

Instructions for use Fully electric
stand-up wheelchair

P6-Compact



POWERSTAND

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INTRODUCTION

You have just acquired a P6-Compact wheelchair from the PowerStand brand, and we hope you will be completely satisfied with it. Before using it, it is essential to read this manual in detail. Here, you will find a lot of advice on usage and maintenance to ensure better safety.

The PowerStand electric stand-up wheelchairs are designed to improve mobility and health for individuals with a maximum weight of 120 kg. PowerStand cannot be held responsible for material and/or physical damage resulting from improper use of any of its electric wheelchairs. PowerStand also disclaims any liability for material and/or physical damage resulting from failure to follow the instructions and recommendations in this manual.

If you encounter problems with your electric stand-up wheelchair that you cannot solve by following the instructions and recommendations in this manual, please contact your PowerStand dealer. You will find the model number and serial number of your wheelchair on the frame under the seat, near the armrest.

Reminder of the safety and maintenance points that must be strictly observed:

1. **Safety:** Standing up with the wheelchair should only be done on a flat surface, far away from stairs, ramps, or slopes.
2. **Adjustments:** This wheelchair must be ADJUSTED by the dealer, who can make the proper adjustments for your body type. You must never attempt to adjust it yourself.
3. **Annual Maintenance:** To ensure your wheelchair provides long-lasting satisfaction, an annual inspection by an authorized dealer is essential to check the safety features.
4. **Physiological Benefits of Daily Standing:** The use of this wheelchair should only be based on medical prescription. A gradual rehabilitation to standing under the supervision of your physical therapist is highly recommended before using a stand-up wheelchair daily. The benefit of standing is primarily derived from the frequent alternation of "sit-stand-sit" positions. This alternation reduces the risk of pressure sores. Frequently standing up throughout the day to perform daily activities gradually regulates bowel and bladder function and contributes to the improvement of joint, bone, and blood conditions.
5. **Warranty:** We ask you to return the Warranty Card (found at the end of this manual) as soon as possible, so we can intervene if necessary.

We are open to comments or suggestions and remain at your disposal for further information. If you are visually impaired, you can find this manual in PDF format on our website at 4power4-powerstand.com.

Please read the user manual before putting the chair into service and operating it.



Warning: The tilting mechanism under the seat may cause injury.
The location is indicated by this symbol.



If you have a visual impairment, you can access this user manual in PDF format on our website: 4power4-powerstand.com.

Chapter I - Safety

1.1 – SAFETY INSTRUCTIONS:

Before using the wheelchair, it is essential to read the user manual. The following safety measures must be followed to ensure user safety:

- Do not drive on a slope greater than 6° when the wheelchair is upright (otherwise, a safety feature will return the wheelchair to the sitting position).
- Do not drive around with the backrest fully reclined.
- Do not stand the wheelchair upright if the backrest is reclined.
- Store the charging cable in the designated storage compartment before using the wheelchair.
- Do not transport or tow loads other than the user.
- Do not ride with multiple people on the wheelchair.
- The wheelchair is not a lifting or carrying system for objects.
- Ensure no one is behind the wheelchair when it returns to the sitting position.
- The surface temperature of your wheelchair can increase when exposed to heat sources such as the sun.
- Only use the wheelchair in an ambient temperature between -10°C and 50°C.
- Avoid using your wheelchair on slippery surfaces (ice, wet tiles, etc.).
- Do not use your wheelchair under the influence of alcohol, drugs, and/or medication.
- The cushions comply with the requirements of the NF EN 1021 standard, but it is recommended to avoid any contact of any part of the wheelchair with a heat source to prevent ignition.
- Avoid any physical contact with the wheelchair motors, as this can cause burns.
- Do not smoke while using the wheelchair. Serious injury or death can result from fire if the wheelchair user cannot quickly move away from the fire source.
- Avoid using or storing your wheelchair near open flames or flammable products.

1.2 - GETTING IN AND OUT OF THE WHEELCHAIR:

Your doctor and/or therapist will advise you on how to transfer, depending on your lifestyle and health condition.

1.3 - PASSING STAIRS OR STEPS:

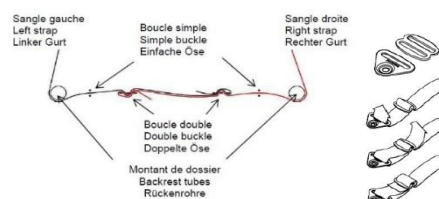
Approach any obstacle slowly and preferably in the presence of a third person, regardless of its nature. Never exceed obstacles higher than 8 cm.

1.4 – ASCENDING OR DESCENDING A RAMP:

When going uphill, always lean forward and avoid abrupt changes in direction. When going downhill, always lean backward. It is also essential to maintain good control over your speed. In all cases, to reduce the risk of falling, avoid slopes that are too steep (maximum slope of 8 degrees), too long (risk of acceleration), or sideways (risk of tipping).

1.5 - FASTENING BUTTON:

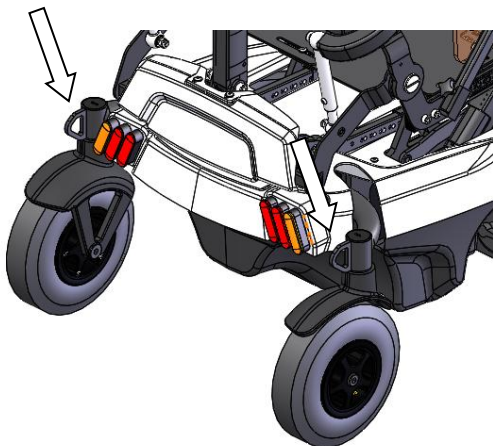
For your safety, check the fastening button of the safety belt (or harness), which should be double. The loop must pass through the ring TWO times, as shown in picture 1.:



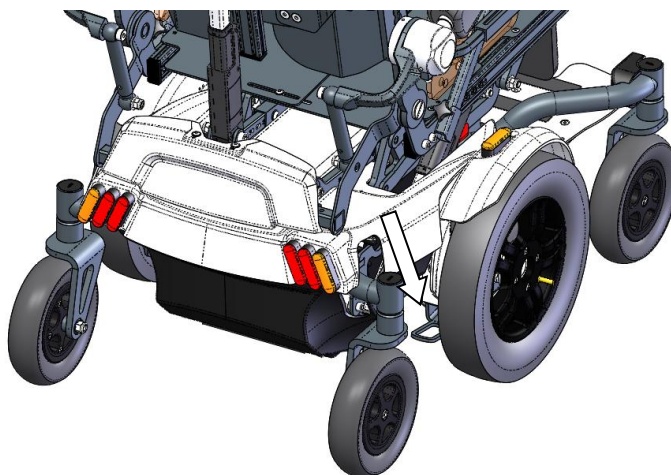
Picture 1: Security Belt

1.6 – TRANSPORTATION OF THE WHEELCHAIR BY CAR:

The wheelchair must be empty when transporting. It should be securely attached to the vehicle using the 4 anchoring points on the frame and the armrest (see Picture 2 & 3).



