requirements. These limitations provide reasonable protection against harmful interference in typical medical installations.

1. Product composition (electrical control system)

Serial number	Part name	Model specifications
1	DC motor	MY1016Z-250W24V
2	Batteries	50A
3	Controller	35A

2. Product Cable

Serial number	Name of cable	Specifications	Whether to shield
1	Power Cord	0.75mm <sup>2</sup>	No

3. EMC performance

The equipment may be used by other medical equipment and radio communications caused by radio frequency interference. In order to prevent such interference, the product is tested according to YY 0505-2012 and meets the requirements. However, the company does not guarantee in the individual installation environment will not be disturbed.

If interference with the equipment is found (which can be determined by opening and closing the equipment) , the user (or qualified maintenance personnel) shall attempt one or more of the following measures to resolve the interference problem:

- a) Adjust the direction or position of the emission affecting the equipment;
- b) Increase the distance between the device and the emitting device;
- c) Using other power sources (rather than those used to generate the affected equipment) to power the equipment;
- d) Consult with suppliers or service representatives for additional advice.

The manufacturer shall not be liable for any interference caused by:

- a) Use interconnect cables other than the recommended cables.
- b) The right to alter or modify the equipment without permission, which may cause the user to operate the equipment in the urban area.

All types of electronic equipment may cause electromagnetic interference to other equipment through air or other cables connected to it. The term EMC (Electromagnetic compatibility) refers to the ability of a device not to be affected by electromagnetic interference (EMI) generated by other devices and not to affect the capabilities of other devices by similar electromagnetic radiation.

If the specified EMC performance is not fully met, the user should follow the steps described in the manual to install the product correctly. If there are problems with EMC, please contact the maintenance staff.

4. Points for attention in product installation

- 1) Use the power cord supplied or specified by the company. Products equipped with power plugs should be plugged into a fixed power outlet with protective grounding. Do not use any type of adapter or converter (such as the "Three to two" converter) to connect the power plug.