Mobility TEK

Model: TEK88M



Mobility Chair

TABLE OF CONTENT

1.0		PROLOGUE4
3.0		SAFETY SIGNS
4.0		SPECIFICATION
5.0		SCHEMATIC
6.0		ELECTROMAGNETIC INTERFERENCE
7.0		GUIDELINES
	7.1	User
	7.2	Caregiver
	7.3	Mounting and Dis-mounting
	7.4	Body Position - Balance
	7.5	Body position - Leaning
	7.6	Dressing
	7.7	Stairs
	7.8	Weight Capacity
	8.1	Operational Safety19
	8.2	Joystick Stationary State
	8.5	Road Operations21
	8.6	Obstacles
	8.7	Reversing23
	8.8	Gradients
9.0		INSTALLATION INSTRUCTIONS
	9.1	Joystick Installation
	9.2	Joystick Control
	9.3	Joystick Horn
10.0)	BRAKE27
	10.1	Brake Open / Close
11.0)	BATTERIES28
	11.1	Usage29
	11.2	Charging30
	11.3	Installation and Removal
	11.4	Charging Port31

11.5	Over Discharge Protection	32
11.6	Over Current Protection	32
11.7	Period Cleaning	32
12.0	FOLDING AND UN-FOLDING	33
12.1	Folding Steps	33
12.2	Un-Folding Steps	34
13.0	MAINTENANCE	35
13.1	Routine Cleaning	35
13.2	Regular Checks	36
13.3	Storage	36
14.0	TROUBLESHOOTING	36
14.1	System Diagnostics	36
14.2	Diagnostic Table	37
15.0	WARRANTY	37
15.1	Exclusions	38



1.0 PROLOGUE

Thank you for purchasing the Mobility TEK, this portable electric mobility chair is designed with the intention of providing you comfort and mobility throughout your daily activities.

Before operating your Mobility TEK mobility chair for the first time, please read this manual carefully. This instruction manual will help you to understand how to set up, operate and maintain this mobility chair properly. If you have any trouble understanding the instructions in this manual, or requires further assistance on setting up, operating and the maintenance of your mobility chair, please contact your local dealer, service representative or professional technical assistance.

2.0 INTRODUCTION

Powered by two DC motors, the Mobility TEK is suitable for both indoor and outdoor use. Its raison d'être, definition would be an individual transport for the mobility impaired, disabled or elderly that experience walking difficulties. The Mobility TEK is foldable thus can collapse and fit into most car boots. It is also reasonably lightweight making it very portable. The Mobility TEK comes pre-assembled, is designed to be lightweight, easily maneuvered, portable, and most importantly, safe and comfortable.

Please do not use or operate the Mobility TEK until you have fully read and understood this instruction manual. If you have any trouble understanding the warnings and instructions, please contact your local dealer for professional technical assistance. Operating the Mobility TEK without clear understanding of all instructions in this manual may cause personal injury and/or damage to the mobility chair.

For any further assistance, please contact your local dealer, service representative or professional technical assistant.

User

Please do not use or operate the mobility chair until you have fully read and understood this instruction manual. If you have any trouble understanding the warnings and instructions, please contact your local dealer, service representative or professional technical assistant.

Operating the mobility chair without clear understanding of all instructions in this manual may cause personal injury and/or damage to the mobility chair.

3.0 SAFETY SIGNS

The signs below will help you to identify warnings, mandatory operations and prohibitive operations of your Mobility TEK. These signs are extremely important, please go through them carefully.



Read and follow the instructions of this manual.



The safety warning sign; - A dangerous operation that may hurt you or others.



Electromagnetic/RF Resistance Sign;

When using this mobility chair, avoid using mobile phones, laptops or other radio transmitters.



Easy extrusion/grinding points



Avoid using in rain, snow, ice, salt and water, this mobility chair should be maintained in a clean and dry environment.



The product has passed the test of the electromagnetic/RF resistance to 20 V/M.



The battery contains corrosive chemicals.



Explosive





Do not use batteries with different capacity and models at the same time; when replacing the batteries, do not mix up old and new ones.



Keep tools and other metal objects far away from the positive and negative ends of the battery. Exposing metal objects to both ends of the battery may cause a short circuit or generate an electric shock.



Flammable material, do not expose to flame, spark or any heat source.





Disposal and recycling--

Only authorized recycling companies can recycle parts of this mobility chair.