Picture 2: anchoring ring on the armrest



Picture 3: anchoring ring motor

To transport the wheelchair in a vehicle, you can reduce its size by folding down the backrest and footplate. (see Chapter II).



Warning

After each assembly of the wheelchair, it is absolutely necessary to check that the parts are properly locked before using it again.

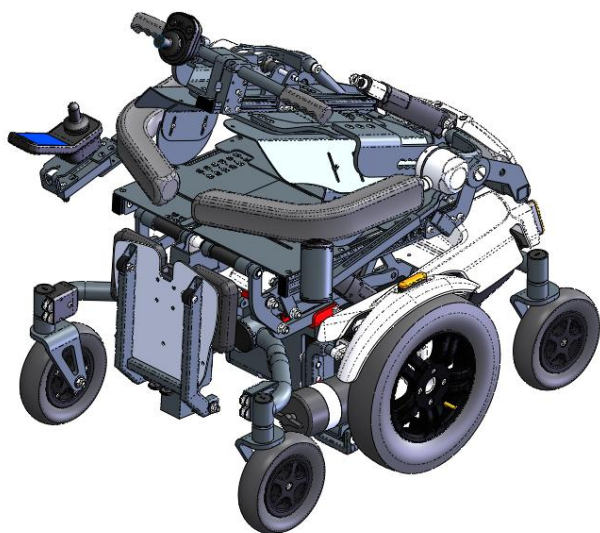


Warning

Under no circumstances should the wheelchair be used as a car seat.

Chapter II - STARTING TO USE

2.1 - UNPACK

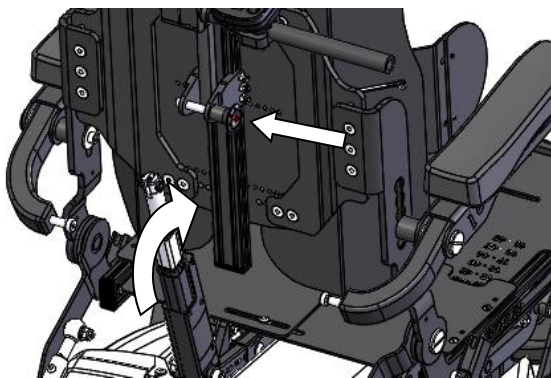


Picture 4 : Wheelchair taken out of the box

To avoid lifting a load that is too heavy, it is recommended to open the box from the front and not from above. Then roll the wheelchair forward without lifting it.

2.2 - BACKREST ASSEMBLY

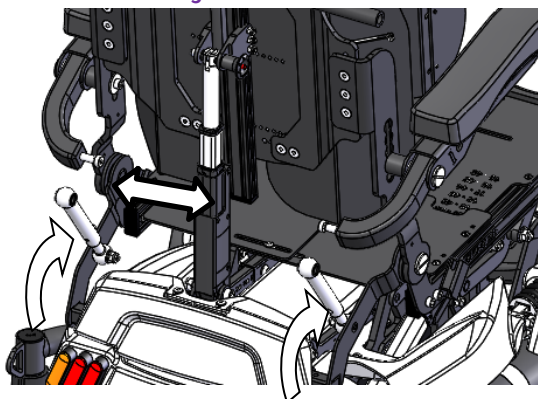
For easier transportation, the wheelchair is supplied with the backrest folded down, the footplate folded up, the anti-tip wheels removed, the fixation cushions detached, and the clothing protectors disconnected.



Picture 5 : Attaching the backrest

Adjust the backrest to an upright position.

Install the quick release of the gas spring by pressing its red button. (Make sure it goes through the gas spring rod). (See picture 5)



Picture 6: Attaching the armrests

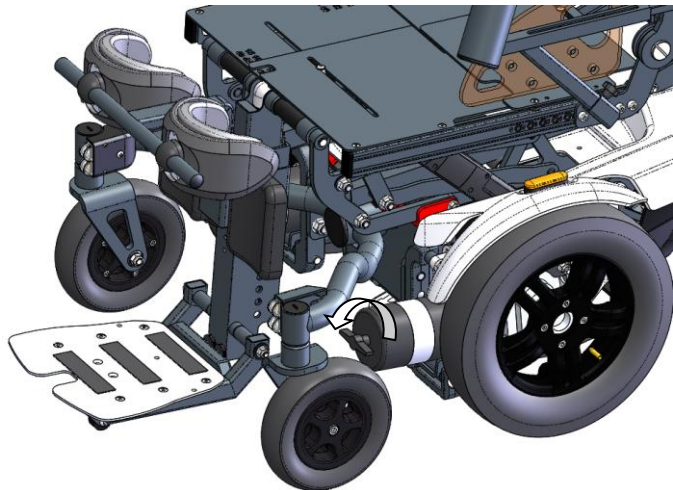
Use a 5mm hex wrench to reattach the armrest brackets. (See picture 6)

2.3 - COUPLING AND DISCONNECTING THE ENGINES

Your wheelchair can be used in either "electric motor mode" or "freewheel mode", allowing a third person to move the wheelchair without using the drive.

The control levers are located on top of the motors, on either side of the battery.

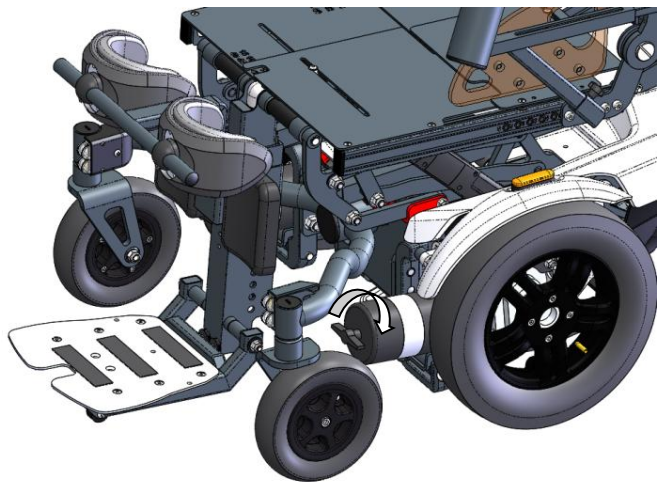
2.3.1 - Clutch: Electric drive mode



Picture 7: Applying the brakes

Turn both levers counterclockwise. The wheels are connected to the motors for electric propulsion. (See picture 7)

2.3.2 - Disengagement: "freewheel" mode



Picture 8: Release the brakes.

