

# User's Manual



## Eagle HD

# INTRODUCTION

## ***Dear Users,***

Thank you for choosing the Eagle HD Power Wheelchair for your portable wheelchair transportation needs. It is important to read through this manual before operating your Eagle HD Power Wheelchair to become familiar with its features as well as its limitations and safety information.

You will find the operation and care of your Eagle HD Power Wheelchair simple and easy.

Manufacturer and dealers cannot be held responsible for personal injury or property damage resulting from the unsafe or improper operation or maintenance of Eagle HD Power wheelchair.

As part of our ongoing product improvement initiative, we reserve the right to change specifications and design without notice. As a result, there may be minor differences between your Eagle HD Power wheelchair and accessories and the photos, illustration and instruction in this manual.

We strongly believe that the wheelchair would bring you more convenient and reach the goal of free life to you. If you discover a problem, contact your authorized local Dealer or Distributor for assistance, alternatively direct contact with manufacturer with the following Contact Information.

## **Discover Your Mobility Inc.**

11055 E 9 Mile Rd Warren Mi 48089

[www.discovermymobility.com](http://www.discovermymobility.com)

Toll Free: (866) 868-9694
























## **Recommendation**


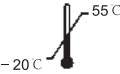














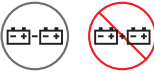









Please pay attention to "Warning" in the manual is to protect you from any injury. Unable to follow "Notification" in this manual may result in damage the wheelchair.

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## SYMBOLS

	Warning Beware of potential hazard		Attention, see instruction for use
	Refer to instructions for use - Mandatory Failure to read the instruc- tions for use could intro- duce a hazard		Refer to instructions for use - Recommended Failure to read the instruc- tions for use could intro- duce a hazard
	Manufacturer		Product fulfill WEEE directive
	Date of manufacture		Serial number
	Batch number		Type BF applied part
	Use until year & month (Expiration date)		Type B applied part
<b>IPX-4</b>	Water proof grade		CE mark
	Medical device		UKCA mark
	=Radio frequency fields beyond this point may exceed FCC general public exposure limit		Importer
	Name and Address of European Union Representative		Distributor
	Unique Device Identification		Country of Manufacture
	Model Number		Don' t use when packing damaged

	Humidity limitation		Temperature limitation
	Store in clean & dry place protected from rain, snow, ice, salt and water.		Protect from heat and radioactive sources
	Danger of explosion		Package Number
	Keep dry		Foot Switch
	Equipotential		CF application part
	Switch		Fuse
	PCTB		Volume control
	Disposal and recycling only authorized recycling companies can recycle parts of this mobility wheelchair		Do not use mobile phone, remote speakers, laptop computer or other wireless device while operating the unit.
	Do not adapt battery which is with different capacity and wrong model number.  Never combine use long time used battery with new battery at the same time, always change batteries in brand new condition.		Implication of flammable material. Do not expose under fire, fire sparkles and other heat sources conditions. Never transport batteries along with torch, explosive items or flammable materials.
	Keep away other metal related items or tools away from the negative and positive terminal end to avoid any short cut or electricity shock from happening.		Avoid contacting with rain, snow, ice, salt and keeping in water, keep under clean and dry ambience.
	Easy to be crashed, crashing spot		The product has passed electromagnetic test of 20 V/M.
	With potential explosion		Battery contains anti-corrosion chemical substance.
<b>Power</b>	100~240VAC, 50~60 Hz		Type 2 device
<b>DC output</b>	+29.4V  2.0A	<b>Frequency</b>	500VA



**Warning!**

Please read through and understand the contents of this manual fully for safety concern. Keep all time awareness while driving wheelchair to ensure your safety.



**Warning!**

Please be aware of and go through "Warnings" carefully to keep away from damages or personal injuries from improper operation. Users are highly recommended to take appropriate safety related cautions. Manufacturer is not to take responsibility of personal injuries and product damages led from improper operations. Be aware of local pedestrian traffic rules, other people around maybe unable to aware of you when you are driving wheelchair. Make sure there is no other vehicle on the road carefully before driving. It is necessary to apply safety equipment such as reflectors, reflective clothings, lights and safety signs.



**Warning!**

This electric wheelchair is suitable for use on flat pathway within living rooms, in hospitals, nursing homes and nearby buildings. Do not use on grass, gravel, slopes greater than 8 °, motorways, and driving when it is raining or snowing. Never driving on roads.



**Warning!**

Do not operate wheelchair under the influence of alcohol drinking. Consumption of alcohol significantly affect safe operation of wheelchair. Every wheelchair is different, please check it yourself before driving and refer to the instructions on this manual for "Setting up" and "Pre-operation procedure" at the first time driving wheelchair. It takes some time and practices to make sure operation of wheelchair safely.



**Warning!**

Do not operate the wheelchair on other paths that not recommended in this manual. Do not use the wheelchair for other purposes, for example weight training, sports and track and field towing, fast moving or towing, etc., these may result in hazards and excessive abuse of wheelchair.



**Warning!**

This electric wheelchair is suitable for travelling on good, leveled surfaces. Do not drive under heavy rain, in snow, on mud, on rough, on loose, in narrow, on icy surfaces, on treacherous roads or waterways without guardrails, on poor roads, or under icy conditions. Water or excessive moistures can cause electrical parts to malfunction. Do not use when the ambient temperature is below -10°C or above 45°C.



**Warning!**

Make sure the power of the powerchair is switched off before charging. Do not charge the powerchair below 0 ° C, charge under an ambient temperature between 0°C ~ 45°C. Never indoors as there is a risk of fire. Do not charge when the controller power on to prevent malfunction. Keep the battery from freezing and do not charge a frozen battery, it may cause personal injury and battery damage. Keep all charger power cable terminals clean, dry and away from moisture to prevent damage to the electrical system and personal injury.



**Warning!**

Keep wheelchair in dry and clean environment. Do not take wheelchair for showers, in bathtubs, in pools or saunas, always away from rain, snow, salt, fog/spray conditions and frozen/slippery surfaces that can cause rust or corrosion of wheelchair screws or fixtures. Prolonged exposure under excessive heat and cold affect the upholstered and non-upholstered parts and batteries and battery components of wheelchair.



**Warning!**

Do not expose the wheelchair to flames. This wheelchair is not waterproof, do not expose it in rain or snow and do not drive in rain or snow. Do not ride the wheelchair across waterways. Avoid environment that is directly impacted by water (e.g. heavy rain) or is very wet. Do not use the powerchair near water sources such as rivers, lakes or sea.



**Warning!**

Do not alter the controller settings your own. Any variation of controller happens, please contact your service provider. Never have any unauthorised modification. Adding accessories may alter the specification of the wheelchair such as the total weight, dimensions or the centre of gravity. Changes may damage some aspects around you.

Do not alter the specification of seat. Do not place any other cushions or pillows on the seat. These could lead to an unstable seat position and fall off from wheelchair.



**Warning!**

Do not leave the powerchair under low or high temperature for long time, it will potentially impair the functions of wheelchair. Always check the electrical components if there is corrosion, check all brakes if there are any looseness, wears and tears or damages. Constantly check the wiring harnesses and terminals, in case of any damage for immediately replacement if it is necessary.



**Warning!**

The wheelchair is not designed for climbing up stairs or escalators. Do not seat on wheelchair when it is transported by any vehicle.

Do not tow the wheelchair, it may exceed its own speed threshold resulting in damage of critical parts.





**Warning!**

When transporting wheelchair with battery, please make sure that they are under safe condition. Do not transport wheelchair or battery along with flammable materials. For safer transportation, keep power off all time. Failure to keep power off, wheelchair may move unexpectedly due to mistake touching of the controlling devices. Make sure brakes are engaged to prevent wheelchair from moving during transportation. If wheelchair is driven with a person into the lift, switched off after driving into the lift and the person must be seated firmly to ensure that the vehicle does not move.



**Warning!**

It is strongly recommended do not smoke while sitting in wheelchair. Please observe the following safety rules if you insist on smoking in wheelchair: Keep ashes at a safe distance while disposing of your cigarette and make sure it is completely extinguished.



**Warning!**

Manual mode without an attendant is prohibited and it may result in personal injury. To prevent wheelchair out of control and moving on its own, do not switch wheelchair to manual mode especially on any inclined surface. When seating in wheelchair, do not move position by yourself to prevent personal injury may result, Always ask care giver for help if necessary.



**Warning!**

Expect to be seated in a fixed position for longer time, switch off power to keep wheelchair from moving accidentally. Adopt any accessory that may interfere with the operation, as it may cause the wheelchair to move unexpectedly. Keep yourself, your clothes and other objects away from wheels while the wheelchair is in motion. Do not drag any objects behind the wheelchair while it is in motion.



**Warning!**

Do not connect any other device which described in the manual, especially electronic system or apply any other device with the wheelchair battery. When disconnecting the harness, grasp the terminals to prevent damage to the harness. Do not pull the harness directly.



**Warning!**

Before getting in and out of the wheelchair, try to sit as far back as possible in the wheelchair to prevent injury from rollover. Avoid bracing your body on the armrests as it may cause a rollover with injury. **WARNING!** Avoid concentrating your weight on the footrests, it may lead to rollover for injury.



**Warning!**

The wheelchair may come to a sudden stop at any time during operation. Do not operate wheelchair if it runs abnormally or irregularly. Under unlikely events, such as wheelchair turns to unexpected direction, immediately release the joystick and power off at once. Power off immediately while it comes to loss of control or malfunction of the brakes.



## SECURITY GUIDANCE



### Warning!

1. The user must perform all of the procedures in this manual.
2. Do not drive on public highway.
3. No over cross any gap which is over 100 mm (3.94") in width.
4. Never try to overpass obstacle which is over 40 mm (1.57") in height.
5. Wheelchair is suitable for both outdoor and indoor use, hospital, senior center, family or similar circumstances use only.
6. The suitable environment of using electric wheelchair:  
Temperature -10~+50 °C, Atmospheric Pressure 860~1060hPa, Humidity 10% ~ 93%.
7. Power Source Condition:  
Charging Voltage AC (100-240)V  $\pm$  10%, 50  $\pm$  1Hz, Battery Voltage DC 24V (+5%, -10%), Power of Motor  $\geq$ 350W environmental conditions that might be harmful to the wheelchair (e.g. inclines greater than 8 degrees, rain, snow, ice, etc.), such as temperature and humidity.
8. Operate wheelchair after it is under unfolded condition and only allow one person on wheelchair all time.

