CASWE S10

Walking Assistance Robot
User Manual

【Introduction】

Dear User:

Hello! We sincerely thank you for choosing Easwe Walking Assistance Robot! Your trust is our driving force to keep moving forward.

Before starting your journey with our product, please carefully read this operating manual. This manual serves as a professional guide, providing you with systematic, comprehensive, and detailed instructions to help you master the key points, operation skills, and functional features of Easwe Walking Assistance Robot. If you have any doubts during reading or need further assistance, please feel free to contact us at any time. We will be dedicated to answering your questions and resolving your concerns.

This manual is rich and detailed, not only systematically explaining the basic principles and core product features of Easwe Walking Assistance Robot, but also deeply analyzing its main components and their functions. It also provides meticulous instructions on safety requirements, standard operating procedures, battery usage specifications and precautions, emergency handling plans, and product maintenance methods.

Furthermore, to better ensure your safety and convenience, this manual features prominent specific markings to highlight warning content and key matters that require special attention. These important pieces of information are closely related to your safety. Please carefully study, fully understand, and firmly remember them. They will protect your every use, ensuring a safe, secure, and smooth experience.

Walking Assistance Robot Operating Manual

【Product Name】

Walking Assistance Robot

【Model/Specification】

Model: Easwe S10

【Structure and Composition】

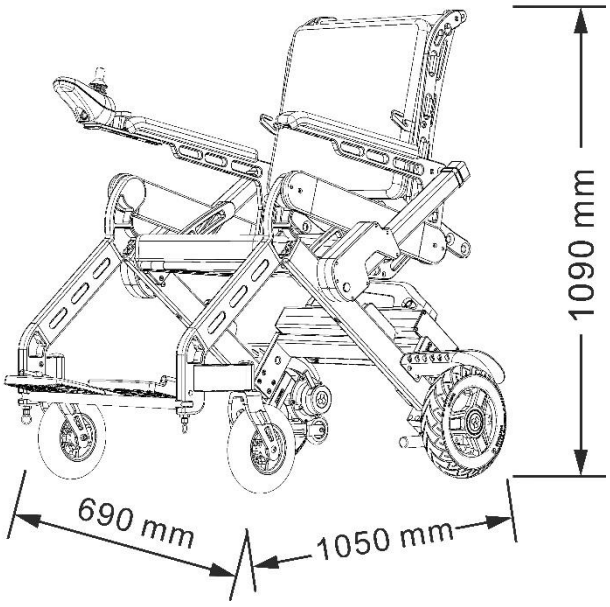
The product consists of an assistive walking controller, lifting drive, motor, battery pack, seat, casters, and main frame assembly.

【Scope of Application】

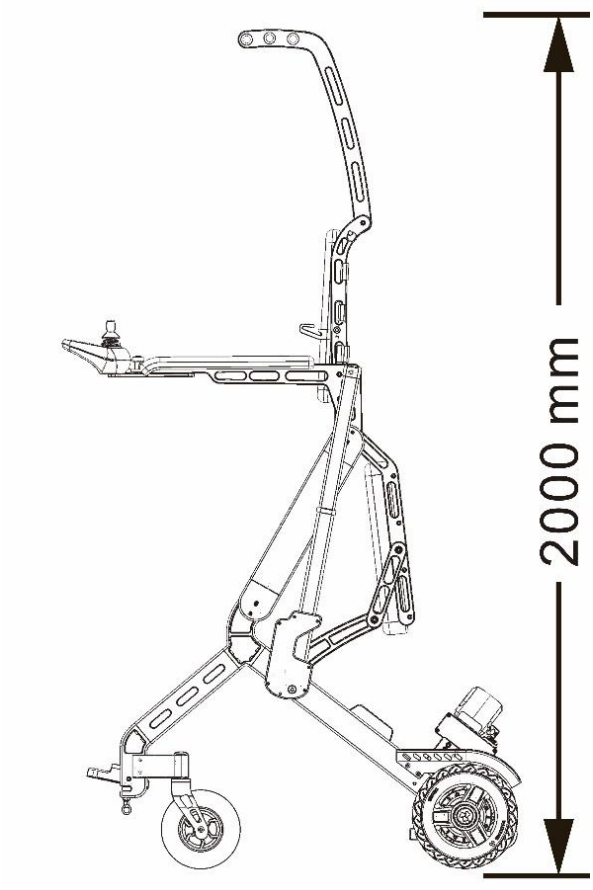
Designed for assisting walking rehabilitation of individuals weighing less than 240 lb with waist weakness, leg weakness, or hemiplegia. Never use on highways or other dangerous areas.

【Product Size】

Note: The final size of the product is subject to the physical object.