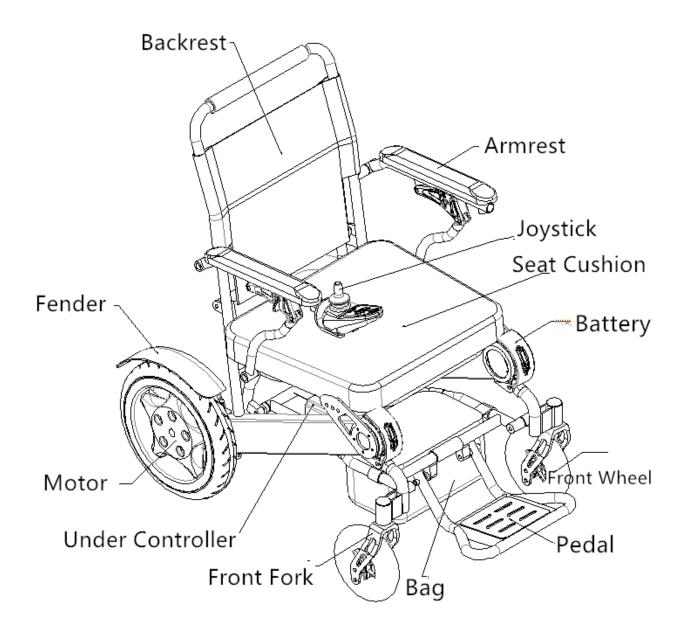
4.0 SPECIFICATION

Item	Description
Model	TEK88M
Colour	Silver
Folded Size	580*325*780 mm (L*W*H)
Unfold Size	960*580*930 mm (L*W*H)
Max. weight Capacity	120 kg
Product weight - without batteries	23.5 kg
Travel Range	18 - 22 km (fully charged)

Item	Description
Motor	
Туре	Brushless DC Motor
Rated Power	250 Watt * 2 pcs
Input Power	DC 24V
Brake System	Intelligent Electromagnetic Brake
Battery	
Туре	Lithium Battery (Li-Ion)
Capacity	12 Ah (6Ah per unit)
Output Voltage	DC 24V
No of Battery Packs	Two (2)
Charging Time	6-8 Hours
Controller System	
Joystick	Assist Type / European Standard
Power Module	Brushless IM-30A-B2
Output Voltage/Current	DC 24V, 30A
Front Castor Wheels	
Outer Diameter / Tyre Width	7" × 1.75" (180 mm x 45 mm)
Type / Material	Solid Tyre - PU
Rear Wheels	
Outer Diameter / Tyre Width	12.5" × 2.25" (320 mm x 57 mm)
Type / Material	Solid Tyre - PU
Weight	
Without Batteries	23.5 kg
With Two (2) Batteries	26.5 kg
Measurables	
Maximum Grade	10°
Travel Range	18 - 22 km (fully charged)
Max Speed	6 km/h (3.75 mph)
Turning Radius	835 mm
Highest Obstacle Capability	40 mm (1.57")



5.0 SCHEMATIC





6.0 **ELECTROMAGNETIC INTERFERENCE**





Electromagnetic interference may affect the operation of your Mobility TEK. Please read through this section carefully, it is extremely important that you have a clear understanding of how electromagnetic interference works.

This section explains the problems electromagnetic interference may cause while operating an electric mobility chair, it is designed to help the user to understand and take corresponding protective measures to avoid or minimize the risk.

Interference from radio waves 6.1

Electric mobility chairs are susceptible to electromagnetic interference, the electromagnetic energy is usually emitted from radio, television, radio transmitters, two-way radios, and mobile devices. Electromagnetic interference may trigger the brakes of the electric mobility chair to lose control, causing the mobility chair to move by itself. This could bring serious injury to the mobility chair user and considerable damage to the mobility chair. It is crucial for an electric mobility chair to have resistance against electromagnetic interference. Our Mobility TEK has passed the resistance strength of 20 V/m electromagnetic interference test, it is equipped with high anti-interference ability, and can resist most common radiation electromagnetic interference in daily life.





Caution

Although this electric mobility chair is equipped with an anti-interference ability, the user should still abide by the following instructions while operating the mobility chair and when the mobility chair is powered on, avoid using mobiles phones, walkie-talkie, laptops, citizen band radios and other radio transmitters. Also avoid getting close to radio sources, such as radio and television stations.

If any uncontrolled movement occurs while operating, the user should turn off the power

of the mobility chair immediately, contact their local dealer, service representative or professional technical assistant for further assistance.

Please avoid modifying parts or adding accessories to the mobility chair as this may affect the electromagnetic resistance.

6.2 EMC Guidelines

Below the cable information is provided for EMC reference.

Cable	Max. cable length - unshielded		Number	Cable classification
DC Power Line	100 cm	unshielded	1 Set	DC Power
AC Power Line	174 cm	unshielded	1 Set	AC Power

Important information regarding Electro Magnetic Compatibility (EMC)

FOLDING ELECTRICALLY POWERED MOBILITY CHAIRS needs special precautions regarding EMC and put into service according to the EMC information provided in the user manual; FOLDING ELECTRICALLY POWERED MOBILITY CHAIRS conform to the IEC 60601-1-2:2014 standard for both immunity and emissions. Nevertheless, special precautions need to be observed.

FOLDING ELECTRICALLY POWERED MOBILITY CHAIRS are intended for use in Professional health-care facility environment and Home health-care environment. It's ESSENTIAL for the brake function correctly.

WARNING: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the FOLDING ELECTRICALLY POWERED MOBILITY CHAIR, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

The use of accessories, transmitters and cables other than those specified by the manufacturer, with the exception of accessories and cables or replacement components or parts sold by the manufacturer, may result in increased EMISSIONS or decreased IMMUNITY of the FOLDING ELECTRICALLY POWERED MOBILITY

CHAIR to EM interference.

