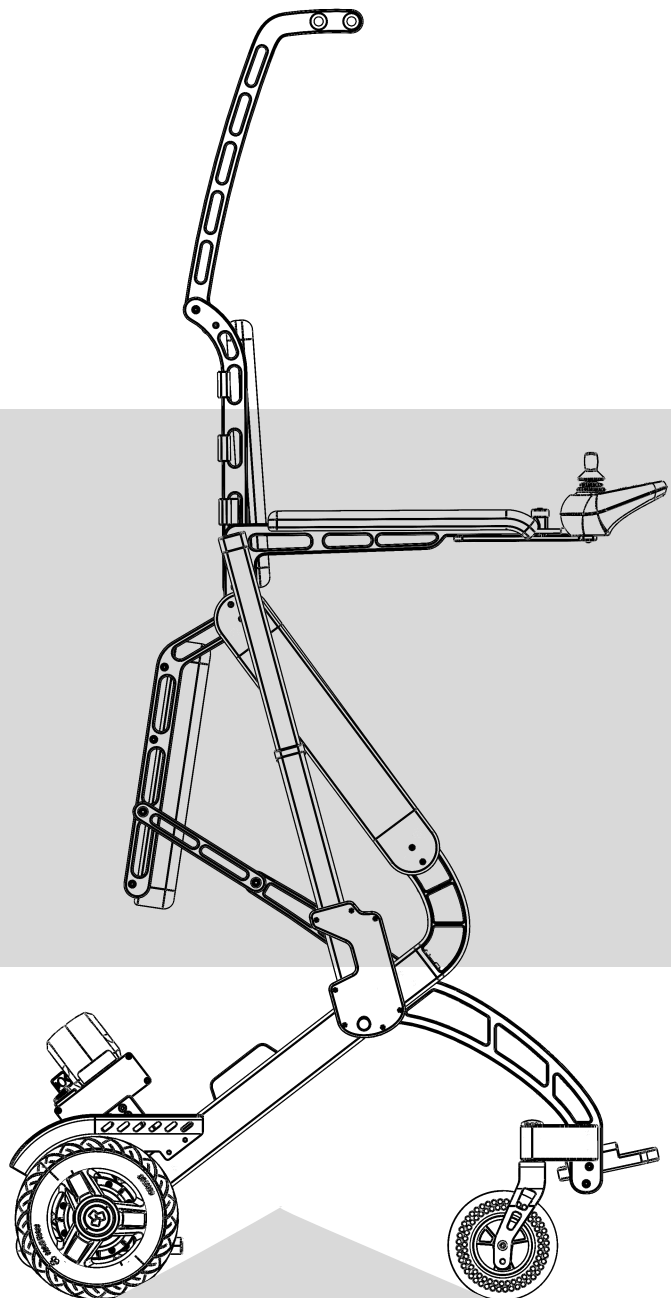


User's Manual

Smart Auxiliary Walking Robot

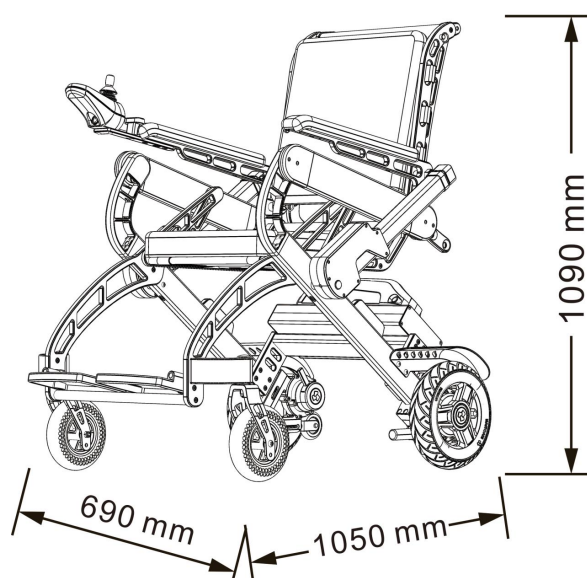


Contents

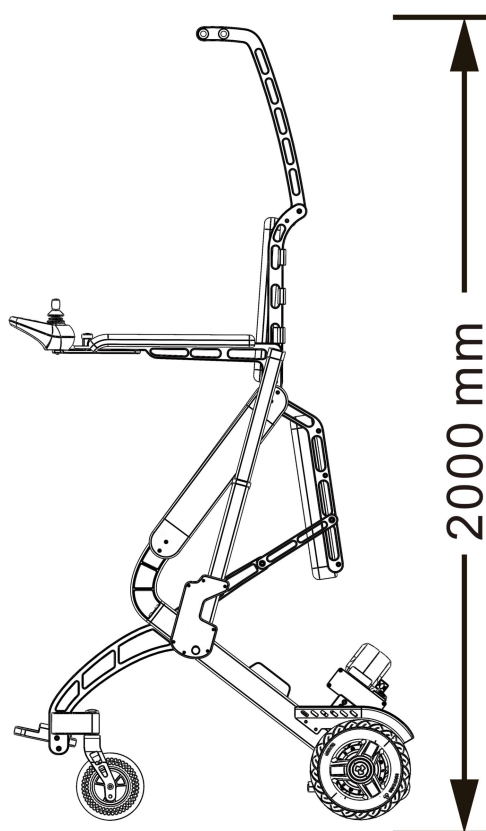
I . Product information.....	1
II . Use the controller.....	5
III . Assisting Standing Function.....	5
IV . Manual folding of the seat backrest.....	8
V . Manual Mode Switching.....	9
VI . The removal and installation of the battery.....	10
VII . Battery instructions and precautions.....	10
VIII . Troubleshooting.....	11
IX . Maintenance.....	12
X . Product Warranty.....	13

