ICONREHAB™

whizzi sport

CARBON FIBRE FOLDING ELECTRIC WHEELCHAIR (YHWT-001)

OPERATING MANUAL

For the safety of you and others, please read the manual carefully!
Use it under the guidance of medical staff!
No driving on roads or the highway!

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1. Customer notification

Scope of application: The Electric wheelchair is a motor driven, indoor and outdoor transportation vehicle with the intended use to provide mobility to a disabled or elderly person limited to a seated position.

First of all, thank you for choosing to buy and use our electric wheelchair, thank you for your trust and support to our company! Please read our instructions carefully before use!

2. Safety instructions

★Be sure to read:

 Note	**Please follow the instructions and specifications in this manual when operating the wheelchair to ensure the safety of the product. Be sure to abide by national and local road traffic regulations and drive carefully.**

We only provide the repair and service described in this manual, please use factory parts. Please note that our instruction manual contains many precautions, any vehicle can cause injury if used incorrectly, careless driving may endanger your own safety, but also affect the safety of others. Please follow our guidelines and use your wheelchair properly. When driving outdoors, please obey the traffic rules and follow the points of caution in this manual.

2.1 Precautions before use

2.1.1 Every time you get into or get out of the wheelchair, don't stand on the foot pedal, step on the ground.

 Warning	**When getting in and out of the wheelchair, do not stand on the footrest!**

2.1.2 Practice in a safe and wide area such as a park before you are used to driving.

2.1.3 Make sure the user wears a seat belt to ensure safety.

2.1.4 Make sure to maintain the specified tire pressure (tire pressure: <250KPa (pneumatic tire only)). Abnormal tire pressure may cause instability, increase power consumption and reduce driving range.

2.1.5 Make sure to go forward up and down hills. Please proceed at the lowest speed when going down hills.
2.1.6 Please avoid crossing high steps. This product can cross 4cm high steps with 50cm run-up. When crossing the steps, please be sure to walk at a right Angle to the steps.
2.1.7 If you choose to go downhill with your back to the side, please make sure that there is an attendant to take care of you.
2.1.8 Do not use this wheelchair to carry goods and traction purposes. It is prohibited to stand on the seat cushion and jumping.
2.1.9 The circuit design of this wheelchair is based on the safety of the user, and it is strictly prohibited to modify the circuit without permission

 **Warning**	**The user should not drive or use the wheelchair in any motor vehicle because the user may be thrown from the wheelchair and injured in an emergency or during emergency braking. When in any motor vehicle, the user should move from the wheelchair to a seat of the vehicle and secure the wheelchair using straps or neeting in the vehicle.**

2.2 Notes for carers

2.2.1 Please make sure that the user's feet are securely on the pedals and that clothes do not touch the wheels.
2.2.2 Please keep the controller on when going up or down the hill. Do not turn off the controller/powerchair as the electromechanical brake will not work!
2.2.3 Please do not brake too hard or too fast in case the user is unseated
2.2.4 Maximum working load: 120KG

 **Advice**	*** Environmental protection: Waste batteries and vehicles should be recycled in accordance with relevant national guidelines.** *** Speed limit: According to national regulations, the speed of electric wheelchairs should be controlled below 6km/h. Please comply with relevant regulations to protect your own safety.**

2.3 Safe operation instruction

Operation mode of different road surface
Step Up and Down (see Figure 1)
• Slowly approach steps or obstacles and stop at the right Angle;
• Place the front wheel close to an obstacle or step and lean against the step;

• Keep the front wheel at right angle to the obstacle and keep the direction forward;
• Keep the direction and drive slowly forward until the rear wheels
are cleared the obstacle and the maximum obstacle height is 4cm.

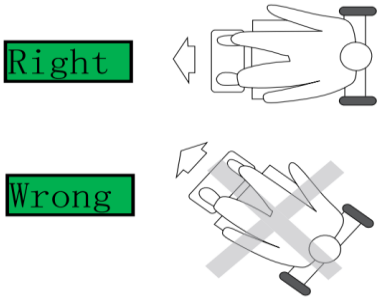


Figure 1

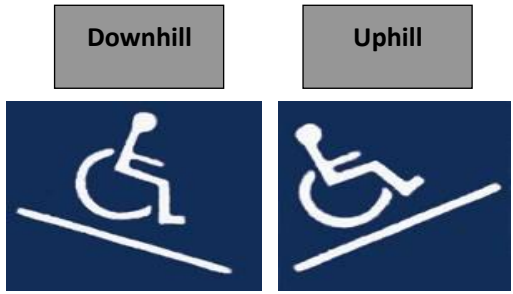


Figure 2

Downhill (see Figure 2)
• The downhill speed should not set to the lowest gear, drive with the lowest
speed and keep within a controllable range;
• Do not swerve or brake suddenly;
• Do not try to go downhill on slippery roads; Uphill
• Keep the back straight when going uphill;
• Do not try to push your torso out of the wheelchair seat range while climbing;
• Drive straight when going uphill. Don't zig-zag or make sudden turns;
• Do not attempt slopes that are too steep and no more than 10 degrees is
recommended.

2.4 Special instructions on product labels, chargers and use:

2.4.1 Interpretation of graphics, symbols, abbreviations and other contents used in medical device labels:

 **Note**  **Type B application section**

2.4.2 The Wheelchair and battery charger complies with GB/T 18029.21;
2.4.3 In addition to the contents specified in ISO 7176-15, the manual contains warnings

on the related risks caused by electromagnetic radiation source interference in the use environment of wheelchairs, including but not limited to:

-- mobile phones;

-- Electronic goods anti-theft system.

3. Product Overview

Name: Folding Carbon Fibre Electric Wheelchair **Model:** Whizzi Sport YHWT-001

Scope of application: This Electric wheelchair is a motor driven, indoor and outdoor transportation vehicle with the intended use to provide mobility to a disabled, mobility restricted or elderly person limited to a seated position.

