



**TRAVEL-LITE WHEELCHAIR  
USER MANUAL**

## PRECAUTIONS

Thank you for buying Royale Medical Travel Lite folding wheelchair. We sincerely hope that it could bring you a convenient life and spiritual enjoyment. Please read the instructions before using the wheelchair in order to operate and maintain properly. Royale Medical nor its dealers assume no responsibility for personal injury or property damage sustained by or through the use of this product.

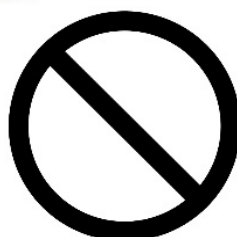
Please pay attention to the following content with these warning symbols, failure to take precautions could result in serious injuries, it can also damage or decrease the life expectancy of Travel Lite folding wheelchair.

This chair is suitable for Disabled, handicapped and elderly

This chair is suitable for 1 person under 150kg

Wheelchair class hierarchy B

Complies with EN 12184 & AS3695.2:2013



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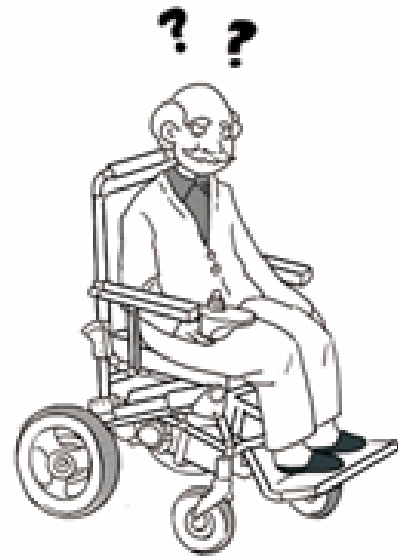
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## 1. TRAVEL LITE COMPONENTS



## 2. SAFETY GUIDE

- The user must be of sound mind and judgment. They must be conscious and have unimpaired motor functions in their hand to use the controller.
- The user must read this user's guide before operating the chair and get familiar with its components and features.
- The user should practice driving skills with assistance on open, flat and safe grounds before normal use.



### Forward/ Parking

- Lightly push joystick forward.
- To stop, release joystick.



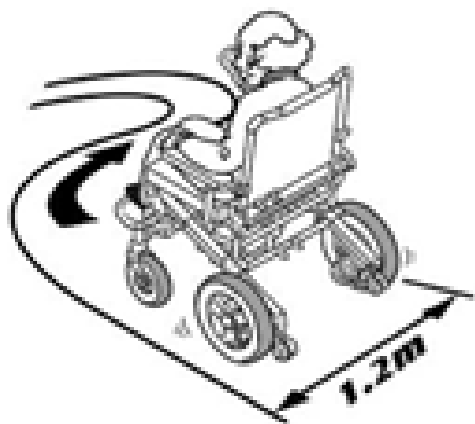
### Backward

- Lightly push back joystick.
- Meanwhile, the user needs to pay attention to back situation to avoid collision.



### Turning

- Lightly push joystick left or right.
- Meanwhile, the user needs to pay attention to left and right direction situation to avoid collision.



### **Bend Driving**

- Lightly push joystick direction according to curve direction and practice speed control accordingly

### **Barrier Avoiding Practice**

- Lightly push the joystick in either direction to avoid and maneuver around the obstacles, practice speed control.



### **Fast Driving**

- Push the joystick all the way in the direction you want to go. Pull the joystick back to the middle if you do not feel you are not 100% in control.

### **Across Stairs**

- Slowly driving cross the stair. The step should not be higher than 3cm.



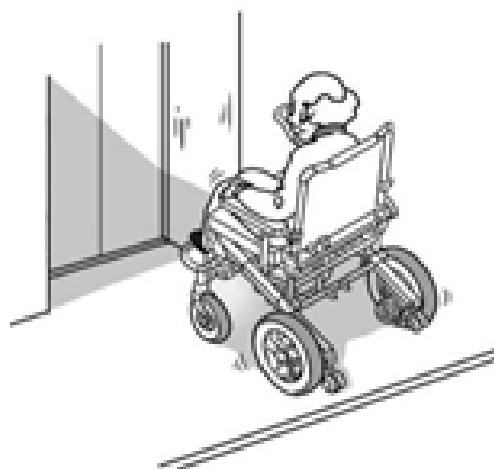


## Uphill Driving

- Keep your body tilted forward to keep the center of gravity stable. Drive slowly. We recommend the slope be less than 8 degrees for optimal performance.