Turn both handles clockwise. The wheels are now unlocked, allowing the wheelchair to move freely. (See picture 8)

Chapter III - Settings

Adjustments to be Made by the Dealer Based on the User's Body Structure for Optimal Verticalization:

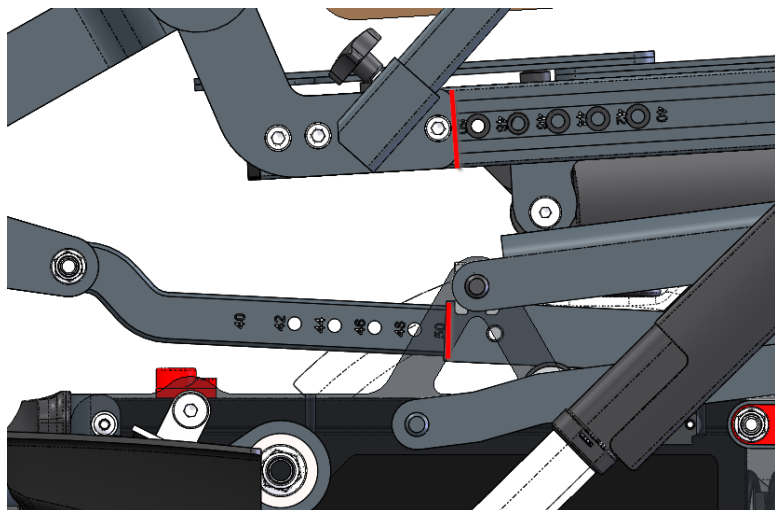
3.1 IN SITTING POSITION

3.1.1 – Seat Depth

The seat depth can be adjusted between 40 and 50 cm in 2 cm increments.

For optimal comfort and an upright extended position, the seat must be adjusted to the user's thigh length. The correct seat depth is achieved when the user's back makes contact with the backrest, and there is a clearance of 4 to 5 cm between the front of the seat cushion and the back of the user's knee.

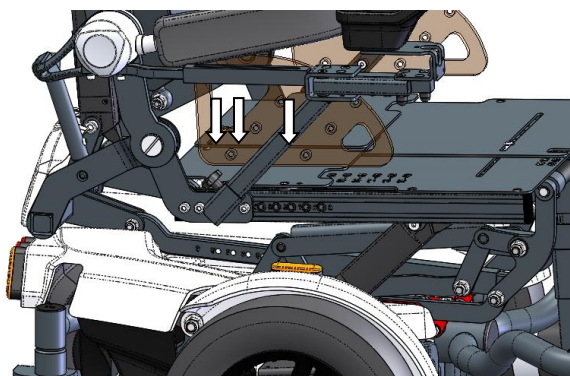
A scale on both sides of the wheelchair and on each adjustable bar indicates the seat depth. The edge of the component next to the number ensures a clear reading (marked in red in picture 9).



Picture 9: Seat Depth

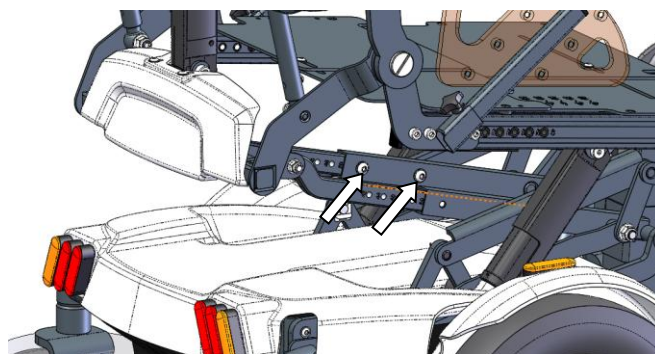
To Make This Adjustment:

- Remove the three screws from the upper pivot point of the seat (on both sides of the wheelchair) (see Picture 10).
- Position the seat pins at the correct number (50 to 40) indicating the desired seat depth.
- Reattach the three screws (on both sides of the wheelchair).



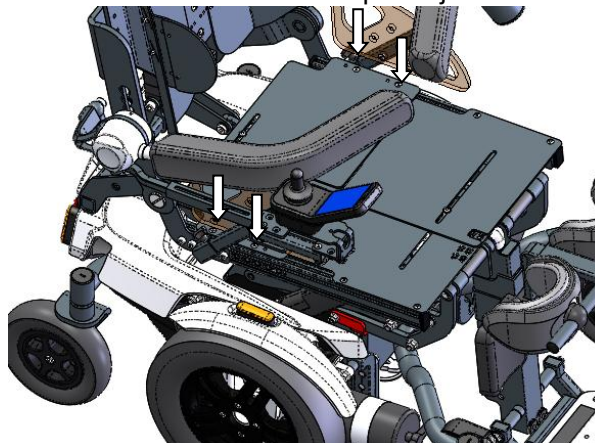
Picture 10: Seat Depth Adjustment (Top View)

- Remove the two screws from the lower seat bar (on both sides of the wheelchair) (see Picture 11).
- Adjust the lower seat bar to the same number for the seat depth as previously set (for the seat pin).
- Reattach the two screws (on both sides of the wheelchair).



Picture 11: Lower Armrest Depth Adjustment

- Loosen the two screws on the rear plates of the seat (see Picture 12).
- Move the rear plates to the desired position.
- Tighten the two screws on the rear plates of the seat.



Picture 12: Seat Plate Depth Adjustment



Warning

Incorrect adjustment of the seat can cause serious and irreversible damage to the wheelchair! It is essential to ensure all markings on the seat are at the same number!

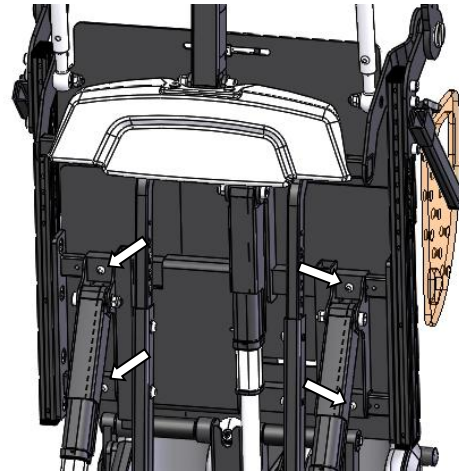
Note

The adjustment process is easier with two people! Adjusting the lower seat bars is easier when the seat is slightly lifted.