Structure and composition: It is composed of frame, leg rest, front wheels, rear wheel, Seat and backrest cushion, armrest, controller, motor, battery, charger.

Product Performance:

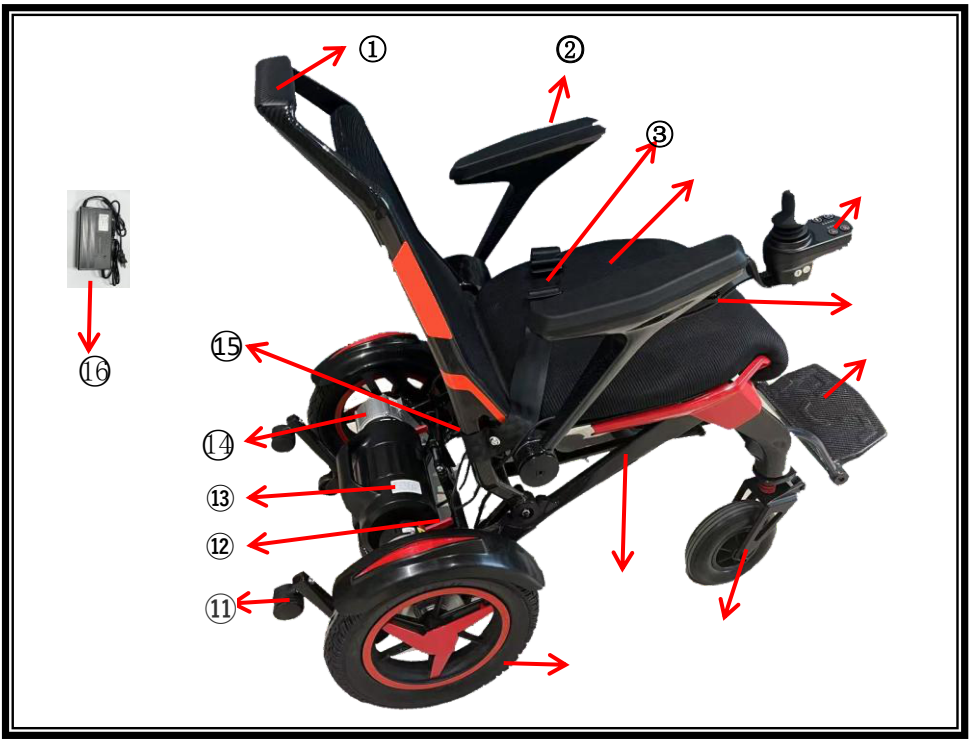
Description		**Performance index (outdoor)**
Max speed， km/h		≤6.0
Running braking performance	Level road braking， m	≤1.5
	Maximum slope safe braking, m	≤3.6（6°）
Slope parking performance		≥9°
Static stability	Forward leaning	≥9°
	Backward leaning	≥9°
	Side leaning	≥9°
Dynamic stability	Backward dynamic stability on the slope	≥6°
	Backward dynamic stability on the slope	≥6°
	Side leaning dynamic stability on the slope	≥6°
Height of obstacle， mm		≥40
Ditch width， mm		100
Climbing ability（Angle）		≥6°
Minimum turning radius, mm		≤1200
12AH capacity battery Theoretical driving distance, km		≥20

Product Features:

1. Frame: Carbon fiber material
2. Motor: Brushless Motor DC24V/200W*2;
3. The rated voltage and frequency: DC24V;
4. Size(L*W*H): 1020(±50mm)* 650(±30mm) * 950(±30mm)
5. Net weight: 23（±2kg）
6. **Maximum working load: 120kg**

Part Names:

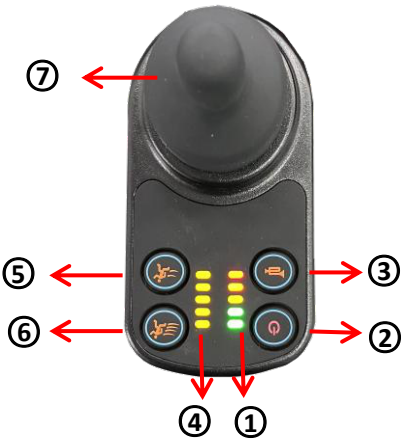
1. Backrest tube	**2**. Handrail	**3**. Seat belt	**4**. Backrest cushion
5. Controller	**6**. Knob for the controller		**7**. Footrest
8. Front forks & wheels	**9**. Frame	**10**. Rear wheel	
11. Anti-reverse wheels	**12**. Electromagnetic brake lever		**13**. Battery
14. Motor	**15**. Folding mechanism		**16**. Charger



Name, status, and function of each part of the controller:

Controller 1：

① Power level light: Each grid light indicates 20% electricity;
②Switch: Turn on or off the power supply;
③Horn button;
④Speed gear light: current speed status gear (1 gear per grid);
⑤ Downshift: reduce the driving speed
⑥ Upshift: increase driving speed
⑦ Joystick: Direction, Speed, Parking



4. Installation and use

4.1 Unpacking, assembly and debugging

4.1.1 Unpack and check if the wheelchair and accessories are in good condition：

4.1.1.1 Using a box cutter, cut the packing belt, be careful not to cut your hands or others (as shown in Figure 3);

4.1.1.2 Using a box cutter, cut the packing tape, be careful not to cut your hands or others (as shown in Figure 4);

Figure 3

Figure 4

4.1.1.3 Check whether the items in the box are damaged, if there is damage, please take a picture and contact the merchant as soon as possible (as shown in Figure 5); 4.1.1.4 Two people are required to hold one end of the anti-reverse wheel and the other end of the frame with both hands respectively, lift them out with force and put it down lightly (as shown in Figure 6);