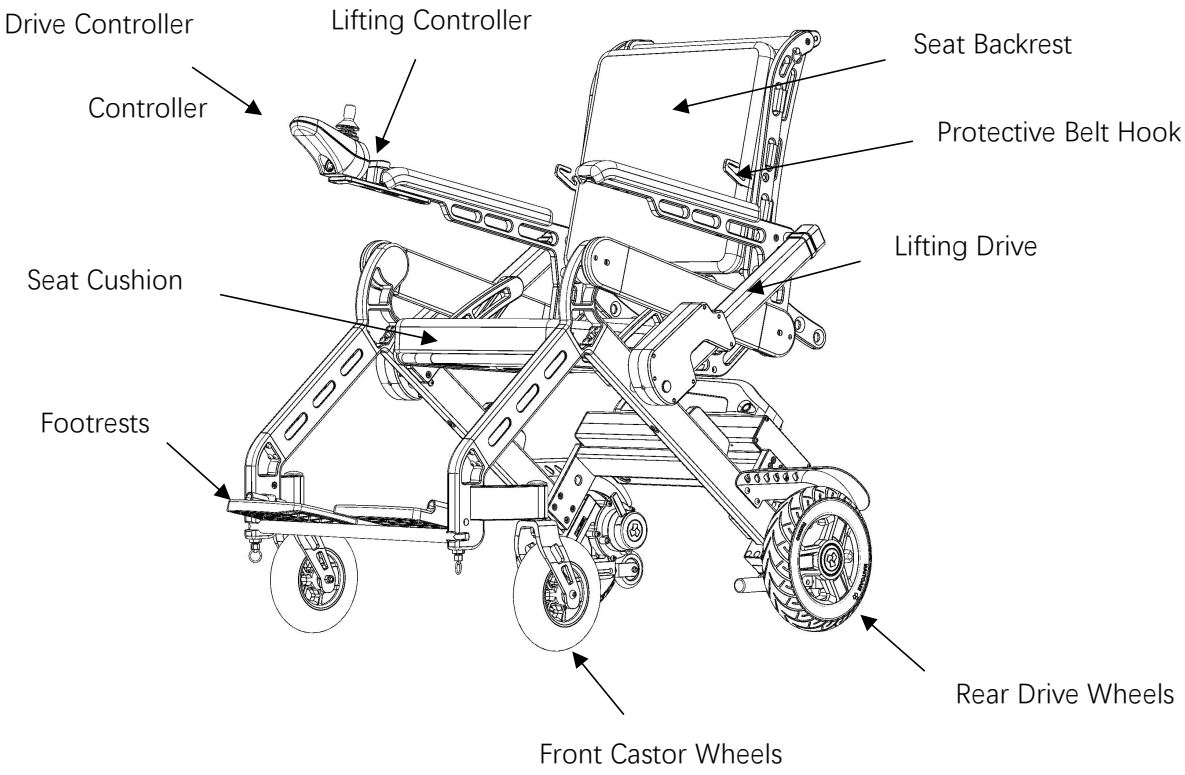


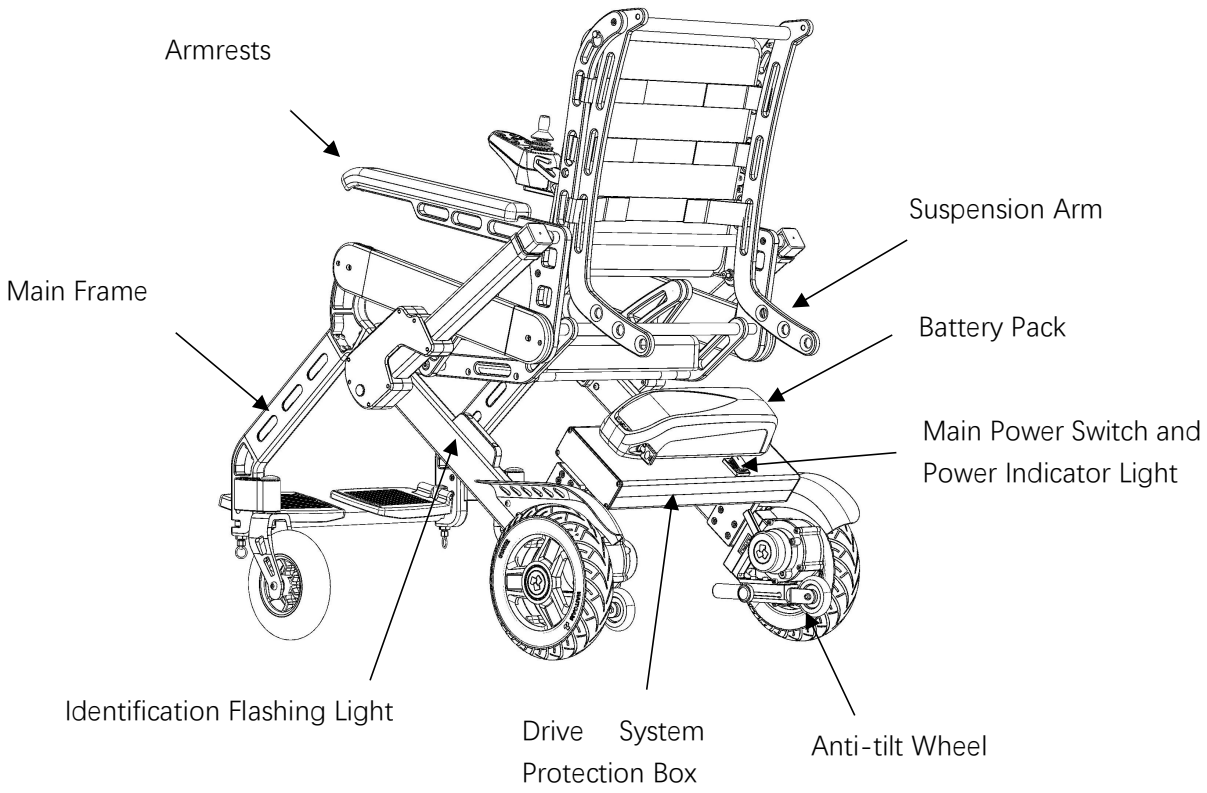
Lowest Sitting Posture



Optimal Standing Posture

【Product Structure Diagram】





【Technical Specifications】

Product Name	Walking Assistance Robot		
Model	Easwe S10		
Operating Range	Maximum Range on Full Charge:15 mi		
Total Weight	100 lb		
Lithium Battery Pack	Rated Capacity: 15.4Ah	Rated Voltage: 24V	Equipment Quantity: 1 set
Drive Wheel Motor	Rated Voltage: 24V	Rated Power: 200W ×2	Equipment Quantity: 1 set
Charger	Input Power: 220V, 50Hz	Output Voltage: 29.4V	Output Current: 2A
Dimensions	Sitting Position: 41.34 in×27.17 in×42.52 in Standing Position: 41.34 in×27.17 in×78.74 in		
Other Parameters	Seat Height from Ground: 22.24 in Seat Depth: 16.54 in Seat Width: 16.54 in Backrest Height: 16.54 in		
Minimum Turning Radius	≤39.37 in		
Maximum Speed	≤4 mph		
Climbing Ability (Seated Position)	8°		
Braking Performance	Horizontal Road Braking: ≤59.06 in Maximum Safe Slope Braking: ≤141.73 in (6°)		
Slope Holding Ability (Seated Position)	10°		
Static Stability (Seated Position)	9°		

