



MISSY CARE
bridging the needs.

User Manual

Santa



Detachable Foldable Power Wheelchair



Preface

IT IS VERY IMPORTANT THAT THE USER READ ALL THE INSTRUCTIONS BEFORE USING THE WHEELCHAIR. IT IS USER'S RESPONSIBILITY TO USE THE EQUIPMENT CORRECTLY ACCORDINGLY TO THE FUNCTIONS IT IS DESIGNED FOR.

Please read the user manual carefully before using the power wheelchair.

- ✧ This manual contains operations, assembly methods, and simple faults solutions.
- ✧ This manual applies to our model: ***MissyCare MC1010-Santa***.
- ✧ This manual contains wheelchair maintenance and self-checking methods.
- ✧ The annotations and illustrations in this manual might be slightly different from the actual product due to quality improvement or changing of design.
- ✧ Improper use of any vehicle may lead to injury. Unsafe driving could harm yourselves and others.
- ✧ This electric wheelchair is designed to transport ONE person only.



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.

User Guide

It is very important that the users and caretakers read all the instructions before using the equipment. It is user’s responsibility to use the equipment correctly according to the functions it is designed for.

1.1 Composition of Santa



1.2 Main Technical Data



Wireless Bluetooth controller (10m range)

Santa Specifications	
Model No	MC-1010-Santa electric powered wheelchair
Seat Dimension	18" (W) x 17" (D)
Floor to Seat Height	18"
Overall Dimensions	42" (L) x 24.5" (W) x 38" (H)
Net Weight	28 kg with 12ah battery / 29kg with 20ah battery
Max User Weight	100 kg
Max Speed	6 km/ hr (Compliant with LTA regulation)
Battery/ Mileage	24V / 12Ah Lithium battery for 10-15 km* 24V / 20Ah Lithium battery for 20-25 km* * depends on user riding patterns, road conditions, terrain, loading etc
Features	▪ Dual DC 250W high efficiency wheel hub generator ▪ Unique lightweight Aluminum alloy frame chassis wheelchair structure providing extra durability & stability. ▪ Comfortable removeable seat & back cushions for prolonged sitting ▪ Foldback handles for ease of car boot storage ▪ Flip up armrests & detachable footrest for ease of transfer. ▪ Wireless Bluetooth controller for caregiver to control wheelchair movement remotely within 10m ▪ Safety belt is included
Warranty	▪ 1 year on frame chassis, motors & Control modules with 6 months on battery against manufacturing defects, faulty materials and workmanship only ▪ Any alterations, misuse, abuse, or accidental damage void this warranty

Main technical data	MissyCare MC1010-Santa		
Overall size	106cm x 62.5cm x 97cm	Folded size	78cm (L) x 45.5cm (B) x 75.5cm(H)
Seat size	45cm x 43cm	N.W. with 12Ah battery	28kg
Speed	1~6km/h	Seat Height	46cm
Armrest height	23cm	Backrest height	39.5cm
Max user load weight	100kg	Front wheel diameter	8 inches
Rear wheel diameter	12 inches	Battery	DC 24V 12Ah/20Ah Li-ion
Motor (*2pcs)	DC 24V 250W	Battery charger	AC 100~240V, 50Hz, 1.5~5A
Control	35A	Max driving distance	20km
Degree of protection	IPX3	Max safe slope	6°
Turning radius	≤1.2m	Static stability	9°
Reversing width	≤1.5m	Climbing angle	6°
Tire type	Solid PU	Obstacle climbing	40cm

Application Range

MissyCare Santa power wheelchair is designed for the physically challenged and elderly people under 100kg weight to use it as a travelling aid. It is suitable for indoor use.

Contraindication:

People who are under these circumstances: Unresponsive upper limbs, senile dementia, psychopath, physiology who are not independent are advised **NOT** to use this equipment.

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 navigate the wheelchair skillfully.
- ♦ Please strictly follow traffic rules of the local traffic law regulations.
- ♦ Please drive on the sidewalk and the zebra crossing. Do not drive on vehicle lane.