I . Product information

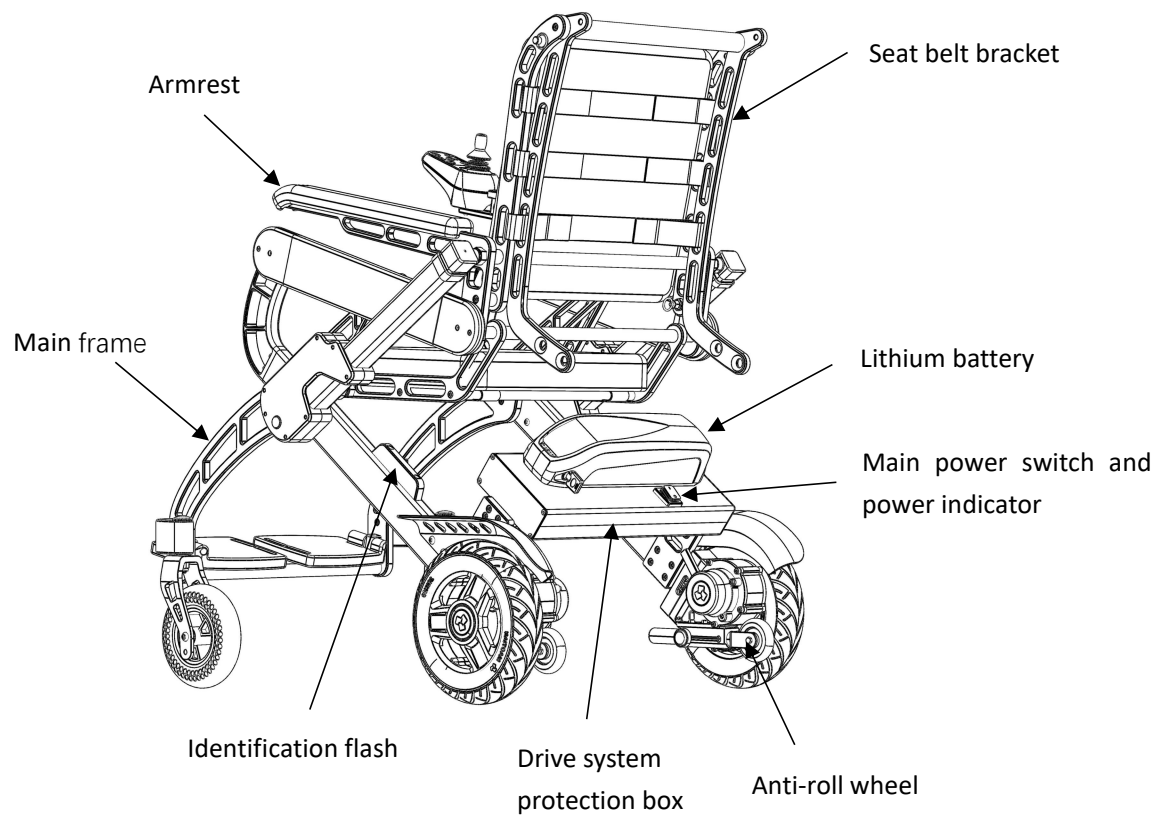
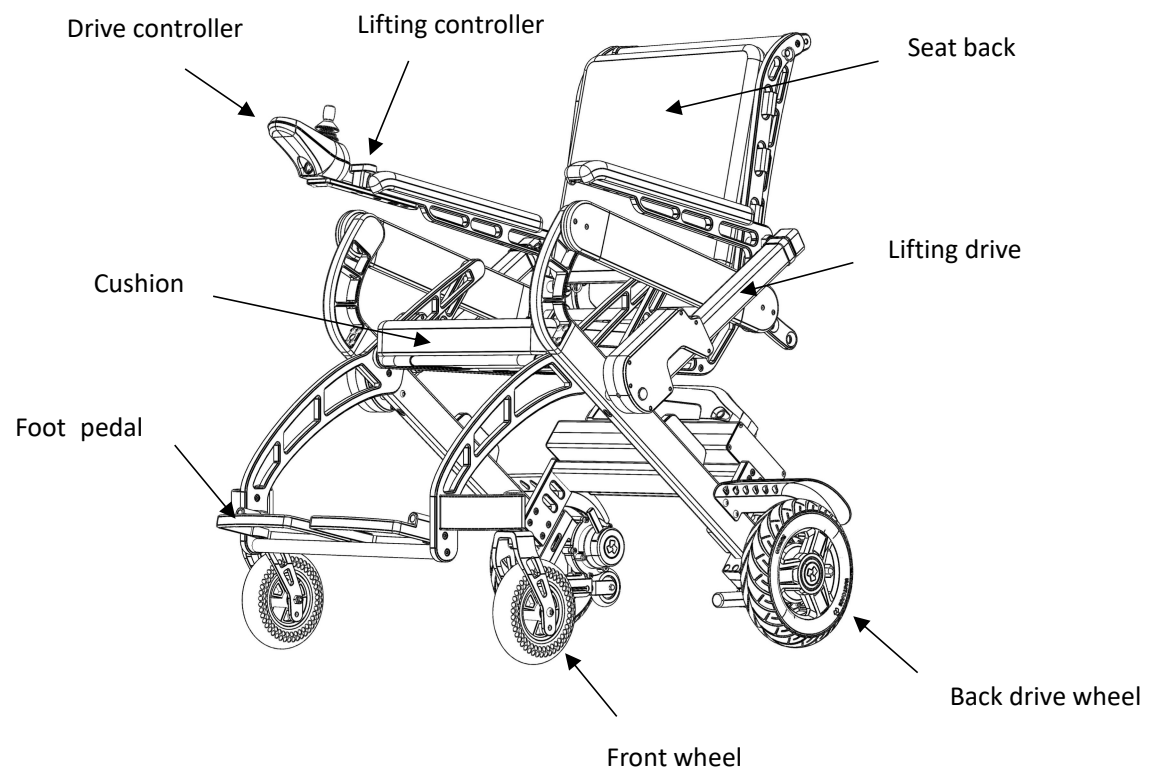
1. Product Structure