Figure 5

Figure 6

4.1.2 Quick installation and use:

4.1.2.1 Install the controller (Patient or Attendant): Insert the controller bracket into the installation hole of the handrail, and then tighten the knob to fix it. (as shown in FIG. 7)

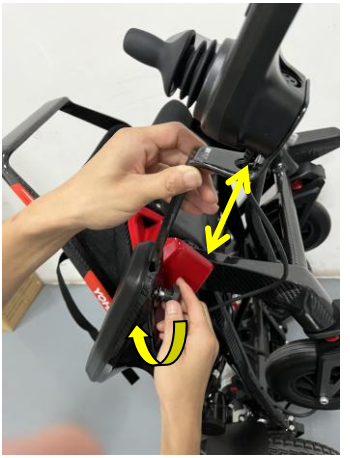


Figure 7

4.1.2.2 Unfold the wheelchair (Attendant): Pull the backrest tube with one hand and the seat cushion with the other to unfold the wheelchair (Note: After unfolding, make sure that the rear folding buckle of the wheelchair is fastened). Finally, unfold the

footrest. (As shown in Figures 8 and 9)

Figure 8

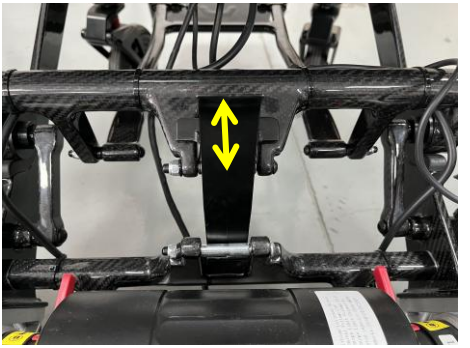


Figure 9

Note

To ensure safety, it is essential to make sure that the folding buckle mechanism is fastened properly before using the wheelchair.

4.1.2.3 Battery installation (Attendant): Insert the battery along the battery installation slot at the rear of the wheelchair. When you hear a "click", the battery installation is complete. To remove the battery, first press the button and then rotate it outward to take it out. (As shown in Figures 10)

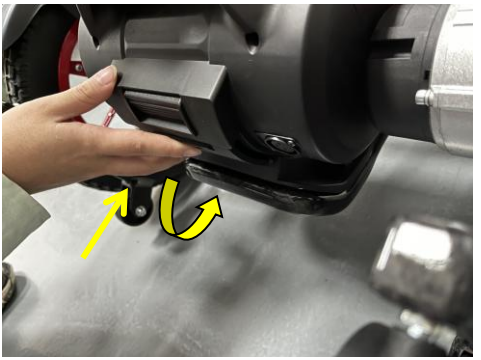


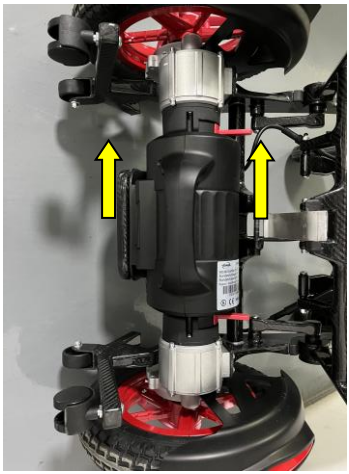
Figure 10

Figure 11

4.1.2.4 Handrail Usage: This handrail can be flip up. Just hold the handrail and pull it back to lift it up and hold it and press it down until it can no longer be lowered. (As shown in Figure 11)

4.1.2.5 Use of the clutch (Patient or Attendant): When the wheelchair needs to be used in "electric mode", the clutch needs to be pushed upward [as shown in Figure 12];

"Manual mode" needs to be pushed down directly [as shown in Figure 13] (if the wheelchair is in faulty or the battery is insufficient, the "manual mode" needs to be turned on); The operation is as follows:



Electric mode Figure 12

Manual mode Figure 13

Electric mode: Push the clutch lever up on both sides to the top as shown in Figure 12.	Manual mode: push down the clutch lever on both sides to the bottom as shown in Figure 13.

4.1.2.6 Product inspection before use:

Check that the wheelchair is fully unfolded, the folding buckle is fastened, the controller is installed, the battery is installed, the electromagnetic brake is in electric mode, then sit on the wheelchair and fasten the seat belt, the controller is turned on normally. After completing the above steps, the wheelchair can be used.

4.2.2.7 Moving the chair when folded:

Fold the wheelchair as shown in Figure 14, and you can move it by pulling or pushing the backrest tube of the wheelchair (as illustrated).

Figure 14

4.2 Battery and charger

The charger is designed to provide wheelchair charging. Insert the circular (Cannon head) charging connector of the charger into the downside of the controller (or you can directly plug the circular (Cannon head) charger into the battery). (As shown in Figure 15)

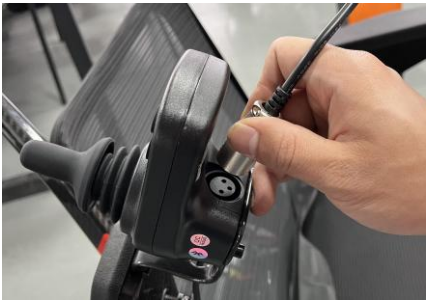


Figure 15

4.2.1 Timing of charging

Advice	**1.When charging by plugging in the controller, make sure the controller is turned off.** **2. The actual charging time of the battery must not exceed 12 hours.**

4.2.1.1 Continuous use for more than one hour, or more than one quarter of the electric quantity is used when the indicator is orange;

4.2.1.2 It is recommended to charge it every day as long as it is used;

4.2.1.3 If the electric wheelchair is not used for a long time, please charge it every 1-2 months;

4.2.1.4 When the remaining power cannot reach the expected distance，follow the instructions below to complete the charging procedure.