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 get in contact with water, wipe down the wheelchair immediately.
- ♦ Drive on the poor road condition, such as muddy, trail, sand road, gravel, etc.
- ♦ Drive on no fence side ditch, pond, etc.
- ♦ When you must move across a wider gap from the platform onto the train, try to enter via reversing into the train to make sure that the front tires will not get stuck in the open gap.
- ♦ The electric wheelchair is only for personal use. Do not carry other people or child on your lap.
- ♦ Caregivers should confirm that the users' feet are placed properly on the footrest.



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 operate the controller carefully when drive on slopes.
- ♦ Keep moving straight 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.

2.3 Repairs and Modifications:

Repairs & Modifications should only be done by a trained technician from authorized agent. Do not modify by yourself. It may cause accident or wheelchair malfunction which will void all warranty.



Don't modify the assembly or materials of this 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. Periodical checks and maintenance are needed to last the service life of the power wheelchair.

Date of manufacture: see the label tab.

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. Hence 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.



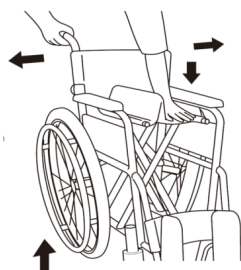
Electric wheelchair shouldn't be put or used together with other electromagnetic devices.

3. Usage and Operation

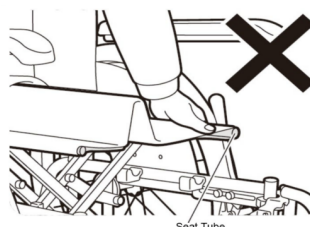
3.1 Adjustment of Wheelchair

Unfolding the wheelchair:

Push down the seat frame gently to open the wheelchair for usage. (Pic 1). Do not hold seat tube when pressing down the seat in case fingers are pinched (pic 2). Please make sure that the lock is secured before sitting on.



Pic 1



Pic 2

Folding up the wheelchair

First step: Take off the battery and unplug the red plug (pic 3).

Second step: Pull the backrest joint lever backward and fold back the handle (pic 4 and 5).

Third step: Lift the cushion strongly by hands, fold wheelchair (pic 6).



Pic 3



Pic 4



Pic 5



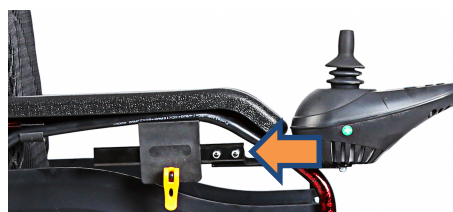
Pic 6

Installing the joystick controller

Loose the quick release spanner which under the armrest (pic 7). Adjust controller to a proper position, clockwise rotate the spanner and then button it. After lock the control, put the control wire into the groove. (Pic 8)



Pic 7



Pic 8

3.2 Installation and Replacement of Battery

Disconnect the battery plug and controller plug (pic 9), and then remove battery from wheelchair. Do the vice versa for installation of battery.



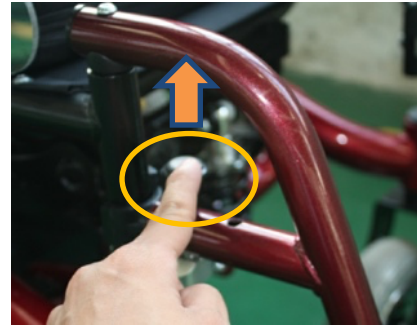
Pic 9

3.3 Engaging the Footrest

To install the footrest from the outward position, align the black plastic and insert into the frame as circled. And swing inward to the locked position. To detach, pull the black knob upward to release the locking pin. Swing the footrest outward. (Pic 11)



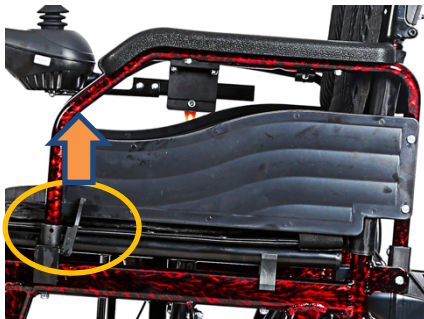
Pic 10



Pic 11

3.4 Detaching and locking of Armrest

One hand to press on the armrest lever while the other hand to flip up the armrest (pic 12). And press down the armrest back to the original position to lock armrest (pic 13).