Sitting posture - lowest



Standing posture – highest



2. Specification

Product Name	Smart Auxiliary Walking Robot		
Model	QDL-2101		
Speed per hour	≤ 6 km/h		
Electricity Mileage	More than 20km after a single charge		
Total weight	32Kg		
Battery	Rated Capacity 15.4Ah	Rated Voltage 24V	No.of Equipment: 1
Motor	Rated Voltage 24V	Rated power 250W×2	No.of Equipment: 1
Charger	Power 220V, 50Hz	Output Voltage 24V	Output Current 2A
Measurement	1000mm×690mm×1080mm		
Other parameters	Seat height from the ground: 565mm Seat depth: 420mm Seat width: 420mm Backrest height: 420mm		
Minimum radius of gyration	≤ 1200 mm		
Maximum speed	≤ 6 km/h		
Gradeability	$\geq 8^\circ$		
Braking performance	Horizontal road braking ≤ 1.5 m; maximum safe slope braking ≤ 3.6 m (6°)		
Standing capacity	9°		
Static stability	$\geq 9^\circ$		
Dynamic stability	$\geq 6^\circ$		
Obstacle clearance height	≥ 40 mm (The obstacle crossing surface is inclined and the obtuse angle is $\geq 140^\circ$)		
Corssing-ditch width	100 mm		
Temperature	$-25^\circ\text{C} \sim 50^\circ\text{C}$		
Tire size	Front wheel 7 inches, rear wheel 10 inches		
Seat material	Oxford fabric cushion		

3. Warnings

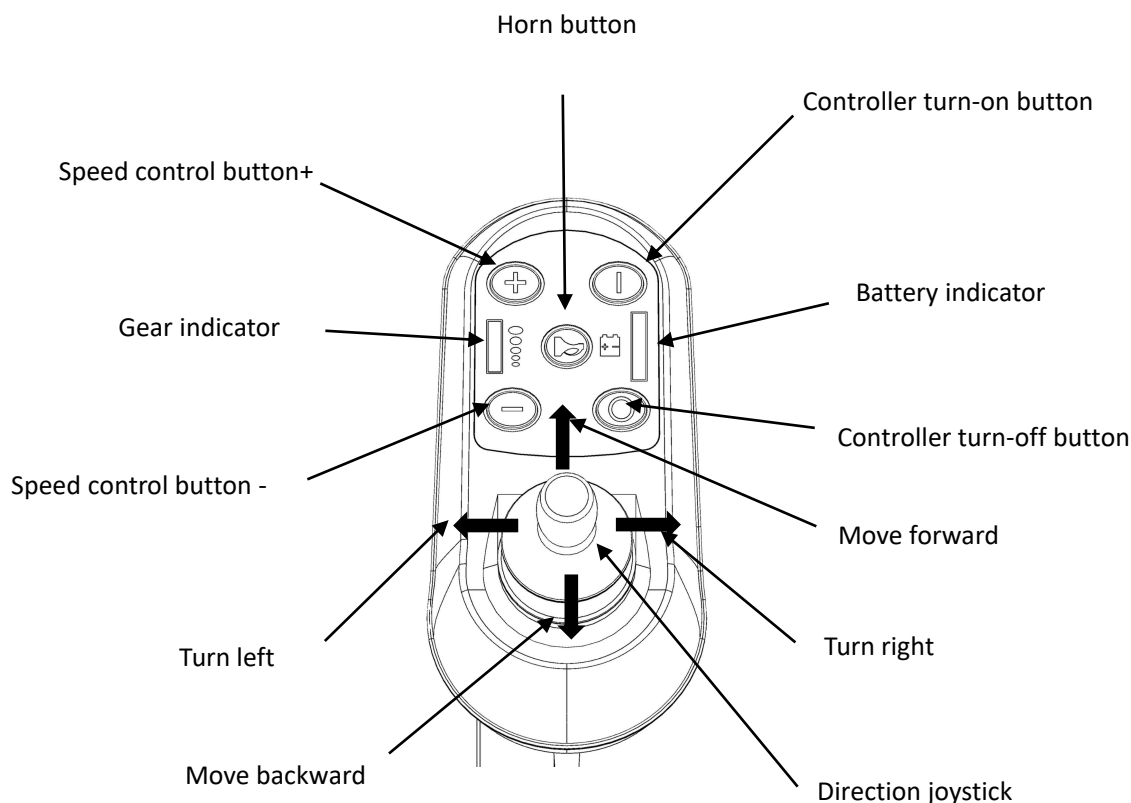
1. Not allowed to drive on the motorway
2. Do not drive after drinking alcohol
3. Don't connect any mechanical or electrical devices to the product personally
4. Don't drive on a slope over than **10°**
5. Don't cross the width of obstacle over than **100mm**
6. Don't cross the height of obstacle over than **30mm**
7. Don't drive on icy, slippery or saline land
8. Turn off the power when don't use
9. Don't use to carry goods
10. Don't use if max load is exceeded
11. Don't use it in hot weather or harsh environment