Before charging, please read the instructions provided with the charger and select the correct voltage:

Step 1: Check that the charger slot is not blocked; Step
2: Make sure the wheelchair switch is turned off;
Step 3: Connect the output plug of the charger Insert it into the charging slot and make sure it is firmly inserted;
Step 4: Insert the power plug of the charger into the controller (see Figure 15), the charger indicator will turn orange (charging), the whole charging process takes about 8~12 hours;
Step 5: When the charging indicator turns green, it indicates that the battery is fully charged;
Step 6: Turn off the power supply connected to the charger, disconnect the output plug from the wheel chair controller charging slot.

 **Warning**	Using it without confirming full charge will reduce battery life. If the accumulated mileage (the mileage between the two charging times) often exceeds half of the maximum endurance, the battery life will be significantly reduced; when charging, personnel should not be on the electric wheelchair. The company will not be responsible for any product failure or damage caused by failure to follow the above battery maintenance conditions or by self-replacement.

 **Advice**	**Please observe the following rules to avoid danger whilst charging:** 1.It is strictly forbidden to change or modify the charging circuit without permission. The company will not be responsible forany accidents caused to products or personnel; 2.Do not disassemble or modify the charger; 3.The charging place should be well ventilated, do not expose to the sun or humid environment for charging, and do not cover any tarpaulins or objects when charging; 4.When the charger is working, there will be fan noise, please feel free to use it. The function is to dissipate heat, but the temperature of the charger shell will still rise slightly, which is a normal condition;

	5.The charger is not waterproof 6.Do not place the charger over flammable objects, such as oil, pedals or seats... And so on;

 **Warning**	1. Please keep away from the fire source when charging, which may cause the battery to catch fire or explode; 2. Please do not smoke when charging because hydrogen will be generated, please charge in a well-ventilated place; 3. Do not install or remove the charging socket when your hands are wet or the socket is damp. This may cause electric shock.

4.2.2 Charger

4.2.2.1 Charger parameters：1. Input voltage：AC110V-240V; 2. Output voltage：24V/DC; Output current： 2A；

4.2.2.2 During charging, the charging indicator will turn orange and when the charging is completed it will turn green;

4.2.2.3 Charger operation is based on the attached instruction;

4.2.3 Battery

4.2.3.1 Do not store the wheelchair or the battery in an environment lower than minus 10 degrees Celsius or higher than 50 degrees Celsius. The above environment will lead to overheating and damage the battery or reduce the battery life;

4.2.3.2 This vehicle uses a maintenance-free battery without replacing or supplementing battery fluid;

4.2.3.3 For other battery-related matters, see the precautions on the battery box sticker.

 **Warning**	**1. Do not open the cover of the battery or get close to the fire, which will cause explosion and danger.** **2. Damaged batteries have environmental protection and safety issues, so please recycle them in an environmentally friendly manner or notify the dealer or the company to deal with them.**

4.2.4 Battery cleaning

If the battery is contaminated with dirty water, battery acid or dirt & dust, the battery will discharge rapidly, so please follow the steps below to clean the battery.

4.2.4.1 Turn off the power;

4.2.4.2 Wipe the wheelchair body around the battery with a clean cloth;

4.2.4.3 Wipe the battery with a clean cloth. If there is white powder in the connector, remove it with a copper brush;

 **Note**	1. Make sure the connector is properly installed; 2. Do not use the battery of this vehicle to supply power to communication equipment or other equipment; 3. The capacity of the battery will change with the external temperature, and the endurance will be shorter in winter.

4.2.5 Battery replacement

 **Note**	1. For battery replacement, only use the same battery or the same type of battery recommended by the manufacturer. If you need to replace the battery due to special factors, please be sure to read the instructions in this manual. If you have any questions about battery replacement, please contact our company or the dealer you purchased it from; 2. Before replacing or installing the battery, be sure to turn off the power of the controller; 3. Please do not touch any metal objects with the battery connector; 4. Please read the warning label on the battery carefully; 5. Do not dissect the battery to avoid the leakage of the battery fluid and injury to the skin or eyes. If the skin and clothes are stained with the electrolyte, rinse with plenty of water. If it splashes into the eyes, rinse eyes with clean water for at least 15 minutes and seek medical attention in time; 6. For protection, it is recommended to wear rubber gloves, long-sleeved clothing, and suitable splash goggles or face shields when handling batteries; 7. If the slot or cover of the battery is cracked, deformed, or leaks, replace it immediately.

4.3 System Diagnosis

Code	Problem Description	Diagnosis	Recommended Action
1	**All the LED lights are off**	Power off or sleep mode	Turn on or check the fuse
2	**Fewer LED lights mean less battery power/charge**	Low power and low voltage	Low battery voltage, use after charging，if battery damaged, use after replacing. (Please pay attention to environmental protection.
3	**The left drive wheel is not moving**	Left side motor failure	Check if the left motor or the linking device and motor wires connection are loose.
4	**The right drive wheel is not moving**	Right side motor failure	Check if the right motor or the linking device and motor wires connection are loose.
5	**The controller wire is abnormally hot**	Over current	If the motor drive mechanism is stuck, use the ammeter to detect the current and check the controller
6	**Direction control is not working**	Joystick failure	If the rocker is reset or the rocker cable is disconnected, check whether the link plug is loose.
7	**Controller not responding**	Controller failure	Please contact with the after-sales service
8	**Direction control error**	Signal error	Please contact with the after-sales service

4.4 Control System

Before fully familiarizing yourself with how to use this controller, please do not use the wheelchair. All controller parameters are professionally set by the factory to produce optimal performance in various situations. If any changes to the controller parameters are required due to medical considerations, professional personnel from our company must adjust and confirm user safety, and comply with the safety regulations of medical

devices. The circuit design on the wheelchair is designed to ensure your safe use. Please do not change or adjust it in any way that may cause damage.

