

decon mobility



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1. To the user

Dear customer,
Thank you for choosing the SmartChair MAX S electric wheelchair.

This electric wheelchair offers high safety and comfort and is easy to maneuver. It will help you regain your mobility and will be your reliable companion.

The chair has two 250 W brushless DC motors and can be used both indoors and outdoors. (The ambient temperature should be between -5°C and +45°C.) The electric wheelchair is compact, lightweight, and foldable. SmartChair MAX S, also designated PL001-8002, is classified as a Class I medical device and complies with the requirements of EU Regulation 2017/745 of April 5, 2017 (MDR).

Do not use the electric wheelchair before you have read and understood the user manual. If you have difficulty understanding the warnings, notes, and instructions in this user manual, please contact your prescriber or dealer for guidance and assistance. Otherwise, you may suffer bodily injury due to incorrect use.

The user manual describes the functions, operating modes, and maintenance of the electric wheelchair in a systematic manner. Contact your prescriber or dealer if you need further help and guidance.

2. Safety marking

Familiarize yourself with the following warning signs, prohibition signs, and instruction signs so that you can use the power wheelchair more safely and efficiently.

Markings on the frame

	Reverse rotation		Forward rotation		Transport mode
	Safe		Lifting		Rotation
	Risk of pinching		Read and follow the instructions in this user manual		Safety warning
	Parts that come into contact with the user		Part that may cause entrapment		Keep clean and dry
	Approved EMI/RFI test at immunity level 30 V/m				

Markings on the battery

	Charging socket		Approved for air transport		Battery recycling
	Battery disposal		Flammable material		Short circuit
	Corrosive substance				

3. Electromagnetic interference

The electric wheelchair's electrical system may be affected by electromagnetic interference. It is therefore important that the user reads these instructions carefully. This section describes the problems that may arise due to known electromagnetic interference so that the user can take appropriate safety measures to prevent or minimize the risks.

The electric wheelchair's electrical system is sensitive to electromagnetic radiation from masts, radio and TV transmitters, and communication equipment such as walkie-talkies. Interference from such electromagnetic radiation may cause the electric wheelchair's brakes and steering system to malfunction or break down.

The electric wheelchair's electrical system has passed the EMI test at 30 V/m. It has high interference resistance and a certain immunity to most common sources of electromagnetic energy.

For safety reasons, you should try to keep a distance from devices that emit radio waves, including radio and TV transmitters. If the electric wheelchair makes uncontrolled movements when you are using it, you should switch it off immediately.

4. Technical specifications

General

Dimensions (unfolded): L x W x H	1 100 mm x 620 mm x 945 mm
Dimensions (folded): L x W x H	400 mm x 620 mm x 900 mm
Maximum load	150 kg
Net	32.6 kg (with battery) / 30 kg (without battery)
Maximum incline angle when driving uphill	6°
Range on a full charge	≥15 km or 30 km (under normal conditions)
Maximum speed	7.5 km/h
Maximum height of obstacles that can be passed	50 mm

Engine

Type	Brushless DC motor
Nominal power	250 W
Input voltage/current	24 V
Number	2
Brake system	Intelligent electromagnetic brake
Braking distance	At maximum speed: <1 m

Battery

Type	Lithium battery
Nominal capacity	12 Ah
Output voltage	24 V
Number	1

Control unit

Type	Control unit with rocker switch for dual brushless motors
Input power	280 W
Input voltage/current	24 V DC/12 A Max value: 15 A

Front wheels

Wheel diameter x tire width	200 mm x 50 mm
Type	Solid tire
Material	PU
Number	2

Rear wheels

Wheel diameter x tire width	300 mm x 55 mm
Type	Solid tire
Material	PU/rubber
Number	2

5. Product design

5.1 Main components

This subsection describes the main parts of the electric wheelchair. Familiarize yourself with the different parts so that you learn how the electric wheelchair is constructed and can describe and solve problems if something breaks.

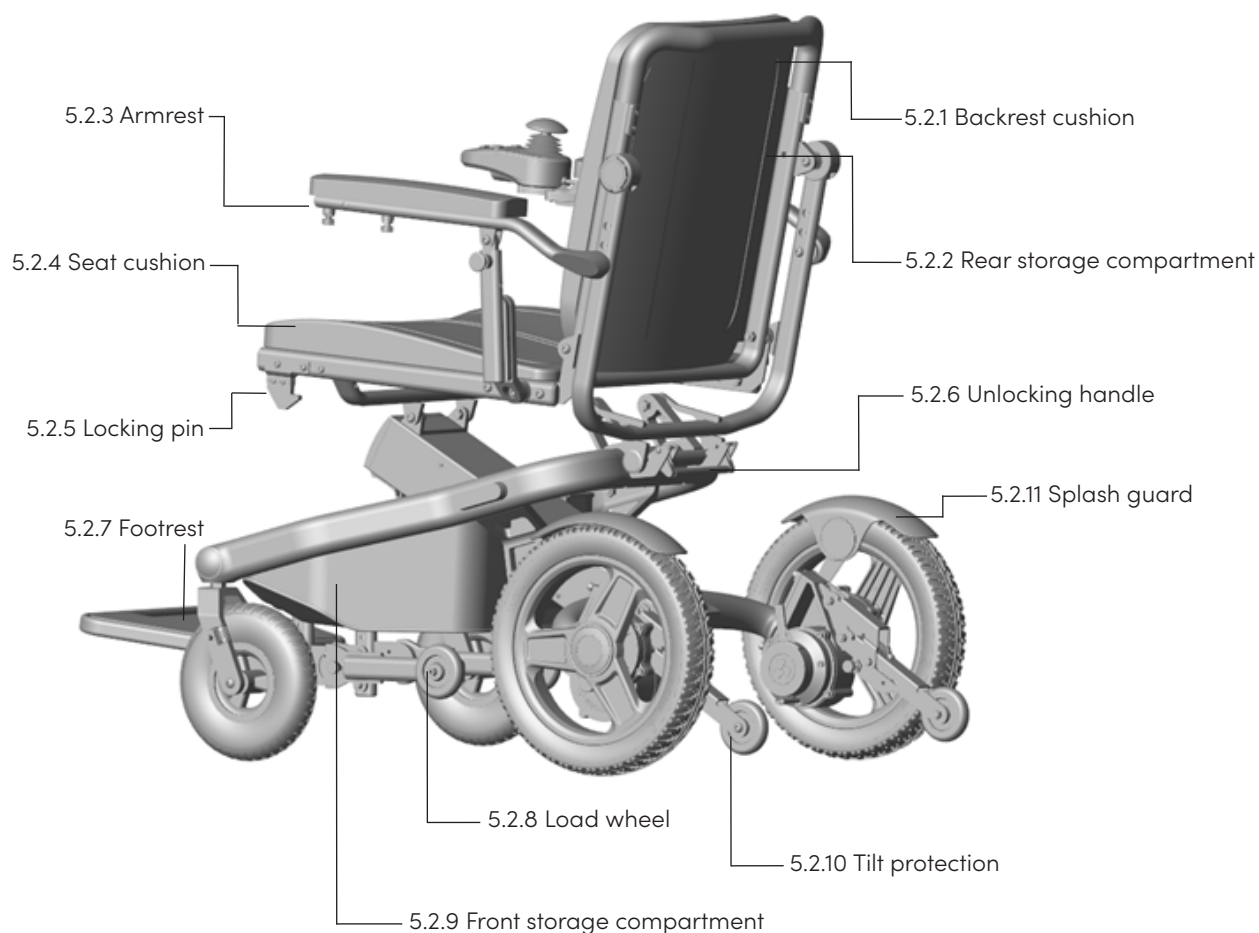
- 4.1.1 Brushless DC motor
- 4.1.2 Battery
- 4.1.3 Control panel
- 4.1.4 Control unit
- 4.1.5 Front wheels



5.2 Other components

This subsection describes the other parts of the electric wheelchair. These components will give you a better understanding of the detailed functions of the electric wheelchair.