Dynamic Stability (Seated Position)	6°
Obstacle Clearance Height (Seated Position)	1.57 in (Obstacle Surface is Inclined Plane with Obtuse Angle 140°)
Trench Crossing Width (Seated Position)	3.94 in
Operating Environment	-25℃～50℃
Tire Size	Front Wheel: 8 inches Rear Wheel: 10 inches
Seat Upholstery	Oxford Cloth
Product Load Capacity	≤240 lb
Total Thrust of Lifting Driver	≤1000N
Lower Body Protection Belt Load	≤240 lb
Suspension Strap Load	≤240 lb

【Contraindications】

1.Patients, individuals feeling unwell, visually impaired persons, especially those with upper limb impairments

2.Persons with acute tumors

3.Individuals with heart disease

4.Pregnant women or those menstruating

5.Children (under 12 years old)

6.Individuals with health concerns should consult a physician before use

7.Users with pacemakers should consult a physician before use

8.Persons with complete lower limb paralysis or delayed sensation

9.Unconscious individuals, those in a coma, with poor blood circulation, or severe sensitive skin

【Safety Precautions, Warnings and Instructions】

1.Do not operate the walking assistance robot on motor vehicle lanes.

2.Do not use the walking assistance robot under the influence of alcohol.

3.Do not attach any mechanical or electronic devices to the walking assistance robot without authorization, as this may cause personal injury.

4.Do not drive on slopes greater than 10 degrees while in the seated position.

5.Do not cross ditches wider than 3.94 in while in the seated position.

6.Do not forcibly cross steps higher than 1.18 in while in the seated position.

7.Do not operate on icy, slippery surfaces or salt-alkali grounds, as this may cause accidents and personal injury.

8.Do not combine with any transportation vehicles, as this may cause accidents and personal injury.

9.Turn off the power when leaving the walking assistance robot to prevent safety issues.

10.Do not use the walking assistance robot to carry goods or overload with additional passengers.

11.Do not add extra loads.

12.This product is designed for both indoor and outdoor use, but should not be used in high-temperature weather or harsh environments.

【Installation and User Manual or Diagrams】

Series of Walking Assistance Robots are controlled by the user through finger gestures to move forward, backward, turn left, turn right, fold and unfold, and adjust the speed. Therefore, users must possess the following abilities:

-The ability to read and understand instructions.

-The ability to identify and assess risks.

-Have safety awareness or compliance with road safety regulations.

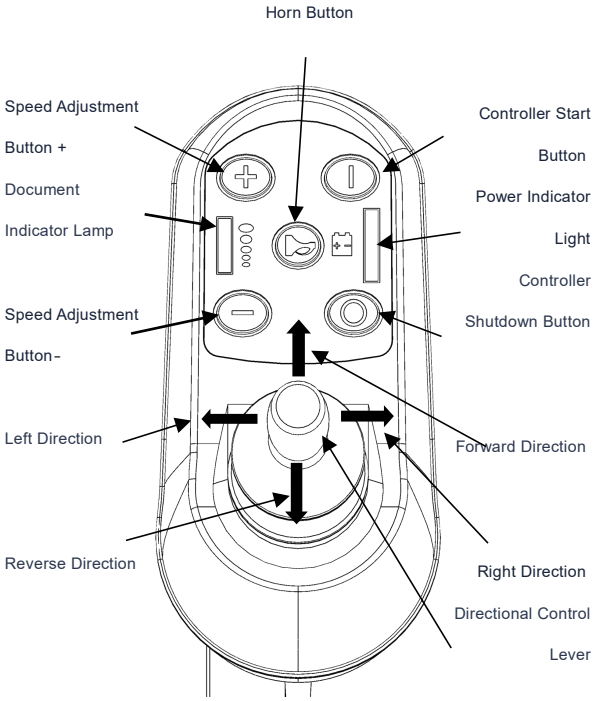
-Quick reaction ability.

Product Features

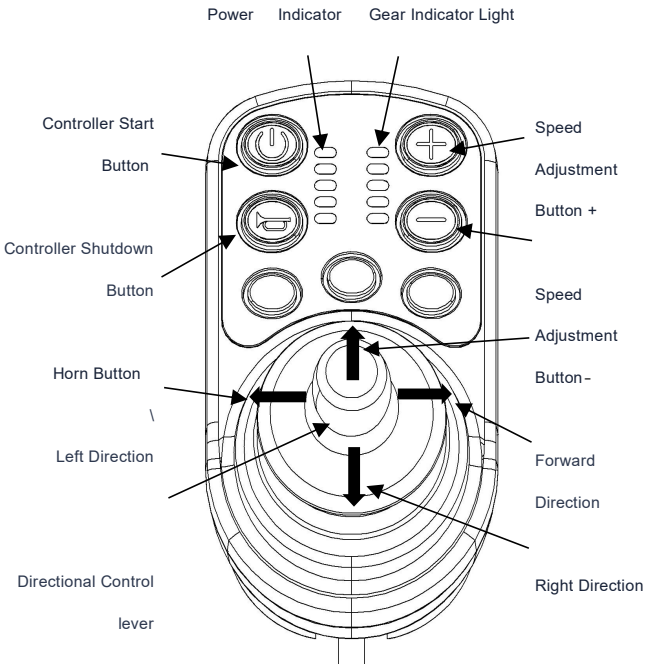
1. Driven by two motors on the left and right sides, forward, backward, left turn, and right turn can be operated with one hand. As the driving motors are positioned at the rear, there is no dizziness when turning.
2. This walking assistance robot is equipped with an assisted standing drive mechanism. The lifting control panel can be operated with one hand to drive the armrest, backrest, safety belt, and bracket to move up and down synchronously, assisting users to stand safely.
3. The backrest and safety belt bracket of this walking assistance robot can be manually folded.
4. The walking assistance robot can be folded to reduce its volume. It can be slowly transported by operating the control lever of the controller.
5. The controller armrest can be installed on either the left or right side to accommodate people with different left/right hand usage preferences.
6. This walking assistance robot has solid tires on the front and rear wheels, which do not need to be pumped up, and the tires cannot be dismantled at will.
7. This walking assistance robot is equipped with a main power switch and power indicator light. When the battery is charged and the main power switch is turned on, the power indicator light will illuminate; when the main power switch is turned off, the power indicator light will extinguish.