3.1.2 – Seat Width

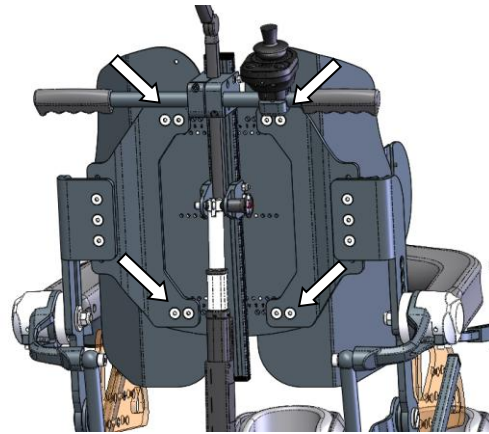
Adjustable width from 40 to 50 cm in 2 cm increments.

- Place the wheelchair in a vertical position. Perform the adjustment in two steps, one on each side of the wheelchair.
- Use a 4 mm hex key to remove the four bolts for the seat width adjustment (on one side) (see Picture 13).



Picture 13: Seat Width Adjustment

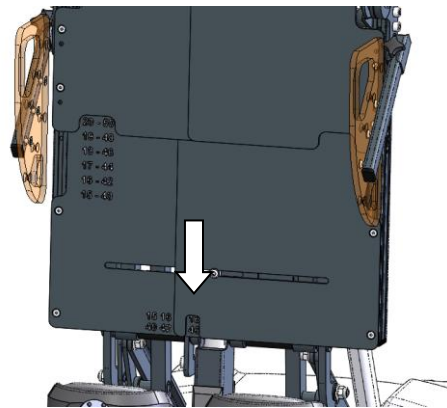
Use a 5 mm hex key to loosen the four bolts for the width adjustment of the armrests on the same side as before (see Picture 14).



Picture 14: Backrest & Armrest Width Adjustment

- Set the desired seat width (using the marking on the front edge of the seat, see Picture 15).
- Reattach the 2 bolts for the seat width adjustment and the four bolts for the armrest width adjustment.

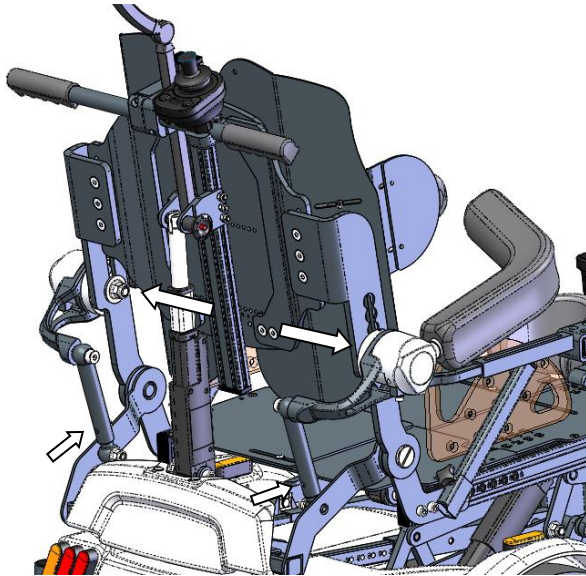
Repeat the procedure on the other side and check the width using the markings.



Picture 15: Armrest Attachment

3.1.3 – Armrests

Height adjustment (5 possible positions).



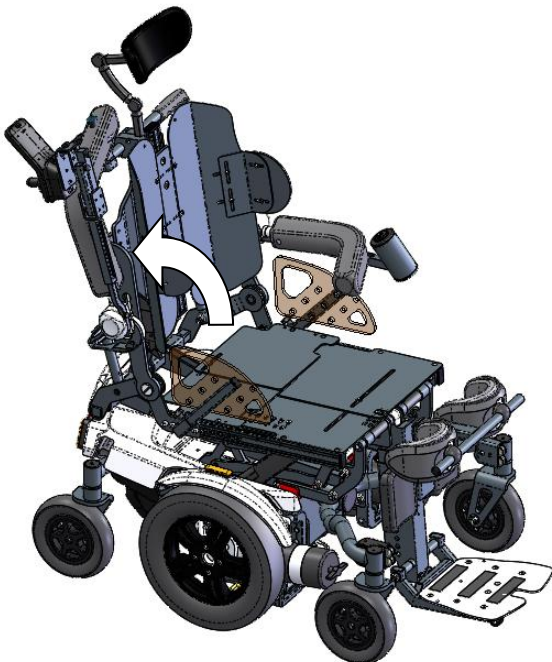
Picture16 : Armrest Height Adjustment

Remove the screw and the fixing washer of the armrest. Move the armrest to the desired position. Reattach the screw and fixing washer of the armrest.

Remove the adjustment screw of the armrest strut. Adjust the armrest strut so that the armrest is horizontal again.

(There should be the same number of free slots below the adjustment screw of the strut as below the armrest axis). (See Picture 16).

Reaward swiveling

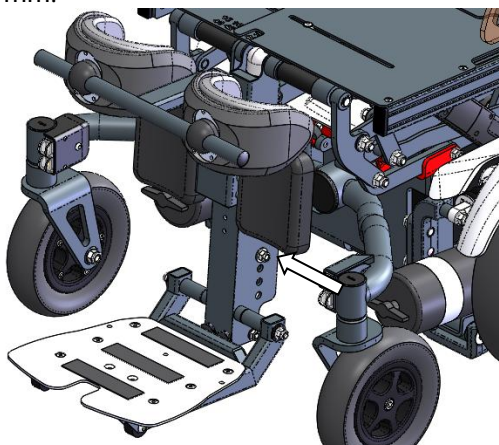


Picture17 : Lift the armrest

To facilitate side transfers, the wheelchair is equipped with liftable armrests. (See Picture 17).

3.1.4 – Footrests

Adjust the height of the footplates according to the user's leg length. 4 possible positions for a total adjustment range of 80 mm.



Picture18 : Leg Length Adjustment

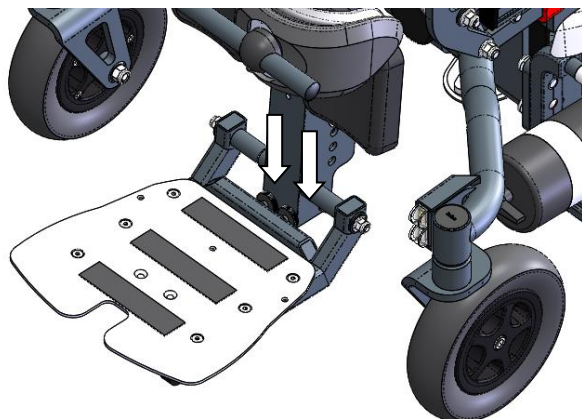
Remove the bolt (screw/washers/nut) located on the lower rectangular tube of the footrest.
Position the footrest to the desired length.
Reattach the bolt. (Ensure the bolt passes through the actuator rod in the footrest).
(See Picture 18).