WARNING: Use of this FOLDING ELECTRICALLY POWERED MOBILITY CHAIR adjacent to or stacked with other equipment should be avoided because it could result in "improper operation".

6.3 EMI & EMS Compliance Table

Table 1 - Emission

Phenomenon	Compliance	Electromagnetic environment
RF emissions	CISPR 11	Professional healthcare facility
		environment and Home healthcare
	Group 1, Class B	environment
Harmonic distortion	IEC 61000-3-2	Professional healthcare facility
		environment and Home healthcare
	Class A	environment
Voltage fluctuations	IEC 61000-3-3	Professional healthcare facility
and flicker		environment and Home healthcare
	Compliance	environment

Table 2 - Enclosure Port

Dhanamanan	Posio EMC	Immunity toot lovels
Phenomenon	Basic EMC	Immunity test levels
	standard	Professional healthcare facility
		environment and Home healthcare
		environment
Flactrostatio	IEC 64000 4.2	
Electrostatic	IEC 61000-4-2	±8 kV contact
Discharge		±2kV, ±4kV, ±8kV, ±15kV air
Radiated RF EM field	IEC 61000-4-3	10V/m for battery charger
		, , , , , , , , , , , ,
		80MHz-2.7GHz
		601VIF12-2.7 GF12
		80% AM at 1kHz
		20V/m for mobility chair main body
		26MHz-2.7GHz
		2011112 217 01 12
		900/ AM of 1kHz
		80% AM at 1kHz
Proximity fields from RF	IEC 61000-4-3	Refer to table 4
wireless		
communications		
	1	1

equipment		
Rated power frequency magnetic fields	IEC 61000-4-8	30A/m
		50Hz or 60Hz

Table 3 - Proximity fields from RF wireless communications equipment

Toot	Dond	Improved to the color
Test	Band	Immunity test levels
frequency		Professional healthcare facility environment and Home
(MHz)	(MHz)	healthcare environment
385	380-390	Pulse modulation 18Hz, 27V/m
450	430-470	FM, ±5kHz deviation, 1kHz sine, 28V/m
710	704-787	Pulse modulation 217Hz, 9V/m
745		
780		
810	800-960	Pulse modulation 18Hz, 28V/m
870		
930		
1720	1700-1990	Pulse modulation 217Hz, 28V/m
1845		
1970		
2450	2400-2570	Pulse modulation 217Hz, 28V/m
5240	5100-5800	Pulse modulation 217Hz, 9V/m
5500]	
5785		

Table 4 – Input A.C. power Port

Phenomenon	Basic EMC standard	Immunity test levels Professional healthcare facility environment and Home healthcare
		environment
Electrical fast transients/burst	IEC 61000-4-4	±2 kV
		100kHz repetition frequency
Surges	IEC 61000-4-5	±0.5 kV, ±1 kV
Line-to-line		
Conducted disturbances induced	IEC 61000-4-6	3V, 0.15MHz-80MHz
by RF fields		6V in ISM bands and amateur radio bands between 0.15MHz and 80MHz
		80%AM at 1kHz

Voltage dips	IEC 61000-4-11	0% Uτ; 0.5 cycle
		At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315°
		0% U⊤; 1 cycle and 70% U⊤; 25/30 cycles
		Single phase: at 0°
Voltage interruptions	IEC 61000-4-11	0% U _T ; 250/300 cycles

7.0 GUIDELINES





Caution

7.1 User

Before using your Mobility TEK for the first time, make sure you read through this instruction manual carefully, and understand how to operate the mobility chair properly.

When operating the mobility chair for the first time, have someone help you to perform operations such as turning, surmounting obstacles and braking until you feel comfortable performing them on your own.

Do not attempt new maneuvers unless you are sure it is safe to do so. Be aware of your surroundings and stay out of hazardous places.

7.2 Caregiver

Health care assistants should have been trained and obtained professional guidance before using the mobility chair

Before assisting for the first time, make sure you read through this instruction manual carefully, and understand how to operate the mobility chair properly.

Cooperate with the user, listen to the opinions of the user's doctors, nurses, or physical therapists, and make a plan which is most suitable for the user's ability to

operate the mobility chair.

When pushing the electric mobility chair with hands, you must make sure the electromagnetic brake switch is disengaged, this will ensure the mobility chair is in its free-wheel or manual state.

When pushing the mobility chair, you must use the push handle in the back. This will prevent the mobility chair from overturning backwards when pushing.

Check the push handle, make sure the push handle does not rotate or slide while pushing the user through obstacles.

To prevent injuring the pusher's back, when you lift, or push the mobility chair through obstacles, you can bend your knees a little, and keep your back vertical.

Before each movement, make sure the user is aware of your intentions, and explain to the user what you would like him/her to do at the same time. This will allow the user to prepare for your actions and reduce the risk of injuries to both.

Never transport up or down the stairway or steps while the user is sitting in the mobility chair.

If you have to tilt the mobility chair while the user is sitting in it, remind the user to grab both armrests and lean back against the backrest.