Instructions for Using the Walking Assistance Controller

1. The settings of the walking assistance controller are shown in the figure (Please note that different models may have different configurations, and the actual product shall prevail):



Controller Operation Panel 1



Controller Operation Panel 2

2.Battery charge indicator light, When the green light is full, it indicates that the battery is fully charged. If only the red light is on, it means the battery is low and needs to be charged.

3.Controller start button, click to turn on the controller.

4.Controller shutdown button, click to turn off the controller power.

5.Horn button: Press the button to sound the horn, release the button to stop the horn.

6.Speed display light, speed adjustment button -, speed adjustment button +, speed gear display 1-5 bars, representing 5 speed levels from low to high.

7.Directional control lever: When pushing the lever forward, the product moves forward. The greater the pushing force, the faster the forward speed. When pushing the lever backward, the product moves backward. The greater the pushing force, the faster the backward speed. When pushing the lever to the right, the product turns right. The greater the pushing force, the faster the right-turn speed. When pushing the lever to the left, the product turns left. The greater the pushing force, the faster the left-turn speed.

8. The startup of the walking assistance robot: Charge the battery fully, turn on the main power switch and wait for the power indicator to light up. Press the controller start button to activate the controller power supply, and wait for the speed and battery level indicators to light up. Now you can operate the directional control lever to use this walking assistance robot.

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

Assisted Standing Function

This walking assistance robot helps users stand safely through the lifting drive, protective belt, suspension strap, and suspension strap bracket. As illustrated below:

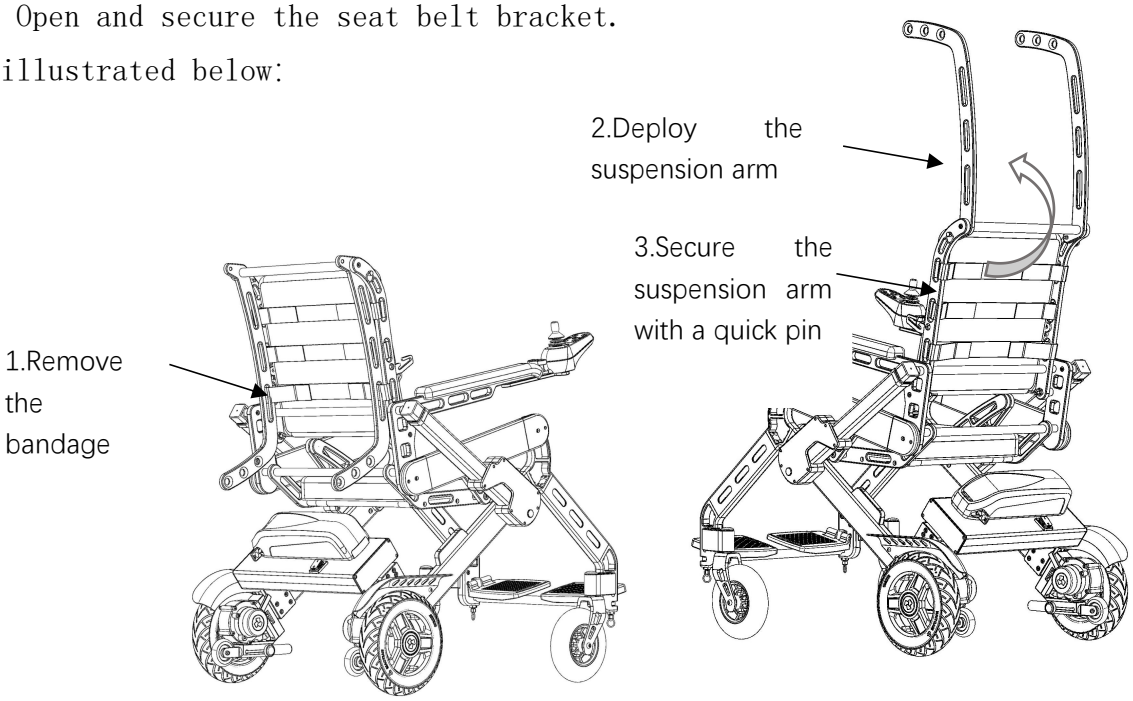
1. Protection Belt Assists Standing

2. Standing with Suspension Strap Assistance

1．Usage of Seat Belts and Belt Anchors

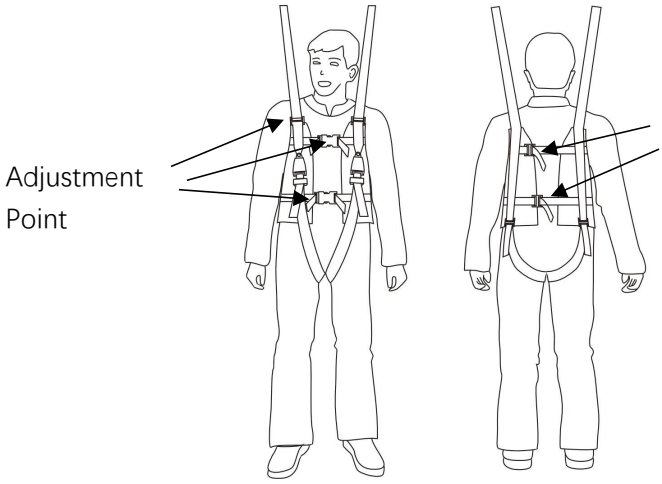
1.1 Open and secure the seat belt bracket.