## Weight limitations

1. The wheelchair is tested with simulation of human model at 180 kgs (397 lbs) load capacity.
2. Your wheelchair is rated for a maximum weight capacity. Please refer to the product specifications table for this limit. Keep in mind that the maximum weight capacity includes the combined weight of the user and any accessories mounted to the wheelchair. Stay within the specified weight capacity of your wheelchair. Exceeding the weight capacity voids your warranty. We will not be held responsible for injuries and/or property damage resulting from failure to observe weight limitations.



### Warning!

- **WARNING !** We are not responsible for any damage and inquiry cause due to over weight.
- **WARNING !** Not to drive on dangerous slopes.
- **WARNING !** Not to drive backwards when going up and down a hill. Max grad ability is uphill 8°.

## Statement

### Indications for use:

**It 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.**

The wheelchair (Model Eagle HD) has a base with aluminium alloy frame, two front wheels, two rear wheels, a seat, an adjustable steering column, a tiller console, two electric motors, an electromagnetic brake, 2 rechargeable lithium batteries with an off-board charger. The movement of the wheelchair is controlled by the rider who operates the throttle lever, speed control dial and handle on the tiller console. The device is installed with an electromagnetic brake that will engage automatically when the wheelchair is not in use and the brake cannot be used manually. The wheelchair only can be operated on the flat road.



1. Please read the following statement.
2. Please read this manual carefully and understand everything clearly before using the Electric wheelchair for the first time.



### Warning!

1. Please do not use the wheelchair in any unclear cases, otherwise, the product may be damaged or people may get hurt. If you have questions, please contact us.
2. Please pay attention to the warning and cautions in this manual. We are not responsible for any injury and damage caused by wrong use of this product and neglect of the warnings and cautions.

## Instructions



### Warning!

1. Improper use will cause death or serious injury.
2. Improper use will cause damage of wheelchair.
3. Comply with the manual to keep wheelchair in good condition.
4. DO NOT make sharp turns at high speed or on inclines or reverse direction abruptly.
5. DO NOT utilize brake release / freewheeling option on any incline without assistance to control motion.
6. To avoid danger of suffocation, keep all the plastic bag in the package away from babies and children. Do not use the plastic bag in cribs, beds, carriages or playpens. The plastic bag is not a toy.

## PRODUCT FEATURES

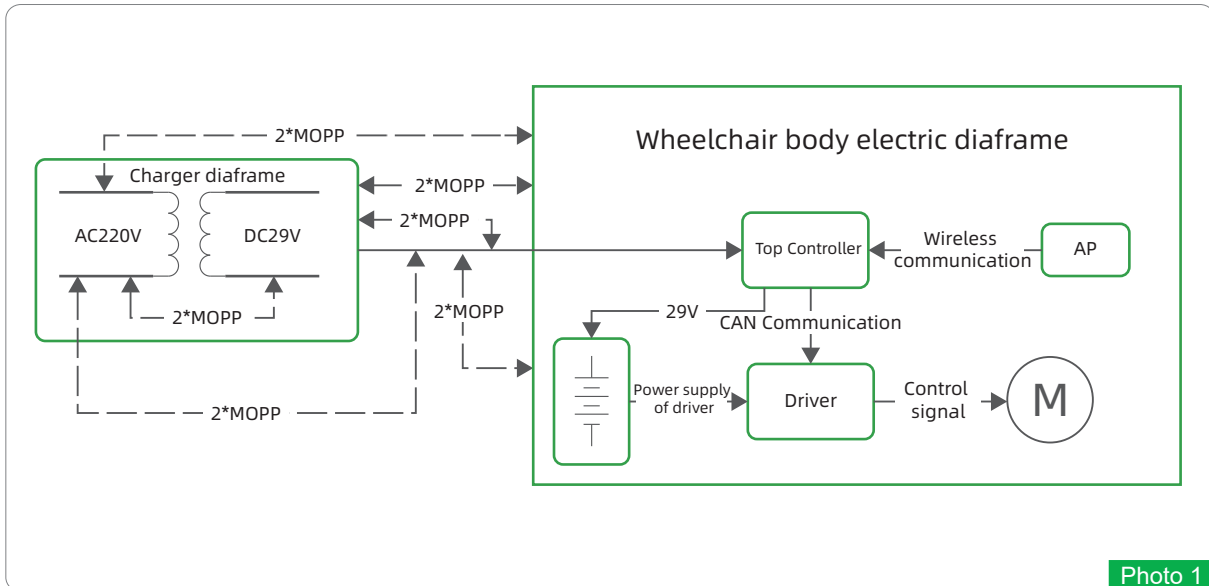


Photo 1

### Product features

- 1.1 Based on Electric Shock Proof Classification: Classified as internal power type device during operation, it is type 2 device while it comes to charging.
- 1.2 Based on classification of Electric Shock Proof: It belongs to B type applicable section.
- 1.3 Based on classification of liquidity proof: IPX 4
- 1.4 Based on the the safety classification of using combustible anesthetic gas mixed with air, oxygen, or flammable anesthetic gas mixed with nitrous oxide: Not AP/APG type.
- 1.5 Electromagnetic compatibility is grouped according to GB 4824: it belongs to Class B of Group 1.
- 1.6 Classification of running mode: Continuously-running mode.
- 1.7 Rated Voltage and Frequency: Internal power DC 24, Charger AC 220 V / 50 Hz.
- 1.8 Input power: 200VA.
- 1.9 There is no applicable protection of defibrillation discharge effect.
- 1.10 There is no signal input .
- 1.11 The product is not belong to eternal installation.
- 1.12 For electrical insulation diagram, please refer to photo 1.

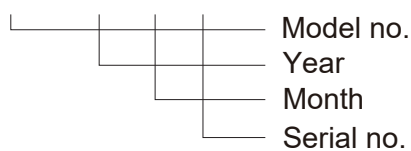
## PRODUCT RELATED EXPLANATION

**【Intend Use】** The product is for people with inconvenience of having ability to walk fully or having or with disabilities (excluding obesity).

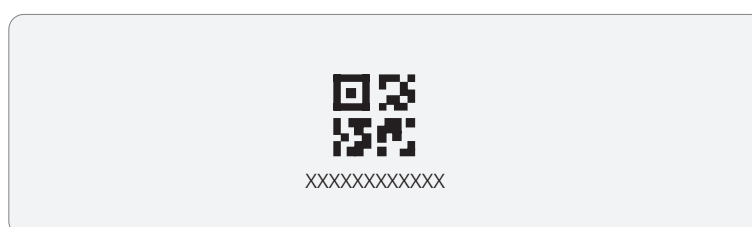
**【Intended use environment】** Electric wheelchair is suitable for operated on concrete, asphalt, and flat indoor surfaces inside homes, hospitals, nursing homes, home surrounding area.

**【Contraindications】** Intended user, with visual weakness, intellectual impairment or neck disease, who is unable to observe environment on the back, should be operated by others. Anyone with paraplegia below the chest, osteoporosis or hypochondriasis is prohibited to use the product.