4.4.1 Controller power switch and sleep function:

◎ **Turn on the controller:** Press the power switch button  the power indicator lights up from left to right in sequence, and the buzzer beeps, the controller is normally turned on;

◎**Power off the controller**: Press the power switch button,  lights on the panel are off, and the controller has no output. In certain emergency situations, you can press the power switch button to turn off the controller;

◎**Sleep mode:** After 20 minutes without any operation of the joystick, the controller automatically turns off the power and enters the sleep mode. Press the key again to wake up the control system. In the sleep state of the product, its own power consumption (≤2.2mA) will not damage the battery.

4.4.2 Basic operation of the controller:

4.4.2.1 Confirm that the controller lever is perpendicular to the ground, press the switch on the controller, and the power light is on. If the control lever is moved first and then the switch is turned on, the safety device will prevent the wheelchair from moving, and the power display light will be in a flashing state. As long as you release the control lever, you can resume moving;

4.4.2.2 **Speed adjustment**: The speedometer displays the comparison value between the current speed and the maximum speed, and the speed can be increased (decreased) by pressing the speed up button  (speed down button ); Each press will increase(decrease) 20%. For fine-tuning, press and hold the button until the speedometer jumps to the desired speed, and then release. The speed is divided into five gears  (one light is 20% of the highest speed, five lights for the highest speed);

4.4.2.3 Under the speed limit set by the user, the control lever can control the direction [as shown in Figure 16];

The direction of joystick movement commands the wheelchair to move, and the magnitude of joystick movement determines the speed of the wheelchair in that direction:

Control lever up: drive forward;
Control lever down: drive backwards;
Left joystick: Turn left in place;
Right joystick: Turn right in place.

Figure 16

4.4.2.4 When starting or stopping the wheelchair, please adjust the speed knob to slow speed;
4.4.2.5 When driving proficiently, the speed can be increased to a safe controllable speed;
4.4.2.6 When used indoors, please use the lowest speed to avoid collision with objects;
4.4.2.7 In case of emergency, if an emergency stop is required, simply release the control lever or turn the lever in the opposite direction (emergency stop).

4.4.3 Controller connection diagram

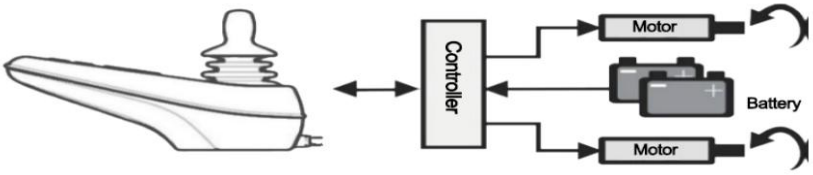


Figure 17

5.Maintenance

5.1. Wheelchair cleaning and daily inspection:

5.1.1 Clean the wheelchair;
◎Use a wet cloth and mild detergent for cleaning;
◎The electronic part should not be contact with water;
◎Do not use high pressure cleaning equipment;
◎Manual brake: Before each use, make sure that the static function of the wheel after manual brake is normal;
◎Tire pressure: Before each use, be sure to check the tire pressure is normal;

◎Cushions and backrests: Wash with warm water and diluted soapy water if necessary;
◎Controller: In any case, the protective measures of the controller must be taken;
◎Fastening parts: Before each use, check whether all screws are firm, and tightenit immediately if it is loose.

 **Note**	**Scrub and disinfect:** Seat parts, armrests and controller rockers can be wiped and disinfected with 75% medical disinfection alcohol. The frequency of cleaning and disinfection is generally once a week to prevent mold reproduction and maintain hygiene.

5.1.2 Daily inspection:

Please check the following items before driving, if any abnormality, please contact our after-sales service or the dealer you purchased to get the best solution.

 **Note**	**If you find any abnormality, please contact our customer service staff or the dealer you purchased for repair service**

5.2 Regular maintenance records:

5.2.1 In order to ensure that your wheelchair is in good condition, please contact our customer service staff regularly to do further wheelchair maintenance and make regular maintenance records;

5.2.2 We recommend that your wheelchair be inspected every 6months and repaired once a year;

5.2.3 The following is the check list for wheelchairs. Please check your wheelchair at the recommended frequency below. For some checks, you must check yourself when you sit in or get up from the wheelchairs to ensure safety.

6. After-sales service

6.1 Product Term:

The electric wheel chair produced by our company belongs to active, non-sterile, reusable products and does not contain chemical substances. Through searching, there are no relevant regulations or standards to specify the contents related to the validity period of electric wheel chair and similar products.

The safety, validity period and service life of wheelchair in clinical use depend not only on the structural strength of the product itself, but also on the user's use, the product's

use environment, user's use habits, whether it is maintained according to the cycle and other factors. The suggested validity period of our products is 5 years from the date of production.

6.2 Product Warranty Period:

1) 2-year warranty service for the main frame from date of production;

2) Within 1 year from the date of purchase, if any material or manufacturing defects are found in the parts listed below after inspection by the sales representative, the company will provide free repair or replacement services for the original customers.

■Electrical control or joystick system;

■Motor/drive system;

■Bearings and bushings.

3)Parts and conditions not covered by warranty:

●Consumables are not covered by the warranty, such as: batteries, tires, seat back pads, guard plates, armrest pads and other plastic parts, rubber parts, and other auxiliary equipment;

●Damage caused by abuse, misuse, accident and negligence;

●Damage caused by incorrect operation, maintenance and storage;

●Commercial use or other abnormal use;

●Vehicle damage caused by various natural disasters and man-made accidents;

●Sensory judgments that can be identified as having no functional impact;

●Surface deterioration phenomenon of wear and tear after use; ●Unauthorized modification of electric wheelchairs;

●If you do not contact the company or after-sales service outlets, the costs incurred by self-maintenance shall be borne by oneself.