7.3 Mounting and Dis-mounting

Getting on and off the electric mobility chair effects the centre of balance of both you and the mobility chair. With improper techniques, falling or tipping over can occur, resulting in injuries and/or damage to the mobility chair.

Avoid falling:

When you are ready to sit in the electric mobility chair, you must turn off the power supply. Otherwise, if you touch the joystick, it may lead to unexpected movement of

the mobility chair.

Ensure the motor is locked, and the mobility chair does not move on its own.

Learn the safest way of moving your body from your professional health care assistant, position your body correctly while sitting in the mobility chair, and know how to support yourself in the process of getting on and off the mobility chair.

Let others help you until you are sure that you can do it on your own.

Move your electric mobility chair as close as possible prior to sitting.

Rotate the front wheels forward.

Be careful of the pedal. Fold it up as far as possible (as shown in figure B2).



В1



B2

Never stand on the pedal, this will damage the mobility chair.

Fold up the armrests if you need more space getting on and off the mobility chair (B1)

When getting on the mobility chair, sit down as quickly as possible.

7.4 Body Position - Balance

When driving, the electric mobility chair should be kept in balance and with a

stable centre of gravity to prevent tipping over.

Factors that influence the balance and centre of gravity:

The height and angle of the seat.

Changing user's body position and posture.

The ramp or slope gradient.

Changing weight distribution of the mobility chair by adding or removing carriage.

If you need to modify or adjust the electric mobility chair, please consult your supplier in advance, and the manufacturer must authorize its modification.

The modified mobility chair may need to be adjusted prior to use. After modifying the mobility chair, be cautious while operating until you are familiar with the mobility chair's new balance and centre of gravity

7.5 Body position - Leaning

Stretching or tilting your body will affect the centre of gravity and balance of the electric mobility chair. With improper techniques, falling or tipping over can occur, resulting in injuries and/or damage to the mobility chair. The following tips can reduce the risk of falling or tipping over.

Never move out of the seat of your mobility chair while stretching or tilting your body, keep your back and rear end in contact with the backrest and seat as much as possible.

If you are leaning forward, keep your rear end in contact with the seat as much as possible (as shown in figure C1),

Never attempt to reach for an item that is far, move your mobility chair as close as

possible to the item that you are trying to reach.

Never attempt to pick up an item on the floor. (as shown in figure C2)

When you are extending your body, do not exert pressure on a single point of the mobility chair, doing so may cause the mobility chair to tip over.

Never lean on the top of the backrest, doing so may cause the mobility chair to tip over.

If you do extend or tilt your body, you are doing so at your own risk. Remember:

Move your electric mobility chair as close as possible to the object you want to reach.

Rotate the front wheels as forward as possible, this will make the electric mobility chair more stable.



C1



C2

Turn off the power supply to the mobility chair when it's not in use.

7.6 Dressing

Dressing while sitting in the mobility chair affects the centre of balance of both you and the mobility chair.

To make the electric mobility chair more stable, rotate the front wheels as forward as possible.

Attention:



Never move out of the seat of your mobility chair while dressing, keep your back and rear end in contact with the backrest and seat as much as possible

Never sit or tilt your body sideways during the dressing process.

Never put pressure on the pedal while dressing.

7.7 Stairs

This electric mobility chair is not suitable for traveling up and down stairs, or on the escalator. Pay attention to the following precautions when using the elevator.

- Do not use the mobility chair on any stairs or the escalator.
- The elevator can be used when you are sitting on the mobility chair.
 Make sure the elevator stops and the door is completely opened before driving inside.

When the elevator is not available, the mobility chair needs to be folded before carrying.

If the user wants to move the electric mobility chair between floors by stairs, the assistant should note the following:

- the user must get off the electric mobility chair.
- Fold the electric mobility chair. Before folding, the joystick controller must be taken off.
- Avoid collision when moving the electric mobility chair up and down stairs.

7.8 Weight Capacity





Caution

The maximum load capacity of this electric mobility chair is 120 kg. The total weight of the user and all carriage should never exceed this limit.

The backrest's load capacity is less than 75 kg, do not press against the backrest.

Never perform any weight training on this mobility chair, even if the total weight of the user and all weights does not exceed the weight limit.

If the load exceeds the maximum load capacity, it could damage the seat, frame, fasteners, motors etc., and may cause injuries to its user.

Damage to the mobility chair caused by exceeding this weight limits voids all warranty.

8.0 OPERATIONS





Caution

8.1 Operational Safety

Do not attempt to operate the electric mobility chair when you are on transport vehicles, such as buses, subways, trains, planes and ships.

Make sure you fasten your seat belt while sitting on a moving transport vehicle.

Secure your electric mobility chair so it does not shift or roll on the motor vehicle.

Never place the electric mobility chair in the front of transport vehicles, doing so will interfere with the driver.

When getting on or off the transport vehicle, if an assistant need to lift the mobility chair, grip the edge of the seat frame, never hold the handrail or back of the mobility chair to lift.

Do not lift the mobility chair while the user is sitting on it.

8.2 **Joystick Stationary State**

When you stop using your Mobility TEK, even for a short duration, make sure you turn off its power.