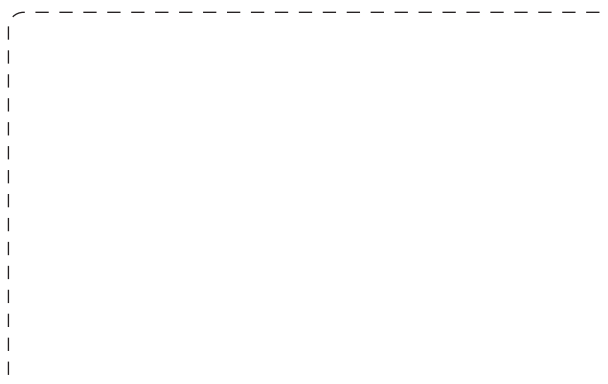
**【Frame No.】** D09-2024-05-070



**【Eternal Identification Mark】** Please refer to QR code on frame



**【Label of the Wheelchair】**

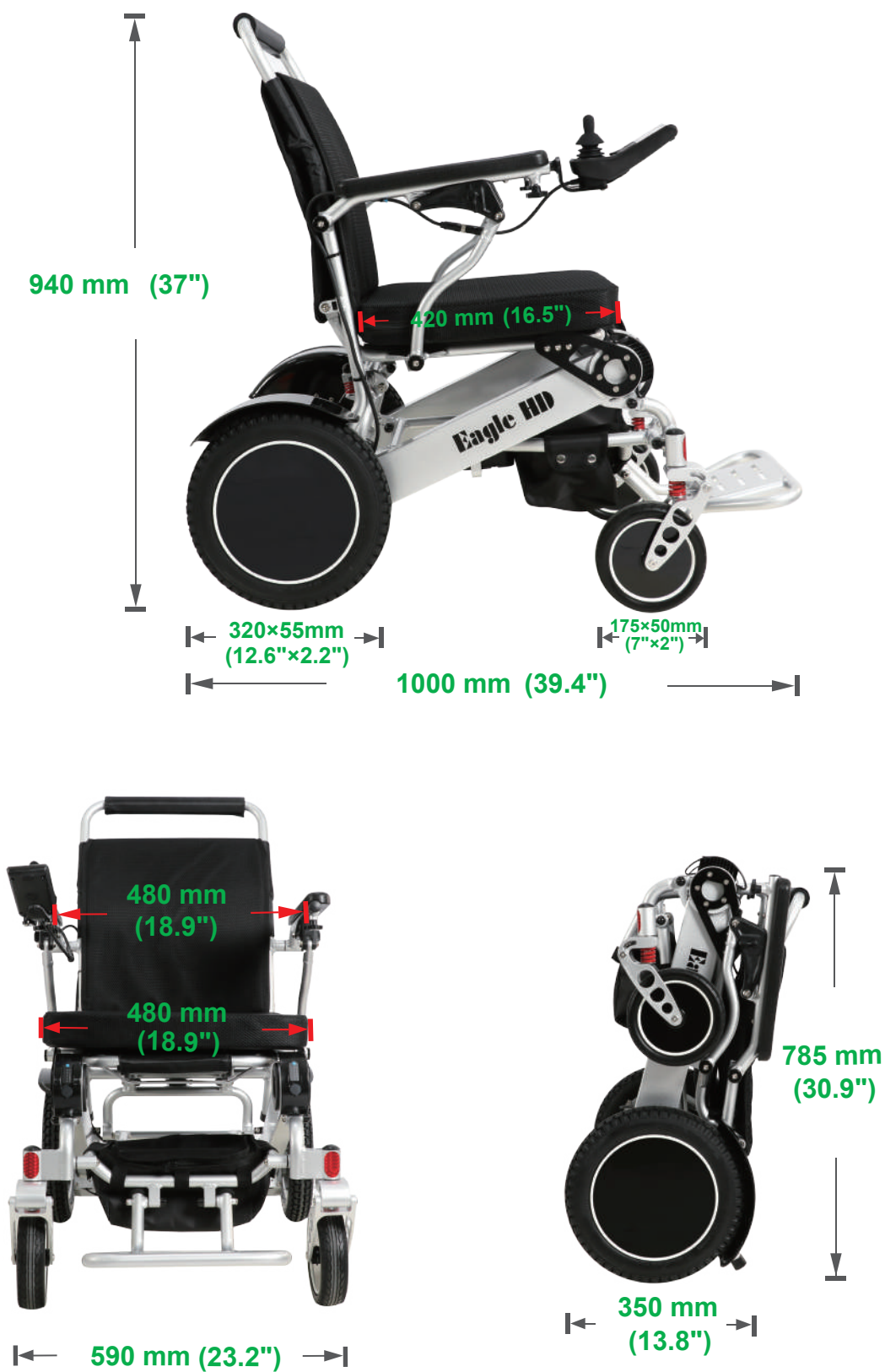


## SPECIFICATIONS



Model	Eagle HD
Material	Aluminum Alloy
Unfold Size (L * W * H) (mm/inch)	1000 × 590 × 940 mm (39.4"×23.2"×37")
Fold Size (L * W * H) (mm/inch)	590 × 350 × 785 mm (23.2"×13.8"×30.9")
Load Capacity	180 kgs (397 lbs)
Motor	250W × 2 pcs brushless motors
Battery	24V 6AH × 2 pcs lithium battery
Max Speed	6 km/h (3.7mph)
Driving Range	20 km (12.4 miles)
Front Wheels	175×50 mm (7"×2") PU solid wheels
Rear Wheels	320×55mm (12.6"×2.2") PU solid wheels
Climbing Slope	Max 8°
Charging Time	6~8 hours
Width Between Armrests	480 mm (18.9")
Seat Width	480 mm (18.9")
Seat Depth	420 mm (16.5")
Seat Height	Front 510 mm (20.1") / Back 480 mm (18.9")
Turning Radius	800 mm (31.5")
Net Weight (Without Battery)	26.3 kgs (57.9 lbs)
Net Weight (Finished Product)	29.2 kgs (64.4 lbs)
Gross Weight With Export Packing	35.5 kgs (78.3 lbs)
Drive Model	Rear Drive
Braking System	Intelligent Electromagnetic Brake

## SPECIFICATION DIAGRAM



## SAFE USE GUIDELINE



### For users



**Keep metal objects away from positive and negative terminals of battery to avoid electric shock and circuit short cut.**

1. Carefully read through the instructions, or receiving training and guided by professional technician or nursing staff who is familiar with the product.
2. Always have full understanding and feel of electric wheelchair prior to start up and operate the wheelchair.
3. Always with help by nurse to practice forwarding, bakcarding, obstacle overcoming and so on, until familiar the operations independently, proficiently and safely.
4. Make sure fully aware of safety if you would like to try a new action.
5. Have a full realization of the area where you would like go with electric wheelchair, keep away and hazards.
6. The maximum capaicity weight of the electric wheelchair is 120 kgs (265 lbs), please do not overload, please do not overload. It is limited to one passenger.
7. Do not drive under consumption of alcohol or fatigue.
8. Please do not drive at night or in poor visibility.
9. Please have inspectionbefore driving, refer to the instruction manual for the first time "Commissioning" and "Pre-operation practice".
10. This wheelchair is not waterproof, please do not expose it under rain or snow, and do not drive when it is rainy or snowy.
11. This wheelchair has certain ability to cross ditches and obstacles, reduce the speed and slowly over the obstacles.
12. Avoid travelling in places with heavy traffic flow such as crowdness and full of vehicles.
13. Fully understand the local pedestrian traffic rules. It may be difficult for others to see you when you are in the wheelchair. Manufactuer is not responsible for any personal injury and/or product damage caused by improper operation.
14. Never switch to manual mode without any attendant. It may result in personal injury. To prevent wheelchair from losing control and moving on its own, do not place wheelchair under manual mode on any inclined surface. When you seating in wheelchair, do not move the position by yourself, personal injury may be occurred. Seek assistance of care giver if necessary.



### For caregivers

1. The power switch must turned off and the freewheel mode lever each on left and right motor is switched to manual mode before pushing the wheelchair by hand, once the levers are switched to manual mode that motors are not work.
2. From behind to push backrest frame while choosing manual push the electric wheelchair. It is safer and it keeps reliable force point to prevent wheelchair from overturning. Make sure the folding and unfolding buckle is securely locked.



3. Keep cooperating with user all time, particularly prior to each action inform user your intention and clearly give your reasons.
4. To protect the back of user from injury while passing through obstacle, user should have kept with right dynamic body posture. Bend your knees slightly in order to keep you back upright.
5. Remind mind user of leaning body against backrest while you are about to lift up the back of electric wheelchair.
6. Never directly go up and down stages or stairs, there is potential danger of falling off or roll over when turning a corner, climbing up and down.
7. Do not go uphill or downhill under manual mode condition of electric wheelchair that could lead to the risk of slipping.

### **Precautions on controller**

**Note: Adjust the installed position of joystick controller (as photo 2) to protect from any risk of bump or falling down.**

1. Inspect and adjust the installation of joystick every six months, as often as it is necessary.
2. Contact with your local dealer or distributor if the control panel of joystick controller abnormal and its operational malfunction.



### **Precautions when electric wheelchair is under not moving status**

1. Power off the electric wheelchair while it is stopped, even it is a short time stopping (Refer to Photo 3). This will prevent any accidental touch of joystick by anyone for the accidental interference on electromagnetic system affect normal use of electric wheelchair.
2. Make sure any helper (say shop assistant) is fully understand the joystick function, there no any accidental touch to prevent sudden move wheelchair is unexpected.
3. If seated in a fixed position for an longer time, please switch off power to prevent accidental movement of the wheelchair. Avoid using any accessory that may interfere with the operation, it may cause wheelchair to move unintentionally and accidental movement of wheelchair.



## Operational environment

1. This electric wheelchair is suitable for good, leveled surfaces. Do not drive under heavy rain, snow, on mud, on rough, on loose, in narrow, on icy surfaces, on treacherous roads or waterways without guardrails, on poor roads, or under icy conditions. Water or excessive moistures may cause electrical parts to malfunction. Do not operate wheelchair when the ambient temperature is below  $-10^{\circ}\text{C}$  or above  $45^{\circ}\text{C}$ .



### Warning!

#### Avoid malfunction of electric wheelchairs:

- Do not place or keep the electric wheelchair under direct impact of water (such as heavy rain) or in a very humid environment.
- Please do not use this electric wheelchair while in bathing, sauna and swimming.
- Please do not use this electric wheelchair near water sources (such as rivers, lakes or oceans).
- Please ensure that the battery charging cover is closed.
- If the joystick is damaged, please replace the joystick device.
- Ensure that all electrical connectors are secured and free of looseness.
- It is forbidden to wash this electric wheelchair with water. If the electric wheelchair is soaked, please remove the battery and dry the electric wheelchair as soon as possible. dry immediately after the electric wheelchair is determined, Insert it into the battery holder for reuse.
- Switch off power of the electric wheelchair before charging, please do not charge below  $0^{\circ}\text{C}$ , please charge while environment temperature is between  $0^{\circ}\text{C} \sim 45^{\circ}\text{C}$ .
- Do not charge indoors from risk of fire. Do not charge with power on to prevent malfunction.
- Prevent the battery from frozen and do not charge frozen battery, charging frozen battery may cause personal injury and battery damage.
- Keep all charger power cables and terminals clean, dry and keep away from moisture sources from damage of electrical system and personal injury.
- This wheelchair is not waterproof, do not expose under rain or snow and do not drive when rainy or snowy. Do not operate wheelchair across waterways. Avoid placing or operating powerchair in an environment where directly hit by water (e.g. heavy rain) or in any very humid environment.
- Do not expose the powerchair to flames. Do not leave the powerchair for long time under low or high temperatures, it will impair the functions of the powerchair.
- Check the electrical components frequently for corrosion.
- Always check the electrical components for corrosion, check all the brakes, wear and tear, and check the wiring harnesses and terminals.

- Check the wiring harnesses and terminals and replace them in time if necessary.
- Do not connect any other device to the electronic system of wheelchair or use the wheelchair battery to activate any other device unless described in the instruction manual.
- When disconnecting the wiring harness, always hold on terminals to prevent damage to the harness. Do not pull the harness directly.

2. When it is unable to avoid operating the electric wheelchair onto wet or smooth ground, please be careful and keep at very slow speed.

- One or two main wheels lose traction, Stop the electric wheelchair immediately to avoid out of control or falling down.
- Any snow, ice, water or oil film on any slope or ramp, please do not drive when come across these situations.
- With doubting and can't confirm the safety, please always ask for helping.
- Keep wheelchair under dry and clean environment. Do not access in showers, bathtubs, pools or sauna. Rain, snow, salt, fog/spray conditions and frozen/smooth surfaces caused rust or corrosion of wheelchair screws or some of the fixtures.
- Long exposure under extreme heat and cold may affect upholstered and non-upholstered parts and battery components damage.

## Suitable surfaces

1. The wheelchair is suitable for travelling on concrete, asphalt, indoor flat surfaces in the vicinity of interiors, hospitals, nursing homes and homes and buildings only.
2. Do not operate the wheelchair on sand, loose soil or rough and rugged terrain to prevent damage of bearings, axles or motor, and possible loosening of fasteners.
3. Do not drive on grass, gravel roads, slopes greater than 6 ° and motorways, and do not operate in rain or snow.
4. Do not drive on public roads.

## Driving on road

**Most countries and regions are illegal for powered wheelchairs to drive on motor vehicle lanes. It is dangerous for electric wheelchairs to drive on roads or parking lots.**

1. When drive at night or in darkness, reflective stickers attached on electric wheelchair are helpful (Refer to Photo 4). For safety concern user can also wear a garment with Reflective material.
2. When come across with other vehicles, make sure the drivers of vehicles notice you easily. Have eye contact with the driver before you continue. Communicate and allow the driver understand your intention until you are convinced that it is safe.