4. Product features

1. Left and right two rear drive motor, forward, backward, turn left, turn right, operation with one hand.
2. Equipped with lift driver, operation panel can drive armrest, backrest, safety belt and bracket lifting at the same time, assist the user to stand.
3. Backrest and safety belt holder are foldable.
4. The product is light in weight, small in size after folding.
5. The controller is available to choose left and right side.
6. Solid tires, do not disassemble at will.
- 7.** Equipped with power master switch and indicator light, turn on switch, light on, turn off switch, light off

II . Use the controller

The drive controller settings are shown as follow:

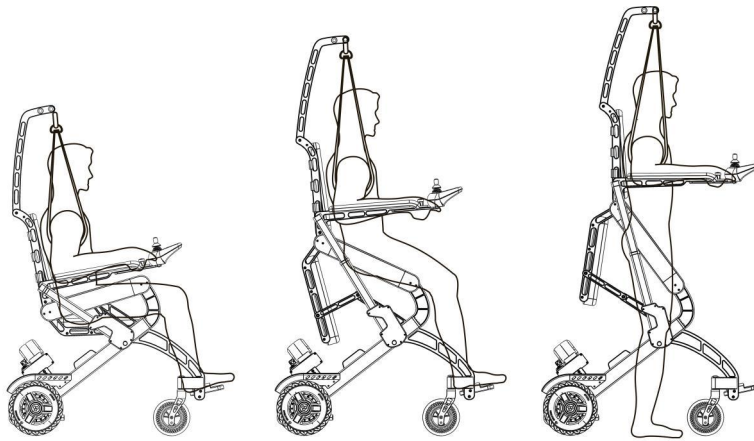


1. Power light, the green light indicates the battery is full, only when the light is red, the battery is low and needs to be charged.
2. Press the controller “on” and “off” to turn on and off the power.
3. Horn key, press→sound, release→stop
4. The direction of the wheelchair is controlled by the direction of the joystick.
5. Start the wheelchair: press the “power switch”, when the power light is on, press the controller “on” , then you can operate the wheelchair, when the speed and power indicate light up.

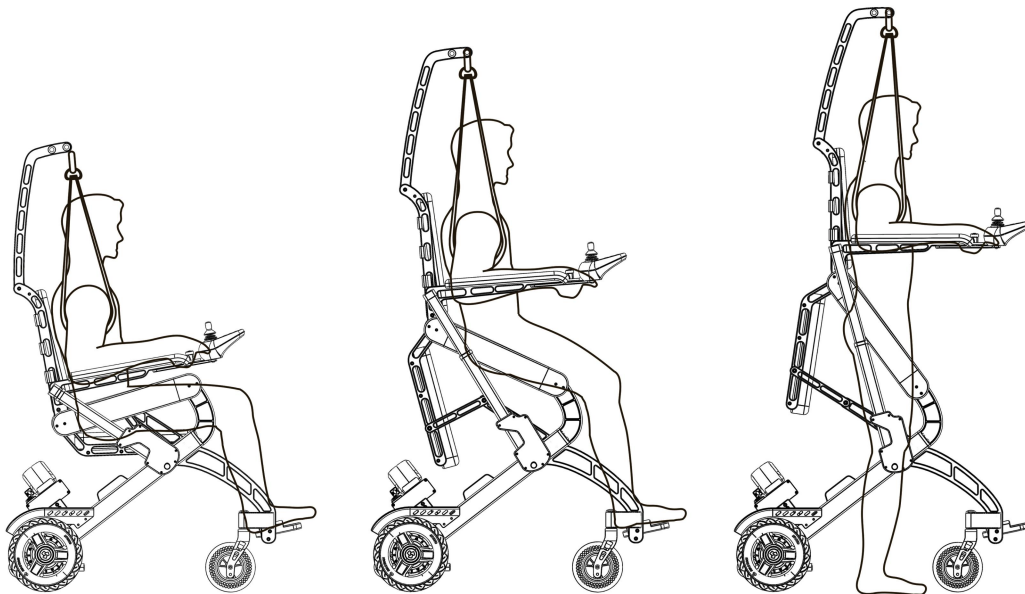
Warning: Do not place the controller in a humid environment.