As illustrated below:

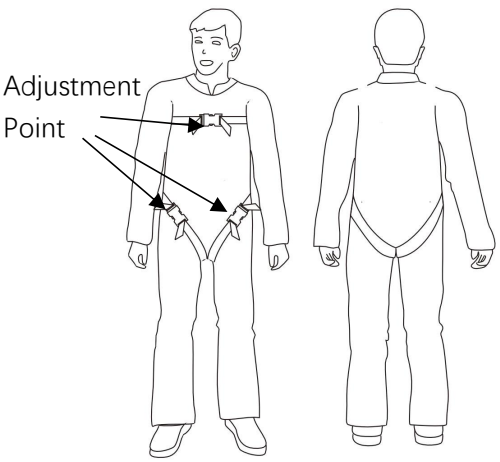


1.2 Install the protective strap and suspension strap. As illustrated below:

1.3 Proper wearing of suspension straps and protective belts. As illustrated below:



Suspension Straps Wearing Diagram

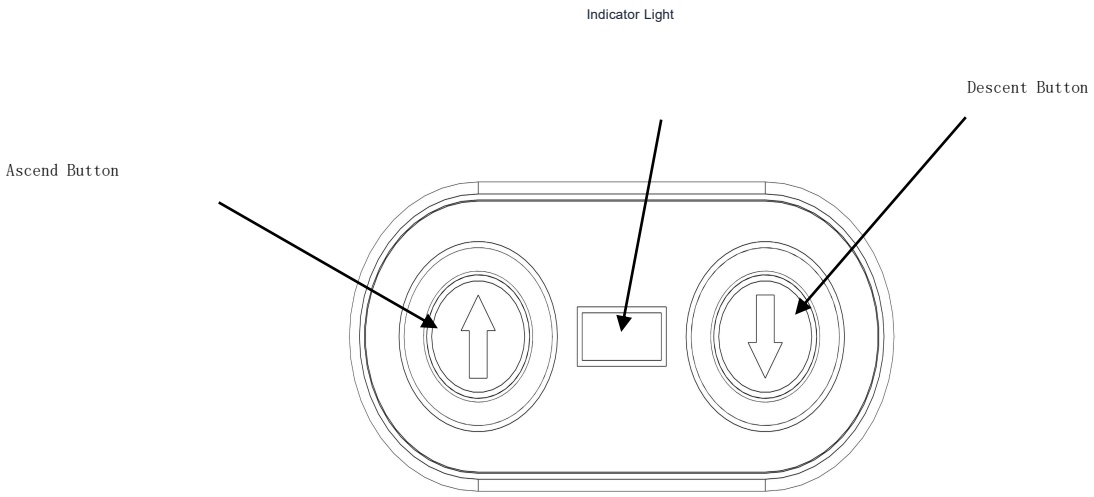


Protective Belt Wearing Diagram

1.4 The suspension straps and protective belts feature multiple adjustable nodes, allowing users to adjust them to the appropriate size based on their height or body shape.

2.Instructions for Assisted Standing Drive System: As illustrated below:

For the first use or when power is turned on, the indicator light is off and the system is locked. Press and hold the descent button of the assistive standing driver (for about 2 seconds) until the indicator light turns on, indicating that the lifting system can enter the operational state. Press and hold the ascent button, the indicator light will flash, and the assistive standing driver will drive the handrails, backrest, safety belt, bracket, and cushion of the walking assistance robot to flip backward simultaneously and rise synchronously. Release the ascent button, the indicator light will stop flashing, and the ascent action will stop. The ascent will automatically stop when reaching the highest set position. When the indicator light is on, press and hold the descent button, the assistive standing driver will drive the handrails, backrest, safety belt, bracket, and cushion of the walking assistance robot to flip forward simultaneously and descend synchronously. Release the descent button, the descent of the walking assistance robot will stop. The descent will automatically stop when reaching the lowest set position. During the descent process, the indicator light will flash. If there is no operation for 30 seconds, the indicator light will turn off, and the lifting system will enter self-locking state and cannot be operated. Press and hold the descent button (for about 2 seconds) until the indicator light turns on, and the lifting system will re-enter the operational state.



Elevator Control Panel

Warning: This product must be used or operated on a relatively level ground when using the assisted standing function.

Warning: Do not use the assisted standing function when the battery indicator is extremely low to avoid accidents.

Warning: Do not use the assisted standing function until the safety belt is properly fastened.

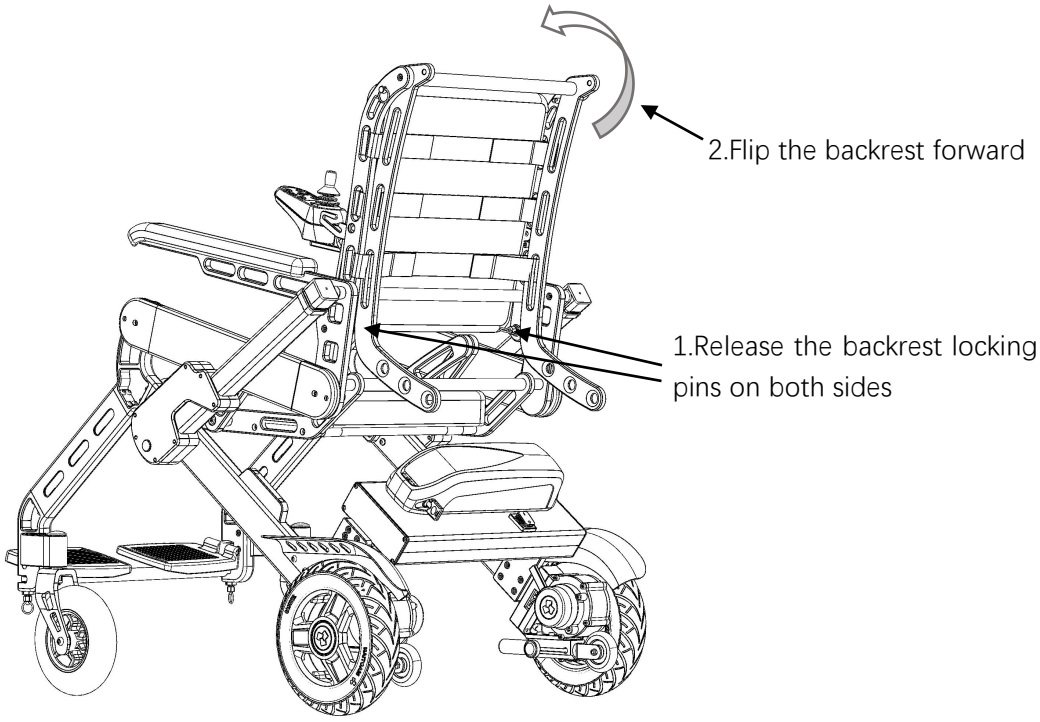
Warning: The assisted standing function should not be used by individuals whose height or body size does not meet the requirements for wearing the safety belt provided with this product.

