



iTRAVEL Plus

User Manual

Before using this product, read this manual carefully and save for future reference

Preface

Please read the user manual carefully before taking the product into use.

- ✧ This manual contains operations, assembly methods, and simple faults solutions.
- ✧ This manual applies to our model: Itravel Plus.
- ✧ This manual contains wheelchair maintenance and self checking methods, please put it in proper place.
- ✧ Please provide this manual for reference when other people are going to use this wheelchair.
- ✧ The annotations and illustrations in this manual might be slightly different with the real parts due to quality improvement or changing design. Please in kind prevail.
- ✧ Contact with your dealer if there is any ambiguity or question.
- ✧ Improper use of any vehicle may lead to injury. Unsafe driving could harm yourselves and others.
- ✧ The electric wheelchair is intended to comfortably transport persons with walking difficulties or no walking abilities.
- ✧ This electric wheelchair is designed to transport 1 person only.

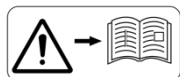
Symbols used in this manual



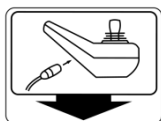
Warning symbol

Follow the instructions next to this symbol closely.

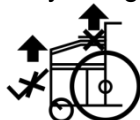
Please pay attention to these instructions, otherwise it would result in physical injury or damage to the wheelchair or the environment.



Caution read operating manual



Battery charging socket



Not lift on armrest a. footrest, both sides

1 Product Introduction

1.1 Product Images



Product Performance

This series of electric wheelchairs are powered by Li-ion battery, driven by DC motor. Users control direction and adjust speed by joystick control. It is suitable for application of low speed, good road condition and small slope.

1.2 Product Information

Performance Parameters

Main technical data	Itravel Plus		
Overall size	42.32''×24.4''×38''	Folded size	24.4''*17.32''*31.89''
Seat size	18''×16''	N.W.	65lbs
Max. Speed	4 MPH	Seat Height	18''
Armrest height	11''	Backrest height	17''
Max loading weight	300lbs	Front wheel diameter	8''
Rear wheel diameter	12 inch	Battery	DC 24V 12Ah/20AH Li-ion
Motor (*2pcs)	DC 24V 180W	Battery charger	AC 100~240V, 50Hz, 1.5~5A
Control	35A	Max driving distance	13 Miles
Degree of protection	IPX3	Max safe slope	10°
Turning radium	≤47''	Static stability	9°
Reversing width	≤59''	Climbing angle	6°
Tire pressure	2kgf/m ²	Obstacle climbing	2''

Application Range

Our electric wheelchair is for disabled and elderly people (less than 300lbs) using as walking vehicle, suitable for indoor use. Do not run on the motorways.

Contraindication

People who is under these circumstances: Upper limb is unresponsive, senile dementia, psychopath, physiology can not take care of themselves, and doctor request not to use.

2 Safety Instructions

2.1 Main Security Features

- ♦ Classified according to the type of protection electric shock: Internal power.
- ♦ Classified according to the type of protection against electric shock: Type B application.
- ♦ Classified according to the degree of inlet liquid protection: IPX3.
- ♦ Classified according to the safety of use in a flammable anesthetic mixture with air or gas mixed with oxygen or nitrous oxide flammable anesthetic gases occurs: Non AP/APG type.
- ♦ Classified according to operation mode: Continuous operation.
- ♦ Rating voltage: DC.24V.
- ♦ Have no protective effect on the application of defibrillator discharge section.
- ♦ No signal output or input part.
- ♦ Non-permanently installed equipment.

2.2 Driving Notice

General Driving Cautions

- ♦ Please keep your hands on the armrest to control the wheelchair.
- ♦ Please practice in parks or other safe open places until you can use the wheelchair skillfully.
- ♦ Fully practice driving in a safe place, to master principle of moving forward, stopping and turning circles.
- ♦ Before driving to the road, please be accompanied by caregivers and confirm it is safe.
- ♦ Please strictly follow traffic rules of the pedestrian, do not regard yourself as vehicle driver.
- ♦ Please drive on the sidewalk and the zebra crossing. Do not drive on vehicle lane.
- ♦ Steadily drive, to avoid driving in 'Z' line or sharp turn.
- ♦ Please keep pressure of pneumatic tire properly, the abnormal tire pressure may cause unsteady driving or excessive lost of current.