4) Comply with maintenance items:

●According to the operation method shown in this manual, operate normally;

●Perform the daily inspection and maintenance work shown in this manual.

5) Warranty and effective

●The after-sales service card of the product has been included in this manual, and the after-sales service card will take effect from the date of purchase.

●The main frame of this product is guaranteed for 2 years (from the date of production), other parts refer to the above regulations.

7. Electromagnetic compatibility

The following cables must be used to comply with electromagnetic emissions and interference resistance requirements

7.1 In addition to the accessories and cables provided by the manufacturer of the electric wheelchair, the use of accessories and cables outside the regulations may lead to an increase in the emission of the electric wheelchair or a decrease in the noise immunity.

7.2 The electric wheelchair should not be used close to or stacked with other equipment. If it must be used close to or stacked, it should be observed and verified that it can operate normally under the configuration it uses.

7.3 The following battery chargers and cables must be used to meet the requirements of electromagnetic emission and anti-interference.

(See Table 1 and Table 2) : Table 1 Charger information

Charger：	24V 2A

Table 2 Cable information

Cable Type	Length
Power cord	0.9m
Charging cord	0.95m

7.4 Except for cables (transducers) sold as spare parts for internal components, the use of unspecified accessories and cables (transducers) may increase the electromagnetic emission or reduce the immunity of the electric wheelchair.

7.5 The electric wheelchair has unique identification of the wheelchair andbattery charger model or other information

7.6 Guidelines and manufacturer's declaration.

Table 3 Electromagnetic emission —— impact on wheelchair drive system

Launch test	Compliance	Electromagnetic environment —— Guidelines RF emission
CISPR 11	Group 1	The equipment only uses RF energy for its internal functions, so its RF emission is very low and there is little possibility of interference to nearby electronic equipment
RF emission CISPR 11	Class B	The equipment is suitable for use in all facilities, including domestic and residential public low-voltage power supply networks directly connected to domestic use.
Harmonic currents emissions IEC 61000-3-2	Class A	The equipment is suitable for use in all facilities, including domestic and residential public low-voltage power supply networks directly connected to domestic use.
Voltage fluctuation /flicker	Compliant	The equipment is suitable for use in all facilities, including domestic and residential public low-voltage power supply networks directly connected to domestic use.
emissions	IEC61000-3-3	

Table 4 Electromagnetic immunity to wheelchair drive system			
Immunity test	Test level	Compliance level	Electromagnetic environment — — Guidelines
Electrostatic discharge（ESD） IEC 61000-4-2	ISO 7176-21:2009 ±2kV ±4kV ±6kV contact discharge ±2kV ±4kV ±8kV air discharge IEC 60601-1-2:2014+A1:2 020 ±8kV contact discharge ±2kV ±4kV ±8kV ±15kV air discharge	ISO 7176-21:2009 ±2kV ±4kV ± 6kV contact discharge ±2kV ±4kV ± 8kV air discharge IEC 60601-1-2:2014+A 1:2020 ±8kV contact discharge ±2kV ±4kV ± 8kV ±15kV air discharge	The floor shall be wood, concrete or ceramic tile, and if the floor is covered with synthetic material, the relative humidity shall be at least 30%
Power frequency magnetic field （50/60Hz） IEC 61000-4-8	30A/m @50Hz or 60Hz	30A/m @50Hz or 60Hz	The power frequency magnetic field shall have the horizontal characteristics as in typical places of commercial or hospital environment

Guidelines and manufacturer's declaration - Electromagnetic Immunity The purchaser or user shall ensure that the equipment is intended for use in an electromagnetic environment specified below:			
Immunity test	Test level	Coincidence level	Electromagnetic environment — — Guidelines
Radiofrequency radiation IEC 61000-4-3	ISO 7176-21:2009 20V/m @26MHz-2,5GHz AM 80% at 1 kHz IEC 60601-1-2:2014+A1:2020 3V/m @80MHz-2,7GHz AM 80% at 1 kHz	ISO 7176-21:2009 20V/m @26MHz-2,5GHz AM 80% at 1 kHz IEC 60601-1-2:2014+A1:2020 3V/m @80MHz-2,7GHz AM 80% at 1 kHz	Portable and mobileRF communication equipment should not be used closer to any part of the equipment than the recommended isolation distance, including cables. The distance is calculated by the formula corresponding to thetransmitter frequency. Recommended isolation distanced $d=1.2\sqrt{(P)}$ 150kHz-80MHz $d=1.2\sqrt{(P)}$ 80MHz-800MHz $d=2.3\sqrt{(P)}$ 800MHz-2.5GHz Note： P - according to the

			maximum rated output power of the transmitter provided by the transmitter manufacturer, in watts (W); D - is the recommended isolation distance, in meters (m). The field strength of the fixed RF transmitter is determinedby surveying the electromagnetic field A, and in each frequency range, it shall be lower than the coincidence level at B. Interference may occur near equipment marked with the following symbols. 

A Stationary transmitter, such as base stations of wireless (cellular / cordless) telephones and ground mobile radios, amateur radios, AM and FM radio broadcasting and television broadcasting, have field strengths that cannot be predicted accurately in theory. In order to evaluate the electromagnetic environment of fixed RF transmitter, the survey of electromagnetic field should be considered. If the measured field strength of the place where the equipment is located is higher than the above applicable RF compliance level, the equipment shall be observed to verify its normal operation. If abnormal performance is observed, supplementary measures may be necessary, such as reorienting or re-positioning the equipment.

B in the whole frequency range of 150khz-80mhz, the field strength shall be less than 3V / m.

Recommended isolation distance between portable and mobile RF communication equipment.