Pic 12

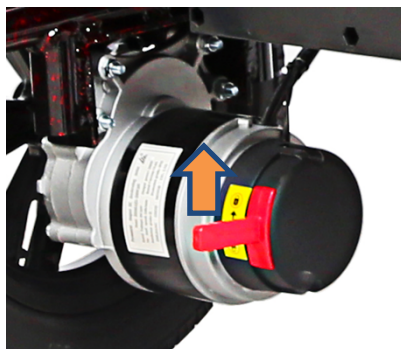


Pic 13

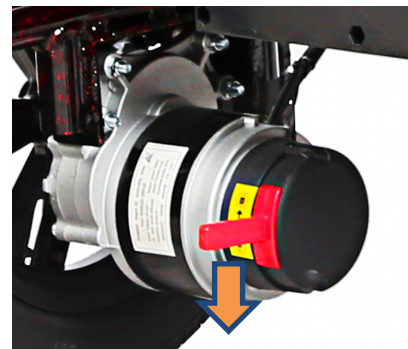
3.5 Switching between Manual Push Mode and Electric Power Mode

Manual Push mode: pull up the gear switch lever on left & right motor (pic 14).

Electric Power mode: pull down the gear switch lever on left & right motor (pic 15).



Pic 14



Pic 15



When changing from manual push mode to electric powered mode, please ensure both gear switch levers are engaged correctly. Otherwise, it may cause danger of rollover.

4. Battery and Charger

4.1 Charger Requirements

The charger is used for battery charging. Do not operate the power wheelchair during charging.

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 Charging through your controller

To charge the battery, connect the charger to the power supply.

Follow the instructions below to complete charging process:

Step 1: Ensure that the charger groove is not blocked.

Step 2: Ensure that the electric wheelchair is turned 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 blue light on the charger will be lit to indicate charging in progress.



Do not stop charging until charge process is finished. Repeat usage of a battery which is not fully charged will shorten the battery life, so each charging cycle of the battery should be complete. When battery is fully charged, the power indicator will turn to green. After full charging is completed, turn off the power supply to protect the battery. Do not charge more than 24 hours. Over-charging is dangerous.



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 damage the battery prematurely. It is normal for the charger to be warm during charging. Please do not worry about it. It is normal for the fan to make a sound during the charging process. This is to cool the charger and does not pose a concern.

Prevent liquid from getting into the charger during charging. Please keep flammable items such as fuel away from the charging port. Please stay away from the flames when charging the battery. The flames may cause battery fire or explosion. 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 Clean and Maintenance of the wheelchair & battery

Please clean the wheelchair regularly. Wipe down the parts which are frequently in contact with user's body (such as seat cushion, armrest, controller) with a clean damp cloth. Do not use alcohol-based solvents to clean parts made of PU rubber & plastics as it may cause premature damages to the parts.

Wrong operation of replacing battery may cause danger of explosion. Only the same or recommended type of battery is suitable for replacement. Make sure the battery poles are connected correctly. Key tips to prolong the battery life: charge frequently to keep battery power full. It is better to charge up the battery fully even if the wheelchair is not being used. If the power wheelchair hasn't been used for a prolonged period, it is ideal to charge at least once a month to make up for the battery memory loss.

5. Error Diagnosis Indication Chart

When the indicator LED lights are blinking, it means the control system has having some problem trying to operate normally. The problems may occur in following parts: motors, brakes, battery, wire connections. Through the product's LED visual signal indicator, the source of the problem can be detected by the diagnosis signal. The problem can be detected so that necessary actions can be taken.

When malfunctions happen, make sure the power is turned off before diagnostic commences.



The controller has a smart diagnosing system to monitor the controller and motor. Any malfunction of these parts is indicated by the controller. Please kindly refer to page 10 of Error Diagnosis indicator chart.