Accompanied by Caregivers or Avoid Driving in These Conditions

- ♦ Drive in bad weather, such as rainy day, heavy fog, strong wind, snow, etc.
- ♦ In case of wheelchair is wet out, wipe the water immediately.
- ♦ Drive on the bad road condition, such as muddy, trail, sand road, gravel, etc.
- ♦ Drive on crowded road.
- ♦ Drive on no fence side ditch, pond, etc.
- ♦ Across the railway.
- ♦ When you have to across railway, pause at turnoff to confirm it is safe, and make sure that the tires will not be stuck by railway.
- ♦ The electric wheelchair is only for personal use, do not carry people or goods, and do not for a traction purposes.

Precautions for Uphill and Downhill

- ♦ Avoid driving on following places: steep hills, tilt places, high steps, channels etc.
- ♦ Avoid driving on steep slopes, the slope range should be less than 9 degrees. Please carefully operate the controller when drive on slopes.
- ♦ Keep moving forward during uphill or downhill.
- ♦ Slow down speed during downhill.
- ♦ Avoid driving sideways on the steep.
- ♦ Forbid driving on the stairs place and avoid crossing high steps.
- ♦ Avoid crossing wide ditches.
- ♦ During crossing ditches, keep 90° angel between tires and the ditches.



- ♦ Do not set the wheelchair to manual mode during uphill and downhill.

When the wheelchair is malfunction at traffic crossing, please immediately ask passerby for help. And set wheelchair to manual mode, then push wheelchair to leave the scene, or user to get away from the site to a safe place immediately.

Precautions for the Caregivers

- ♦ Caregivers should confirm that the users' feet are on the footrests' proper position and ensure clothes do not attach to the wheels.
- ♦ Caregivers should push the wheelchair to move forward to keep safe on steep slope or long slope.

2.3 Other Notice

Repair and Refit

If it has to repair or refit the wheelchair, please contact seller or service department. Do not modify by self. It may cause accident or wheelchair malfunction.

Keep Dry

Do not put the wheelchair in wet place. If the wheelchair is wet, please dry it immediately.



Without our company's confirmation, don't modify the assembly or materials of this wheelchair. In order not to cause imbalance, don't add weight arbitrarily. When someone is sitting on the wheelchair or the clutch is not in manual mode, do not use other vehicles to pull or push the wheelchair.

2.4 Service Life

The service life of this product is 5 years after the date of production. Please use the product within the limited period. Please do not use it beyond the validity period for more than one year to avoid accidents.

Date of manufacture: see the label.

2.5 Electromagnetic Compatibility

The wheelchair should away from strong magnetic fields and large inductive electrical equipment, such as radio station, TV station, underground radio station, cell phone transmitting radio station. Pay attention to that if there are sources of electromagnetic interference nearby, as far as away from those sources to avoid electromagnetic interference. The electric wheelchair should avoid electromagnetic interference.

Note:

- ♦ Electric wheelchair should meet electromagnetic compatibility requirement of YY0505 standard.
- ♦ User should install and use electric wheelchair based on the electromagnetic compatibility information provided.
- ♦ Portable and mobile RF communication device shall affect performance of electric wheelchair. Therefore, please avoid strong electromagnetic disturbance, like near mobile phone or microwave.
- ♦ Please refer to attachment for notice and manufacturer's statement.
- ♦ Cut-off voltage of battery is 23V.
- ♦ Electric wheelchair belongs to D class in GB/T 18029.21-2012, a wheelchair with electronic differential steering and manual brake



Electric wheelchair shouldn't be put or used together with other devices. If have to, please verify that electric wheelchair can work normally under the circumstances.

3 Usage and Operation

3.1 Adjustment of Wheelchair

Unfold wheelchair

One hand hold the backrest, another hand hold the seat and open by force (picture 1). Fully unfold the wheelchair, and then fasten the lock which under the backrest (picture 2). *Before use, please make sure that the lock is well locked. Otherwise it will cause fold danger when driving.*



Picture 1



Picture 2

Fold Wheelchair

Loose the lock (picture 3), then one hand hold backrest, another hand pull the seat, fold it (picture 4).



Picture 3



Picture 4

Install Controller

Insert the controller into armrest tube. Please note to keep the controller horizontal (picture 5). And then lock the screw (picture 6).



Picture 5



Picture 6

Install and Replace Battery

Dismantle battery

Disconnect the battery plug and controller plug (picture 7), and then loosen the screw (picture 8).