- 5.2.1** Backrest cushion
- 5.2.2** Rear storage compartment
- 5.2.3** Armrests
- 5.2.4** Seat cushion
- 5.2.5** Lock pin
- 5.2.6** Unlocking handle
- 5.2.7** Footrest
- 5.2.8** Load wheel
- 5.2.9** Front storage space
- 5.2.10** Tilt protection
- 5.2.11** Mudguard



6. Safety

6.1 For the user

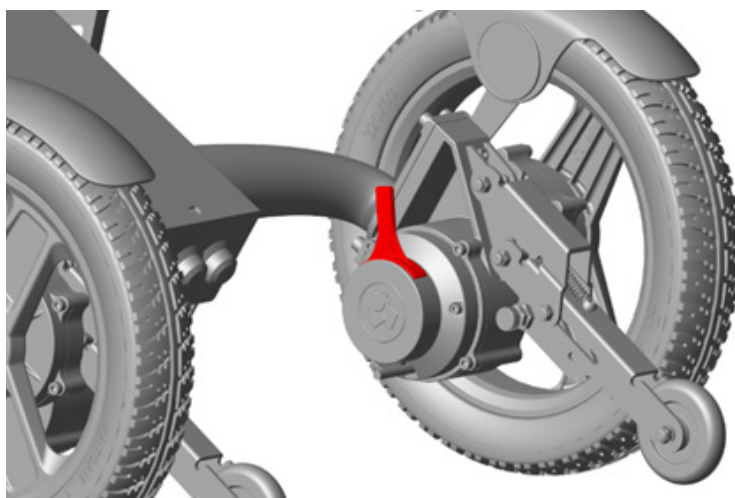


1. Before using the electric wheelchair for the first time, you should receive instructions on how to use it safely from professional healthcare personnel. Practice using the electric wheelchair together with the healthcare personnel until you feel confident enough to move forward, turn, drive over obstacles, brake, etc. on your own.
2. Familiarize yourself with how the electric wheelchair is used and read the safety instructions carefully before using it.
3. Make sure that tools or other metal objects do not come into contact with the battery terminals. Upon contact, the battery may short-circuit or an electric shock may occur, causing injury.
4. Check the safety of the area of use before using the chair and take the necessary measures to reduce risks. Contact your prescriber or dealer if you cannot guarantee safe use.

6.2 For caregivers



1. If you are a caregiver and need to assist the user, make a plan that is as safe as possible, if possible in consultation with the user's prescriber or dealer.
2. When pushing the electric wheelchair forward, you must pull the electromagnetic lock (Figure 6.2.1) toward the free wheel or the unlocked position so that the electric wheelchair is in manual mode. In that situation, the brake on the control unit does not work.



6.2.1

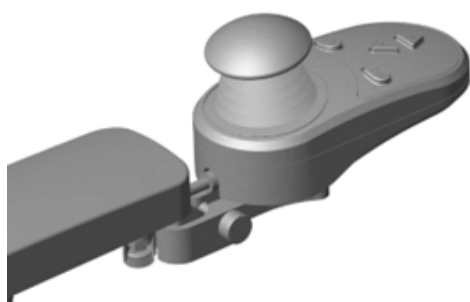
3. Also keep the following in mind when pushing the electric wheelchair in front of you.
 - 3.1 Help the user find the correct body position based on the dynamics of the human body so that the user does not injure their back. Bend your knees and keep your back straight and upright when lifting the user or the power wheelchair.
 - 3.2 Tell the user what you are going to do, why you are doing it, and what you want them to do so that they can prepare themselves. This way, the risk of injury is reduced.
 - 3.3 When pushing the power wheelchair straight ahead or making a sharp turn, you should reduce the speed so that the power wheelchair does not tip over.
 - 3.4 Remind the user to lean against the backrest when you are tilting the power wheelchair backward. Move slowly when driving the power wheelchair down stairs so that the user or the power wheelchair itself is not injured.

6.3 Control panel

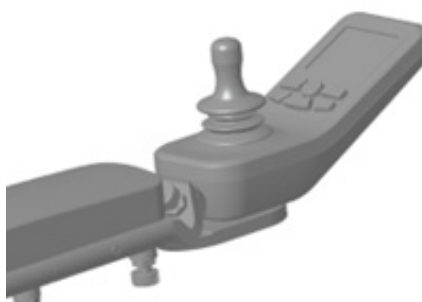
The control panel on the SmartChair MAX S can be moved forward and backward (Figure 6.3.1). You can move the control panel to the position that feels most comfortable. However, the control panel may be positioned in such a way that it risks hitting surrounding objects. To prevent damage to the control panel, you may need to:

1. Adjust its position to prevent collision
2. Reduce the speed as much as possible when driving in confined spaces.

The images show two alternative joysticks.



6.3.1



6.3.1

6.4 Static mode

Turn off the power by briefly pressing the power button when the power wheelchair is not in use (Figure 6.4.1) so that:

1. The control panel is not activated by accidental contact, which could cause the electric wheelchair to move
2. The power wheelchair is not affected by electromagnetic radiation that can activate the wheelchair's operating system. Do not allow anyone else to touch the control panel so that the electric wheelchair does not make any unexpected movements that could result in injury.

The images show two alternative joysticks.



6.4.1a



6.4.1

6.5 Operating environment

6.5.1 Intended use

1. The electric wheelchair is intended for use on flat surfaces such as concrete, asphalt, and indoor floors.
2. Do not use the electric wheelchair on loose sand, loose soil or uneven surfaces, as this may damage or loosen the wheels, ball bearings, motor and other parts.

6.5.2 Driving in traffic

1. Follow local traffic regulations when driving on public roads.
2. To be more visible in the evening, the electric wheelchair has reflectors (fig. 6.5.2.1).
3. The user can also wear reflective clothing.
4. Make sure that other road users can see you when driving the electric wheelchair in traffic. Make eye contact with drivers before continuing forward and signal what you intend to do until you are sure it is safe to drive.



6.5.2.1

6.5.3 Improper use

1. This electric wheelchair must not be stored in rain, snow, or ice.
2. If the power wheelchair comes into contact with water or is used in high humidity, it may malfunction. The electric wheelchair is not completely waterproof and rust may form on the inside of the chair in damp environments. If the electric wheelchair has become soaked, remove the battery as quickly as possible and do not use the chair until it is completely dry.
3. Follow these recommendations to prevent malfunctions:
 - 3.1 Avoid placing or using the electric wheelchair in environments exposed to water (heavy rain) or very humid environments.
 - 3.2 Do not use the power wheelchair when showering, swimming, etc.
 - 3.3 Avoid using the power wheelchair near bodies of water (rivers, lakes, seas, etc.).
 - 3.4 Replace the control panel if it is damaged to prevent safety issues due to internal short circuits.
 - 3.5 Check that all electrical connections are secure and properly connected.
4. Drive carefully at low speed if the surface is wet or slippery.
 - 4.1 If any of the drive wheels lose grip, you must turn off the power wheelchair immediately so that you do not lose control.
 - 4.2 Avoid driving on slopes or ramps covered with snow, ice, water, oil, etc.
5. Check that the power is turned off after use, charge the batteries fully, and keep the electric wheelchair clean and dry.