## Safety tips for riding motorized vehicles

1. Do not to drive electric wheelchair through transportation, such as buses, subways, trains, planes and ships.
2. If you must drive an electric wheelchair, you should be accompanied by someone to find a reliable place to park, fasten your seat belt and turn off the power supply of the electric wheelchair.
3. If the user drives the electric wheelchair alone, it is necessary to find a place where the wheels or the whole electric wheelchair can be fixed and parked, so as to avoid injury of sudden braking or traffic accidents.
4. Don't keep the electric wheelchair in the front of any vehicle, as a result of interfering with driving of vehicle driver.
5. To get on and off bus, if necessary to lift the user together with the electric wheelchair, please hold the edge of the seat cushion frame, never hold the armrest or the rear backrest frame.
6. The wheelchair is designed to be driven into lift car for lifting and lowering. Once inside lift, switched off power and the person must be seated firmly to ensure that the vehicle does not move.
7. Do not attempt to operate wheelchair under conditions that described in the manual for example weight training, towing for sports and athletics, fast moving or towing which may result in hazards and excessive stress of the wheelchair.

## Balance on driving

**The electric wheelchair should be kept in balance and at stability to center gravity while driving to avoid overturning during the process of forward and backward. The balance to center gravity is affected by the following factors:**

1. The seat height and angle.
2. Dynamic body position, posture or weight distribution of user.
3. The angle of ramp or slope.
4. Change load and weight distribution of electric wheelchairs by applying backpack or other object.



### Warning!

Please do not make any unauthorised modifications to the wheelchair. Adding accessories may change some of the specifications of the wheelchair such as the total weight, dimensions or the centre of gravity. Be aware that some changes may damage things around you.

Do not alter specifications of your seat. Do not place any cushion or pillow on the seat. This may cause seat unstable and fall off.

If modify or adjust this electric wheelchair required, please consult with your dealer in advance, a modification plan should be authorized by the manufacturer in writing. The modification of electric wheelchair could have additional adjustment to correct the center of gravity. When electric wheelchair has been modified, be especially careful to familiar with the balance point of the electric wheelchair and master the ways to avoid falling or overturning.



## Recommended cloth dressing on electric wheelchair

When you sit in an electric wheelchair and dressing cloth, your body will rotate. In order to make the electric wheelchair more stable, the front caster should be adjusted to the forward position.

Keep yourself, clothings and other objects away from wheels while wheelchair is in motion. Do not drag any objects behind the wheelchair when operating.

## **Precautions for getting on/off electric wheelchairs**

1. When it is ready to seat on the electric wheelchair, please make sure to turn off the power first. If you touch the joystick, it may cause electricity. The wheelchair moves unexpectedly due to unexpected mistake touching.
2. Learn safest way to move your body from your health care professionals, the way to position your body and properly support yourself in the process of moving.
3. Ask for help you until you before you can safely get on and off the electric wheelchair alone.

### **The correct way to get on/off an electric wheelchair**

1. Keep electric wheelchair as close as possible where you want to sit. If possible, use a conversion board.
2. Rotate the front casters as forward as possible.
  - Don't stand on the foot pedal to move your body, it may lead to harm.
  - Make sure your feet are not caught or caught between the gaps of the pedals.
  - Ensure that it is not blocked or interfered by handrails (Refer to Photo 5).
  - Move to the seat as soon as possible, it reduces the risk of missing seat and falling.

**Be careful every time move yourself, have a support point that is not lower than the seat cushion surface.**



Photo 5



## Precautions of hand extending, body leaning and body stretching while seat on wheelchair

Body part extending, leaning and stretching will affect the balance of center gravity of the electric wheelchair, which may cause you to fall or turn over with improper operation. Follow the key points below to reduce the risk of physical injury and damage:

1. While change your body center of gravity including raising your body sideways or leaving seat, please don't lean out of the range of seat cushion of the electric wheelchair.
2. Move forward in your seat, please don't lean over or have inclination (Refer to Photo 6), always keep your hip attach to backrest.
3. Don't keep hands reluctantly to grab things which are far away, in case lose body balance and fall.
4. Under no circumstances should you try to pick it up articles from between your knees or in front of your body (Refer to Photo 6).
5. Don't put pressure on the pedals when your body is extended, in case of falling off caused by falling over.
6. Don't lean against the top of the seat back to prevent from falling and damaging the back.



### Warning!

#### Remember :

Move your electric wheelchair as close as possible to what you want to achieve. Rotate the front casters until they are as forward as possible. This will make electric wheelchair more stable.

#### Note:

1. If you move your electric wheelchair beyond the target you want to reach during this operation, step back and approach it, then returned to original place. The front casters will rotate forward.
2. When you reach the desired position, turn off the power of the electric wheelchair. If the electric wheelchair tilted to one side, hold the handrail tightly with one hand when leaning, This will prevent you from falling.



## Obstacles over passing

**You may need to overcome some obstacles in daily use, including doorsill, elevator, ramp, pit and broken pavement, etc. Improper operation may damage your electric wheelchair, and also cause personal injury.**

1. Note that the threshold is very dangerous. Even a small height may jam the casters and tilt the electric wheelchair or rollover, it is recommended that remove the threshold of the room or cover the threshold to slope. Install a ramp to access door.
2. When you move the electric wheelchair, please carefully check the area you want to pass, make sure the place where you use electric wheelchair could smoothly and safely cross obstacles.
3. Adjust your center of gravity by the following methods: When about to cross an obstacle or pass a section from low to high, slightly tilt your upper body forward. When pass through a section from high to low, upper body should press back.

## Backward

**In reverse extra carefully While rear wheel hits an object, you may lose control of the electric wheelchair and fall.**

1. When driving backwards, please always slow down.
2. Check from time to time to ensure that there are no obstacles endangering safety on the road.

## Driving on incline/slope/hillside

**When on the slope, the balance center of gravity of electric wheelchair will change. Note if it is not sure about the safety of using this electric wheelchair on a slope, please use it with some help, and be sure not to use it alone.**

**Matters needing attention:**

1. For your safety, please don't use this electric wheelchair on a slope with a gradient older than 8.
2. Please don't use electric wheelchair on slippery slopes (such as snow, ice, water or oily film).
3. Please don't use this electric wheelchair when the road surface on the slope has ups and downs (ups and downs, bumps and depressions).
4. If there is a small pit at the bottom of the slope, please do not use this electric wheelchair.

## Weight restrictions

1. The maximum load of this electric wheelchair is 180 kgs (397 lbs), and the load in use should not exceed this maximum load.
2. The bearing capacity of the rear backrest is less than 75 kgs (165.4 lbs), it is not allowed to press down or lift the rear backrest.
3. Under no circumstances, do weight training on this electric wheelchair, even if the user's weight is added with the lifted weight. The sum of the quantity does not exceed the maximum bearing capacity of the electric wheelchair.
4. In use, the load exceeding the maximum load may damage the seat, frame, fasteners, folding mechanism, etc. May seriously hurt. Or other people, may also damage or scrap the electric wheelchair.
5. No warranty is provided for problems caused by the load exceeding the maximum load in use.

## Matters needing attention when going up and down stairs



### Warning!

**This electric wheelchair is not used for going up and down stairs or using escalators.**

#### **1. Always pay attention to the following warnings when using the elevator:**

- Do not use escalators (stepped elevators) between floors to move electric wheelchairs, so as to avoid serious accidents. Personal injury.
- You can use the up-and-down elevator when sitting in an electric wheelchair. Please operate the electric wheelchair after the elevator door is opened, and Ensure that the elevator door is always open when the electric wheelchair enters and exits the elevator.
- When the elevator is unavailable, after the electric wheelchair is transported to the required place, if you need to deploy the electric wheelchair, please Refer to the chapter "Electric Wheelchair Deployment Method".

#### **2. When you want to move an electric wheelchair through stairs between floors, you should operate according to the following specifications:**

- Get off electric wheelchair.
- Before folding electric wheelchair, the upper controller must be closed and removed.
- When moving the electric wheelchair up and down the stairs, do not have any impact on wheelchair.

# INSTALL SETUP

## Components

Your Eagle HD Power Wheelchair will arrive carefully packaged in a cardboard box. Open the top of the box then turn the box on the side for easier pulling out the chair and contents.

Joystick



Chair



Tools



Charger



Lithium battery



Safety belt



Seat cushion



Users manual



1. To expand the Eagle HD Power Wheelchair, grasp the push bar and pull up while holding down on the seat to expand the chair and complete the assembly (Refer to photo 7).





2. Continue to expand the chair into a seated position until you hear a \*CLICK\* indicating it has locked into the seated position (Refer to Photo 8).

3. Locate the seat cushion and back rest cushion provided. Orientate the seat-cushion such that rear of the seat and the Velcro on the bottom of the seat cushion aligns with the Velcro on the seat (Refer to Photo 9) .



4. Next, place the back rest cushion over the top bar and adhere to Velcro on either side of the back rest tension straps. Be sure the pocket is at the rear and the back rest is placed behind the horizontal back bar of the chair (Refer to Photo 10) .

5. Install the controller into the open slot on the arm of the chair, on the right side (if user needed, can change to left side). Tighten knob located under the armrest to secure the controller in place (Refer to Photo 11).





Photo 12

6. Connect the controller wire harness to the CPU wire harness. Take care the line up the pins properly as arrow tip indicate, so that they do not get bent, broken or damaged (Refer to Photo 12).

## Seat belt installation

Seat belt plays a role of restraining displacement and buffering, preventing user from sliding down the seat forward. Seat belt can be adjusted according to the user's comfort. In case of accidents, it will firmly hold the user to the seat to prevent personal injury caused by secondary collision.

### 1. Install seat belt:

Ensure that the seat belt has bound the waist of the body with the lower part of the backrest frame of the electric wheelchair.

### 2. Adjust the seat belt according to user's comfort:

Please bulked up with a click sound

Adjust the safety belt with appropriate length, don't be too tight causing discomfort.

### 3. Unbuckle your seat belt:

Press the button on buckle to unbuckle.



### Warning!

Make sure that the seat belt is properly fixed on the electric wheelchair and adjusted to the most comfortable state for the user. Check whether the seat belt is loose or damaged. If you find a problem, please contact the dealer for maintenance and repair.

## BATTERY SETUP

### Install the battery

Just put the battery to battery shell on both side of wheelchair, hold the battery handle, insert the other side of the battery into the opening of the battery tube until the battery is all the way inside (Refer to photo 13) .



### Remove the battery

Press the soft plastic button on the battery shell ,at the same time pull out the battery (Refer to photo 14) .