## Enter & Exit Elevator

- The user should pay attention to elevator door open and close interval to avoid a collision while entering & exiting the elevator..

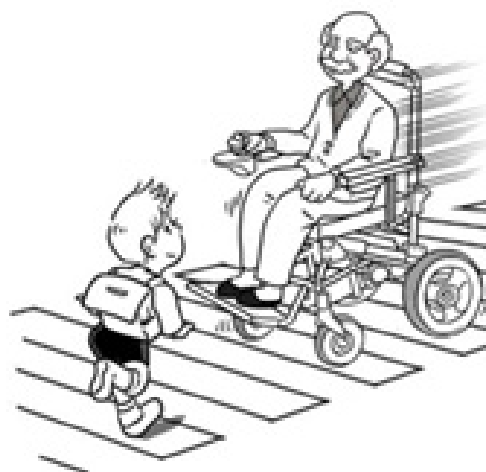


## Sidewalk Driving

- The user should stay on the sidewalk and avoid entering the motor vehicle lane unless to cross the street. Pay attention to obstacles and avoid contact with them.

## Crossing Crosswalk

- Pay attention to avoid cars and only cross when you are allowed to. Must drive slowly over the curb, to get back on the sidewalk, which should not be higher than 3cm.





## WARNING

### Driving over rail road/train tracks

- We highly recommend you do not cross rail road/train tracks alone in the Travel Lite Power Wheelchair. You should be accompanied by an assistant, friend or loved one.
- Attempting to cross tracks that are elevated too high (more than 3cm) could result in a rollover or accident. It could endanger the personal safety of the user.

## NURSING



## WARNING

### Driving over a high curb/step or steep inclines

- Driving over too high of a curb/step (more than 3cm) could result in rollover.
- Driving on too steep incline could also result in a rollover.



## WARNING

### Driving downhill

- Make sure the electromagnetic brake is closed before driving downhill.

Otherwise it may lead to personal injury.

*Check the image to the right to see*







## WARNING

### Getting into & out of a bed/chair/couches

- We recommend that the user has assistance getting into & out of the chair.
- Move the arm rests and foot rest out of the way before entering & exiting the chair.

## NURSING



## WARNING

### Crossing the Road

- Pay attention to traffic light switching time when crossing the road.
- Otherwise, it may lead to endangering personal safety.
- Nursing person should be accompanying while the user is crossing the road.

## NURSING



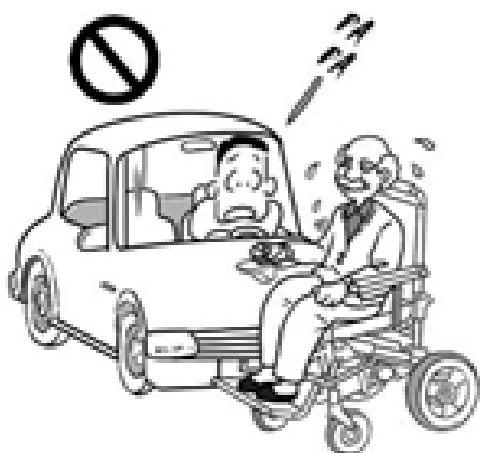
## WARNING

### Crossing the Road

- Please pay attention to back situation when driving backward to avoid danger

## NURSING





## WARNING

### Driving through the crosswalk

- Make sure your chair has sufficient power before crossing the street.
- Stopping suddenly in the middle of street because of insufficient power can cause personal injury or even death.
- Nursing person should be accompanying while the user is crossing the road.

## NURSING



## BAN

### Self repair of the chair

- DO NOT attempt to repair the chair on your own. It may cause permanent damage to the chair and could put yourself at risk of injury or death.
- The product should be repaired by a professional repair shop or maintenance service personnel.



## BAN

### Seat Belt

- Use the seat belt anytime when using the chair.



## BAN

### Moving someone in the chair

- Must carry the frame to move.