6.6 In vehicles

1. Avoid sitting in the electric wheelchair when traveling by bus, subway, airplane, boat, or other means of transportation.
2. If you are sitting in the electric wheelchair when traveling by such means of transport, use the seat belt and choose a place where the wheels or frame of the electric wheelchair can be secured so that you are not injured in the event of a sudden stop or traffic accident.
3. Do not place the electric wheelchair at the front of the vehicle where it may interfere with driving.
4. If possible, do not remain seated in the electric wheelchair when getting on or off a vehicle. If you need to get on or off without leaving the electric wheelchair, do not allow anyone else to lift the electric wheelchair by the armrests or backrest. The electric wheelchair must be lifted with a firm grip on the front and rear edges of the seat cushion frame.
5. Make sure that the electric wheelchair is well balanced and stable when driving so that you do not tip over. The following factors can affect the weight distribution of the electric wheelchair:
 1. The height and angle of the seat.
 2. The user's sitting position or center of gravity.
 3. Backpacks or other items hung on the backrest of the electric wheelchair. It may change the total weight and weight distribution.

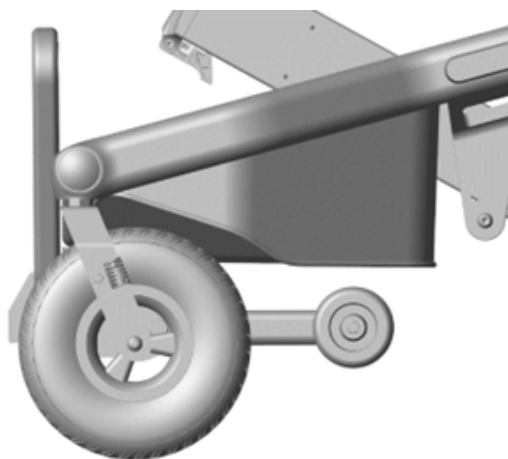
If you need to modify or adjust the electric wheelchair, you must first consult your prescriber or dealer for approval. A modified electric wheelchair may require further adjustments to ensure correct balance. Be extra careful when using a modified electric wheelchair until you find the right balance and know how to avoid falling or tipping over.



6.7 Getting in/out of the electric wheelchair

To be able to move around independently, you must have good balance and mobility. When moving, we recommend that you support yourself on a point slightly higher than the seat cushion to prevent falling.

1. Check that the power is turned off before sitting in the electric wheelchair. Otherwise, the electric wheelchair may move unexpectedly if you accidentally touch the joystick.
2. Check that the electromagnetic lock is in the locked position and that the electric wheelchair cannot move when subjected to external forces.
3. Consult healthcare staff on how to get in and out of the power wheelchair as safely as possible.
 - 3.1 Learn how to position your body and support yourself when moving.
 - 3.2 Ask someone to help you until you are confident that you can get in and out of the electric wheelchair safely.
4. Move the electric wheelchair as close to the desired position as possible. Use appropriate assistive devices if possible.
5. Fold up the footrest with your hands or feet as shown in figure 6.7.1. Then hold onto the fixed object so that you can sit down in the electric wheelchair in a comfortable position.
6. Do not stand on the footrest when moving to or from the electric wheelchair, as the wheelchair may tip forward and injure you. Fold up the footrest before sitting in the electric wheelchair so that it is not in the way.
7. When getting out of the electric wheelchair, first fold up the footrest. You can also press the armrest lock button (on either side), fold up the armrest, and step out from the side (fig. 6.7.2).



6.7.1



6.7.2

6.8 Leaning the body

If you stretch out your hands or lean to either side, the balance of the electric wheelchair may be affected. If you are not sitting correctly, you may fall off or tip the electric wheelchair. Here's how you can reduce the risk of injury to yourself or the electric wheelchair:

1. When moving, e.g. lifting one side of your body or getting up from the chair, do not lean your body outside the seat cushion.
2. Do not lean your body too far forward when moving forward in the chair. Your hips should always be in contact with the seat cushion.
3. Do not reach out to grab objects that are out of your reach, as this may cause you to lose your balance and fall.
4. Do not try to pick things up by bending forward between your knees.
5. Do not push against the footrest when stretching, as this may cause the power wheelchair to tip over, resulting in serious injury.
6. Do not lean against the upper edge of the backrest, as this may cause the electric wheelchair to tip over and damage the backrest.
7. If you need to put on clothes while sitting in the electric wheelchair, first make sure that the power is turned off so that the electric wheelchair does not start moving if you turn your body or accidentally touch the joystick.

6.9 Driving over obstacles

It can be dangerous to drive over thresholds and potholes, enter and exit elevators, drive on slopes, etc. Improper use may result in personal injury or damage to the electric wheelchair. To prevent the electric wheelchair from tipping over, we recommend that you do the following:

1. Remove thresholds or cover them with ramps that the electric wheelchair can drive over.
2. Install a ramp at the front door.
3. Carefully check that any obstacles along your planned route are not higher or larger than the electric wheelchair can handle.
4. Make sure you can pass the obstacles smoothly and safely in the electric wheelchair.
5. For added safety, you can adjust your body's center of gravity in the following two ways:
 - 5.1. Slowly lean your upper body slightly forward when driving over an upward slope.
 - 5.2. Lean your upper body slightly toward the backrest when driving over a downward slope.

6.10 Driving on slopes

When driving on a slope, the balance of the electric wheelchair changes.

Please note that slopes also include hills and ramps. If you do not feel completely safe using this electric wheelchair on slopes, ask someone else for help and try to avoid using it on your own.

Pay particular attention to the following:

1. The electric wheelchair must not be used on slopes with a gradient of more than 6°.
2. Avoid driving the electric wheelchair on wet or slippery slopes (e.g. snow, ice, water, or oil).
3. Avoid driving the electric wheelchair in hilly areas with many uphill and downhill slopes.
4. Avoid driving the electric wheelchair on slopes if there are holes or uneven surfaces at the bottom of the slope.

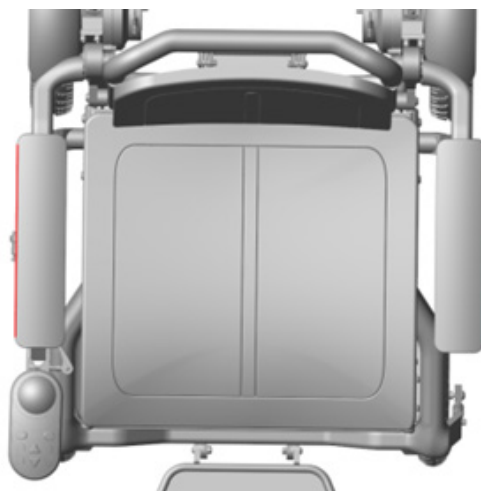
6.11 Maximum load

1. The maximum load for the electric wheelchair is 150 kg. It must not be exceeded.
2. Under no circumstances should the user perform strength training in the power wheelchair.
3. If the electric wheelchair is overloaded, the frame, the screw-fastened parts, and the folding mechanism may be damaged. The user or others may suffer serious injury, and the electric wheelchair may also be damaged.
4. If the electric wheelchair is damaged due to overloading, the warranty will be void.

6.12 Stairs

Please note the following when using stairs:

1. The power wheelchair must not be driven up or down stairs or escalators due to the risk of serious personal injury.
2. The electric wheelchair can be used in elevators. Drive in and out when the elevator door opens and make sure the door is held open when passing through it.
3. The width of the electric wheelchair's armrests can be adjusted. The maximum external width is 700 mm (Figure 6.12.1). Therefore, check that the width of the elevator door is greater than 700 mm so that you do not get stuck when entering or exiting the elevator.