Picture 7



Picture 8

Install battery

Put battery groove in the back tube (picture 9), loosen the screw (picture 10). Then connect the battery plug with controller plug (picture 11).



Picture 9



Picture 10



Picture 11

Footplate

The footplate can be pulled up or down (picture 12).



Picture 12

Install and Dismantle Anti-tipper

Press the button to install/dismantle the anti-tipper (picture 13-14)



Picture 13



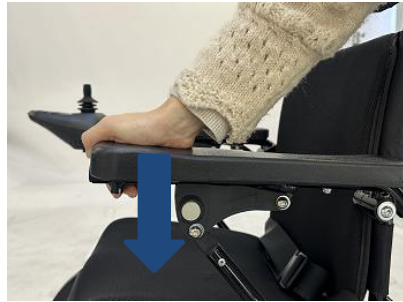
Picture 14

Armrest Flip-up

One hand press the armrest button, another hand flip up the armrest (picture 15). And press down the armrest to the proper position to fix armrest.



Picture 15



Picture 16

Switch between Manual Mode and Electric Mode

Manual mode: pull up the switch lever on left & right motor (picture 17).

Electric mode: pull down the switch lever on left & right motor (picture 18).



Picture 17



Picture 18



When changing from manual mode to electric mode, please confirm both side clutches are inside the grooves. Any side clutch is not fully into groove, may cause danger of rollover.

4 Battery and Charger

4.1 Charger Requirements

The charger is used for battery charging. During electric wheelchair is charging, do not use it.

Charger Technical Data

Input voltage: AC220V (110V) $\pm 10\%$ Output voltage: 24V/DC Output current: 1.5~5A

Ingress protection level is IPX1.

The charger should meet the requirement of GB 4706.1-2005 and GB 4706.18-2005.

4.2 Usage of Charger

4.2.1 Type 1 (charge directly in battery)

In order to charge the battery, connect the charger with power supply and battery box's plug. Do as following instructions to complete charging process:

Step 1: Make sure the charger groove is not blocked.

Step 2: Make sure the electric wheelchair is power off.

Step 3: Unplug the plugs which connect the battery box and controller.

Step 4: Connect the charger's output plug to the battery box's power plug.

Step 5: Connect the charger's main plug to the power supply and the red light will be alight. Fully charging needs 8 to 10 hours, do not overcharge more than 24 hours.

Step 6: As to prevent cut short battery life, please charge the battery at least once per month when the wheelchair is not being used.



4.2.2 Type 2 (charge through controller)

In order to charge the battery, connect the charger with power supply and controller socket. Do as following instructions to complete charging process:

Step 1: Make sure the charger groove is not blocked.

Step 2: Make sure the electric wheelchair is power off.

Step 3: Make sure the battery and controller are connected.

Step 4: Connect the charger's output plug to the socket below the controller.

Step 5: Connect the charger's main plug to the power supply and the red light will be alight. Fully charging needs 8 to 10 hours, do not overcharge more than 24 hours.

Step 6: As to keep the battery life from being shortened, please charge the battery at least once per month when the wheelchair is not being used.



Do not stop charging until charge process is finished. Repeat using of battery which is not fully charged will shorten the battery life, so the battery should be fully charged as much as possible. When battery is fully charged, the power indicator will turn to green. Do not stop charging before fully charged.

After finish charging, turn off the power supply, otherwise the battery will discharge slowly. Do not charge more than 24 hours. Over-charging is dangerous.



Users should follow the following rules to avoid charging dangers:

The electric wheelchair doesn't include the charger, please use national standard charger that the output voltage is 24V/DC 1.5A~5A.

It should be well ventilated when charging. Do not expose the wheelchair to sunlight and humid environment.

The charging environment temperature range is from 10 °C to 50 °C. If it is out of the environment temperature range, the battery is unable to function well, and can easily make battery damaged.

It's normal for the fan making a sound during charging. It is for cooling the charger, please do not worry about it.

Prevent liquid go into the charger during charging. And do not place charger on the flammable items, such as: fuel, footrest or seat cushion.

Please stay away from the flames when charging the battery. The flames may cause battery fire or

explosion.

Charging makes hydrogen, do not smoke while charging.

Do not unplug the power supply when the socket or your hands are wet, it may cause electric shock.