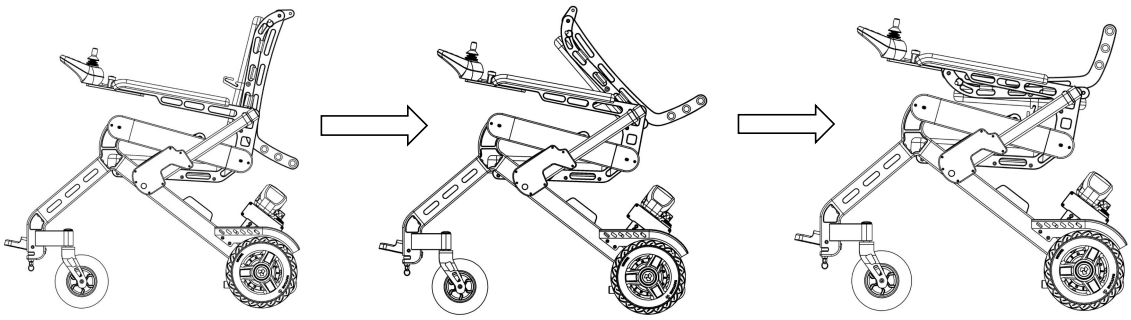
Warning: The walking function of the walking assistance robot must not be used during the automatic reset process of the standing assist system.

Warning: Do not continuously use the lifting function under load for more than 5 minutes, as overheating may damage the standing assist drive.

Manual Folding of Seat Backrest

Backrest Manual Folding Method: Loosen the fixing screws at the lower back of the chair, then tilt the backrest forward. As illustrated below:

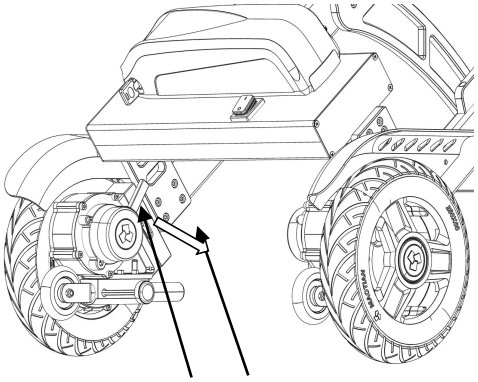




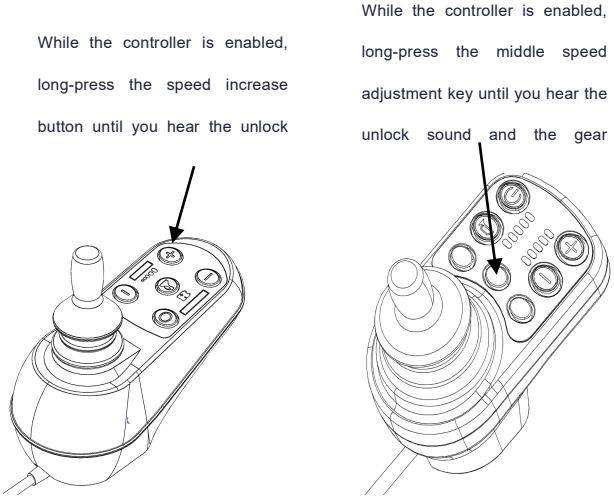
Backrest Folding Diagram

Switching of Trolley Mode

This product can be switched from drive mode to manual push mode through both mechanical and electronic methods.

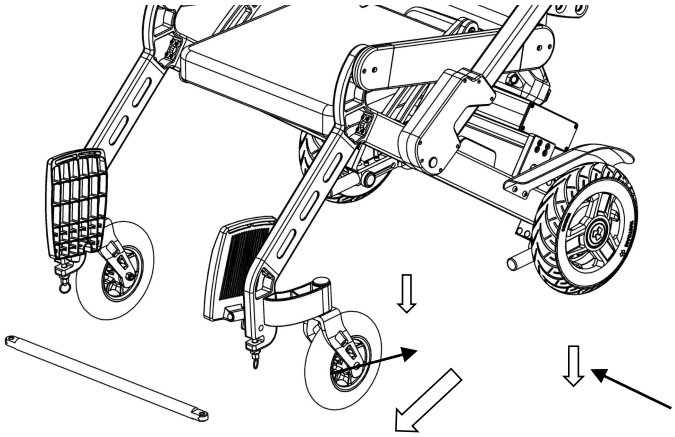


1、Mechanical Switching Mode Diagram



2、Schematic Diagram of Electronic Switching Mode

Footrest Linkage Removal



1.Pull the retaining pins downward, leftward, and rightward respectively.

2.Remove the pedal linkage

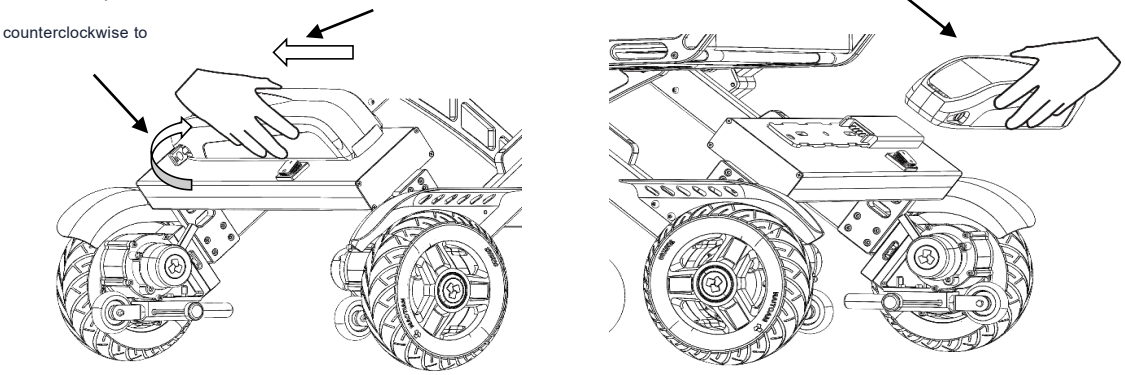
Battery Removal and Installation

1.Battery disassembly. As illustrated below:

1.Turn the key counterclockwise to

2.Grasp the battery with your hand and pull it to the

3.Eject the battery



2. Battery installation.

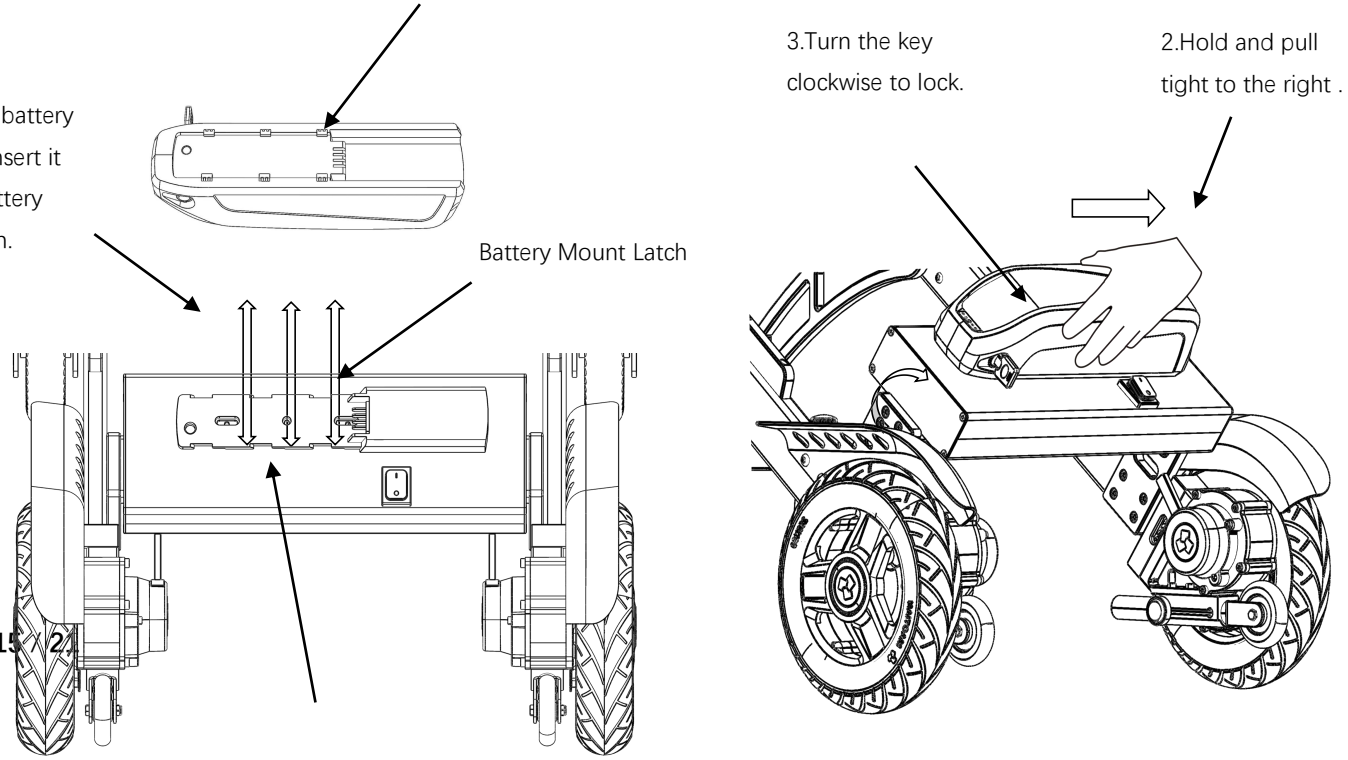
As illustrated:

Battery Latch

1.Align the battery latch and insert it into the battery mount latch.

3.Turn the key clockwise to lock.

2.Hold and pull tight to the right .



Battery Mount Latch

Battery Mount

Battery Usage Instructions and Safety Precautions

1.This product uses a 24V, 15.4AH high-performance lithium-ion battery. The battery requires no maintenance and has a long service life.

2.When using the battery for the first time, you must fully discharge it before recharging until it is fully charged;

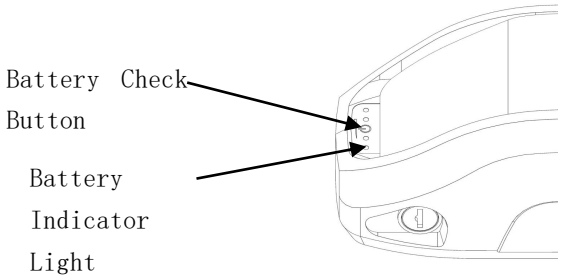
1) To ensure smooth operation of the series of walking assistance robots, please fully charge them before use.

2) When charging, please use the appropriate charging plug based on the voltage in your country/region. do not charge with too low or too high a voltage with a mismatched plug to prevent charging from being damaged.

3) If this vehicle will not be used for an extended period, please disconnect the power supply and ensure the main power switch is in the off position.

3.How to charge the battery

After using the battery for a period of time, you should check its charge level in time. When you find the battery charge is not saturated or very low, you should charge it promptly. Otherwise, the vehicle cannot operate normally. The battery check method: Press the charge check button in the middle of one end of the battery. The more green lights displayed indicate more charge, while fewer green lights mean less charge. If only the red light is displayed, it indicates the battery is out of power - please charge the battery immediately.As illustrated below:

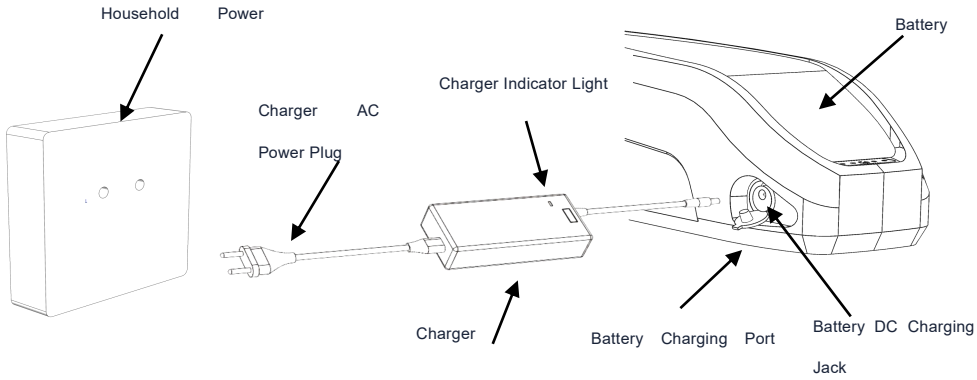


Charging Steps:

1) Ensure that the walking assistance robot lifting function for standing assistance is in the initial setting status, and that the power is turned off.