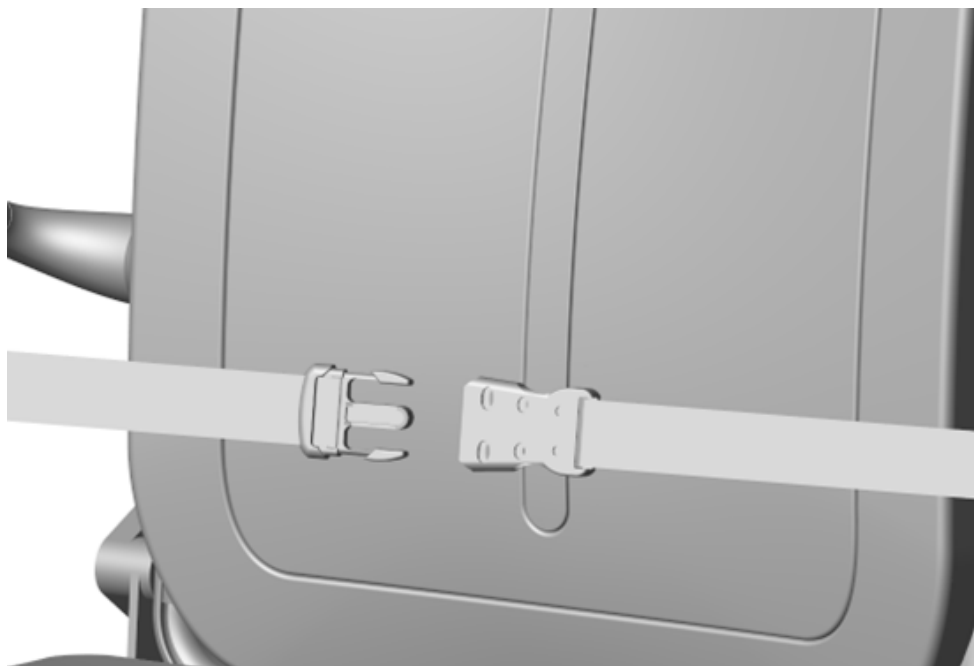


6.12.1

7. Installation guide

7.1 Belt

We recommend that you fasten the belt when using the electric wheelchair (Figure 7.1.1). The belt is an important part that can prevent you from sliding forward on the seat. You can adjust the belt to the correct length so that you sit safely and comfortably.



7.1.1

7.2 Control panel

7.2.1 Install the control panel

The control panel can be mounted on the right or left armrest depending on the user's preference. (The control panel is mounted on the right armrest as standard. Contact your prescriber or dealer if you want to move it to the left side.)

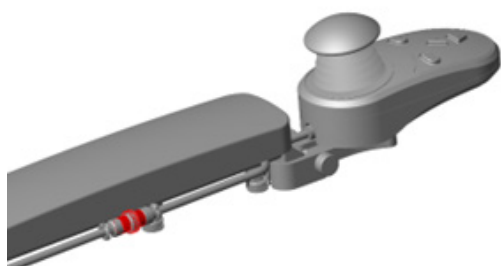
To remove the joystick:

1. First, turn and loosen the rear extension cable (fig. 7.2.1).
2. Then loosen the clamp (fig. 7.2.2).

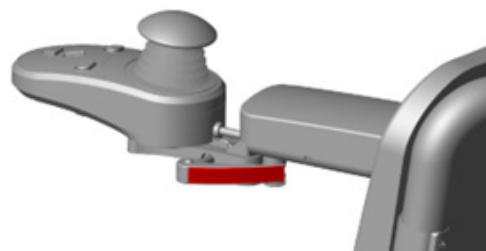
How to install the joystick:

1. Connect the cable from the control panel to the extension cable (fig. 7.2.1) and secure them by turning the locking ring.
2. Attach the joystick to the clamp (fig. 7.2.2).

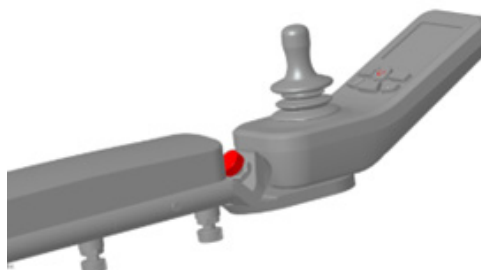
The images show two alternative joysticks.



7.2.1



7.2.2a

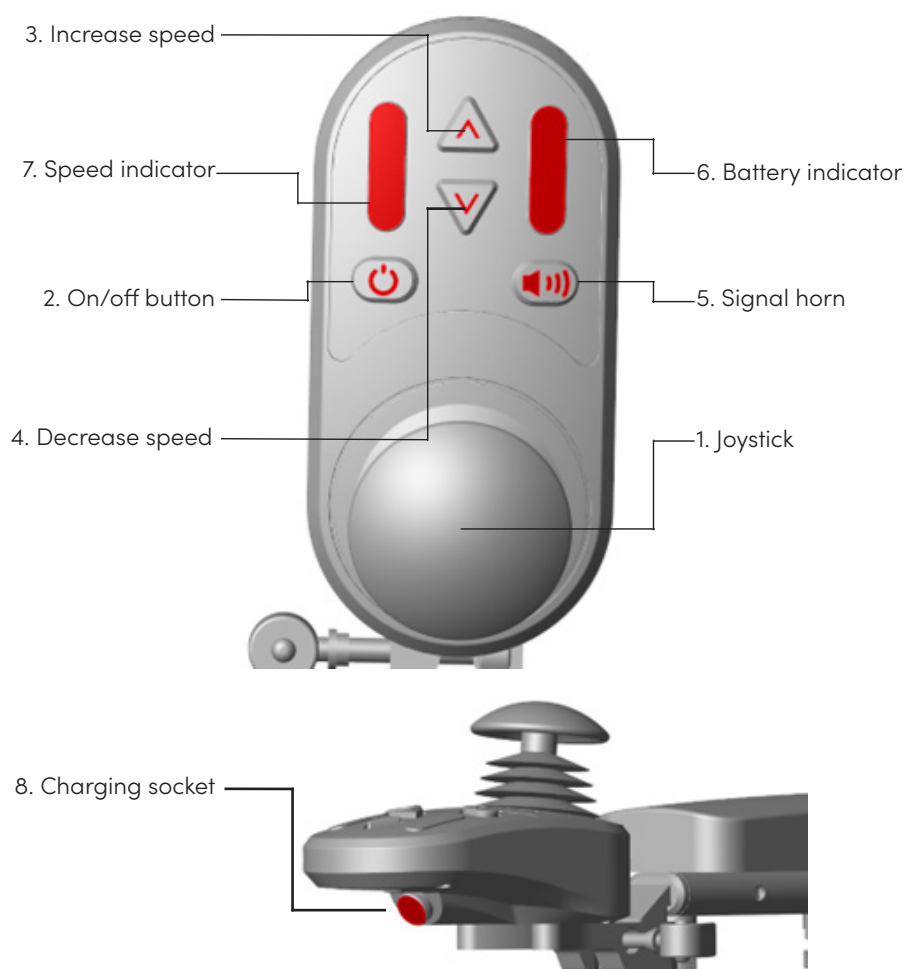


7.2.2

7.2.2 Using the control panel

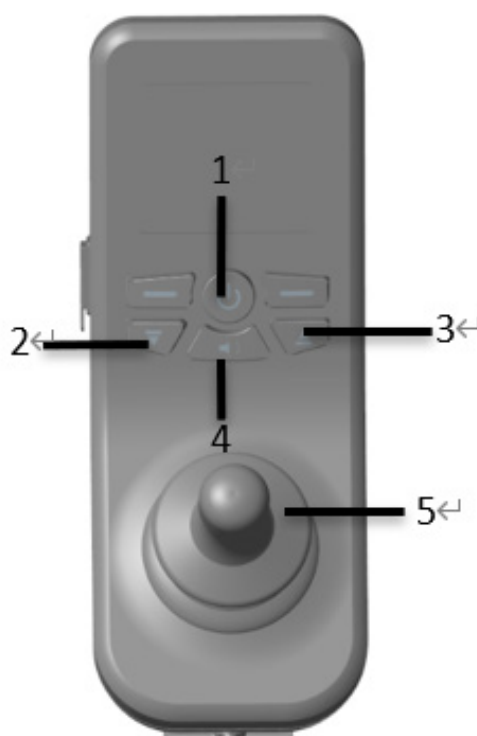
The electric wheelchair is operated using the buttons and joystick on the control panel. The functions of the buttons are described below.