III. Assisting Standing Function

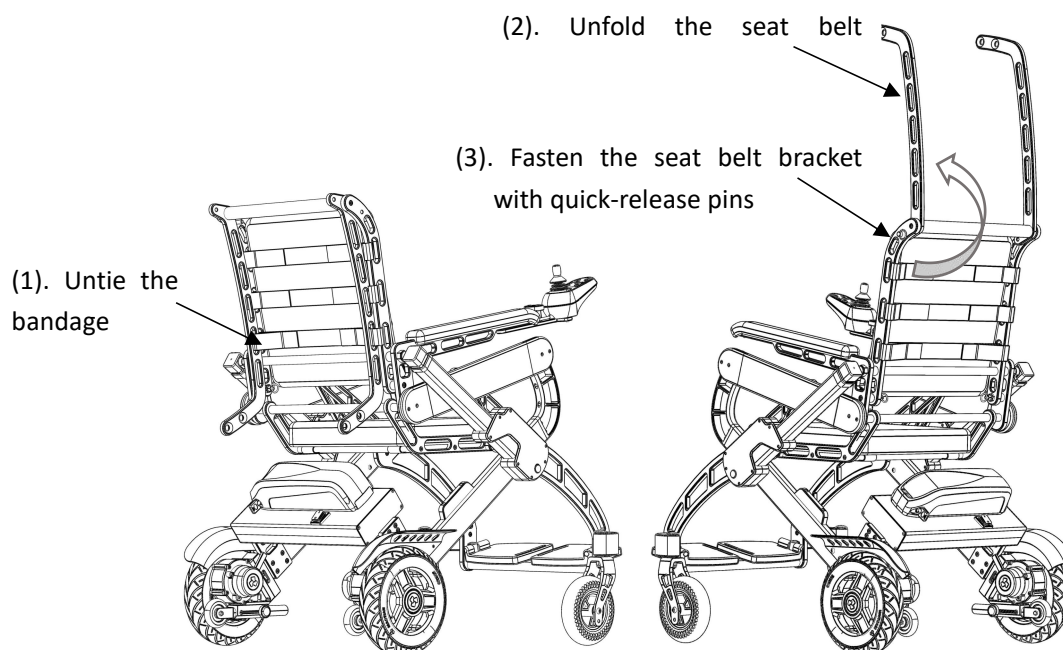
The wheelchair can assist the user to stand by lifting controller、lifting driver、safety belt and safety belt holder. As following picture shows:



1. The usage of seat belts and seat belt brackets



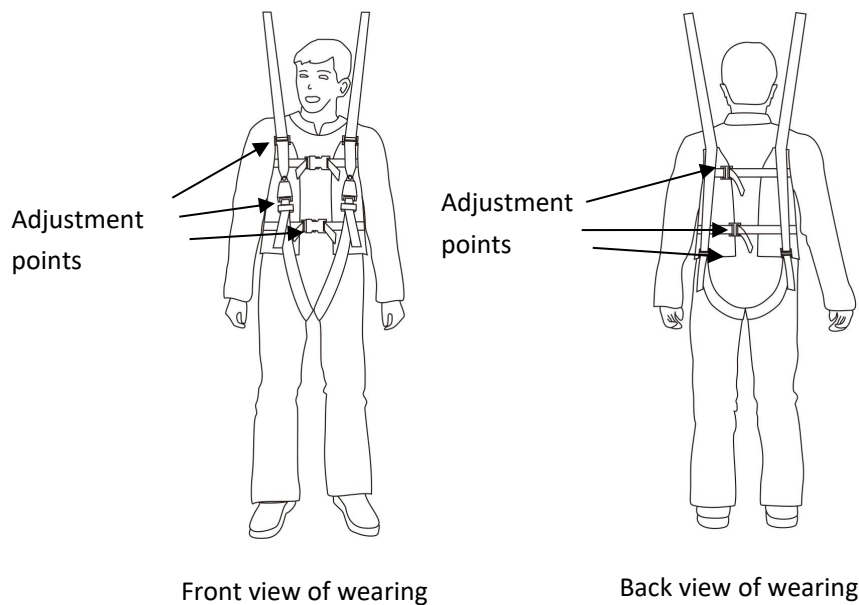
1.1 Open and fix the seat belt bracket. As shown below:



1.2 Install the seat belts. As shown below:



1.3 The correct way to wear the seat belts. As shown below:



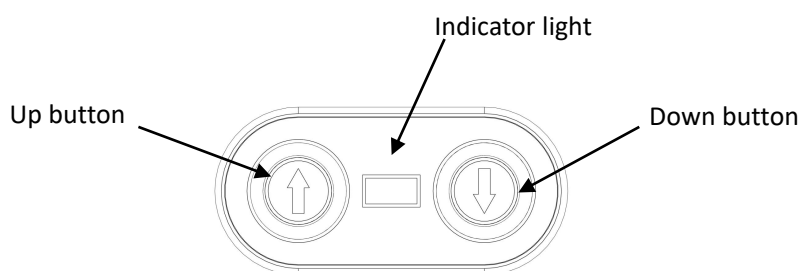
1.4 There are several adjustable points on the safety belts, the user can adjust the safety belt to a suitable size or status according to his height or body shape.