**Warning!**

Please ensure that the power to the wheelchair is turned off before performing this operation.

## FOLDING AND UNFOLDING

### **Warning!**

1. Making sure all the attaching parts are fastened properly after any adjustment, repair or maintenance, for avoiding any damage or injury.
2. The wheelchair with certain weight that requires correct way of lifting up to avoid injury. While it is necessary to lift up for moving the wheelchair, it is strongly suggested user get off wheelchair first.
3. If user have to stay in wheelchair for lifting up and moving at the same time, make sure safety is fully secured. Do not hold attaching part for lifting and moving wheelchair.

### Steps for wheelchair folding

1. Hold top of backrest frame with one hand, the other hand lift up the locking control rod at the back of back rest for unlocking.
2. Lift up the front of seat by hand for folding.
3. Push top of back rest and front end of seat together.
4. Fold footrest.



### Steps for wheelchair unfolding

1. Unfold foot pedal first.
2. Hold the top of backrest with one hand, the other hand hold front end of seat.
3. Both hand push away till a "Click" sound heard for completely unfold the wheelchair.





# CONTROLLER

## Control panel

The Eagle HD Power Wheelchair is equipped with a joystick controller. Detail functions as shown.



## Controller and driving tips



### Warning!

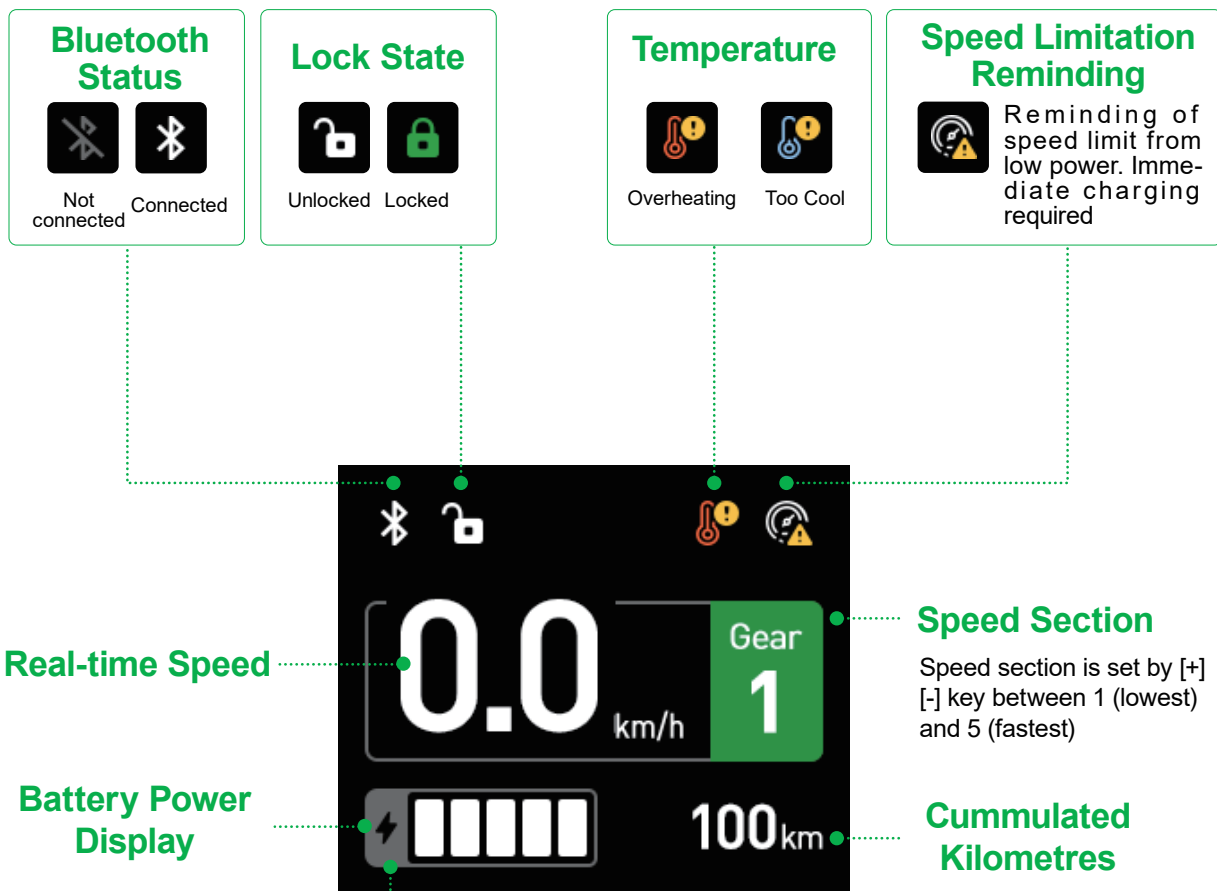
1. Never have sharp turn while at high speed.
2. Unable to follow the "Warning" may cause tilting of the electric wheelchair as a result of injury or product damage.
3. The location of joystick is at lower part of the control panel for controlling the speed and direction smoothly. With 360 ° directional rotation performance, convenience of operation, there is a spring designed for returning to the initial intermediate status.
4. Push the joystick toward the direction desired, the joystick has the function to control the driving proportionally. Greater push, the faster the speed will be. Top speed is limited to 6 km/h (3.7 mph).
5. To slow down the speed of the electric wheelchair, reduce the pushing of joystick forward. The electric wheelchair automatically slow down and adjust direction at slightest way.
6. Learn how to drive electric wheelchair at the very beginning, try at slow speed and move lightly. Gently tilt the joystick forward at lowest speed, the practice will help you learn how to control the electric wheelchair before user familiar fully, including controlling, starting and stopping the electric wheelchair smoothly.
7. Wheelchair may come to sudden stop at any time during operation. If the wheelchair behaves abnormally or irregularly, immediately stop operation. Under the situation that wheelchairs travels in unexpected direction, out of control or the brake is out of order, please immediately release the joystick and press the power off.
8. Do not change the controller settings. If you find any variation to control your wheelchair with your ability, please contact your service provider.

## Joystick operational direction

The joystick allows you to control the forward, backward, left and right turning, acceleration, deceleration and parking of wheelchair.

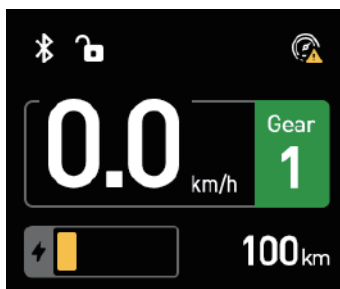


## Screen display



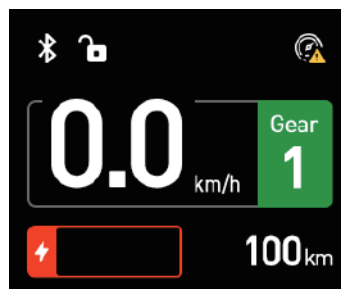
### Low Battery Power

Indication turns yellow with on bar displayed. The speed limit warning icon shows up the upper right corner.



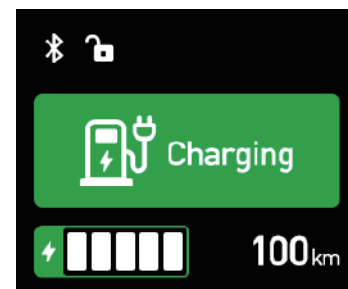
### No Power

The speed limit warning icon at the upper right corner lights up while the battery power is running out.



### Charging Status

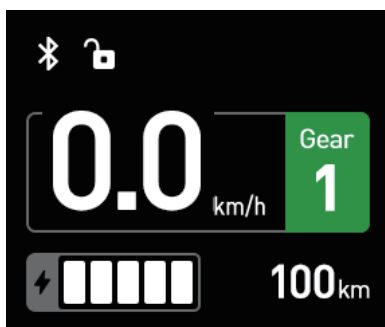
The green icon is flashing all the time with green while charging.



## Screen display

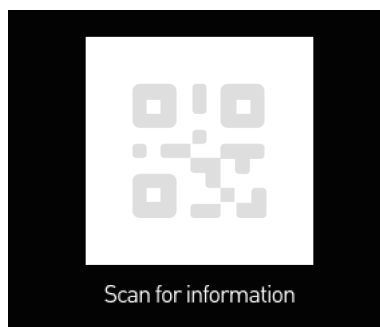


Press the left or right button for 5 seconds to select the page desired, three pages available in total



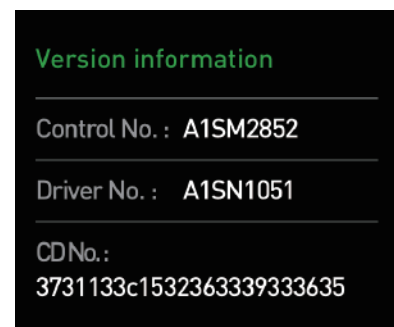
### Main Page

The first displayed page when power on



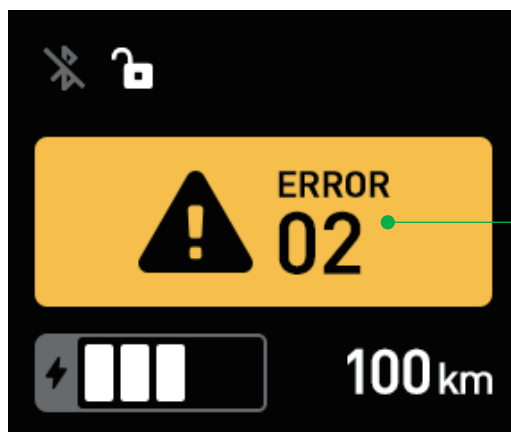
### QR Code Page

Scan code to obtain information, such as device ID



### Equipment Number Page

Display information of device ID and firmware version



### Fault Reminding Pup Up






Fault code reminding please refer to faults and troubleshooting for the cause and solution. If you are unable solve the trouble yourself, please contact after sales at once.

\* 【 Common faults and troubleshooting methods 】 Please refer to the page 43.

# CHARGING BATTERY

## Use of battery

Your Eagle HD wheelchair will arrive with full charged battery, which should last about 20km (12.4 miles) under normal operation conditions. We recommend that you run the Eagle HD Power Wheelchair until the battery are completely dead in order to get the most out of the battery life.