Standard joystick



1. Joystick: Used to control the direction and speed of the electric wheelchair. Move the joystick in the desired direction.
2. On/off button: Start the electric wheelchair by briefly pressing this button. Hold down the button to turn off the electric wheelchair.
3. Increase speed: Press this button to increase the speed.
4. Decrease speed: Press this button to decrease the speed.
5. Horn: Sound the horn to attract the attention of other road users.
6. Battery indicator: Shows how much battery capacity is left.
7. Speed indicator: When 1 LED light is lit, the electric wheelchair is running at the lowest speed. When 5 LED lights are lit, the electric wheelchair is running at maximum speed.
8. Charging socket: You can charge the electric wheelchair without removing the battery.

Joystick with COT function (Cumulative Operating Time), operating time meter.



1. On/off button: Start the electric wheelchair by briefly pressing this button. Press once more to turn off.
2. Decrease speed: Press this button to decrease the speed.
3. Increase speed: Press this button to increase the speed.
4. Horn: Sound the horn to attract the attention of other road users.
5. Joystick: Used to control the direction and speed of the electric wheelchair. Move the joystick in the desired direction.

Joystick with COT function:

1. This function tracks the wheelchair's accumulated operating time during electric driving, measured in hours. It includes an automatic save function.
2. The accumulated operating time is displayed in the upper right corner of the joystick's LCD screen.
3. Each time the unit is in electric drive mode, the COT is automatically updated.

If this is the first time you are using an electric wheelchair, you should also keep the following in mind:

1. The first time you use the electric wheelchair, we recommend that you drive carefully at low speed and gradually push the joystick further forward. This will help you learn how to control the speed and how to start and stop the electric wheelchair.
2. Set the control panel carefully.
3. Do not make sharp turns at high speeds.
4. Failure to observe these warnings may result in the wheelchair tipping over and serious injury to you and the wheelchair.
5. Move the joystick in the desired direction. The joystick controls the movements of the electric wheelchair proportionally, i.e. the harder you press, the faster the wheelchair will move.
6. Release the joystick slowly and gradually so that the electric wheelchair slows down safely. The electric wheelchair slows down automatically.

The images show two alternative joysticks.

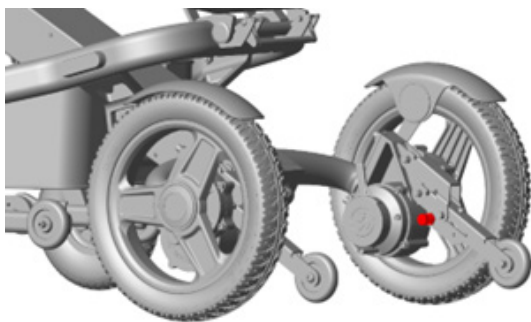


8. Folding

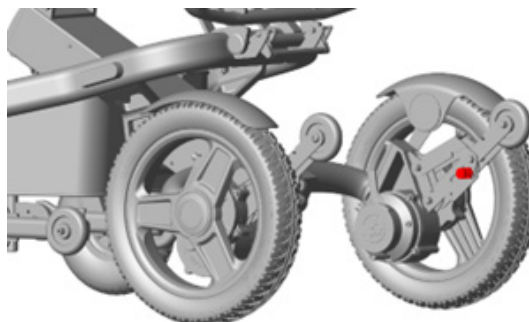
The power wheelchair is easy to fold and unfold, and you will quickly learn how it works with the instructions below

8.1 Folding the electric wheelchair

1. Pull the anti-tip lock button (Figure 8.1.1). The anti-tip device will automatically fold up and lock into place with the built-in spring (Figure 8.1.2).



8.1.1



8.1.2

2. Pull the power wheelchair's release handle upward (figure 8.1.3) and push the backrest forward when the locking lever has separated from the frame.



8.1.3



8.1.4

3. Push the electric wheelchair against the locking hook (Figure 8.1.5) until you hear a click, which means that the chair is locked. Then turn the power wheelchair upright so that it stands on its side with the foot pedal at the top (figure 8.1.6).



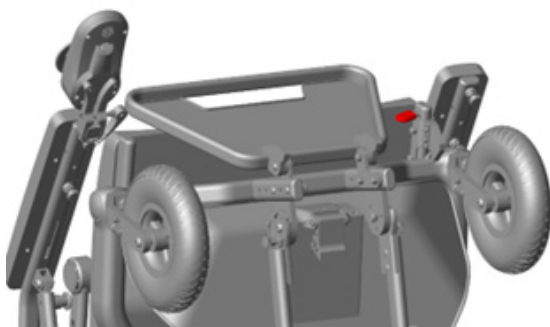
8.1.5



8.1.6

8.2 Unfolding the electric wheelchair

1. Pull the anti-tip lock button (Figure 8.1.1). The anti-tip device automatically folds up and locks in place with the help of the built-in spring (figure 8.1.2).



8.2.1

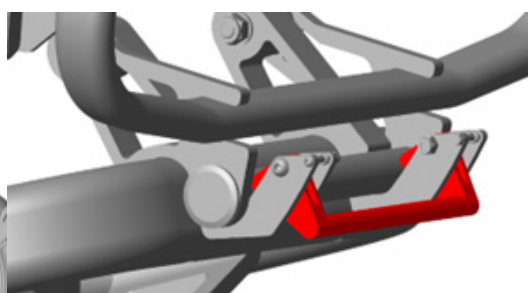


8.2.2

2. Pull the backrest until you hear a click (Figure 8.2.3), which means that the chair is raised and locked. For safety reasons, you should check that the locking lever is in the locked position and completely enclosed by the locking handle (figure 8.2.4).



8.2.3



8.2.4

3. Then fold down the anti-tip device (Figure 8.2.5) and the footrest (Figure 8.2.6) so that the electric wheelchair is fully unfolded.



8.2.5



8.2.6

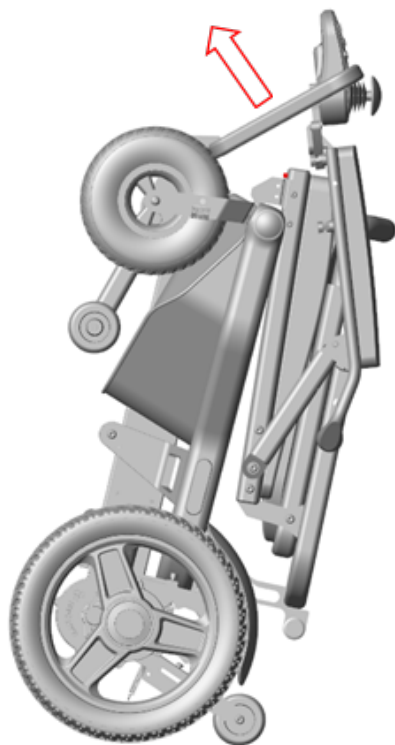
9. Pulling and loading function

To make it easier to move the power wheelchair, the chair has a practical and user-friendly pull function and a load wheel that makes it easier to load the power wheelchair into the trunk of a car.