This can prevent:

- You or others touching the joystick accidentally, causing
 - unexpected movement.
 - The possibility of an unexpected source of electromagnetic interference triggering the mobility chair to move accidentally.

Please ensure that others, especially your assistant know how to use the joystick controller properly. Never play around with the joystick controller.

8.3 Unfavourable Condition

This mobility chair is not suitable for use in heavy rain, snow or icy conditions.

Contact with water or excessive moisture can cause electrical failure. Frame, motor and other electric mobility chair parts are not waterproof, exposing them to water may cause rust or corrosion from the inside.



To prevent the malfunction of the electric mobility chair, the following operations are strictly prohibited.

- Avoid using this electric mobility chair during heavy rainfall.
- Avoid using this electric mobility chair in the bath, sauna and swimming pool.
- Avoid using this electric mobility chair near water sources (such as rivers, lakes or ocean).

- Make sure the battery cover is closed
- If the joystick is broken, replace it as soon as you can.
- Make sure all the electric connections are safely secured.
- Never rinse this electric mobility chair. If electric mobility chair gets wet, take out the batteries as soon as possible, dry the mobility chair and batteries completely before attempting to use them again.

Do not use this electric mobility chair on wet or slippery surfaces.

- You must make sure that you are operating in a safe environment.
- If one or two drive wheels lose traction, stop operating immediately to prevent the electric mobility chair from running out of control.
- Never operate on slopes or ramps with snow, ice, water or oil on top.
- Seek help immediately when you are stuck in a wet environment.

Turn off the power supply if you are not operating this mobility chair.

8.4 Favourable Conditions

The electric mobility chair is only suitable for concrete, asphalt and indoor floor surface.

Do not use this electric mobility chair in sandy or coarse dirt or rugged terrain, doing so may cause damage to wheels, bearings, shaft or motor parts, or fasteners may become loose.

8.5 Road Operations

In most countries and regions, operating electric mobility chair on public roads is illegal.

Operating the electric mobility chair on the road or in the parking lot is dangerous.

For easy recognition at night, Reflective tapes should be placed on the electric mobility chair (see pictures). The user can also wear reflective clothes





When operating this electric mobility chair in public, always make eye contact with driver of the oncoming vehicle before you proceed. If there is any doubt, yield until it is safe to move.

8.6 Obstacles

You need to overcome some obstacles during your daily use of your electric mobility chair, these obstacles include threshold, elevator, ramp, pits and broken pavement, etc.

Attention:





Caution

Thresholds are very dangerous. Even a small height change may cause the electric mobility chair to tilt and roll over.

You may have to install ramps at entry or exit doors as well as remove or cover threshold strips between rooms.

When operating the electric mobility chair, beware of obstacles and avoid them as much as possible in the area that you are driving on.

Operate your mobility chair slowly while going over obstacles.

To better maintain your centre of balance while operating through obstacles:

When you are going over an obstacle, lean your body slightly forward.

When you are moving downward through an obstacle, lean your body slightly backward.

8.7 Reversing

When you drive the electric mobility chair in reverse, you need to be more careful. If the rear wheel hits an object, you may lose control and tipping over can occur.

When driving in reverse, drive as slow and as steady as possible.

When driving in reverse, keep an eye on what's behind you and make sure the path is clear.

8.8 Gradients

When operating on the slope, the centre of balance of you and your electric mobility chair will change.

"slope" may be a ramp or hillside. Operate only if you are sure it is safe to do so, have someone help you while you are operating on a slope.

Attention:



Never use the mobility chair on a slope that is steeper than 10 degrees.

Never use the mobility chair on a slope if there is snow, ice, water or oil on it.

Never use the mobility chair on a slope that has uneven surfaces or a change in the slope grade.

Be aware of a slope that has a drop off at the bottom, this may cause the mobility chair to tip forward.

9.0 INSTALLATION INSTRUCTIONS

9.1 Joystick Installation

You must install the controller in position as shown on the picture to reduce the risk of collision and falling.

Check functionality of the joystick every six months. (If necessary, check and adjust as needed)



If you find any change in functions of the controller joystick, please contact your local dealer, service representative or professional technical assistant for further assistance.

The joystick controller can be installed on either the left or the right arm according to the user's needs.



D1

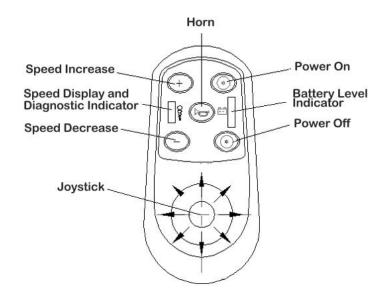


D2

As shown in figure D1, insert the joystick into the armrest tube opening, make sure it has been inserted correctly, and fixed the joystick by locking the knob on the bottom.

As shown in figure D2, insert the four-core plug on the right into the left socket.

The control panel controls the electric mobility chair. It consists of the following sections:



Power on: Turn the power on when the power chair is in electric mode.

Power off: Turn the power off when the power chair is in electric mode.

Battery Level Indicator: The lights here will indicate the remaining battery power.