Note

Proper adjustment allows optimal pressure distribution under the thighs.

Inclination Adjustment



Picture19 : Footplate Inclination Adjustment

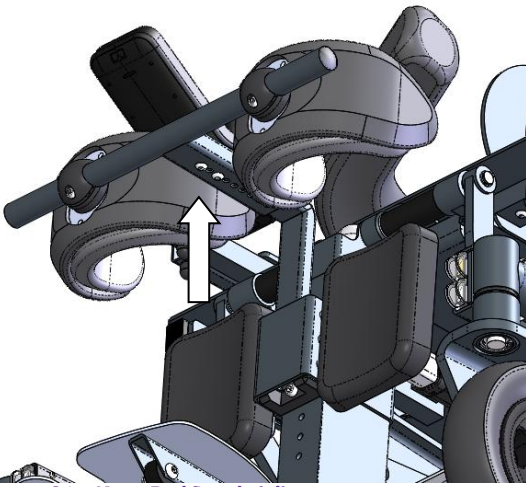
By tightening the shock absorbers inserted at the back of each footplate, the angle of inclination decreases and the footplates will be flatter. The opposite effect occurs when loosening. The action must be symmetrical on both sides. (See Picture 19).

Footrest Folding

3.1.5 – Knee Pads

Consists of a central mast, supported by a sleeve. Before any verticalization, it is necessary to position the knee pad in height and depth and also adjust the spacing of the knee pads.

Depth Adjustment



Picture21 : Knee Pad Depth Adjustment

- ☒ Remove the 2 screws located under the knee pad support.
- ☒ Adjust to the desired depth.
- ☒ Reattach the 2 screws under the knee pad support.
- ☒ Maintain a clearance of 3 to 4 cm between the user's knee and the knee pad. (See Picture 21).



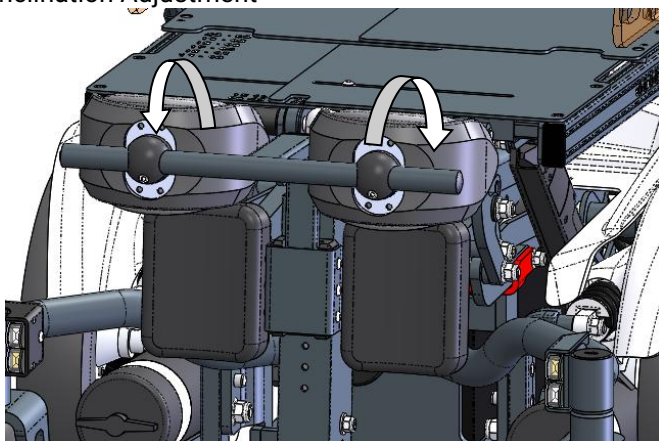
Picture22 : Knee Pad Height Adjustment

The ideal position is:

- 2 fingers below the tibial tuberosity.
- 1 finger between the tibia and the knee pad foam.

(See Picture 22).

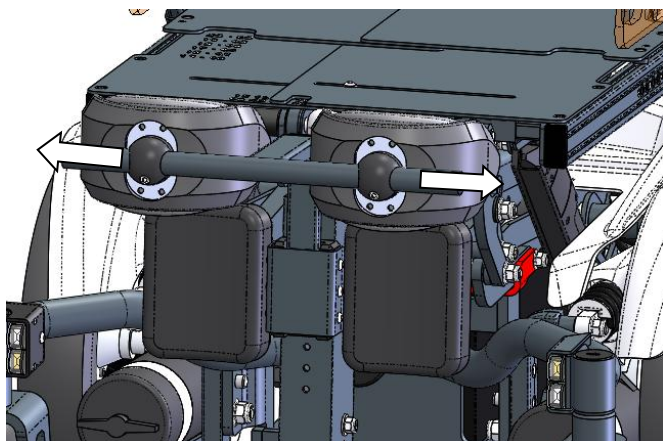
Inclination Adjustment



Picture23 : Knee Pad Inclination Adjustment

Loosen the clamping screws of the knee pads and adjust the inclination according to the user's morphology. Once the adjustment is found, tighten the screws. (See Picture 23).

Spacing Adjustment



Picture24 : Knee Pad Spacing Adjustment

Loosen the screws of the knee pads and adjust the width (from left to right) within the limit of the tube end. Once the adjustment is found, tighten the screws.

(See Picture 24).

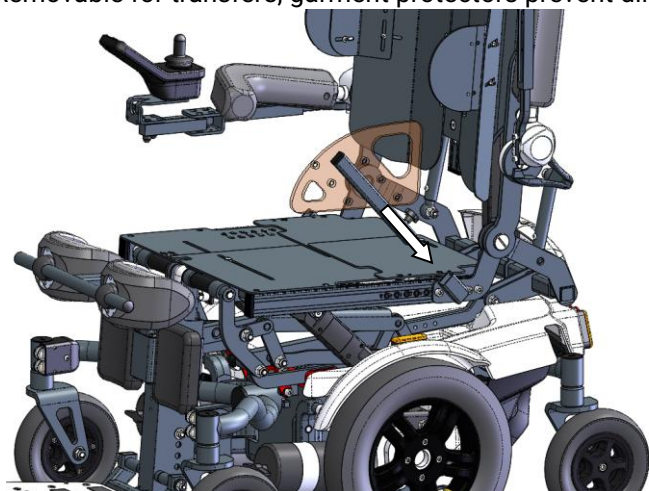


Warning

These initial adjustments must be refined after a phase of gradual verticalization to ensure no excessive pressure on the knee and proper alignment of the user's joints.

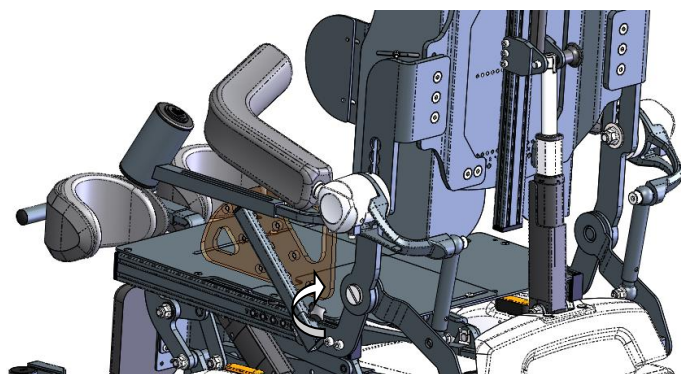
3.1.6 – Side Garment Protectors

Removable for transfers, garment protectors prevent dirt and/or tears on clothing caused by contact with the wheels.