## BAN

### Washing the chair

- DO NOT hose down (spray) the chair with water or any liquids. It will cause damage to the chair and could also harm or endanger your personal safety.
- Wipe down with a damp cloth.
- The seat cushion could also be removed to be washed separately.



### Battery handling and care 1

- DO NOT leave the battery or electrical components of the chair in a car that is baking (heating up) in the sun. It will cause permanent damage.
- Keep the battery away from fire and heat sources.



## Battery handling and care 2

- DO NOT allow children to access to the battery or electrical components of the chair.
- Store the battery in a cool and dry area that children do not have access to.



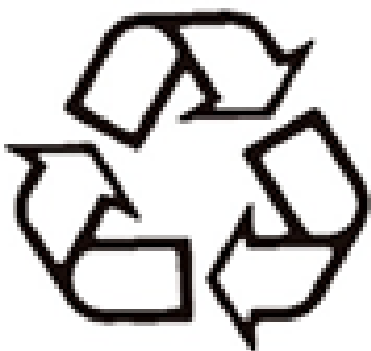
## Battery handling and care 3

- DO NOT place any items over or on the charger while it is charging.
- If the battery becomes hot, deformed or emits odor while charging, stop the charging immediately.



## Battery handling and care 4

- DO NOT store the battery in direct sunlight. Again, it should be stored in a dry, cool and ventilated area that children don't have access to.
- DO NOT store the battery in a severe cold environment. It will damage and decrease the life of the battery.



## Battery handling and care 5

Fully charge the battery in case of long term storage. The battery has discharge characteristics and must be charged once every three months, or it could lead to over-discharge damage.

- The lithium battery is recyclable. Please discard responsibly through a recycling option.

## WARNING



**Danger!**  
Hand clamping



### 3. WHEELCHAIR FOLDING METHOD



Note: when you folding, do not put your hand in the wheelchair to avoid hand clipped.

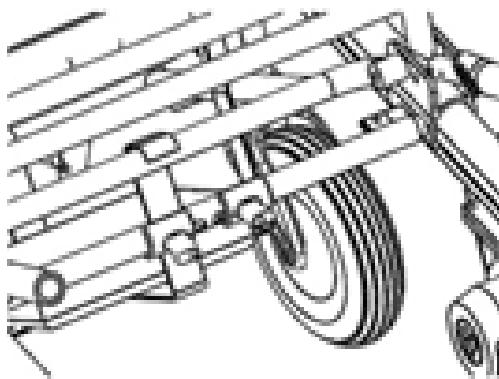
1. Fold the foot pedal.
2. Pull out the joystick controller and put it in the wheelchair.

***Then the wheelchair will be folded in one second so easy!***



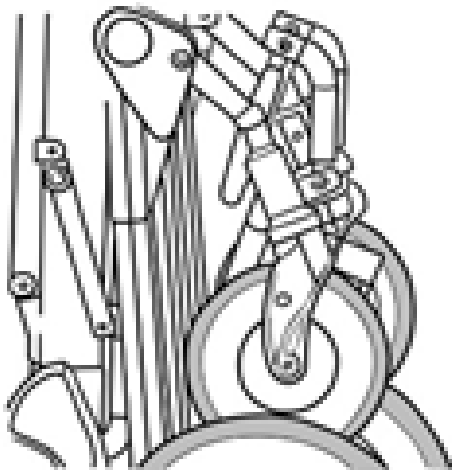
## WARNING

- If the chair is not locked in the open position, it can collapse when attempting to sit in the chair. This can cause damage to the chair and also the user.



## WARNING

- Check the locking device (shown in the image to the left) to make sure the chair is opened all the way and locked into position.



## WARNING

- If the front wheels are not in the proper position (shown in the image to the left), the chair will not be folded tightly and could cause damage. Make sure the front wheels are in the correct position before folding.





### **EP-2410F 24V 10AH**

Eco-Pack

Weight: 2.6kg

Dimension: 14 x 16 x 7cm



### **EP-2415F 24V 15AH**

Eco-Pack

Weight: 4.7kg

Dimension: 19 x 19 x 10cm

We will ship 24V 10AH or 24V 15AH LiFePO4 lithium battery based on buyer's choice.