Speed Display and Diagnostic Indicator: There are five speed options for your power chair, pressing the speed increase/decrease button will adjust the speed accordingly. When the light stays solid green, this power chair is operating properly; if the light starts flickering, there might be an issue with your power chair. More information on how to diagnose your power chair is provided in the trouble shooting section.

Speed Increase: Increases the speed of the power chair when pressed.

Speed Decrease: Decreases the speed of the power chair when pressed.

Horn: The horn will sound when pressed.

Joystick: Controls the direction of the power chair.

9.2 **Joystick Control**

While operating at high speed, do not attempt sharp turns or stop suddenly, doing so may cause the mobility chair to tilt or tip over, resulting in injury to the user and/or damage to the mobility chair.

The joystick is equipped with 360° mobility, it controls the direction of the mobility chair smoothly, and is very easy to operate. While not operating, the spring in the joystick allows it to return to the centre of the initial state, making the mobility chair brake automatically.

Push the joystick in the direction you wish the mobility chair to move to, Joystick has proportional control ability. The speed is limited within 6 km/h (3.75 miles per hour).

If you wish to decrease the speed of the mobility chair, release the joystick. The mobility chair will automatically slow down.

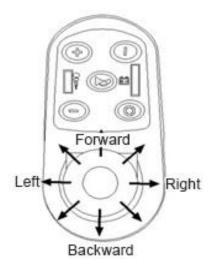
When operating this mobility chair for the first time, push the joystick forward slightly, and operate at a slow and safe speed. This practice will help you to learn how to control the mobility chair. Speed up gradually as you become more familiar with using the joystick to control the mobility chair.

While operating the electric mobility chair, please note the following:

Adjust the control panel to the appropriate settings.

Turn on the power supply. Please refer to the previous section on "press the power on/off button".

Move the joystick as shown on the table below.



Movement	Operate the joystick
Forward	Move the joystick forward
Backward	Move the joystick backward
Right	Move the joystick to the right
Left	Move the joystick to the left



9.3 Joystick Horn

Press the horn button in case of emergencies or to get someone's attention.

10.0 BRAKE

After any adjustment, repair or maintenance, please make sure all accessory parts are installed tightly before operating this mobility chair, otherwise it may cause injury to the user and/or damage to the mobility chair.

Please do not open or close the electromagnetic brake when the power is on.

Locking or unlocking the electromagnetic brakes to the side of the motors will allow you to switch your power chair between manual/free wheel mode and electric mode.

10.1 Brake Open / Close



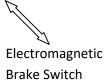


Find the motor electromagnetic brake release lever and perform the following:

Flip the brake backwards with the brake release lever will switch the mobility chair to its electric mode as shown on the picture to the left.

Flip the brake forward with the brake release lever will switch the mobility chair to its manual/free wheel mode as shown on the picture to the right







Manual Mode



Power Mode

11.0 BATTERIES





Do not use batteries with different capacity and models at the same time; when replacing the batteries, do not mix up old and new ones.



Keep tools and other metal objects far away from the positive and negative ends of the battery. Exposing metal objects to both ends of the battery may cause a short circuit or generate an electric shock



Do not store the batteries close to flammable materials. Do not expose the batteries to any heat source, such as fire or sparks, etc. Do not transport the battery with any flammable or combustible materials.



There are some corrosive chemicals in the battery box, disassembling the battery is prohibited.



Do not short circuit batteries or throw battery into the fire to avoid explosion. Dispose the batteries through legal recycling centres.

11.1 Usage





Caution

Do not use pliers, cable wire or any metal item to connect the ends of battery directly.

Do not use the mobility chair when it is charging.

Do not use non-standard power supply (for example: generator or inverter), even if the voltage and frequency meets the requirements.

Do not bend or pull the power wire, especially near the plug to prevent the power wires from being damaged.

Keep children and pets far away from the power wires, never allow them to bite or chew on them.

Hold the plug if you wish to pull out the power wire.

If the circuit breaker is tripped too many times while the batteries are charging, unplug the charger immediately and contact the dealer or professional technical support.

In this guide, all the warranty and operations are referring to lithium batteries.

Do not smoke or have any flammable source near the battery.

Do not use battery in extremely hot or cold environment.

When the new battery packs arrive, they should be fully charged; if not, we recommend fully recharge them before using your mobility chair for the first time.

If it's possible, try to use up the batteries until the charge is as low as possible before recharging them. This is the best way to maximize the life cycle of these batteries.

11.2 Charging

Before first using the new batteries, the user should check the batteries for their remaining power. After using up the batteries for the first time, the charging time should be about 6 to 8 hours.

The recommended charging time is about 6 to 8 hours, continue charging the batteries until the light on the charger turns from red to green.

If you do not use the electric mobility chair for a period, please recharge the batteries least every month, as leaving the batteries for longer period will damage the batteries.

Using batteries with different specification, voltage and capacity will damage your electric mobility chair, and the Mobility TEK will not perform properly.

We suggest you fully charge up the batteries prior to a long trip.