Picture25 : Installing Garment Protectors

Insert the garment protector into its holder located on the side of the seat.
(See Picture25)



Picture26 : Securing Garment Protectors

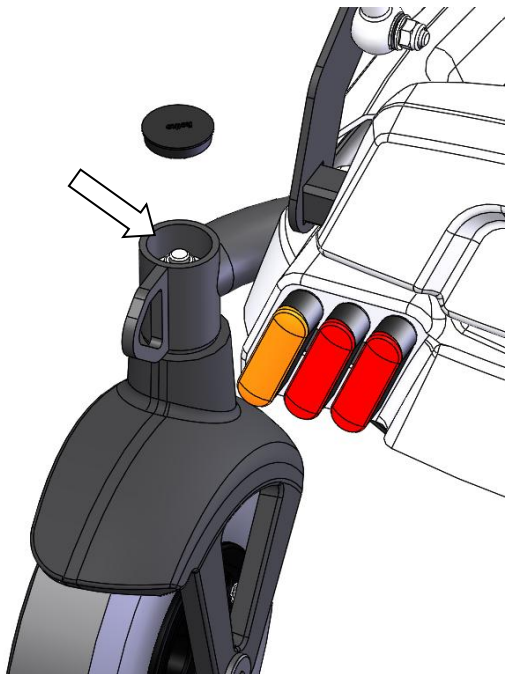
Once inserted, hold the garment protector in this position and then tighten the screw. (See Picture26)

3.1.7 – Anti-Wobble Mechanism

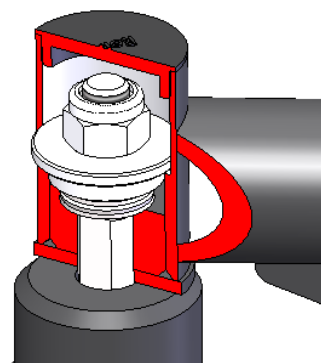
Wobbling is a phenomenon of the free wheels vibrating that naturally occurs at a certain speed. To eliminate this phenomenon, an anti-wobble system is integrated into the front wheel mounts.

To adjust the anti-wobble system, remove the cap on the crossbar and tighten the nut using a 16mm socket so that the fork can only turn when pushed by hand. (See Pictures 27 & 28)

- **If the fork turns on its own:** not tightened enough = wobbling
- **If the fork does not turn:** direction is blocked



Picture27 : Adjusting the Anti-Wobble Mechanism



Picture28 : detail anti-wobble mechanism

3.2 – IN STANDING POSITION

Preparation for Standing:

Ensure you are on a flat surface.

For obvious safety reasons, it is strictly prohibited to stand on slopes or near significant level differences (e.g., stairs, ramps, etc.).

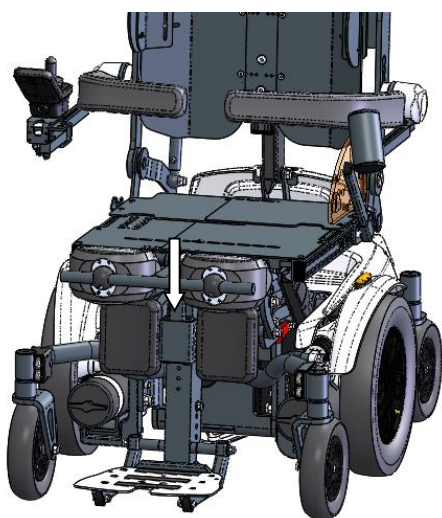
The electronics prevent standing if the front slope (in the direction of travel) has an inclination of more than 6°.

Warning: lateral stability on slopes is less than when facing forward. Therefore, it is strictly prohibited to stand on such slopes.

If the patient mistakenly attempts to stand on a slope greater than 6°, the wheelchair will automatically return to the seated position. However, the risk of falling exists because the return to the seated position is gradual.

When the stability of the wheelchair is no longer ensured, the A400 controller screen displays an exclamation mark (insert photo). As soon as this information is displayed, the forward speed is greatly reduced.

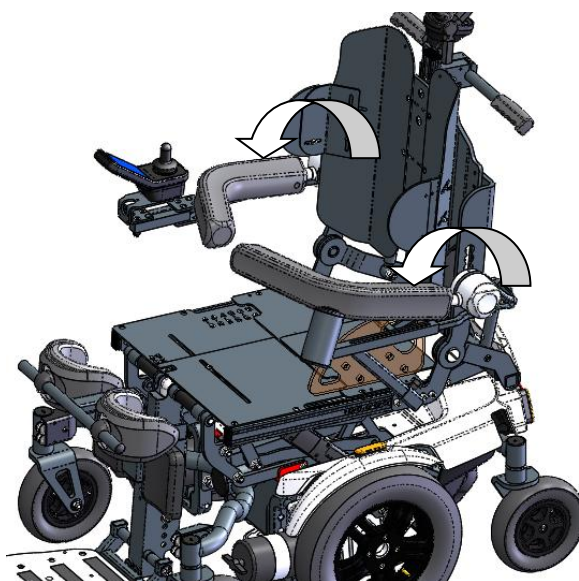
3.2.1 – Installing Knee Pads



Picture 29 : mise en place genouillère

Position the knee pad support into the square sleeve provided at the leg area. (See picture 29)

3.2.2 – Installing Armrests in Horizontal Position



Picture30 : Lowering the Armrests

Lower the armrests to the horizontal position to ensure good lateral support when standing. (See Picture30)

3.2.3 – Installing the Chest Strap

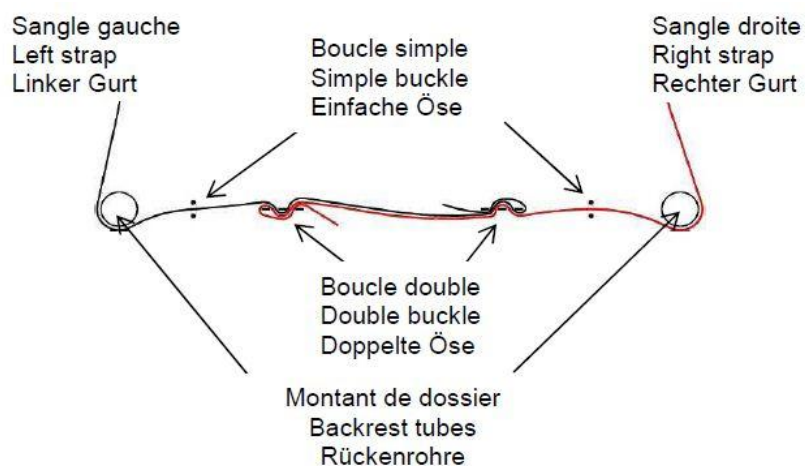


Picture31 : Positioning the Chest Strap

Attach the strap above the armrest on the backrest tube.