9.1 Towing function

When the electric wheelchair is folded, you can easily pull it as follows:

1. Fold up the footrest (Figure 9.1.1).
2. Grasp the opening on the footrest (Figure 9.1.2) and move the electric wheelchair by letting it roll on the rear wheels and the anti-tip device.



9.1.1



9.1.2

9.2 Load function

When the electric wheelchair is folded, you can easily load it into the trunk of your car. Proceed as follows:

1. Place the electric wheelchair directly behind the trunk (Figure 9.2.1) with the rear wheels facing the car.



9.2.1

2. Pull the locking pin so that the load wheels fold out (figures 9.2.2 and 9.2.3).



9.2.2



9.2.3

3. Grasp the lower part of the backrest bar on both sides (figure 9.2.4) and lower the power wheelchair so that the load wheels rest on the floor of the luggage compartment. Grasp the lower part of the backrest bar on both sides (Figure 9.2.5) and lift the electric wheelchair upwards and slide it into the luggage compartment.



9.2.4

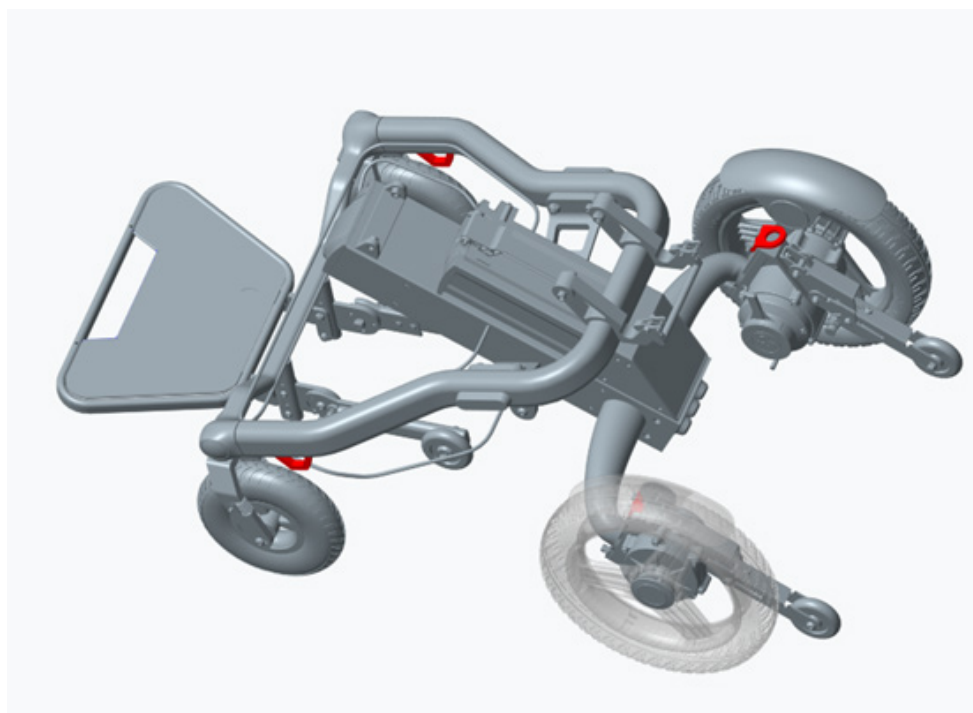


9.2.5

9.3 Securing loads in passenger cars

This electric wheelchair has four attachment points that are used to secure it in the car (see the arrows and red-marked parts in the image below).

Important ! The electric wheelchair must not be used as a car seat.



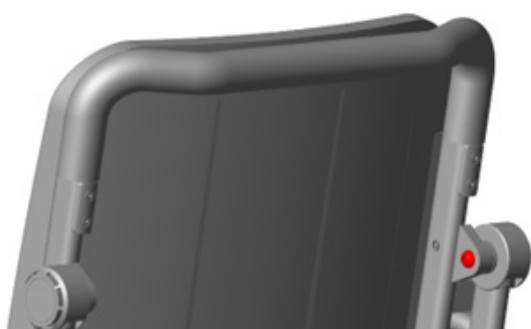
10. Adjustment

The electric wheelchair has an ergonomic design and can be adjusted to suit different body types. The design and adjustment features are based on various parameters of the human body, which means that the electric wheelchair can be adapted to your body shape with a few simple adjustments. This prevents secondary injuries due to an unsuitable sitting position.

In this section, we explain how to adjust the electric wheelchair. You can easily adjust it to your needs according to the instructions below.

10.1 Adjusting the backrest

By loosening the two screws at the top of the backrest, you can adjust the angle of the backrest to between 103 (Figure 10.1.1) and 110 degrees (Figure 10.1.2).



10.1.1



10.1.2

10.2 Adjusting the height of the backrest

By loosening the four adjustment screws on the upper part of the backrest (fig. 10.2.1) you can easily adjust the height of the backrest between 450 mm and 510 mm (fig. 10.2.2).



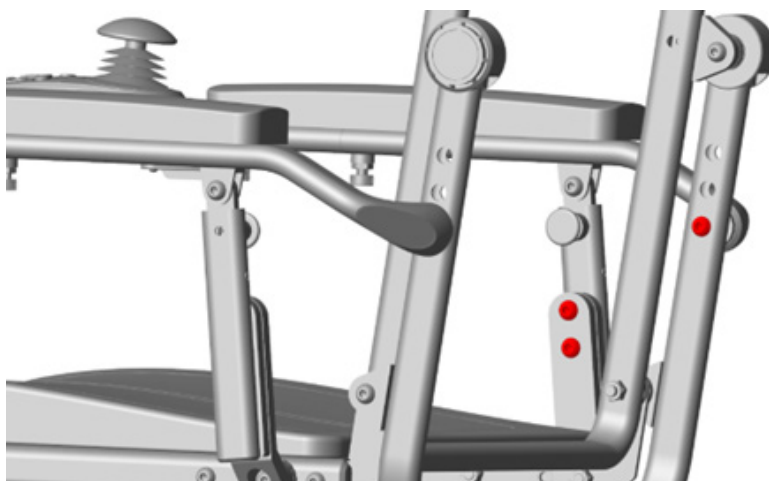
10.2.1



10.2.2

10.3 Adjusting the height of the armrest

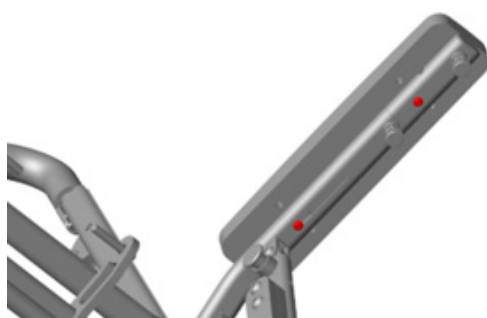
By loosening the three screws on one side of the armrest (Figure 10.3.1), you can adjust the armrest to any height between 220 mm and 270 mm depending on your height and arm length.



10.3.1

10.4 Adjusting the width of the armrest

By loosening the two fixing screws on the underside of the armrest (figure 10.4.1), you can attach the armrest to any hole row to move the armrest inwards or outwards (figure 10.4.2) and change the distance between the two armrests. The distance can be adjusted between 620 mm and 700 mm.