In case of unpredictable accident will happen and hurt the user, do not use or sit on the electric wheelchair when charging.

4.3 The Usage and Maintenance of Battery

Wrong operation of replacing battery may cause danger of explosion. Only the same or recommended type of battery is suitable for replacement. And please make sure the battery poles are correct. Key points for prolong the battery life: charge frequently, to keep battery power full. It's better to fully charge the battery if the wheelchair is not being used. If stop using for a long time, it's better to charge twice per month.

5 System Diagnose

When the indicator LED lights are blinking, it means the wheelchair has abnormalities. The abnormalities may occur in following parts: motors, brakes, battery, wire connections, etc.

Through the product's inner information consultation, the property of the abnormal condition can be detected by the diagnosis signal. The abnormal situation can be detected without other service tools.

Audio Signal Indication

Description of LED light	The meaning of LED light	Explanation & Solution
All LED lights are unlit with no sound	The power is off, wheelchair is in standby or sleep mode. Power is poor contacted. Fuse is tripping or burned out.	
All LED lights are lit	The power is turned on, and self diagnose is working, the electric wheelchair can work well.	Less LED lights lit, less battery power remaining.
The leftmost red LED light is lit	The battery power is extremely inadequate.	To charge immediately. Or battery is malfunction that not able to charge.
Two short beeps, LED lights blink twice	The left motor is malfunction.	The left motor is poor connected or the wire is disconnected.
Three short beeps, LED lights blink thrice	The left magnetic brake is malfunction.	The left magnetic brake is poor connected or the wire is disconnected
Four short beeps, LED lights blink four times	The right motor is malfunction.	The right motor is poor connected or the wire is disconnected.
Five short beeps, LED lights blink five times	The right magnetic brake is malfunction.	The right magnetic brake is poor connected or the wire is disconnected
Six short beeps, LED lights blink six times	controller is in over-current protection status.	Check the brakes, and check if the motor drive mechanism is stuck. Check the current by ammeter, if it is not excessive current, maybe the controller is malfunction.
Seven short beeps, LED lights blink seven times	Joystick is malfunction	Joystick doesn't reset, or the connector is loose.
Eight short beeps, LED lights blink eight times	controller is malfunction.	Please consult your dealer for maintenance.
Nine short beeps, LED lights blink nine times	controller is malfunction.	Please consult service center for maintenance.

6 Controller

6.1 Controller Panel



6.2 Controller Usage

Power Switch



Press this button, the battery power gauge lights will turn on from left to right. Press again, all the LED lights are off.



In some emergency, you can directly turn off power by press power button.

Sleep Mode

If the joystick has no operation more than 20 minutes, the power turn off automatically, and the system in the sleep mode, system will be woke up from sleep mode by press power button.

Speed adjustment

According to user's habits and the circumstances, the wheelchair driving speed is adjustable. Adjust speed by press decrease button or increase button.



Speed is divided into five sections, ranged by 20%, 40%, 60%, 80%, 100% of the max speed.

First gear of speed: 20% of the max speed.

Fifth gear of speed: 100% of the max speed.

Horn Button



Press the horn button, the horn will sounds until you release the button.

Battery Power Gauge



After turn on the power, the battery power gauge is working. The battery power gauge also shows the battery remaining power capacity.

As the picture shown, the battery power is full.

When there is only the red or yellow LED light lit, the battery should be charged. And for a long distance driving, the battery should be fully charged. If only the red LED light is lit, the battery power is extremely inadequate, users need to charge battery as soon as possible.

Use of joystick



The wheelchair moving direction is controlled by joystick. The moving extent of joystick also controls the moving speed.



Please turn on or turn off the power when the joystick is in the middle position. Otherwise the controller will let out wrong operation signal.

Release the joystick to middle, this mistake will stop. If the mistake is still continuing, perhaps this part is malfunction, do not use it and contact with your dealer for maintenance.

7 Maintenance

Maintenance of wheelchair includes clean wheelchair, check wheel and battery, and charge battery. For further maintenance please contact with your dealer. Our suggestion is checking the wheelchair every half year, annually overhaul.

7.1 Clean and Battery Maintenance

Clean Wheelchair

Please clean the wheelchair regularly.

Clean the parts which are frequently touched with user's body (such as seat cushion, armrest, controller) by a clean and slight wet cloth. Do not use organic solvents to clean.