11.3 Installation and Removal





Caution

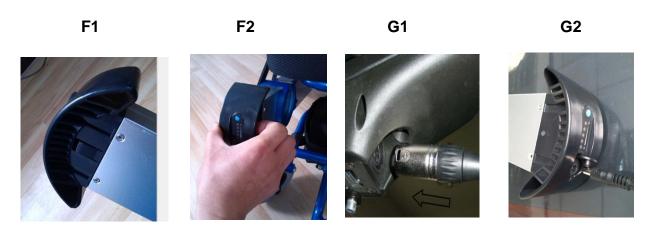
Please make sure you power off the mobility chair before installing or removing the batteries.

Removal of Battery:



Keep tools and other metal objects far away from the positive and negative ends of the battery. Exposing metal objects to both ends of the battery may cause a short circuit or generate an electric shock.

Press the lock button (As shown in figure F1), then pull the battery handle (As shown in figure F2). Pull the battery from the battery tube.



Installing the Battery:

Hold the battery handle, insert the other side of the battery into the right-side opening of the battery tube until the battery is all the way inside, then insert the red power plug into the bottom opening of the battery tube.

11.4 Charging Port

Use available standard alternating current (AC 110-220 V, 50-60 Hz)

for charging, the charging port is in front of the control panel below. Make sure that you

power off the mobility chair before charging.

Insert the charging cable of the charger into the charging port in front of the control panel below. (As shown in figure G1) or you can also charge the battery directly (as shown in G2)

Insert the other side of the charger into the wall socket. If the red indicator light is on, it shows it's charging.



After the charger indicator's light changes from red to green, keep charging the batteries for 30 minutes to ensure they are full charged. Unplug the external wall plug first, then unplug the cable from the control panel.

11.5 Over Discharge Protection

When the battery of the electric mobility chair runs out of power, the over discharge protection device will shut the batteries off to protect them against excessive discharge. Users should notice that when the over discharge protection device is activated, the maximum speed of the mobility chair will be reduced.

11.6 Over Current Protection

The electric mobility chair is also equipped with an over-current protection device. If the current provided to the motor is excessive, the electronic fuse will close the current.

If there is any malfunctioning when operating the mobility chair, the over-current protection device will be activated, the driving wheels will stop rotating. In this process, the fuse will cut off the current, prevent the motor from being damaged from overheating. (See the control panel section)

11.7 Period Cleaning

Check whether the battery case, the positive and negative ends of the battery are corroded or not.

Check whether the plastic battery box has been assembled completely.

Use battery cleaning tools - medium sandpaper to clean the battery port.

Attention:



After cleaning the batteries port, they should be completely dry, and clean up all the dust of the metal particles carefully.

Do not touch your skin or clothing with battery materials. Batteries can weep acidic material, and may lead to harmful burns. If you accidentally touched the materials, immediately wash your skin thoroughly with cold water. If the battery materials ever make contact with your eyes, seek medical attention immediately.

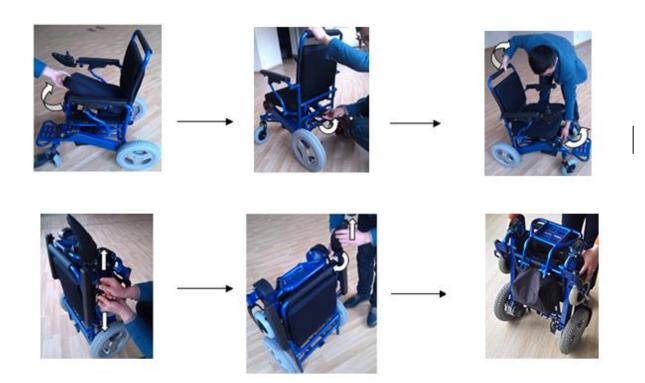
12.0 FOLDING AND UN-FOLDING

After any adjustment, repair or maintenance, please make sure all accessory parts are installed tightly before operating this mobility chair, otherwise it may cause injury to the user and/or damage to the mobility chair.

The weight of the Mobility TEK (with batteries) is 26.5 kg, do not attempt to lift the mobility chair while the user is sitting on it. Grip the edge of the seat frame, never hold the handrail or back of chair to lift.

12.1 Folding Steps

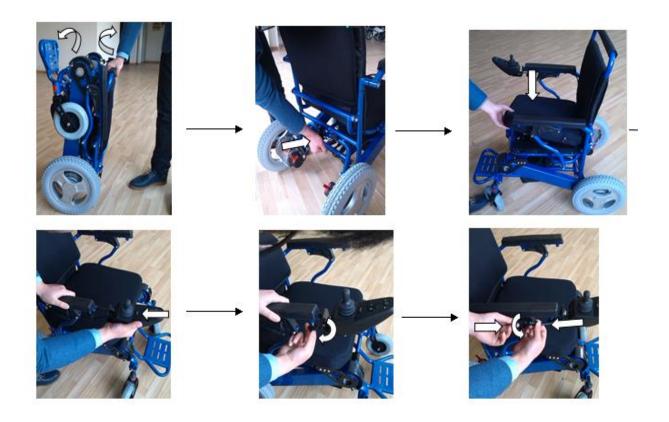
- Make sure the power is turned off.
- Take off the seat cushion
- Unlock the latch on the back of the mobility chair
- Pull up the footrests
- Grip top of the backrest with one hand, front of the mobility chair with another hand, push towards each other until the mobility chair is in its upright position.
- The Mobility TEK is now completely folded.