Error Diagnosis Indication Chart

Status of LED light	Indications	Explanation & Solution
All LED lights are unlit with no buzz sound	❖ The power is turned off with the wheelchair in standby or sleep mode. ❖ Wire connection is loosed. ❖ Fuse has tripped or burned out.	❖ Check wire connections & fuse.
All LED lights are lit	Normal operation. No abnormality	-
The leftmost red LED light is lit	The battery power is extremely low.	❖ Charging is required. ❖ Battery may need malfunctioned/damaged where a replacement is required if charging up is not possible.
Two short beeps, LED lights blink twice	The left motor has malfunctioned.	❖ Check wire connections on the left motor
Three short beeps, LED lights blink thrice	The left magnetic brake system has malfunctioned.	❖ Check wire connections & gear lever position on the left magnetic brake system
Four short beeps, LED lights blink four times	The right magnetic motor has malfunctioned.	❖ Check wire connections & gear lever position on the left magnetic brake system
Five short beeps, LED lights blink five times	The right magnetic brake system has malfunctioned.	❖ Check wire connections on the right magnetic brake system
Six short beeps, LED lights blink six times	controller is in over-current protection status.	❖ Check the brakes system to see if the motor drive mechanism is faulty ❖ Check if the controller has malfunctioned.
Seven short beeps, LED lights blink seven times	Joystick has malfunctioned.	❖ Check wire connections of joystick
Eight short beeps, LED lights blink eight times	Controller has malfunctioned.	❖ Please consult your dealer for maintenance.
Nine short beeps, LED lights blink nine times	Controller has malfunctioned.	❖ Please consult your dealer for maintenance.

6. Controller

6.1 Controller Panel



6.2 Controller Usage

Power Switch



Press this button to activate the control system. The battery power gauge lights will light up on from left to right. Press the power switch again to turn the power off.



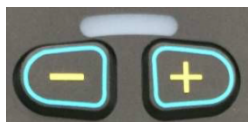
In times of emergency, you can turn off the control system immediately by pressing the power button.

Sleep Mode

If the joystick has no operation more than 20 minutes, the power turns off automatically to conserve power. The system can be re-activated from sleep mode by pressing the 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 ranging from 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 buzz until you release the button.

Battery Power Gauge



After turning on the power switch, the battery power gauge on the controller will show the remaining power capacity. Example as the left picture shows the battery power is full capacity & no charging is required. When LED light lit orange and below, the battery should be charged. If only the red LED light is lit, battery capacity is extremely low hence charging is immediately required. Usage of the power wheelchair is strongly advised against.



The joystick controls the movement of the power wheelchair. The moving extension of the joystick also controls the speed of the power wheelchair. The further you extend the joystick, the faster it moves.

6.3 Wireless Bluetooth Controller



Please turn on or off the power when the joystick is in the neutral upright position. Otherwise, the controller will malfunction

7. Headlight



To install the headlight and USB charger simply insert the headlight into the joystick charging port. Refer to pic 19.

Pic 19.

8. Warranty

8.1 Limited Warranty

Your power wheelchair carries a limited warranty coverage of **12 months** from the original date of purchase on frame, motors, control modules against any manufacturing defects. This device is built to exact standards and carefully inspected prior to shipment.

The factory default battery carries a limited warranty coverage of **6 months** from the original date of purchase against manufacturing defects. Any form of modifications or signs of abuse or neglect will void warranty at agent's discretion.

Our 12 months limited warranty coverage is an expression of our confidence in the materials and the workmanship of our products and our assurance to the user for years of dependable service. In the event of a defect covered by this warranty, we will, at our discretion, repair or replace the affected part.

This warranty does not cover device failure due to misuse or negligence of users, or normal wear and tear. The warranty does not extend to consumable components such as rubber accessories, armrests, and grips, which are subject to normal wear and need periodic replacement. In the event when the device requires repair or replacement within warranty, the owner is responsible for the cost of transportation to and from our service centre.

For any after sales services, please contact your service agent/dealer and give all relevant details so that they can act accordingly. The manufacturer reserves the right to alter without notice any weights, measurements or other technical data shown. All figures, measurements and capacities shown are estimated. Our equipment which has been subjected to negligence, abuse, improper storage or handling, improper operation, unauthorized modifications, or damages beyond reasonable control are not covered by the 12-month guarantee.



PROOF OF PURCHASE IN SOFT COPY OR HARD COPY MUST BE PRESENTED BEFORE ANY WARRANTY CLAIMS CAN BE CONDUCTED. WE RESERVED THE RIGHTS TO REFUSE ANY CLAIMS IF NO PROOF OF PURCHASE IS PRESENTED.

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