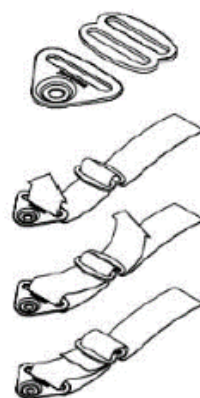
Under no circumstances should these belts be used as a safety belt in a vehicle.
(See Pictures 31 & 32)

For safety, the loop made by the strap must always be attached to the backrest tube above the armrest and according to the following diagram:



Picture32 : detailed chest strap

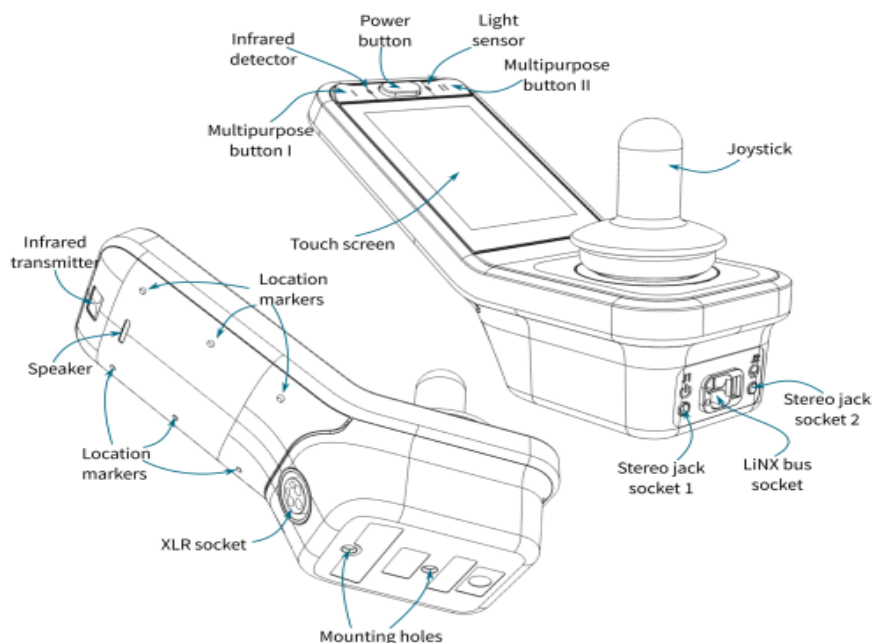
Picture33 : Detail buckle



Chapter IV – GETTING STARTED

Depending on the country, the P-eStand wheelchair can be equipped with either Dynamic Control LinX A200 or A400 electronics.

4.1 – CONTROLLER



Picture34 : Controller

Table 2 : Controller Description

Item	Purpose
Power Button	Used to power the system on and off. Includes a status indicator.
Infrared Detector	Used to measure infrared signals
Brightness Sensor	Used to detect ambient light levels.
Versatile Buttons I & II	These buttons can be configured to perform common operations based on user needs
Touch Screen	3.5-inch capacitive color touch screen with customizable contextual menus. Use swipe or touch actions to navigate through player, seating, utility, and connectivity cards.
Stereo Jack Ports	2 x stereo jack ports for connecting to an external power switch (tip J1 only) and other multi-way switches.
LiNX Bus Socket	Single cable connects to the LiNX bus for communication and power.
Joystick	User-controlled action to manage speed and direction of movement and seating.
Infrared Port	Used instead of a remote control for consumer goods such as a TV
Speaker	Horn for auditory signals.
Location Markers	Three location markers placed on each side of the REM400 backplate to guide the user's hand.
XLR Socket	XLR socket can be connected to a battery charger or LiNX access key.
Mounting Holes	Standard-spaced LiNX mounting holes.

4.2 – OPERATING THE CONTROLLER

Press the Power button: the controller LEDs light up.



Note

In the unlikely event of the wheelchair entering a runaway situation, the user can press the remote module's power button for an EMERGENCY STOP. Refer to section 2.3.2 for executing an emergency stop.



Picture35 : Stop

To power on the REM400 LiNX control module, press the power button (see Picture35).

If there are no system faults, the touchscreen displays the startup screen (see Picture36), the status indicator (via the power button) turns green, and a function card displays with status and battery bars.



Picture36 : Start

If there is a system fault during startup, the status indicator displays the fault with a series of red flashes (refer to the LiNX system manual for more information on fault indication). (See Picture37)



Picture37 : Fault

To power off the system, press the power button; the touchscreen displays the shutdown screen - see Picture34 - the system powers down, and the status indicator turns off. The power button is also used to perform an EMERGENCY STOP – see section 4.9 for executing an emergency stop.



Picture38 : Startup screen



Picture39 : Power off screen



Warning

A power button can only power off a system if its status indicator is active (green or flashing red). If the power button's status indicator is not active (i.e., the power button's status indicator is off), the power button cannot be used to power off the system. Similarly, control input power buttons, including toggles, can only power off a system if the status indicator of the module they are connected to is active. If the status indicator of the module they are connected to is not active, control input power buttons, including toggles, cannot be used to power off the system.



Warning

Before using a user input, such as the joystick or occipital control system, the user must check which user function is selected and at what speed that function is set to avoid unexpected operation.

4.3 – UNDERSTANDING THE TOUCH SCREEN

The REM400 remote modules allow users to interact with the wheelchair via the touch screen. The touch screen provides real-time information about the system and allows control over various aspects of the wheelchair for driving, seating functions, and lighting.

System information and commands are presented to the user through different screens, such as startup screens (Picture40), function cards (Picture41), and overlays (Picture42).



Picture40 : Startup screen



Picture41 : Function card



Picture42 : Overlay

Startup screens are temporary, providing information without requiring user intervention. Function cards provide means to interact with the wheelchair, such as controlling wheelchair speed or turning on lights. Overlays, often placed on a function card, provide information or instructions that may require subsequent user action depending on their purpose. When an overlay is displayed, the touch screen cannot be used.

Faults and other system information are displayed using the status indicator (an LED under the power button) and the status bar.

4.3.1 – nteracting with the Touch Screen :

Users can interact with the touch screen in two ways:

- Swipe mode (see Picture43)
- Tap-only mode (see Picture44).
-

In swipe-tap mode, users can use swipe gestures as well as tap gestures to navigate and select options. In tap-only mode, the touch screen provides areas and buttons that users can press (rather than swipe) to navigate and select options.