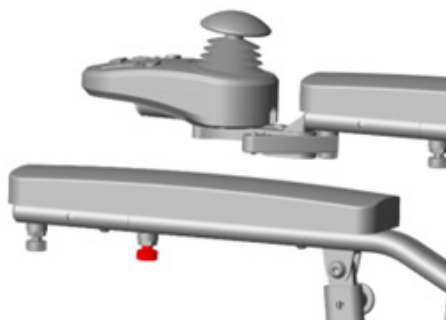
10.4.1



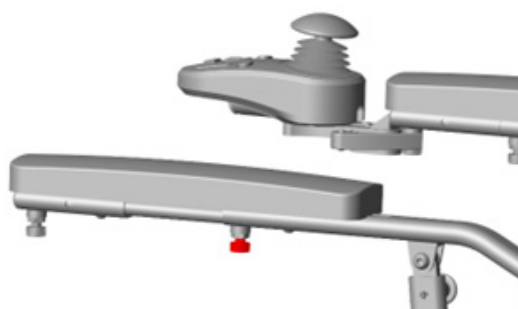
10.4.2

10.5 Armrest before and after adjustment

By pulling the quick-release coupling (Figure 10.5.1) on the armrest, you can quickly and easily change the length of the armrest by a maximum of 60 mm (Figure 10.5.2).



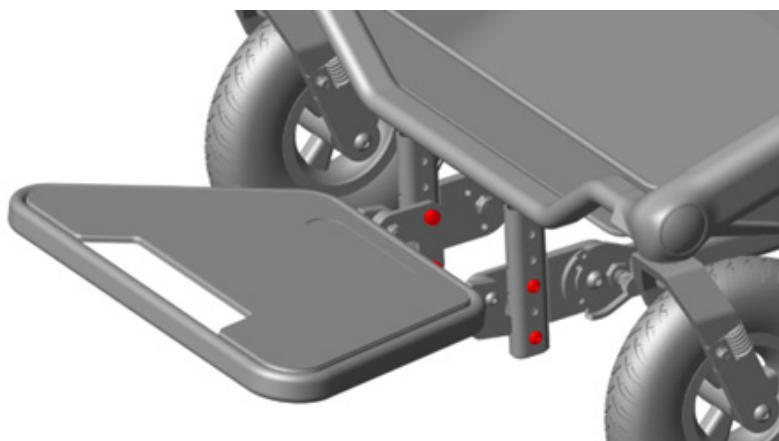
10.5.1



10.5.2

10.6 Adjusting the footrest height

By loosening the 4 screws on the footrest, you can adjust the footrest to any height between 450 mm and 400 mm (Figure 10.6.1).



10.6.1

11. Battery

11.1 Safety instructions for the battery



Make sure that tools or other metal objects do not come into contact with the battery terminals. Contact may cause the battery to short-circuit or an electric shock that could cause injury.



Avoid flammable materials. Make sure that the electric wheelchair is not exposed to open flames, sparks, or other sources of heat. Do not transport the electric wheelchair together with flammable or combustible objects.



The battery contains corrosive substances. Do not disassemble the battery.



Do not short-circuit or burn the battery, as it may explode.

Recommendations:

1. Always check that the battery is fully charged before using the electric wheelchair. The normal charging time is approximately 5.5 hours. However, if the battery is completely discharged, it may take 6–7 hours before the battery is fully charged and the red LED on the charger turns green.
2. Charge the electric wheelchair after use until the battery indicator is green. If the chair is not used for a long period of time, the battery should be fully charged every two months. If the battery is discharged for a long period of time, it may be permanently damaged.
3. Do not use batteries with incorrect specifications or incorrect voltage and capacity, as this may damage the electric wheelchair and affect its performance.



As the battery is dangerous and explosive, we recommend the following for your safety:

1. Do not attempt to charge the battery by connecting directly to the battery terminals using jumper cables or metal wires.
2. Do not use the electric wheelchair while the battery is charging.
3. Do not use non-standard batteries, even if their voltage and frequency appear to meet the requirements for use.
4. Make sure that no one steps on the power cord and that it is not pinched or bent.
5. Keep the power cord out of reach of children and pets.
6. If the power switch does not work, immediately disconnect the charger and contact your prescriber or dealer or a qualified technician.
7. The electronic drive lock is activated, which prevents the chair from being used while the battery is charging.
8. The battery warranty and performance specified in this user manual apply only to lithium-ion batteries.
9. Do not smoke or use open flames near the battery.
10. The operating temperature of the battery is between -5 °C and 40 °C.

11.2 Removing the battery

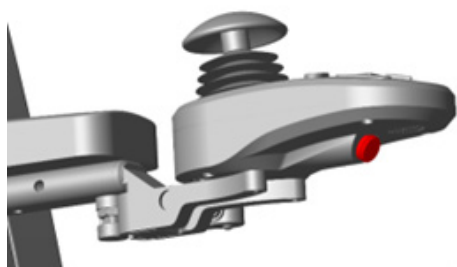
By pulling the battery lock (Figure 11.2.1) with your finger, you can easily remove the battery from the frame for charging or other measures. To reinsert the battery, align it with the frame and push it in. When the battery is in place, it locks automatically and cannot come loose.



11.3 Charging the battery

The electric wheelchair has two charging sockets located under the control unit (Figure 11.3.1) and under the battery (Figure 11.3.2). This allows you to charge in different ways depending on what suits you best.

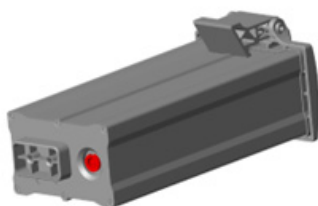
The images show two alternative joysticks.



11.3.1



11.3.1b



11.3.2

When charging the battery, we recommend the following:

1. The battery can be charged with normal alternating current (AC 110–220 V, 50–60 Hz).
2. Make sure that the electric wheelchair is switched off before you start charging.
3. When the LED light is red, the battery is charging. Do not use the electric wheelchair while the battery is charging.
4. When the LED light on the charger changes from red to green, you can continue charging for another 30 minutes to ensure that the battery is fully charged.
5. Unplug the charger from the power outlet before disconnecting it from the charging socket under the control unit or battery.
6. Charge the battery at a suitable ambient temperature. The recommended ambient temperature for charging is between 5°C and 40°C.

11.4 Protecting the battery

11.4.1 Discharge protection

If the lithium battery is completely discharged, it will be permanently damaged. For this reason, the electric wheelchair is equipped with a discharge protection system. When the lithium battery is running low, the protection automatically cuts off the power and the control unit stops working. As a user, you should therefore pay attention to the battery indicator. When the last red LED flashes, the battery needs to be charged. If it is not charged, the battery cannot be activated by the charger, which may result in permanent damage to the battery.

11.4.2 Overcurrent switch

The electric wheelchair also has an overcurrent switch. If the current supplied to the motor is too strong, the overcurrent switch will cut off the power supply. If you are driving on a slope steeper than 6 degrees, if the load exceeds 150 kg, or if the motor cannot drive the wheels, the overcurrent switch is activated and the electric wheelchair's control unit cuts off the power to prevent the motor from overheating.