If it is a patient user, the wheelchair should be cleaned once per week. If the wheelchair is used by an infectious victim, it should be cleaned and disinfected by disinfectants.

Wheels

Check the tires' air pressure and their wear condition regularly. When the tire tread pattern depth reduce to 1mm, please replace new tire.

Battery

To make sure that the battery is fully charged frequently. In order to prolong battery life, we strongly recommend users do not to charge until battery run out of power totally.

7.2 Wheelchair Malfunction and Checking

When malfunctions happen during the wheelchair is working, please turn off the power before check. Symptom: completely lose power, and all the LED lights on the controller panel are off.

Check Step:

Step 1: To check if the controller's plug is loose.

Step 2: To check if the connection of controller's plug and battery box is loose. Please reinsert the plug connector (hold the plug when pull out the plug. Do not pull the wire to avoid unnecessary damage to the wire line). After above checking, if the wheelchair is still not able to restore the power, or if users have any question for above checking, please connect with your dealer.



The controller has a diagnosing system to monitor the controller and motor. Any malfunction of these parts is indicated by the controller. For more details please kindly refer to chapter of audio signal indication.

7.3 Maintenance Checking

The following is a checking list, electric wheelchair should be ordinal checked according to our suggestion. When you get on or get off the wheelchair, some self checking is done automatically. For more your attention, we particularly list these self-checking items in A area.

A area	Before use, please check if following parts are correct: 1.Backrest 2.Armrest 3.Controller position 4.Footrest 5.battery power 6.Clutch/adjusting lever for conversion between manual mode and electric mode
B area	Check the following parts monthly, to avoid original parts losing or wearing 1. Screws 2. Brakes 3. Clutch/adjusting lever for conversion between manual mode and electric mode 4. The front and rear wheels and their tread pattern depth 5. Connectors' of controller and charger
C area	For safety, semiannual overall maintenance is needed.

8 Warranty issues

Warranty contents

We elaborately design this wheelchair for you. If there are improper materials or manufacturing, we provide free repair and lifetime maintenance according to the time and conditions in warranty cards.

Warranty does not cover in these conditions

Subjective impression, no function problems.

Usage and aging loss (coating and plating surface, nature fade of resins, etc).

Maintenance are not applicable when following happens

Don't regularly check our specified issues.

Improper or wrong maintenance.

Different operation with our manual or overload

Unauthorized modifications

External factor such as: soot, pharmaceuticals, bird droppings, acid rain, flying stone, metal powder, etc.

Natural disasters such as: typhoons, floods, fires, earthquakes etc.

The following fees are not covered

Replacement of consumables material such as tire, fuse, plastic parts, glass parts, lubricates etc.

Fees for Inspection, adjustment , add oil, cleaning , etc.

Fees for regularly check that specified by our factory.

Unauthorized modifications

Out authorized service centers maintain costs.

Customers pay attention following cautions

In order to make the warranty is valid, customers have obligation to follow below cautions:

Correctly testing and driving the power wheelchair as manual instructions.

Daily checking.

Implementing the check tips according to our suggestion.

Warranty acceptable

If warranty is needed, please take the power wheelchair and show the after sales service card to our service center for the warranty service. If the user can't provide the after sales service card the service is not provided.

Protect environment

In order to protect environment, every damaged or scraped part of power wheelchair should be backed to our factory or handed over to State Department disposed, do not throw randomly.

Warranty valid

The after sales service card is valid from stamped date.

This product warranty 1 year under normal operating conditions.

Battery Warranty is within half year after purchase date.

Consumable parts (such as: battery set, cushion, tires, side board, armrest pad, etc.) are not under warranty range.



During the warranty period, the maintenance is free. Over the warranty period the maintenance should be charged, the exactly charge fees please consult the service center.

9 Others

Condition for Transport and Storage

During transport and storage, the electric wheelchair should be correctly placed as labeled indication.

- ♦ Transportation should be avoided moisture and sunlight and away from heat resource.
- ♦ In case of electric parts are damaged due to damp, please avoid storing the wheelchair in rain, outdoor and moisture.
- ♦ Storage condition:
 - Environment temperature $-40^{\circ}\text{C} \sim +55^{\circ}\text{C}$;
 - Relative humidity $\leq 80\%$;
 - Air Pressure $86\text{kPa} \sim 106\text{kPa}$.