## **4. CHARGING INSTRUCTIONS**

### **Charging Steps & Instruction**

- Please use the lithium battery charger supplied by Golden Motor.
- Insert the charger into the joystick socket or battery charging port, while being mindful of the plug orientation.
- Insert the charger into an electrical outlet, which will make the charging light turn on.
- Red Indicator light means the battery is charging.
- Green Indicator light means the battery is fully charged.



## 5. DRIVING & OPERATION METHOD

### Install the Joystick

- Insert the controller joystick into the armrest tube and tighten the knob to fix it in position.

### Plug the battery

- Plug battery's discharging connector to controller host's power connector

### User-friendly Control Panel



### Joystick Function Keys

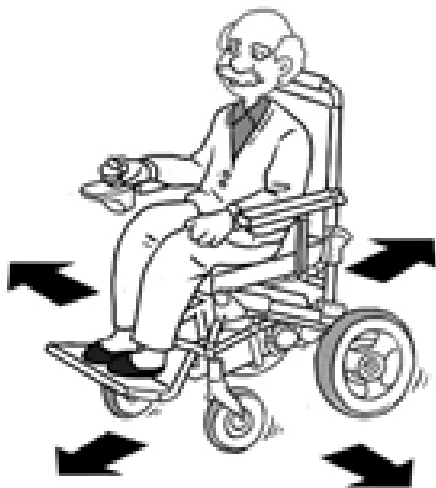
- |                         |   |
|-------------------------|---|
| • Joystick:             | control chair direction and speed.                              |
| • Power on:             | press to turn on the power.                                     |
| • Power off:            | press to turn off the power.                                    |
| • Power display:        | there are red, yellow and green three                           |
| • Speaker:              | horn sounded when press the button, mute when loose the button. |
| • Accelerate max speed: | press to adjust speed.  |
| • Decelerate max speed: | press to adjust speed.  |



## Fault Display

- No.1 indicator light flashes: means the battery power is low.
- No.2 indicator light flashes: means the joystick has no communication signal.
- No.3 indicator light flashes: means the battery is in charging.
- No.4 indicator light flashes: means the motor cable is not connected.
- No.5 indicator light flashes: means the electromagnetic brake is not at the engaged position.

**\*\* Refer to the "Troubleshooting" page for any other problems not covered here.**



## Master Wheelchair Driving Operation Method

After the user is seated in the chair, turn on the power and push joystick.

- Pushing joystick forward to go forward.
- Pushing joystick back to go back.
- Pushing joystick left to turn left.
- Pushing joystick right to turn right.



**The chair will go faster when the magnitude is greater.**

- Release the joystick to park the chair.
- Press the power off button to shut down the power.
- If you need to push the chair, please switch the clutch handle to the separated position.
- For more info please refer to the "Safety Guide".

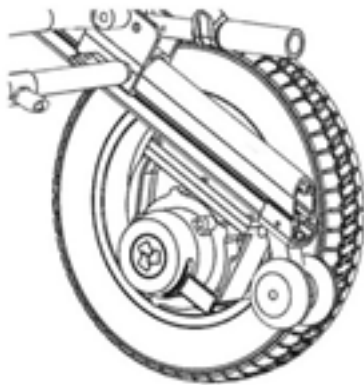


**The chair will go faster when the magnitude is greater.**

- DO NOT use the joystick unless you are sitting in the chair.
- DO NOT disconnect any plugs by pulling on the wire. Disconnect by pulling the plugs from the sockets to prevent damage to the wiring.
- The cable should be around armrest in order to avoid pulling on the joystick.
- DO NOT DRINK AND DRIVE. Operating the chair is prohibited while intoxicated.

Failure to comply could lead to serious injury or even death.

## 6. MANUAL OPERATION



Do not operate clutch handle by foot, it would probably damage the brake.

- Press down on the clutch handle to keep the electromagnetic brake at the separated position. This will allow the wheels to move freely so someone can push the chair.
- Lift the clutch handle up to keep the electromagnetic brake at the engaged position. When the chair is powered electrically, the chair can not be pushed manually.
- This operation is applicable to Travel Lite Power Wheelchair 8" and Travel Lite Power Wheelchair 10". Operation of Travel Lite Power Wheelchair 12" is opposite.