2) Follow the battery removal method described in Section (VI) 1. to remove the battery from the walking assistance robot and place it in the charging position. Open the waterproof cover of the battery charging port, insert the charging plug of the properly set up charger into the battery charging port, and the other end into a household power outlet. The charger indicator light will display blue

to indicate that charging is in progress. When fully charged, the indicator light will change from blue to green.As illustrated below:



3) After the battery is fully charged, unplug the AC power cord first, and then remove the DC charging connector. The charging process is now complete.

4) The charging time is typically 4-6 hours.

Basic Maintenance

1. Troubleshooting for product startup failure:

- Check the response speed of the controller's start button and whether the power indicator light is on;

- If the speed and power indicators are not illuminated, check if the main power switch is turned on.;

Warning: If the device is not to be used for an extended period, please ensure that the battery maintains a certain charge level, otherwise the battery may become defective.

- If the power indicator does not light up when turning on the main power switch, check if the battery is dead;

2. The product stops and starts intermittently.:

- Battery aging.

3. Sudden reduction in travel speed during operation:

- Insufficient Battery Charge;

4.Lifting System Malfunction:

-If the indicator light flashes continuously, a system fault is detected.

Troubleshooting: Reset to factory settings.(Press and hold both the up and down buttons for about 1-2 minutes. During this process, the product will perform multiple up and down movements until the indicator light stops flashing).

Warning: Factory Reset is Strictly Prohibited While in Use by Others

【Product Maintenance and Care Instructions, Special Storage and Transportation Conditions and Methods】

1. Clean

Keep the console and machine surfaces clean. Do not use oil or any chemical liquids when wiping the vehicle. Avoid using sharp brushes to prevent surface scratches. Do not directly spray water from a faucet to prevent electrical component damage. Only use clean rags to directly wipe the surface, or use clean rags dampened with water and wrung dry for wiping.

When cleaning the wheels, do not use oil or any chemical liquids. Only use clean rags or soft brushes to wipe the surface directly, or use clean rags or soft brushes dipped in clean water, wrung out or spun dry, and then wipe the surface. For the seats, only use clean rags to wipe the surface directly, or use clean rags dipped in clean water and wrung out to wipe.

2. Maintenance

2.1 Daily Basic Maintenance During Use

●If you need to use it daily, please conduct a self-inspection before each use. Simply check for any visible damage or defects in the product's appearance.

●Electrical issues occasionally arise, and most can be resolved on your own. The main reasons are usually due to insufficient battery charge or decreased battery performance.

2.2.1 Battery maintenance

Make sure to charge the battery at least every three months to prevent it from becoming ineffective due to prolonged inactivity. Never strike the battery with hard objects or drop it from heights to avoid damage.

2.2.2 Electrical wire joint

Regularly inspect all exposed wire connections; (Monthly)

Conduct regular checks on the insulation of all exposed wires, including the charger power plug; (Monthly)

Repair or replace damaged connectors and joints. (Annually)

2.2.3 Key screws or nuts

Regularly check all exposed screws or nuts for looseness. (Monthly)

2.2.4 Series of bearings and motors/drives

This component has been lubricated and is sealed for use, no additional lubrication is required. (Annual)

Note: Keep all electrical components dry. This includes the control panel, charger, electrical controller, etc. If any component gets wet, it must be dried before use.

2.2.5 Standing assistance drive:

Regularly clean the surface of the telescopic components of the standing assistance drive; (weekly)

3. Waste Disposal
Waste batteries related to walking assistance robots should be disposed of at the end of their useful life in accordance with local laws and regulations, such as curing and burying them in deep pits, storing them in waste mines, and recycling them, rather than disposing of them on their own.

4. Transportation Conditions and Storage Environment
Kraft paper carton packaging, protected against water exposure, hard object pressure, suitable for ocean shipping, air freight, and land transportation.
Store the product in a cool, dry, ventilated place below 40℃, and use it on a flat surface.
Avoid direct sunlight exposure and do not store it with flammable or explosive substances, as this may cause performance degradation or damage to the product.
【Manufacture Date, Usable Period or Expiry Date】
Production date is shown on the label, with a shelf life of more than 5 years.
【Optional Configuration-Charger】
Charging must be done using a charger that complies with GB9706.1-2007 and YY0505-2012 standards.
Charger specifications: 24V 2A
When charging, please use the appropriate voltage and matching charging plug according to your local power standards. Do not use voltage that is too low or too high, or mismatched plugs, to prevent damage to the device.

【Product Warranty】

一、Warranty Coverage Description
Under normal use conditions, if any quality issues arise from material, manufacturing, or assembly defects, the authorized agent shall be responsible for repairing or replacing the defective parts.

二、The following situations are not covered by warranty.
1. Damage due to incorrect operation, use, or maintenance not following the instruction manual;
2. Damage caused by using non-authorized spare parts leading to malfunction of the walking assistance robot series;
3. Damage resulting from accidental incidents;
4. Damage caused by unauthorized modifications to the design of the walking

assistance robot series (including controller programming, etc.);
5. Damage caused by natural disasters such as typhoons, floods, and earthquakes.

【Explanation of Graphics, Symbols, Abbreviations, etc. Used on Medical Device Labels】

	Type B Applied Part		Pinch Hazard Warning
	WEEE Separate Disposal Mark (Please comply with local laws and regulations.)		Avoid Sunlight
	CAUTION: Refer To Accompanying Documentation		Avoid Rain

Other language versions. **Video guidance.**

Email: support@easwe.com