Main Security Features

- ♦ Classified according to the type of protection electric shock: Internal power.
- ♦ Classified according to the type of protection against electric shock: Type B application.
- ♦ Classified according to the degree of inlet liquid protection: IPX3.
- ♦ Classified according to the safety of use in a flammable anesthetic mixture with air or gas mixed with oxygen or nitrous oxide flammable anesthetic gases occurs: Non AP/APG type.
- ♦ Classified according to operation mode: Continuous operation.
- ♦ Rating voltage: DC.24V.
- ♦ Have no protective effect on the application of defibrillator discharge section.
- ♦ No signal output or input part.
- ♦ Non-permanently installed equipment.

Annex of Report---Manufacturer's Declaration of the EUT

1	Guidance and manufacturer's declaration – electromagnetic emission		
2	The ELECTRIC WHEELCHAIR is intended for use in the electromagnetic environment specified below. The customer or the user of ELECTRIC WHEELCHAIR should assure that it is used in such an environment.		
3	Emissions test	Compliance	Electromagnetic environment - guidance
4	RF emissions CISPR 11	Group 1	The ELECTRIC WHEELCHAIR uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The ELECTRIC WHEELCHAIR suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
5	RF emissions CISPR 11	Class B	
6	Harmonic emissions IEC 61000-3-2	Class A	
7	Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Recommended separation distances between portable and mobile RF communications equipment and the ELECTRIC WHEELCHAIR			
The ELECTRIC WHEELCHAIR is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the ELECTRIC WHEELCHAIR can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the ELECTRIC WHEELCHAIR as recommended below, according to the maximum output power of the communications equipment			
Rated maximum output of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$	26 MHz to 800 MHz $d = \left[\frac{3.5}{E_1} \right] \sqrt{P}$	800 MHz to 2.5 GHz $d = \left[\frac{7}{E_1} \right] \sqrt{P}$
0.01	0.12	0.018	0.0345
0.1	0.38	0.057	0.1095
1	1.2	0.18	0.345
10	3.8	0.57	1.095
100	12	1.8	3.45
For transmitters rated at a maximum output power not listed above the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.			
NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

Guidance and manufacturer's declaration – electromagnetic immunity


The ELECTRIC WHEELCHAIR is intended for use in the electromagnetic environment specified below. The customer or the user of the ELECTRIC WHEELCHAIR should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment -guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	±6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient / burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	±2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode ± 2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles < 5 % UT (>95 % dip in UT) for 5 sec	< 5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles < 5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the ELECTRIC WHEELCHAIR requires continued operation during power mains interruptions, it is recommended that the ELECTRIC WHEELCHAIR be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30A/m	30A/m	

NOTE: UT is the a. c. mains voltage prior to application of the test level.

Guidance and manufacturer's declaration – electromagnetic immunity

The ELECTRIC WHEELCHAIR is intended for use in the electromagnetic environment specified below. The customer or the user of the ELECTRIC WHEELCHAIR should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
<p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p>	<p>3 Vrms 150 kHz to 80 MHz</p> <p>20 V/m 26 MHz to 2.5 GHz</p>	<p>3V</p> <p>20V/m</p>	<p>Portable and mobile RF communications equipment should be used no closer to any part of the ELECTRIC WHEELCHAIR, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$ <p>$d = \left[\frac{3.5}{E_1} \right] \sqrt{P}$ 80 MHz to 800 MHz</p> <p>$d = \left[\frac{7}{E_1} \right] \sqrt{P}$ 800 MHz to 2.5 GHz</p> <p>where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).^b</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,^a should be less than the compliance level in each frequency range.^b</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic is affected by absorption and reflection from structures, objects and people.

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the ELECTRIC WHEELCHAIR is used exceeds the applicable RF compliance level above, the ELECTRIC WHEELCHAIR should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the ELECTRIC WHEELCHAIR.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m.

After Sales Service Card

Card Holder:	Contact No.:	Model:
Add:		Mfg Date:
Height:	Weight:	Joystick Position:
Serial NO.:		
Quality Warranty: Your purchased product has following warranty service: 1. Motor, controller and frame has one year warranty. During warranty period, free maintenance. 2. Provide door to door maintenance, service fees should be charged, the fees according to distance.		
Recording Service	Date	Description

Note:

- 1: If you changed your contact information, please inform us in time;
- 2: The replaced parts were owned by our company;
- 3: The consumable parts such as battery, tire, arm-rest etc., are not covered under warranty.