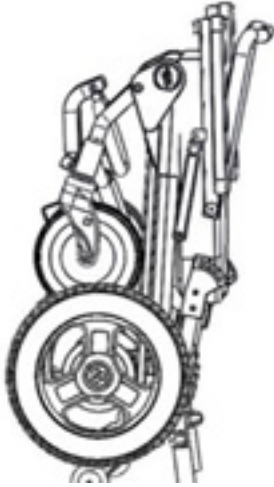


### WARNING



- If the user operates the chair without assistance, the electromagnetic brake must be at the engaged position. Otherwise, the user will not have control over the chair.
- Keep the electromagnetic brake at the engaged position in order to give full control of the chair to the user so they can operate it safely.

## 7. TRANSPORT & STORAGE



- To pick up the chair, stand it up when it is folded. One hand should be placed on the seat cushion beneath the tube, lift and transport the chair.
- Folding method please refer to "3. Wheelchair Folding Method".
- Folded chair can be stored in the car trunk.
- The battery should be fully charged and the chair should be placed in cool, dry and ventilated place in case of the chair will long-term placement.
- \*\* Again, the battery needs to be charged once every three months, otherwise it could lead to over-discharge damage.



### MAIN POINTS

- Avoid storing the chair around heat, cold or direct sunlight. The rubber parts will age quicker and shorten the service life.
- The battery is very sensitive to high temperature environments and it may cause to start a fire.
- There are electronic components in the joystick. Avoid pressing and putting too much pressure on it.
- There is lithium battery at the bottom of the frame.
- Please avoid putting pressure on the battery, it will cause a burn and/or a fire.

## 8. MAINTENANCE & TESTING

Periodically check if the frame connector screws are loose every 6 months. Tighten them if they are loose.

- Check if the front and rear wheels are rotating easily. If there is significant resistance, please replace the bearing.
- Check if the tires, armrest and other rubber/plastic parts are wearing. If so, please replace them.
- Check if the battery connectors have oxidized. If so, please replace them.
- Check if the folding locks work. If they are loose or jamming, please replace them.
- Check the anti-tip wheels/device. If they are loose or jamming, please replace them.

## 9. TROUBLE SHOOTING

| No | Problem   | Reason  | Solution   |
|----|---|---|--|
| 1. | Power can not be turned on                      | Battery power is low.   | Charge the battery.  |
|    |   | Battery is not connected to controller host.  | Connect battery to controller host.  |
|    |   | Joystick is not connected to controller host.   | Connect joystick to controller host.   |
| 2. | Fault display on controller panel               | No.1 indicator light flashes: the battery power is low.                                 | Charge the battery.  |
|    |   | No.2 indicator light flashes: the joystick has no communication signal.                 | Connect joystick to controller host, or replace the joystick.                        |
|    |   | No.3 indicator light flashes: in charging   | Prohibit driving the chair during charging.  |
|    |   | No.4 indicator light flashes: the motor cable is not connected to controller host.      | Connect the motor cable to controller host.  |
|    |   | No.5 indicator light flashes: the electromagnetic brake is not at the engaged position. | Operate the clutch handle to make the electromagnetic brake at the engaged position. |
| 3. | Jetty and noise exist while chair starts moving | Limited max speed is too low.   | Adjust limited max speed higher.   |
|    |   | The motor is lack of phase.   | Replace the motor.   |
| 4. | Endurance mileage is shorten                    | At below 0 ° C environment.   | It is normal characteristic of battery.  |
|    |   | Driving on uneven pavement or slope.  | Energy consumption increases, it is normal.  |
|    |   | Battery capacity decreased.   | Replace the battery.   |
| 5. | Battery charging faults                         | Charger light does not turn on.   | Replace the charger.   |
|    |   | Charger green light always on.  | Connect joystick to controller host, or replace the battery.                         |
|    |   | Charging time is shorten.   | Battery capacity decreased, replace battery.   |