-  Do not use battery with different capacities, brand and type while replace the battery. The original battery should be replaced and all existing battery should be replaced together. Do not mix the old and new battery.
-  The positive and negative electrodes of the battery cannot be connected with conductive objects such as metal, which may cause short circuit or electric shock.
-  Keep away from flammable material. Do not approach or be exposed to heat sources, such as open flames or sparks. When transporting batteries, do not place them with flammable or combustible material.
-  There are corrosive chemicals in the battery. It is forbidden to disassemble the battery without permission.
-  It is not allowed to short-circuit the battery or put the battery into the fire to avoid explosion accidents.

## First charging method

Charge the battery at the same time via controller charge port.

1. Turn the power off.
2. Plug in the charger to the controller port (Refer to Photo 15) , please notice connect the charger cable first, then turn the power on.

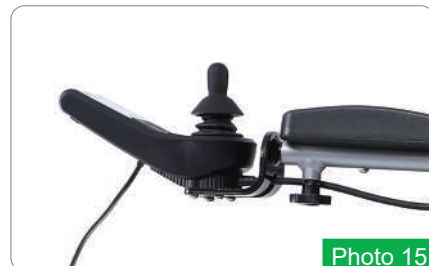


Photo 15



Do not charge continuously over 12 hours through charging port of controller to prevent over charging while the battery is connected to the socket contact on the frame.

1. Allow your wheelchair to charge for 6-8 hours full charge or when the light on the charger turns green, which means your batteries are full charged.
2. Should you require them, the lights and what they mean are located on the back of the charger.



Definition of what the light colour mean



**Charger light**

**GREEN** colour indicates **fully charged**.

**ORANGE** --battery is **charging**.

## Second charging method

1. Turn off the main power.
2. Flip open the charger port protector on the front of battery.
3. Use the secondary charger pigtail to adapt the battery charger to plug into the battery directly (Refer to photo 16).



Photo 16

## **Warning!**

1. Keep charging time of the battery in 6-8 hours when it comes to off board charging to avoid over charging.
2. Immediately unplug charger from power source as soon as indicating light on charger turns green.
3. No operation of wheelchair allowed while it is in the process of charging battery. It is required to unplug charger from power source prior to operate wheelchair.
4. Charging cycles is 500 times for single battery life extend.
5. Please use the factory original standard charger ONLY!

## Charging tips



### Warning!

1. When charging electric wheelchair, it is better direct charge the batteries through joystick controller. Don't charge battery while battery in vehicles. All batteries must be fully charged before plugged in electric wheelchairs.
2. Do not directly connect the battery terminal with the battery clipper or metal cable trying to charge the battery.
3. Never use electric wheelchair while battery is charging. Do not choose non-standard power supply (such as generators or inverters), even their voltage and frequency meet the requirements.
4. Keep power cord not be trampled, squeezed or severely bent, especially at the port. Prevent power cord from being yanked or knotted.
5. Keep children and pets away from the power cord, and don't let them bite and chew the power cord. Please hold the plug for pulling it out to unplug the power cord.
6. Please unplug the charger immediately and contact the dealer or professional technical personnel whence circuit breaker (circuit fuse) is stepped many times during charging,
7. Always choose original charger for charging, never use other charging devices in stead.
8. Do not charge if temperatures is below 0°C. Porper charging ambient temperature is recommended 0° C ~ 45° C. Do not charge indoors in case of fire. Do not charge while the controller is turned on to avoid malfunction and fire.
9. Keep all charger power cords and connecting terminals clean and dry. Keep-away from sources of moisture to prevent damage to the electrical system and any personal injury.
10. Keep battery from freezon and do not charge a frozen battery, charging a frozen battery may cause personal injury and battery damage.
11. Keep all power cord terminals of charger clean and dry. Away from sources of moisture to prevent damage of electrical system and any personal injury.



### Warning!

1. Warning: Please stop driving and immediately charge immediately or replace with fully charged battery, when the power red indicator is on.
2. Warning: Please disconnect the charger immediately and do not touch the charger plug if the plug to the controller falls off during charging state. Please do not add additional batteries and make any modifications.
3. Charging in a place that complies with the fire control regulations, supervised during the charging process.
4. The indications, such as warranty and performance of battery, mentioned in this manual are specific about lithium-ion battery.



1. Charge the battery before first time use the wheelchair will reduce the service life of the battery. (It is highly recommended use up the electricity of battery for the first time then charge to full, this way could completely activate the battery).
2. New battery must be fully charged for the first time to ensure that the battery is fully activated after the very first timing use.
3. It is recommended that time for the battery charging is about 6-8 hours until the orange light on the charger turns green.
4. Always charge the battery as long as the electric wheelchair is used. Charge the battery after use until it is full charged completely. If the electric wheel will not be used for a long time, please charge the electric wheelchair once every 2 months, about 80% charge of the electricity each time. If there is no electricity for a long time, the battery will be damaged and will be unusable, and the electric wheelchair will be seriously damaged.
5. Never use batteries with wrong specifications, voltages and capacities, it may damage your electric wheelchair, and affect the electric wheelchair to stay at the best performance and effect.
6. The charging cycle of the battery is 500 times or so, service life is 2-5 years. If the battery is damaged, always required to be replaced.

### **Over discharge protective device**

When the battery of the electric wheelchair is exhausted, over discharge Protective Device will protect the battery from over discharged. When the over discharge Protective Device is activated, the maximum speed will be decreased. At this time, please charge the battery as soon as possible.

### **Over current protection**

This system is included on the wheelchair and will shut off the current from the batteries if triggered, thus shutting the motor down, which will ensure that the motor and battery do not experience and damage.

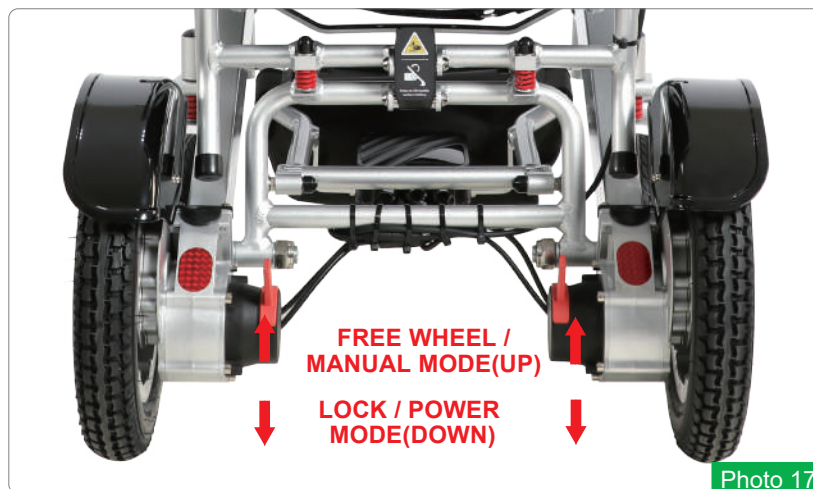
## Cleaning of battery socket

1. Check whether there is corrosion at the positive and negative poles of the battery.
2. Check whether the battery and plastic battery box are assembled in place.
3. Use a battery cleaning tool to clean the battery socket.
4. Carefully clean up all metal particles and dust.
5. Do not let the battery material contact with skin, cloth or other item. Acidic substance that cause harm or damage and burn. If the material contacts skin, immediately wash the skin thoroughly with cold water. If the situation is serious or with eye contact, please seek medical attention immediately.

## FREE WHEEL MODE

In order to have a care giver push the power wheelchair, it must be put in Free Wheel Mode. This mode disengages the drive mechanism to the wheels, making them free to push manually. We recommend that you turn off the power of wheelchair when in this mode, both for safety and to save battery power.

1. To put the Eagle HD in Free Wheel Mode, come to a full stop and turn off the power on the controller.
2. Push down on the two red levers located on each motor as shown. (Refer to Photo 17).



## TRANSPORTING ZEUS

Never transport the power wheelchair in a tie up system (electric mode), as the Eagle HD Power Wheelchair is not compatible with them. Never sit in the wheelchair and be transported in moving vehicle. Do not place the folded power wheelchair in the front seat with driver where it could move and slide.

1. Turn off the power from the controller.
2. Remove seat cushion.
3. Push down the red button with one hand and push the top of backrest toward front with another hand (Refer to Photo 18).
4. Fold the wheelchair.
5. When folded, the seat cross bar can be used to move the wheelchair easily (Refer to Photo 19).



Photo 18



Photo 19

### Direction for use

1. **Transportation requirements:** Batteries should be packed into boxes for transportation. During transportation, severe vibration, impact or extrusion should be prevented, and the batteries should be protected from the sun and rain, so that Transport by car, train, ship, plane (Never exceed 25% charge of battery when it comes to aircraft transportation and keep lower than 50% charge of battery for other vehicle transportation. ) and other means of transportation.
2. **Storage requirements:** The battery should be stored in a clean, dry and ventilated room with an ambient temperature of  $-5^{\circ}\text{C} \sim 35^{\circ}\text{C}$  and a relative humidity of not more than 75%. Avoid contact with corrosive substance and keep away from fire and heat source.
3. The main material of this product is aluminium alloy. The product can be used to replace the running and walking function of potential user with mobility disorder having no trauma. It belongs to non-sterile medical device, sterilization/disinfection process is not applicable. Cleaning method of the product: wipe with clean and soft paper or cloth. Do not clean the wheelchair directly with water or never direct contact with water.
4. Discarded batteries shall be collected and treated by qualified party, and shall not be thrown at random, causing environmental pollution, so as to minimize risks.
5. Never transport the wheelchair or battery with flammable materials. For safer transportation, keep power off all time. Failure to do this, mistake touching of controlling devices will lead move of wheelchair accidentally. Make sure brakes are all engaged, it will prevent wheelchair stable during transportation.

## WARRANTY

1. This warranty is valid from the date of factory and valid for the replacement of dysfunctional parts only. Any parts under warranty will be replaced and shipped to your door. Any service and labor fees, if applicable, to replace parts under warranty must be paid by the user.
2. Due to its straightforward design, most parts can be easily exchanged by the end user without a professional service tech required. However, it is always recommended you seek professional help for maintenance and service, to make sure the work is done properly.

### Under warranty

Chair frame	3 years	Motors	1 year
Controller and CPU system	1 year	Battery	6 months
Wear parts: Includes tires, seat and back rest, armrests, and support straps.			3 months

#### The warranty does not cover:

1. Products damaged by user negligence.
2. Products damaged accidentally.
3. Products damaged intentionally.
4. Products that have been subjected to negligence.
5. Products that have been subjected to abuse.
6. Products that have been improperly stored.
7. Products that have been improperly handled.
8. Products that have been improperly operated.
9. Products that have experienced general misuse.
10. Products that have been modified in an unauthorized, unapproved way.