1.5 Unlock the auxiliary standing function system and restore the initial setting function instructions:

When you use the Smart Auxiliary Walking Robot for the first time, or when you return on the power again, if the indicator light is on and the system is in a locked state, then please press the turn-down button 3 times (1-2 seconds each time, until the light flashes once) to unlock the system, then the auxiliary standing system can be used normally again.

The initial setting of the wheelchair auxiliary standing function control system is the sitting state. When the wheelchair is not in the sitting state, if you operate the system unlocking function, the wheelchair will automatically descend and return to the sitting state. If you want to stop this automatic descent, you need to turn off the main power supply.

2.Instructions of the lifting controller: as shown in the figure below:



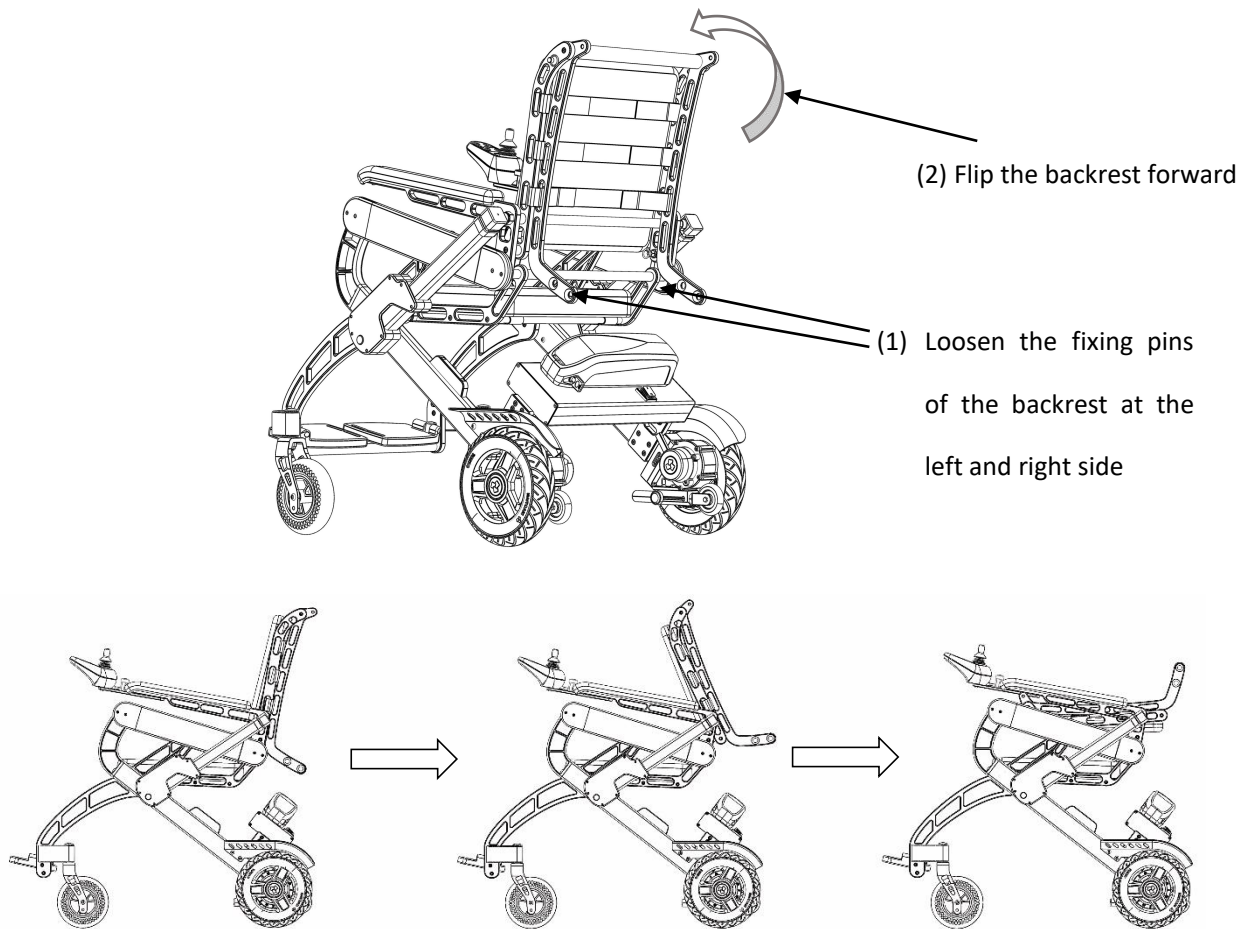
① Long press the “down” key until the indicator light up, then you can operate the lifting system. ② Press and hold the “up” key, light flashes, armrest, backrest, seat cushion and safety belt and holder rise in the meanwhile. Release the “up” key, rising action stops. ③ Long press “down” key, wheelchair descend, release the key→stop. ④ During descending, no operation within 30seconds, system will enter the self-lock state. If you want to operate it again, you should long press “down” key until indicator light flashes

Warnings:

- (1) This product must be used or operated on a relatively flat ground to use the auxiliary standing function.
- (2) It is forbidden to use the auxiliary standing function when the battery power display is in an extremely low state to avoid accidents.
- (3) It is forbidden to use the auxiliary standing function without properly wearing the seat belt.
- (4) It is forbidden to use the auxiliary standing function for people who are not in line with the height or size of the safety belt attached to this product.
- (5) It is forbidden to use the driving function of the wheelchair while the auxiliary standing function system is automatically restored to the initial settings.
- (6) It is forbidden to use the auxiliary standing function continuously for more than 5 minutes under overloaded situation, otherwise the lifting drive will be damaged due to overheating.