## 10. TECHNICAL PARAMETERS

| Royale Travel Lite Folding Wheelchairs |   |  |   |
|--|---|--|---|
|  |  |  |  |
|  | Travel Lite Mini  | Travel Lite Midi   | Travel Lite Maxi  |
| Net Weight:<br>(without rear wheels)   | 15kg  | 15kg   | 15kg  |
| Net Weight:<br>(with rear wheels)      | 24kg  | 26kg   | 27kg  |
| Weight (with<br>24V10Ah battery)       | 26.6kg  | 28.6kg   | 29.6kg  |
| Weight (with<br>24V15Ah battery)       | 28.7kg  | 30.7kg   | 31.7kg  |
| Unfolded Dimension<br>(L x W x H)      | 100 x 63 x 95cm   | 100 x 65 x 98cm  | 100 x 65 x 96cm   |
| Folded Dimension<br>(L x W x H)        | 80 x 63 x 35cm  | 80 x 65 x 35cm   | 80 x 65 x 35cm  |
| Packing Dimension<br>(L x W x H)       | 65 x 36x 83cm   | 68 x 36 x 84cm   | 68 x 36 x 84cm  |
| Seat Dimension<br>(L x W)              | 45 x 45cm   |  |   |
| Seat Height (from<br>ground)           | 52cm  | 54cm   | 54cm  |
| Arm Rest Height<br>(from ground)       | 68cm  | 70cm   | 70cm  |
| Ground Clearance                       | 9cm   | 10cm   | 10cm  |
| Front Wheels<br>(Diameter x Width)     | 6 x 5 cm  | 8 x 5cm  | 8 x 5cm   |
| Rear Wheels<br>(Diameter x Width)      | 8 x 4.5cm   | 10 x 5.5cm   | 12 x 5.5cm  |

## 10. TECHNICAL PARAMETERS

| Royale Travel Lite Folding Wheelchairs |   |  |   |
|--|---|--|---|
|  |  |  |  |
|  | Travel Lite Mini  | Travel Lite Midi   | Travel Lite Maxi  |
| Wheel Base                             | 48cm  | 47cm   | 45cm  |
| Wheel Tread                            | 58.5cm  | 59.5cm   | 59.5cm  |
| Tire Type                              | PU filled tire  |  |   |
| Wheel Material                         | Rubber  |  |   |
| Pedal (L x W)                          | 32 x 13cm   |  |   |
| Motor type                             | 24V 180W  | 24V 180W   | 24V 250W  |
|  | Brushless hub motor   |  |   |
| Controller                             | IM-50B brushless joystick controller    Max output current 30A                    |  |   |
| Battery                                | 24V10Ah LiFePO4 battery: 2.6kg 14*16*7cm  |  |   |
|  | 24V15Ah LiFePO4 battery: 4.7kg 19*19*10cm   |  |   |
|  | Lifetime >1000 cycles   |  |   |