The equipment is expected to be used in an electromagnetic environment with controlled RF radiation disturbance. According to the maximum rated output power of communication equipment, the buyer or user can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitter) and equipment as recommended below：

Maximum rated output power of transmitter W	The isolation distance corresponding to different frequencies of the transmitter/m		
	150kHz - 80MHz $d = 1.2\sqrt{(P)}$	80MHz - 800MHz $d = 1.2\sqrt{(P)}$	800MHz - 2.5GHz $d = 2.3\sqrt{(P)}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For the maximum rated output power of the transmitter not listed in the above table, the recommended isolation distance D, in meters (m), can be determined by the formula in the corresponding transmitter frequency column, where p is the maximum rated output power of the transmitter provided by the transmitter manufacturer. In watts (W).

Note 1: At 80MHz and 800MHz frequency points, the formula of higher frequency band is adopted. Note 2: These guidelines may not be suitable for all situations. Electromagnetic transmission is affected

by the absorption and reflection of buildings, objects and human bodies.

Table 5 Electromagnetic emission - for vehicle mounted and on-vehicle mounted battery chargers

Guidelines and manufacturer's statements - electromagnetic emissions

The purchaser or user shall ensure that the equipment is intended for use in theelectromagnetic environment specified below:

Launch test	Compliance	Electromagnetic environment——Guidelines
RF emission CISPR 11	Group 1	The equipment only uses RF energy for its internal functions, so its RF emission is very low and there is little possibility of interference to nearby electronic equipment
RF emission CISPR 11	Class B	The equipment is suitable for use in all facilities, including domestic and residential public low-voltage power supply networks directly connected to domestic use.
Harmonic radiation IEC 61000-3-2	Class A	
Voltagefluctuation / flicker emission IEC 61000-3-3	Compliance	

Table 6 Electromagnetic immunity - for vehicle mounted and non-vehicle mounted battery chargers

Guidelines and manufacturer's statements - electromagnetic immunity

The purchaser or user shall ensure that the equipment is intended for use in the electromagnetic environment specified below:

Immunity test	Test level	Compliance level	Electromagnetic environment——Guidelines
Electrostatic discharge（ESD） IEC 61000-4-2	ISO 7176-21:2009 ±2kV ±4kV ± 6kV contact discharge ±2kV ±4kV ± 8kV air discharge IEC 60601-1-2:2014+A1: 2020 ±8kV contact discharge ±2kV ±4kV ± 8kV ±15kV air discharge	ISO 7176-21:2009 ±2kV ±4kV ± 6kV contact discharge ±2kV ±4kV ± 8kV air discharge IEC 60601-1-2:2014+A1: 2020 ±8kV contact discharge ±2kV ±4kV ± 8kV ±15kV air discharge	Floors should be wood, concrete or tile, if floors are covered with synthetic material, the relative humidity should be at least 30%
Group of electrical fast transient pulses IEC 61000-4-4	ISO 7176-21:2009 ±1kV Power cord ±0.5kV for input/ output lines IEC 60601-1-2:2014+A1: 2020 ±2kV Power cord ±1kV for input/ output lines	ISO 7176-21:2009 ±1kV Power cord IEC 60601-1-2:2014+A1: 2020 ±2kV Power cord 100 kHz repetition frequency	Network power supply should be of typical quality used in a commercial or hospital environment.

	100 kHz repetition frequency		
Surge IEC 61000-4-5	ISO 7176-21:2009 ±1kV Cord to cord ±2kV cord to the ground IEC 60601-1-2:2014+A1: 2020 ±0.5kV ±1kV Cord to cord ± 0.5kV ± 1kV ± 2kV cord to the ground	ISO 7176-21:2009 ±1kV Cord to cord ±2kV cord tothe ground IEC 60601-1-2:2014+A1: 2020 ± 0.5kV ± 1kV Cord to cord ± 0.5kV ± 1kV ± 2kV cord tothe ground	Network power supply should be of typical quality used in a commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power input lines IEC 61000-4-11	ISO 7176-21:2009 100% UT，Lasting 0.5 cycle,100%UT ，lasting one cycle 30% UT，lasting 25 cycle IEC 60601-1-2:2014+A1: 2020 0 % UT; 0,5 cycle At 0°, 45°,90°, 135°, 180°, 225°, 270° and 315° 0 % UT; 1 cycle and 70 % UT; 25/30 cycles Single phase: at 0° 0 % UT; 250/300 cycle	ISO 7176-21:2009 100% UT，Lasting 0.5 cycle,100% UT，lasting one cycle 30% UT，lasting 25 cycle IEC 60601-1-2:2014+A1: 2020 0 % UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0 % UT; 1 cycle and 70 % UT; 25/30 cycles Single phase: at 0° 0 % UT; 250/300 cycle	The network power supply shall be of the quality typical for use in a commercial or hospital environment. If the user needs to run continuously during the power interruption, it is recommended that the device be powered by an uninterrupted power supply or battery
Note: UT refers to the AC network voltage before applying the test voltage.			

Guidelines and manufacturer's statements - electromagnetic immunity The purchaser or user shall ensure that the equipment is intended for use in the electromagnetic environment specified below:			
Immunity test	Test level	Compliance level	Electromagnetic environment——Guidelines
RF transmission IEC 61000-4-6 RF radiation IEC 61000-4-3	3V (effective value) 150kHz - 80MHz 3V/m 80MHZ - 2.5GHZ	3V (effective value) 150kHz-80MHz 3V/m 80MHZ	Portable and mobile RF communications equipment should not be used closer than the recommended isolation distance to any part of the equipment, including cables. The distance is calculated by the formula corresponding

		2.5GHZ	to the frequency of the transmitter Recommended isolation distance d =1.2$\sqrt{(P)}$150kHz-80MHz d =1.2$\sqrt{(P)}$80MHz-800MHz d =2.3$\sqrt{(P)}$800MHz-2.5GHz Note：P - according to the maximum rated output power of the transmitter provided by thet r a n s m i tt e r manufacturer, in watts (W); D - is the recommended isolation distance, in meters (m). The field strength of the fixed RF transmitter is determined by surveying the electromagnetic field A, and in each frequency range, it shall be lower than the coincidence level at B. Interference may occur near equipment marked with the following symbols. 