12.2 Un-Folding Steps

- Grip top of the backrest with one hand, front of the mobility chair with another hand, pull away from each other.
- Lock the latch on the back of the mobility chair.
- Put the seat cushion on the mobility chair
- Pull down the footrests.
- Install the controller joystick (Refer to the joystick installation instruction section)
- The Mobility TEK is now completely unfolded and ready to operate





13.0 MAINTENANCE

Regular maintenance will both increase the lifespan and improve the performance of your Mobility TEK.

13.1 Routine Cleaning

Clean your mobility chair often, wipe off any dust or dirt especially on or around motors and wheels.

Do not clean your mobility chair with oil or chemical fluids.

Do not rinse the mobility chair with water. Wipe down the surface with a damp cloth, then wipe off any water marks with a dry cloth.

Wash the seat cushion only if necessary, it can be hand washed

13.2 Regular Checks

Check the mobility chair often for any loose fasteners or cables.

Check the batteries periodically for corrosion

13.3 Storage

Always store your mobility chair in a clean and dry area.

Perform a detailed check before using the mobility chair after storage.

14.0 TROUBLESHOOTING

The section will assist your local dealer, service representative or professional technical assistant.

14.1 System Diagnostics

The speed display on the joystick also functions as a diagnostic indicator for your power chair. When the light is green, the power chair is functioning correctly, and if it starts flickering, then there's an issue.

If it's the first time that the indicator is flickering, power off the power chair, turn it on after a few seconds and recheck the diagnostic indicator. If it continues to flicker, then refer to the diagnostic chart for more information.

Issues with the motor, brake, battery, wire connections and other parts of the power chair can trigger the diagnostic indicator to flicker.

There will be a pause after the initial flickering, follow the flickering pattern to find out which part is causing the problem from the diagnostic chart.

14.2 Diagnostic Table

Flicker Pattern	Diagnosis Part	Solving Recommendations
Flickers one time	Hall malfunction	Check the welding connection of the left
slowly	of left motor	motor and the internal hall component.
Flickers two times	Hall malfunction	Check the welding connection of the right
slowly	of right motor	motor and the internal hall component.
Flickers three	Malfunction of	Try a different charger. If the problem
times slowly	battery charger	persists, check the battery cable to make
		sure it's connected tightly.
Flickers four times	Malfunction of left	Check the cable connected from controller
slowly	motor	to the left motor, make sure it's connected
		tightly.
Flickers five times	Malfunction of	Check the cable connected from controller
slowly	right motor	to the right motor, make sure it's
		connected tightly.

15.0 WARRANTY

The warranty instruction:

Warranty parts	Warranty period	Exclusions to Warranty	
Frame	Two years	Malfunction caused by improper use and handling. Modifying the mobility chair without dealer or manufacturer's authorization.	
Motor	One year	Exceeding the weight limit leading to damage to motors or opening the motors without dealer or manufacturer's authorization.	
Battery	One year	Dealer and manufacturer are not responsible for injuries to user and/or damage to the batteries and mobility chair if the user charges the batteries with improper techniques.	

Controller	6 Months	Malfunction caused by improper use and handling. Modifying the mobility chair without dealer or manufacturer's authorization.
Joystick	6 Months	Malfunction caused by improper use and handling. Modifying the mobility chair without dealer or manufacturer's authorization.

15.1 Exclusions

Warranty exclusions apply to the following;

- Back cushion, seat cushion, armrest foam cotton, backrest foam cotton, decorating parts are damaged after use.
- Damage caused by mal-operation, accident, abuse, improper installation and repair.
- Damage caused by refitting the product without the written consent of the manufacturer
- Damage caused by exceeding the maximum weight limit.

Warranty exclusions also apply to the following;

- Incorrect operation and maintenance
- Using incompatible replacement parts
- Accident or misuse caused by mechanical damage
- Consumable items are not in the warranty scope, such as tire, bearing, bulb, etc.
- Any unauthorized conversion.
- Any damage caused by natural disasters or accidents, such as typhoon, flood and earthquake.
- This warranty does not include the routine maintenance or detection service.
- This warranty only applies to the original buyer; transferring is not allowed.

WARRANTY STATEMENT

The warranty card must be handed over to the customer support department of the manufacturer in 15 days after the purchase

The dealer should confirm the problems of the mobility chair first. Under the condition of using incorrectly, if it is the quality problem, the dealer needs to fix or change the parts.

If the serial number of the electric mobility chair is not the original serial number, having been modified or no longer matches with the serial number of the warranty card, or the serial number of the warranty card has been revised, the warranty is void.

This warranty only applies to the original buyer, and is not transferable to anyone else.

Within the permissible scope of the law, this warranty will take the place of any other warranty (e.g., written or oral, express or implied warranty, including merchantability, or suitability for a purpose.