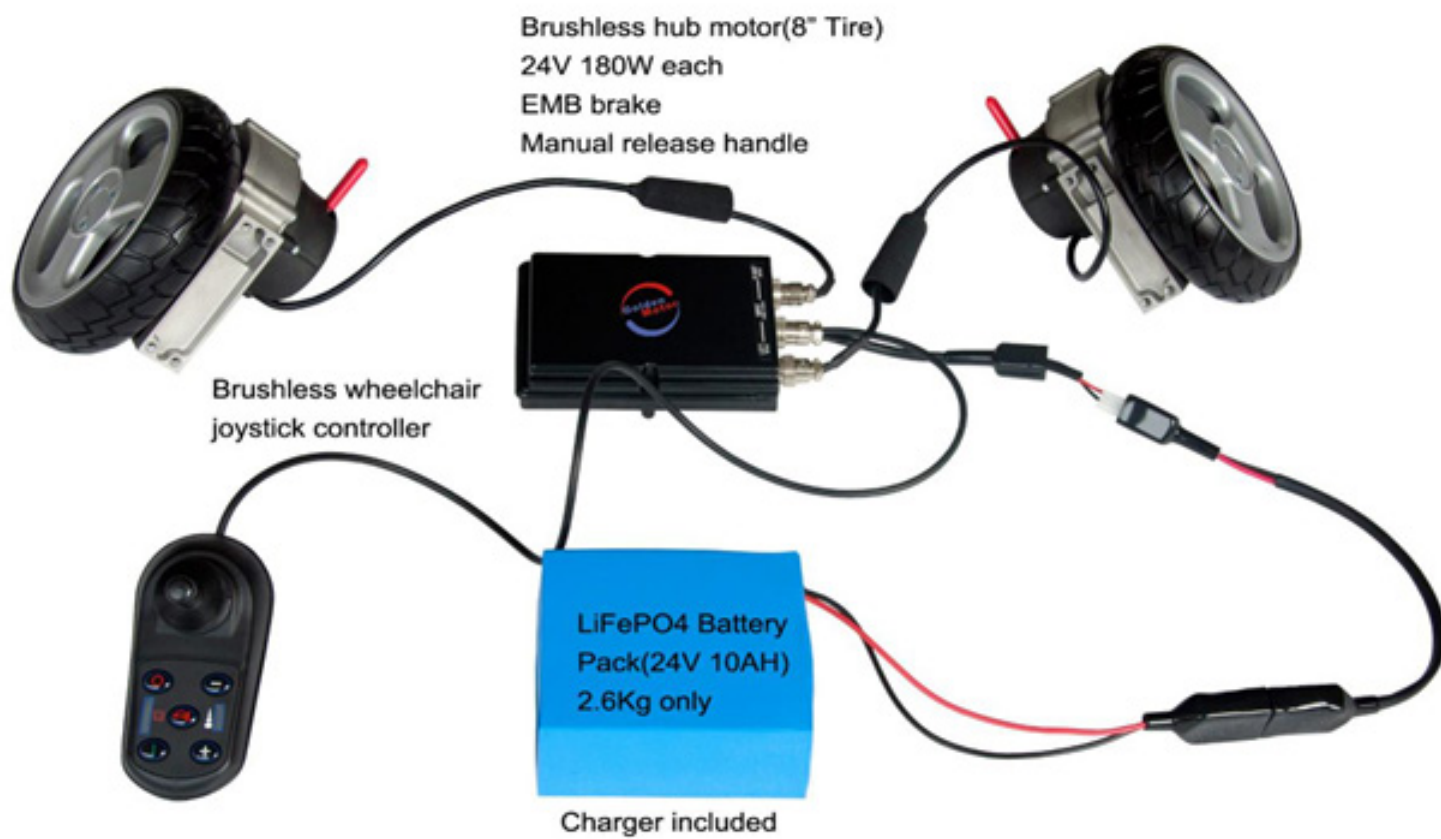


## 10. TECHNICAL PARAMETERS

| Royale Travel Lite Folding Wheelchairs |   |  |   |
|--|---|--|---|
|  |  |  |  |
| Charger (input)                        | AC 110 - 240V   |  |   |
| Brake Type                             | Electromagnetic brake   |  |   |
| Max Speed                              | 4mph  |  |   |
| Distance on Full Battery               | 18km (24V10Ah)    28km (24V15Ah)  |  |   |
| Max Loading Capacity                   | 150kg   |  |   |
| Climbing Ability                       | 12°   |  |   |
| Folding/Unfolding Feature              | 1-second  |  |   |
| Back Rest Tilting Feature              | 5 inclinable angles   |  |   |



## 11. WHEELCHAIR WIRING DIAGRAM





## 12. AFTER-SALES SERVICE

| Warranty Coverage    |                 | Warranty Period       |               | Remark                 |  |
|----------------------|-----------------|-----------------------|---------------|------------------------|--|
| Frame                |                 | 2 years               |               | Non-deliberate damage  |  |
| Motor                |                 | 2 years               |               | Non-deliberate damage  |  |
| Lithium Battery      |                 | 1 year                |               | Non-deliberate damage  |  |
| Controller Host      |                 | 2 years               |               | Non-deliberate damage  |  |
| Joystick             |                 | 2 years               |               | Non- deliberate damage |  |
| Warranty Bill        |                 |                       |               |                        |  |
| Product information  | Item            |                       | Series No.    |                        |  |
|                      | Purchasing date |                       | Receipt No.   |                        |  |
| Customer information | Customer name   |                       | Telephone No. |                        |  |
|                      | Address         |                       |               |                        |  |
| Dealer information   | Dealer name     |                       | Dealer Stamp  |                        |  |
|                      | Telephone No.   |                       |               |                        |  |
| Maintenance date     |                 | Maintenance personnel |               | Maintenance record     |  |
|                      |                 |                       |               |                        |  |
|                      |                 |                       |               |                        |  |
|                      |                 |                       |               |                        |  |
|                      |                 |                       |               |                        |  |
|                      |                 |                       |               |                        |  |
|                      |                 |                       |               |                        |  |