A Stationary transmitter, such as base stations of wireless (cellular / cordless) telephones and ground mobile radios, amateur radios, AM and FM radio broadcasting and television broadcasting, have field strengths that cannot be predicted accurately in theory. In order to evaluate the electromagnetic environment of fixed RF transmitter, the survey of electromagnetic field should be considered. If the measured field strength of the place where the equipment is located is higher than the above applicable RF compliance level, the equipment shall be observed to verify its normal operation. If abnormal performance is observed, supplementary measures may be necessary, such as reorienting or re-positioning the equipment.

B in the whole frequency range of 150khz-80mhz, the field strength shall be less than 3V / m.

Recommended isolation distance between portable and mobile RF communication equipment.

The equipment is expected to be used in an electromagnetic environment with controlled RF radiation disturbance. According to the maximum rated output power of communication equipment, the buyer or user can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitter) and equipment as recommended below：

Maximum rated output power of transmitter W	The isolation distance corresponding to different frequencies of the transmitter/m		
	150kHz - 80MHz d = 1.2 $\sqrt{(P)}$	80MHz - 800MHz d = 1.2$\sqrt{(P)}$	800MHz - 2.5GHz d = 2.3$\sqrt{(P)}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3

10	3.8	3.8	7.3
100	12	12	23

For the maximum rated output power of the transmitter not listed in the above table, the recommended isolation distance D, in meters (m), can be determined by the formula in the corresponding transmitter frequency column, where p is the maximum rated output power of the transmitter provided by the transmitter manufacturer. In watts (W).

Note 1: At 80MHz and 800MHz frequency points, the formula of higher frequency band is adopted.

Note 2: These guidelines may not be suitable for all situations. Electromagnetic transmission is affected by the absorption and reflection of buildings, objects and human bodies.

Guidelines and manufacturer's statements - electromagnetic immunity

The purchaser or user shall ensure that the equipment is intended for use in the electromagnetic environment specified below:

Immunity test	Test level	Compliance level	Electromagnetic environment——Guidelines
Proximity fields from RF wireless communications Equipment IEC 61000-4-3	3V/m @380-390MHz Pulse Modulation 18Hz 28V/m @430-470MHz FM ± 5 kHz deviation 1 kHz sine 9V/m @704-787MHz Pulse Modulation 217Hz 28V/m @800-960MHz Pulse Modulation 18Hz 28V/m @1700-1990MHz Pulse Modulation 217Hz 28V/m @2400-2570MHz Pulse Modulation 217Hz 9V/m @5100-5800MHz Pulse Modulation 217Hz	3V/m @380-390MHz Pulse Modulation 18Hz 28V/m @430-470MHz FM ± 5 kHz deviation 1 kHz sine 9V/m @704-787MHz Pulse Modulation 217Hz 28V/m @800-960MHz Pulse Modulation 18Hz 28V/m @1700-1990MHz Pulse Modulation 217Hz 28V/m @2400-2570MHz Pulse Modulation 217Hz 9V/m @5100-5800MHz Pulse Modulation 217Hz	The distance between the microwave therapeutic system and RF wireless communications equipment shall be greaterthan or equal to 30 cm (12 inches).

WARNING: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the microwave therapeutic system, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Attention!

Our wheelchairs and battery chargers meet the requirements of GB/TISO 7176-21:2009 "Electromagnetic compatibility Requirements and Test Methods for Electric wheelchairs, Electric mobility Scooters and Battery Chargers" and IEC 60601-1-2:2014+A1:2020 "Medical Electrical Equipment -- Part 1-2: General Safety Requirements and Standards: Electromagnetic Compatibility Requirements and Tests".

8. Packing list

NO.	Item name	Quantity	Note
1	Wheelchair (with battery)	1unit	Mainframe
2	Charger	1pc	/
3	Instruction manual (including after-sales service card)	1pc	/

9. Power supply conditions and environmental requirements

Working environment requirements

Temperature 20℃±15℃, relative humidity 60%±35% and atmospheric pressurerange 860hPa~1060hPa。

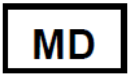
Working power supply conditions

Charging power supply: 110-240 V 50 /60Hz, maximum output current 2 A.
Internal power supply device operating voltage: DC 24 V.

Transportation and storage conditions:

Storage and transportation temperature should not exceed -20℃~55℃, humidity should not exceed 93%, no corrosive gas and clean room with good ventilation.
Loading and transporting according to the transportation marks and graphics onthe outsourcing box

10. Labels, Packing logo design

Symbol	Introductions	Symbol	Introductions
	CE Symbol		AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY
	ManufacturerName Address		Manufacture Date
	Batch Code		Store in clean & dry place protected from rain, snow, ice, salt and water.
	Warningsand Precautions		non-sterile
	medical device		Use-by date
	Keep dry		Keep away from Sunlight
	Consultinstructions for use		Unique Device Identification

	Country of Manufacture		Model Number
	Importer		Distributor

Manufacturered for:

Icon Rehab, Firmdale Village, Brentford, London. TW89ZB. United Kingdom

Manufacturered by:

Yongkang Youha Electric Appliance Co.,Ltd

4th Floor,Agricultural Equipment Science and Technology Innovation Park,No.36,Huahai Road,Chengxi New District,Yongkang,Jinhua,Zhejiang