**Warranty is non-transferable and only valid for the original wheelchair purchaser.**

**The company reserves the right to make any change and improvement without prior notice.**

**It reserves and also the property of models and forbids their reproduction, even partial.**

## TROUBLE SHOOTING AND MAINTENANCE

The following represents the most common questions asked about the fold power wheelchair Eagle HD with regard to every day use; check this helpful guide or the operator's manual for more information if you have a question about using your power wheelchair.

Question	Possible causes	Answer
Why is there no power to the wheelchair ?	<ol style="list-style-type: none"> <li>1. Controller system power is not connected.</li> <li>2. Controller system CPU and joystick are not connected.</li> <li>3. Battery power is too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect the battery.</li> <li>2. Ensure all connections between joystick, CPU and battery are securely tightened.</li> <li>3. Charge the battery.</li> </ol>
Why is the wheelchair noisy or vibrating when turning ?	<ol style="list-style-type: none"> <li>1. Speed is set too low.</li> <li>2. Motor is damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise the speed. At low speeds, the motor may sound or feel strained.</li> <li>2. Replace the motor.</li> </ol>
Why can't I charge the battery?	<ol style="list-style-type: none"> <li>1. Charger light does not turn on.</li> <li>2. Charger light is always green.</li> <li>3. Charging time is stopped before full charge is complete.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the charger.</li> <li>2. Battery is not connected, or may need to be replaced.</li> <li>3. Capacity of battery as decrease over time. This is normal.</li> </ol>
Why can't I connect the controller?	<ol style="list-style-type: none"> <li>1. Connector pins (male) on the controller have become bent and misaligned with connector holes (female) on the CPU connector.</li> </ol>	<ol style="list-style-type: none"> <li>1. Using a small tool, carefully straighten the connector pins (male) on the controller to align with holes (female) on the CPU connector.</li> </ol>

The battery of Power Wheelchair is an extremely important part, the battery life determines the service life of the wheelchair. Try to keep the battery saturated after each use, to develop such a habit, it is recommended to conduct a deep discharge every month! If you don't use a Power Wheelchair for a long time, place it in a place to avoid bumps and pull out the battery to reduce discharge. It is also best not to overload in the process of use, which has direct harm to the battery, so it is not recommended to overload and avoid directly affecting the service life of the battery (Refer to Photo 20).



Photo 20



Photo 21

After the Power Wheelchair is used for a period of time, it is necessary to check the screw loosening of the Power Wheelchair to ensure the connection and operation between the parts and components, and to avoid accidents (Refer to Photo 21).

After being wet by water. Electric walking vehicle should be wiped with dry rag in time, especially the part containing electrical circuit, so that the electric walking vehicle can keep dry and clean (Refer to Photo 22).



Photo 22



Photo 23

If the Power Wheelchair is on the beach, gravel or wet road, if there is sand, mud or gravel on the tire, it should be cleaned in time to prevent some parts from rusting or the tire running badly, which will affect the beauty and driving comfort and safety (Refer to Photo 23).

Power Wheelchair should avoid scratching seat leather and PU hand-rails and plastic ornaments with sharp objects, thus affecting the beauty of the whole vehicle (Refer to Photo 24).

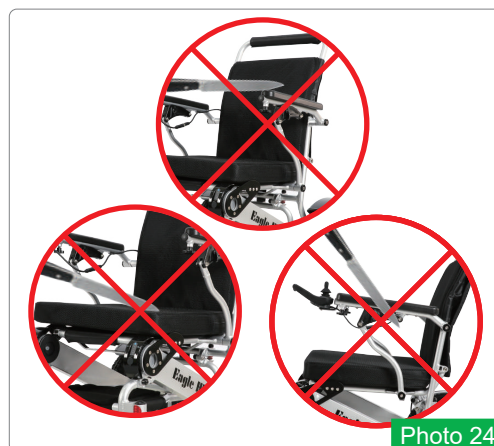


Photo 24



Photo 25

Electric walking vehicle should be placed in a place where the sun can not shine, please avoid sunlight, otherwise it is not only harmful to the battery, but also has a direct impact on the service life of plastic parts and stickers of electric walking vehicles (Refer to Photo 25).

Power Wheelchair are relatively simple to operate, avoid driving by children or adults without experience in Power Wheelchair. Drivers should avoid unnecessary large-scale body movements or sleep on Power Wheelchair, which may lead to accidental danger. In order to avoid this situation, it is best to unplug the power switch key when not in use. It also avoids the risk of theft (Refer to Photo 26).

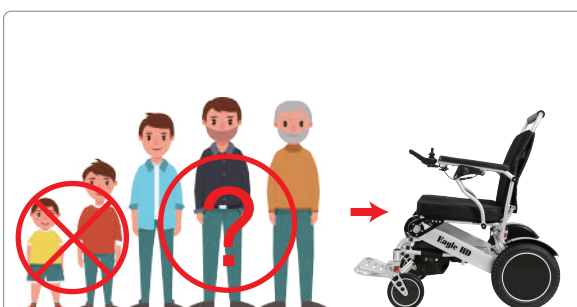


Photo 26

**Maintenance tool** Simple tool kit is accompanied with Wheelchair in Wheelchair packing, while dry soft fabric and so on are handy and easy to get in the market are not included. The period of maintenance is vary depending on the real use frequency and situation, there is no specific rule.



## Maintenance frequency

### 1. Daily check

Turn off the controller, check the lever, make sure the lever is not bent and broken, and be sure to return to it when you release it. Check the nibber base of the lever for damage. Just check the base and do not repair it. If you have any questions, please contact your dealer.

### 2. Weekly check

Disconnect the controller connector and charger connector from the battery box. Check the connection and for corrosion. If necessary, please contact the dealer.

Make sure that all parts of the controller are tightly connected to the product, do not screw the screws too tightly.

Check the brakes. This inspection must be carried out on a level surface and there must be enough open space.

Check the brakes:

- Turn on the controller. After one second, check the battery indicator to make sure the battery is powered.
- Slowly push the lever forward to guide you to hear the "beep" of the brakes, and immediately release the lever. You must hear the brake operation sound after each lever is pushed for a few seconds.
- Repeat the operation three times to push the controller to the rear, left and right sides for inspection.

### 3. Monthly check

- Check the anti-roll wheel for excessive wear and replace the wheel if necessary.
- Check the wear of the front wheels and drive wheels. If maintenance is required, please contact your dealer.
- Check the front fork for wear and looseness, which may indicate that adjustment is needed or the bearing needs to be replaced. Please contact the dealer for repair, or replacement.
- Keep the product clean and do not leave debris, such as food, beverages, residues, etc.

#### **4. Storage**

This product should be stored in a cool and dry environment. Do not store it at the extreme temperature. If it cannot be stored under the above conditions, it may cause rusting of the wheelchair, and damage to the electrical system. Storage conditions: temperature: -40 ~ +65 degree C; Relative humidity: W80%; Atmospheric pressure: 86kPa ~ 106kPa.

If you discover a problem, require for parts supply (Such as battery, tire, charger and so on) contact your authorized local Dealer or Distributor for assistance, alternatively direct contact with manufacturer with the following Contact Information.



**Discover Your Mobility Inc.  
11055 E 9 Mile Rd Warren Mi 48089**

**[www.discovermymobility.com](http://www.discovermymobility.com)**

Highly suggest that use original parts from supplier to avoid any potential issues or failure of function of wheelchair, please always consult with authorized local Dealer or Distributor first.

## DIAGNOSTICS

Fault code	Cause of failure	Inspection and handling methods
<b>01</b>	Abnormal joystick position	Release joystick for returning to normal position.
<b>02</b>	Electromagnetic Braking is not engaged	Engage the brake.
<b>12</b>	Joystick signal communication error	Check all the wheelchair wiring harness.
<b>14</b>	Joystick is out of order	Damage of joystick, replace new one.
<b>22</b>	Battery signal communication error	Inspect the connection of battery quick release plug.
<b>23</b>	Low temperature charging fault	Keep wheelchair under higher temperature condition for charging while ambient temperature is too low. Power on again.
<b>24</b>	Low temperature discharging fault	Keep wheelchair under higher temperature condition for discharging while ambient temperature is too low. Power on again.
<b>25</b>	Charging temperature is too high	Recharge again after the battery temperature is dropped.
<b>26</b>	Charging current fault	Charger is out of order, please replace the charger.
<b>27</b>	Discharging temperature is too high	The temperature of the battery is too high internally. Turn it off and wait, then turn it on again.
<b>28</b>	Discharge current fault	Unplug the battery and replace it.
<b>29</b>	Over voltage fault	If the battery voltage is too high, turn it on and leave it for a while. Then turn it off and turn it on again.
<b>30</b>	Under voltage fault	The battery voltage is too low, charging is required.
<b>31</b>	Charging failure	Replace the charger. If it the fault still there, replace a new battery.
<b>42</b>	Controller signal communication abnormality	Check connection of signal communication interface.
<b>43</b>	Left drive is not connected.	Check whether the connector between motor and controller is well connected.
<b>44</b>	Left drive over temperature	Power off. Wait for a few minutes before turning it on again. If the fault is still there, replace the driving device.

Fault code	Cause of failure	Inspection and handling methods
<b>45</b>	Left drive is overload	Power off and wait for a few minutes before turning it on again. If the fault does not disappear. Replace the drive.
<b>46</b>	Left drive is abnormal	1. Inspect the left drive lever is at right position. 2. Inspection the connecting wire is well connected.
<b>47</b>	Left motor is out of order	Inspect the connection of driver and motor.
<b>48</b>	Left motor MOS failure	Replace the motor driver.
<b>49</b>	Left motor phase fault	Inspect the connection of driver and motor.
<b>50</b>	Left motor is locked	Release joystick. If the fault does not disappear, replace the motor.
<b>51</b>	Left motor phase current offset value is fault	Replace the motor driver.
<b>52</b>	Left motor main wire current fault	Replace the motor driver.
<b>53</b>	Left motor is not connected	Inspect the connection of driver and motor.
<b>54</b>	Right drive is not connected	Inspect the connection of driver and motor.
<b>55</b>	Right drive over temperature	Power off. Wait for a few minutes before turning it on again. If the fault does not disappear. Replace the drive.
<b>56</b>	Right drive over current	Power off and on again. If the fault does not disappear, replace the drive.
<b>57</b>	Right brake fault	Inspect the connection of driver and motor.
<b>58</b>	Right motor is out of order	Inspect the connection of driver and motor.
<b>59</b>	Right motor MOS failure	Replace the motor driver.
<b>60</b>	Right motor phase fault	Inspect the connection of driver and motor.