11.4.3 Cleaning the battery compartment

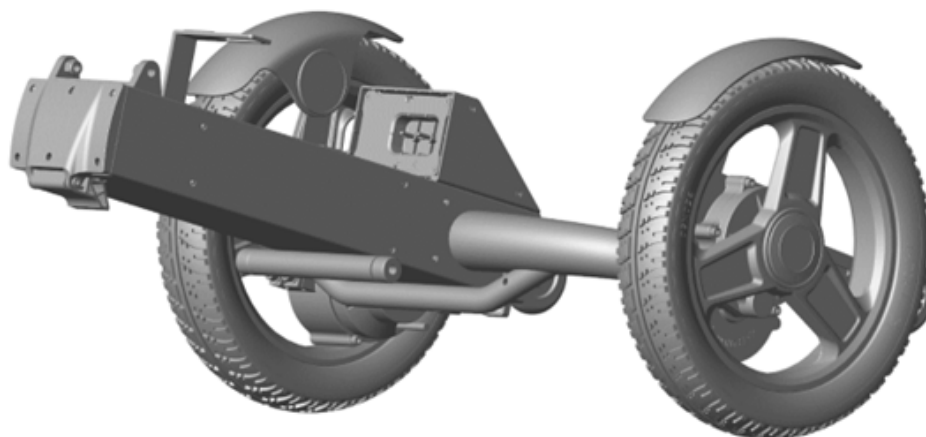
1. Check the battery cover and the positive and negative terminals for rust. Remove any rust from the charging socket using suitable tools, such as a steel brush and medium-grade sandpaper.
2. Clean all metal parts thoroughly.
3. Check that the battery and plastic cover are correctly fitted.

WARNING!

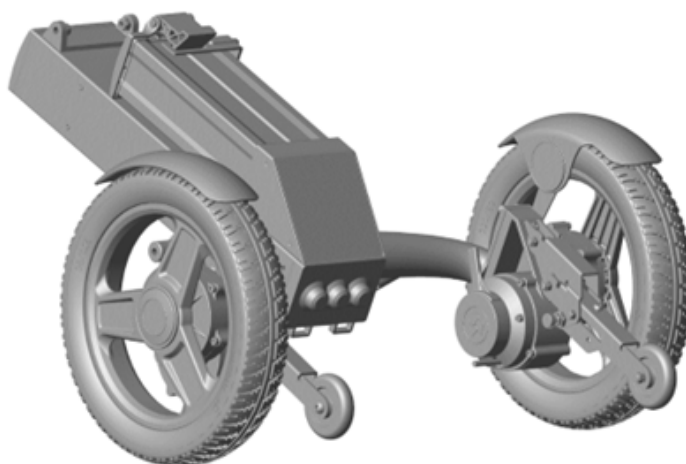
Make sure that the battery contents (battery fluid) do not come into contact with skin, clothing, or other objects. The acidic liquid is extremely dangerous and can cause serious burns. Rinse the skin immediately with cold water in case of contact. In the event of serious injury or if battery fluid gets into your eyes, seek medical attention immediately.

11.5 Dual battery

To meet the need for longer travel distances, we have designed a double battery, which can be an option for the electric wheelchair. Another mounting device (Figure 11.5.1) is then fitted to the upper part of the frame, where two batteries (24 V, 12 Ah) are placed side by side (Figure 11.5.2). Together, the batteries provide a range of over 30 km. Please contact your dealer if you are interested in this option.



11.3.2



11.3.1

12. Troubleshooting

1	Electricity	1. There is no connection between the control panel and the connector.	Insert the 5-pin plug into the socket on electric wheelchair.
		2. Low power supply, the power is cut off automatically.	If the power is automatically cut off, the batteries must be charged within 2 hours. Charging takes 7–8 hours.
		3. Fault in the 4-pin connector that is connected to the battery.	Remove the battery and check that the connector is intact and working. Then the battery back in.
2	Control panel	1. Battery indicator lights up red: low battery level.	Recharge the batteries immediately.
		2. The control panel does not start.	Connect the two ends of the control panel cable, or replace the the control panel.
		3. Communication error: the control unit is emitting an error signal. The middle icon is an exclamation mark. The electric wheelchair is not moving.	Switch off the electric wheelchair. Check then check whether the control unit connector is loose. Restart after inserting the plug.
		4. The middle icon indicates a malfunction in the left/right wheel. The electric wheelchair does not move. The left/right motor is broken.	Insert the motor plug and make sure it is securely connected. Check that the motor lock is in the unlocked position. Contact your dealer for repair if the problem persists.
		5. The electromagnetic brake is disconnected and in fault mode.	Press the brake lever to the locked position.
3	Manual mode knob	1. The electric wheelchair does not move when you using the joystick.	See the instructions for manual mode: turn the manual mode knob on both sides to the OFF position. Contact your dealer for repair if the problem persists.
4	Engine	1. The motor makes unusual noises and vibrations.	Contact customer service.
5	The battery discharges more quickly	1. The electric wheelchair is used in temperatures below 0 °C.	This is normal for lithium batteries.
		2. Driving uphill or on uneven surfaces.	This is normal because battery consumption increases when driving in such conditions.
		3. The battery is depleted.	Contact customer service to replace battery.

6	Charging	1. There is no connection between the control panel and battery connector.	Insert the 3-pin connector into the battery socket on the side of the electric wheelchair.
		2. The control unit is damaged.	Contact your dealer to replace the control unit.
		3. The charging connector is damaged.	Contact your dealer to replace the charging connector.
		4. The charging connector is loose.	Check the connector and reinsert it into the socket.
7	The electric wheelchair does not start when the power is turned on	After not being used for a long period of time or the discharge protection has been activated.	Charge the electric wheelchair and then try to start it again. Contact your dealer for repair if the problem persists.

13. Warranty

Main frame	3 years	In the event of improper use, or if the electric wheelchair has been damaged or modified by the user, the warranty will be void and repair costs will be charged.
Engine	1	In the event of damage caused by overloading or the user dismantling the electric wheelchair on their own, the warranty will be void.
Lithium battery	1	In the event of incorrect charging, or if the battery has been disassembled and damaged by the user, the warranty will be void.
Control unit	1	In the event of incorrect use or if the electric wheelchair has been damaged or modified by the user, the warranty will cease to apply and the repair costs will be charged.
Control panel	1	In the event of improper use, or if the electric wheelchair has been damaged or modified by the user, the warranty shall cease to apply and repair costs shall be charged.
Main frame	3 years	In the event of improper use, or if the electric wheelchair has been damaged or modified by the user, the warranty will be void and repair costs will be charged.

The warranty does not cover the following:

1. Normal wear on the back cushion, seat cushion, foam pads on the armrests and backrest, and other decorations.
2. Modifications to the electric wheelchair made without approval.
3. Parts damaged due to overloading.
4. If the electric wheelchair's serial number is not an original number.

To the extent permitted by law, this warranty replaces all other warranties (both written and verbal, and both express and implied warranties, as well as warranties regarding merchantability or fitness for a particular purpose). In the event of any conflict between these, this warranty shall prevail.

14. Instruction manual

Article	1	/
Main frame	1	/
Lithium battery	1	/
Control panel	1	/
Battery charger	1	/
Instruction manual	1	/
Storage basket	1	/

15. Cleaning

Wipe the electric wheelchair with a damp, well-wrung cloth.

- If the electric wheelchair becomes dirty due to normal use, clean it with a damp, well-wrung cloth.
- If the electric wheelchair is heavily soiled, use a cloth and a neutral cleaning agent.
- Make sure that no cleaning agent remains on the electric wheelchair after cleaning.
- The electric wheelchair can be disinfected, preferably using a cloth with disinfectant.
- Never rinse the electric wheelchair with a water hose or high-pressure washer. Do not use steam cleaning to clean the electric wheelchair. The electronic components may be damaged, which could lead to serious malfunctions.
- Do not clean with solvents such as gasoline or thinner. This may damage the paintwork and plastic parts.



Please contact Decon if you have any questions or encounter any problems with this product.

Decon Wheel AB

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