IV. Manual folding of the seat backrest

To manually fold the backrest: Loosen the fixing screws on both sides of the backrest at the lower end of the backrest and then turn the backrest forward. As shown below:

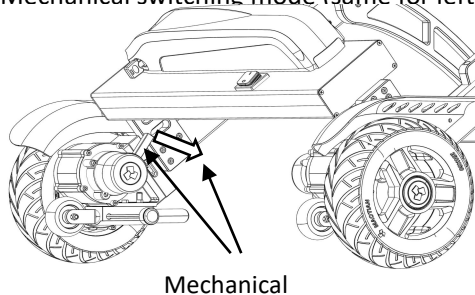


Operational diagrams

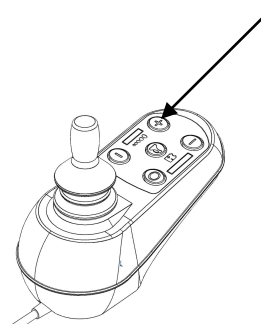
V. Manual Mode Switching

This product can switch from the drive mode to the manual mode through both mechanical and electronic methods.

1. Mechanical switching mode (same for left and



2. Electronic switching mode



When the controller is on, long press and hold the speed control + button until you hear the unlocking sound of the drive and the gear indicator displays three red bars

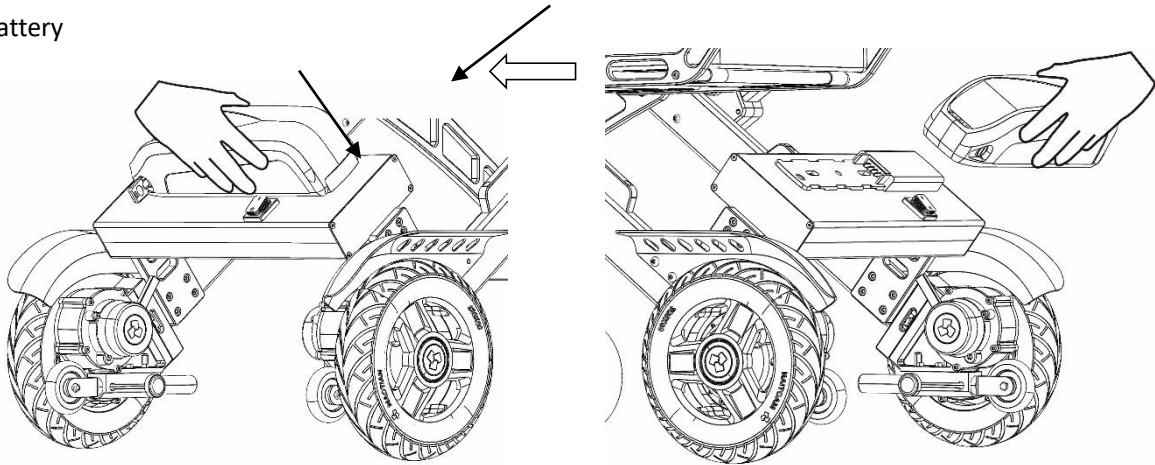
VI. The removal and installation of the battery

1. Battery removal. As shown below:

(1) Turn the key counterclockwise to unlock the battery

(2) Grasp and pull the battery to the left

(3) Remove the battery



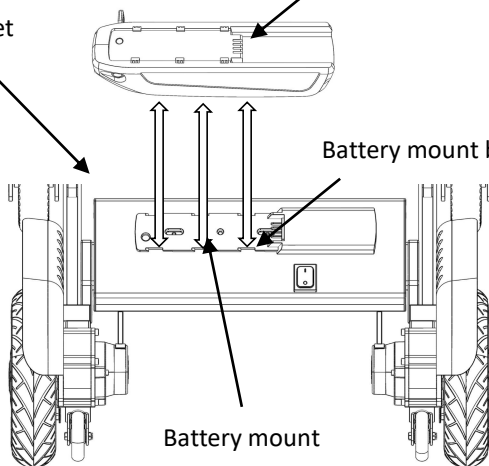
2. Battery installation. As shown below:

(1) Align the battery buckle and insert it into the battery mount bayonet

Battery

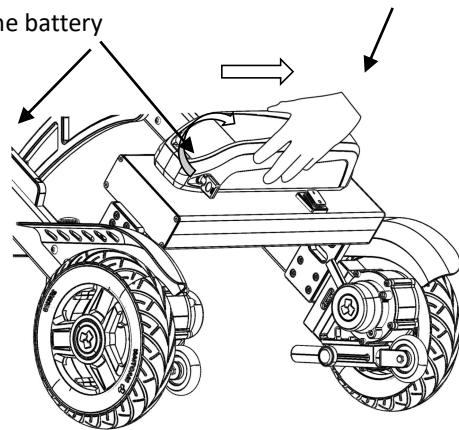
Battery mount bayonet

Battery mount



(2) Grasp the battery with your hands and pull it to the right

(3) Turn the key clockwise to lock the battery

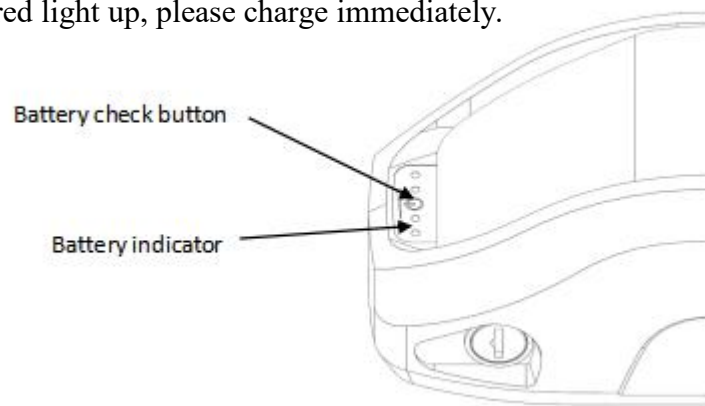


VII. Battery instructions and precautions

1. This product is equipped with a 24V, 15.4Ah lithium battery.
2. When battery is first used, the battery must be run out of power, then charged it until full.
3. In order to drive successfully, battery must be charged full before go out.
4. If you don't use it for a long time, please cut off the power, and turn off the power master switch

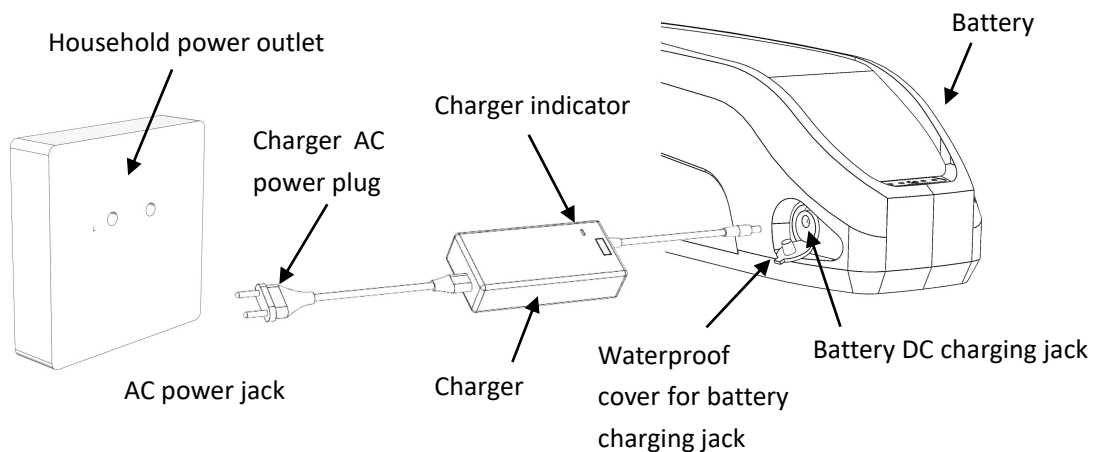
1. Charge the battery

Press the “power check key”, more green light means more power, less green light means less power, if only the red light up, please charge immediately.



Charging steps:

1. Confirm the assist standing function is in initial setting state, and power is off.
2. Remove the battery and connect the charger as shown below.
The indicator light is red when charging and green when full.
3. Charging time is about 4-6 hours



Warning: it is prohibited to charge when battery is not remove from the wheelchair.

VIII. Troubleshooting

1. The wheelchair won't start

-Press controller “on” button to check whether gear position light and power indicator light are on.

-If the lights are not on, check whether the power master switch is turned on.

Attention:

If product is not used for a long time, please charge the battery regularly to keep amount of power. Otherwise the battery may fail.

-Turn on power master switch, if indicator light is not on, check whether the battery is dead.

2. The wheelchair is stop and go

-Aging of battery

3. The speed suddenly slow during operation

- Battery is low

4. Lifting system is fault

-If indicator light is flashing, please turn off the power switch and then turn it on again.

IX. Maintenance

Make sure the battery is recharged at least every three months to avoid faults.

Regularly check the connection parts, whether there is loosening, falling out, rust and so on.

Waste batteries should be treated properly in accordance with local laws. Do not throw away at will.

Please place the product in a cool, dry, ventilate and non-corrosive gas place below 40°C.

Exposure to the sun in hot weather should be avoid.

Chargers that meet the standards must be used.

Charger specification: 24V 2A

When charging, please charge according to the voltage of area and the equipped charging plug.

Interpretation of symbols used in the medical device label

	Type B application part
	Separate disposal mark for waste electrical and electronic equipment (Please comply with local laws and regulations)
	Note, please refer to the attached file
	Pinched hands warning
	Avoid the sun
	Avoid the rain

X. Product Warranty

Product Warranty Card

Name		ID No.	
Address		Contact	
Model		Model number	
Purchase date			
Warranty period	12 months from the date of purchase (6 months for the battery)		
Distributor (Seal or Signature)			
(Or address)			

The warranty not cover :

1. Not properly used in accordance with the instructions.
2. Not using parts manufactured by the Company.
3. Parts are damaged due to accidents.
4. Consumable goods are not included in the warranty scope, refer to wheels, sling, etc.
5. Unauthorized modification of device Settings is not allowed.
6. Typhoons, floods, earthquakes and other natural disasters.