Fault code	Cause of failure	Inspection and handling methods
<b>61</b>	Right motor is locked	Inspect the connection of driver and motor.
<b>62</b>	Right motor phase current offset value is fault	Replace the motor driver.
<b>63</b>	Right motor main wire current fault	Replace the motor driver.
<b>64</b>	Right motor is not connected	Check whether the driver and motor connectors are loose.
<b>65</b>	Controller power is cut off	Turn the vehicle off and power on again.
<b>66</b>	Handrail position fault	Adjust proper handrails position.
<b>72~99</b>	Drive failure	Replace driver.

FCC IDENTIFIER: **2ABU6-MS50SFA**



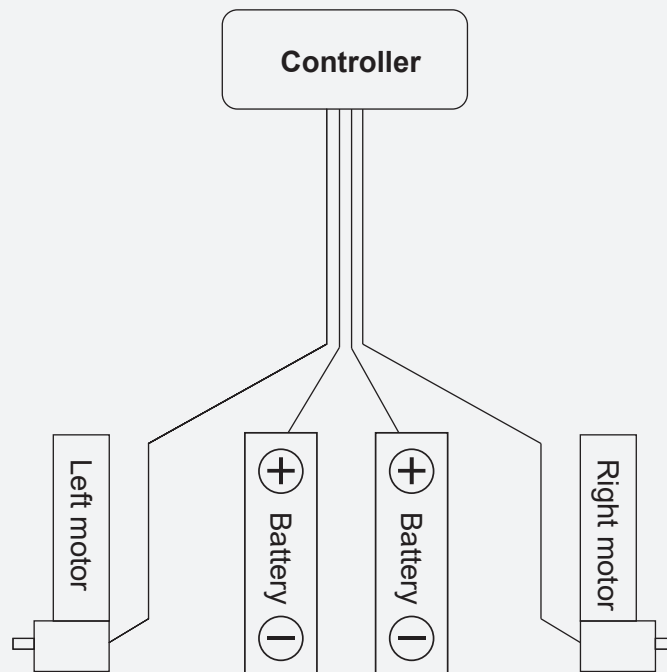
Any modification or changes on product which are not approved by manufacturer, user will have no right of operating.

This device complies with Part 15 of the FCC listed. Operation is subject to the following two conditions:

- (1) This device will not cause harmful interference.
- (2) This device accept any interference including interference comes from accidental operation.

## ELECTRICAL WIRING DIAGRAM

Electrical wiring diagram



## ELECTROMAGNETIC INTERFERENCE & COMPATIBILITY



1. Eagle HD Power Wheelchair meets the electromagnetic compatibility requirements of IEC60601 standards.
2. The user shall install and use according to the EMC information provided in the attached documents.
3. The portable and mobile RF communication equipment may affect the performance of electric wheelchair and avoid strong electromagnetic interference when using, such as close to mobile phones, microwave ovens, etc.
4. The guide and the manufacturer's statement are detailed in the annex.



### Warning!

1. Keep the equipment or system away from other equipment or systems. If it is necessary to stacked on top of ,or close to other equipment, must be observed and verified to function properly of the configuration. When the power of wheelchair is on, do not operate portable transceivers, receivers, radios such as Citizen Band (CB), or turn on personal communication devices such as cellular phones while the power supply is on.
2. Though the wheelchair enhances capability of anti-interference, please observe the following rules when using the powerchair to keep away from sources of radio wave emissions, such as radio and television stations.
3. While wheelchair comes to be abnormal during operation, turn off the power promptly and contact the manufacturer at once.
4. Do not make any alteration of wheelchair, including adding or taking off accessories, in order to ensure anti-interference capability.
5. The adoption of accessories and cables differed from original maker, may result in increased emissions or reduced immunity of the equipment or system.


Project	Cable length (m)	Whether or not shielded	Remark
POWER CORD	1.4	NO	/
CHARGER OUTPUT LINE	1.1	NO	/
EXTENSION CORD	0.12	NO	/



Guidelines and manufacturer's statement-Electromagnetic Emission		
<p>Eagle HD Power Wheelchair is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment.</p>		
Launch test	Compliance	Electromagnetic environment-Guidelines
IEC 60601 RF launch	1	Eagle HD Power Wheelchair only uses RF energy for its internal functions. Therefore, its RF emission is very low and may not cause any interference to the nearby electronic equipment.
IEC 60601 RF launch	B	Eagle HD Power Wheelchair is suitable for domestic use and all facilities directly connected to the public low-voltage power supply network for domestic use.
IEC 60601 Harmonic emission	A	
IEC 60601 Voltage fluctuation/ flicker emission	FIT	

Guidelines and manufacturer's statement-Electromagnetic Immunity			
Eagle HD Power Wheelchair is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment.			
Anti-interference measurement	IEC60601 Test Level	Coincidence level	Electromagnetic environment-Guidelines
Electrostatic discharge (ESD) ISO7176 IEC60601	±6 KV Contact discharge ±8 KV Air discharge	±6 KV Contact discharge ±8 KV Air discharge	The floor should be wood, concrete or ceramic tile, and if the floor is covered with synthetic materials, the relative humidity should be at least 30%.
Electrical fast transient burst ISO7176 IEC60601	±2 KV To the power cord	±2 KV To the power cord	The power supply in the hospital or in the commercial environment should be of typical quality.
Surge ISO7176 IEC60601	±1 KV Differential-mode voltage ±2 KV Common mode voltage	±1 KV Differential-mode voltage	The power supply in the hospital or in the commercial environment should be of typical quality.
Voltage sag, short interruption and voltage variation on power input line  ISO7176 IEC60601	<5% UT, Last for 0.5 circuits (on UT,>95% sag) 40% UT, Last for 1 circuit (on UT,60% sag) 70% UT, Last for 25 circuits (on UT,30% sag) <5% UT, Last for 5 seconds (on UT, >95% sag)	<5% UT, Last for 0.5 circuits (on UT, >95% sag) 40% UT, Last for 1 circuit (on UT,100% sag) 70% UT, Last for 25 circuits (on UT,30% sag) <5% UT, Last for 5 seconds (on UT, >95% sag)	The power supply in the hospital or in the commercial environment should be of typical quality. If the users of electric wheelchair need continuous operation during power interruption, uninterruptible power supply or battery power supply is recommended.
Power frequency magnetic field (50/60Hz) ISO7176 IEC60601	30 A/m	30 A/m	The power frequency magnetic field should have the horizontal characteristics of power frequency magnetic field in typical commercial or hospital environment.
Note: $U_T$ refers to the AC network voltage before the test voltage is applied.			

Eagle HD Power Wheelchair is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment.

Anti-interference measurement	IEC60601 Test Level	Coincidence level	Electromagnetic environment-Guidelines
RF conduction ISO7176 IEC60601	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communication equipment shall not be used closer to any part of the electric wheelchair, including cables, than the recommended isolation distance. The distance shall be calculated by the formula corresponding to the transmitter frequency. Recommended isolation distance $d = 1.2 \sqrt{P}$
RF radiation (charger) ISO7176 IEC60601	3 V/m 80 MHz to 1.0 GHz	3 V/m	$d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 1.0GHz
RF radiation (wheelchair) ISO7176 IEC60601	20 V/m 26 MHz to 2.5 GHz	20 V/m	$d = 0.2 \sqrt{P}$ 26 MHz to 800 MHz $d = 0.4 \sqrt{P}$ 800 MHz to 2.5 GHz Where P is the maximum output rated power of the transmitter provided by the transmitter manufacturer, in watts (W), and d is the recommended isolation distance in meters (m). <sup>B</sup> The field strength of the fixed RF-transmitter is determined by surveying the electromagnetic field A. in each frequency range, B should be lower than the coincidence level. Interference may occur near equipment marked with the following symbols. 

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

Note 2: These guidelines may not be suitable for all cases where electromagnetic propagation is affected by absorption and reflection of buildings, objects and human bodies.

<p>a. If the fixed transmitting airport is strong, such as the base station of wireless (cellular / cordless) telephone and ground mobile radio, amateur radio, am (amplitude modulation) and FM (frequency modulation) radio broadcast and television broadcast, Eagle HD Power Wheelchair is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment, then the electric wheelchair should be observed to verify It can operate normally. If abnormal performance is observed, supplementary measures may be necessary, such as reorientation or repositioning of the electric wheelchair.</p> <p>b. The field strength should be less than 3 V/m in the whole frequency range of 150 kHz to 80 MHz.</p>					
Recommended separation distance between portable and mobile RF communication equipment and electric wheelchair.					
Eagle HD Power Wheelchair is expected to be used in an electromagnetic environment where radiated RF disturbances are controlled. According to the maximum output power of communication equipment, the buyer or user of electric wheelchair can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitter) and electric wheelchair.					
Rated maximum output power of transmitter/W	Isolation distance corresponding to different frequencies of transmitter/m				
	150 kHz ~ 80 MHz $d = 1.2 \sqrt{P}$	80MHz ~ 800 MHz (Charger) $d = 1.2 \sqrt{P}$	800 MHz ~ 2.5 GHz (Charger) $d = 2.3 \sqrt{P}$	26MHz ~ 800 MHz (Wheelchair) $d = 0.2 \sqrt{P}$	800 MHz ~ 2.5 GHz (Wheelchair) $d = 0.4 \sqrt{P}$
0.01	0.12	0.12	0.23	0.02	0.04
0.1	0.38	0.38	0.73	0.06	0.13
1	1.2	1.2	2.3	0.2	0.4
10	3.8	3.8	7.3	0.63	1.26
100	12	12	23	2	4
<p>For the rated maximum 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 output rated power of the transmitter provided by the transmitter manufacturer, in watt (W).</p> <p>Note 1: At 80 MHz and 800 MHz frequencies, the formula for the higher frequency range is used.</p> <p>Note 2: These guidelines may not be suitable for all cases where electromagnetic propagation is affected by absorption and reflection of buildings, objects and human bodies.</p>					

## WARRANTY CARD



### Warranty Registration Card

User Name		ID No.	
Address		Phone No.	
Model		Product No.	

Purchasing Date	(Month) (Day) (Year)
Manufacturer	
Distributor	(Stamp or signature)
Distributor (Phone, Address)	

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## Eagle HD



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