Picture43 : Swipe Mode Interaction



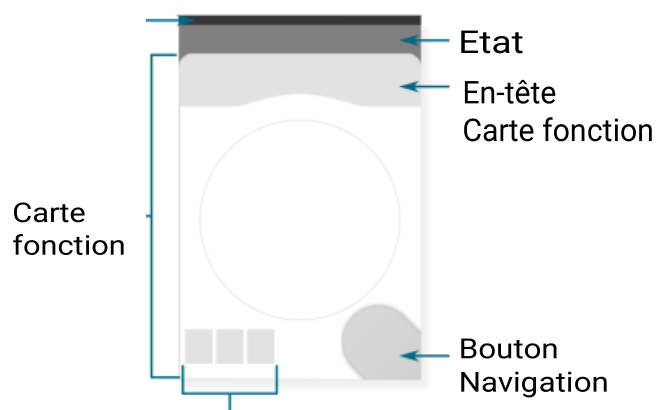
Picture44 : Tap-only Mode Interaction

4.3.2 – Understanding the Touch Screen:

Generally, users interact with the REM400 through a function card (See Picture45). With an active function card, the touch screen includes the following components:

- Battery level gauge
- Status bar
- Function card (with header)
- Navigation button
- Function information
-

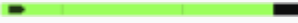
These components are further detailed in Table 3.



Information fonctions

Picture45 : Typical Screen Components

Table 3: Typical Screen Components

Component	Function	More info
	The battery gauge provides information on the battery's charge status. Display status include:	See 4.3.3 battery gauge
	Current profile name Time Icons indicating driving and seating status information	See 4.3.4 barre d'état
	Navigation Button: • Displays the current interaction mode • Opens a preview of the function card (short press) • Opens the status and settings menu (long press)	See 4.3.5 Navigation Button
	Function Header Display Green for driving, orange for seating functions, blue for connectivity, purple for utilities Main input indicator Function card name	See 4.3.6 Function card name
	Function cards provide users with ways to observe and interact with the system. There are four available types: driving, seating functions, utilities, and connectivity.	See 4.5 carte driving, See 5 seating function See 6 card co,nnectivity
	Function information displays icons related to: Gyroscope status Locked drive state Ignore drive Lock	See 4.3.8 Function Information

4.3.3 – Battery gauge:

The battery bar provides a graphical display of the current battery charge status and charging state when a battery charger is connected. Battery states are indicated as follows in Table 4

Table 4: Battery Charge Status

Battery gauge	Battery Charge Status
	Displays green when the state of charge is between 60 and 100%. This level is defined by the Batt Gauge Maximum parameter. See the LiNX system manual for more information.
	Displayed in orange when the state of charge is between 20 and 59%.
	Displayed in red when the state of charge is less than 20%. This level is defined by the Batt Gauge Minimum parameter. See the LiNX system manual for more information.
	Loading. See 7.1 Charging the battery.

Further details on the battery charge status are displayed in the status bar. See 4.3.4 Status Bar for more information

4.3.4 – Status Bar

The status bar can be divided into three sections:

Profile name

Time

Status information



Picture46: status bar

Profile name

The profile name is set using the LiNX Access programming and diagnostic tool under Functions | Profile Name.

The time is displayed in 12-hour or 24-hour format. It is set using Coordinated Universal Time (UTC) and an offset based on the user's location (country). UTC is automatically acquired when a system is connected to a programming and diagnostic tool. The country-based offset is set by the user via the remote module's configuration screen.

Displays the current status of the LiNX system with status icons. Icons include: flash codes, Bluetooth disabled, drive slowdown, drive lock/inhibit, seat lock. These status icons are explained in Tables 5 & 6.

Table 5 Battery Conditions Displayed on the Status Bar

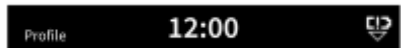
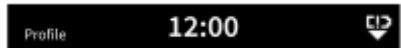
Battery Voltage	Description
	High Voltage — Displayed when battery voltage exceeds the high voltage warning setpoint of the battery gauge.
	Low voltage — Displayed when battery voltage falls below the low voltage warning setpoint of the battery gauge.
	Cut-off Voltage — Displayed when battery voltage drops below the cut-off voltage defined by Cut Off Voltage. Indicates the battery is empty and further discharge will damage the battery. The horn also sounds once every ten seconds for the duration that deep discharge state is active.

Table 6: Status Information Icons

Status icons	Description
	Drive Locked — Informs the user that a drive lock is active, preventing the wheelchair from being driven.
	Drive Slowdown — Warns the user that a drive slowdown is active. Drive slowdown restricts the wheelchair from moving at standard speed for safety reasons, allowing it to operate at reduced speed for the duration of active drive slowdown.
	Flash Code — Informs the user that an error is active. The flash code is a value between 1 and 7 (see the LiNX system manual for more information on errors and flash codes) - this flash code flashes on the status indicator simultaneously.

Status icons	Description
	Seat Locked — Informs the user that a seat lock is active, preventing operation of the wheelchair's seating functions.
	Bluetooth Disabled — Informs the user that Bluetooth connectivity is disabled. See section 2.3.6 Disabling Bluetooth for more information on disabling Bluetooth

Three battery conditions are displayed on the right side of the status bar. These are:

- High Voltage
- Low Voltage
- Cut-off Voltage

4.3.5 – Navigation button



Picture47:
Navigation button

The navigation button (see Picture47) serves two important functions. Firstly, with the use of different colors and icons, it provides visual indication (or reminder) of the configured interaction mode: swipe-tap or tap-only - see Table 7.

Secondly, when activated (tapped by the user's finger), it performs a navigation function based on context and activation duration:

- A short press displays the function card preview.
- A long press displays the status and settings menu.



Note

The REM400 status and settings menu is not accessible when connected to a programming tool (PC or iOS), i.e., the status and settings menu does not appear with a long press of the navigation button.

The appearance of the navigation button varies based on the configured interaction mode (swipe-tap or tap-only) and its state. In swipe-tap mode, an icon with a finger and three arrows is displayed; in tap-only mode, an icon with a finger and a circle is displayed. These icons change color, from gray to blue, when activated. This is summarized in Table 7: Navigation Button Variants.

Tableau 7 : Navigation Button Variants

Inactive Navigation Button	Indication	Active Navigation Button	Indication
	Touch-slide mode		Response to a touch-slide
	Simple tap mode		Response to a simple tap
	Screen lock active		

4.3.6 – Function Card Header

The type of function card is identified by the color of the function card header: green for drive cards (See Picture48), orange for seat functions (See Picture50), blue for connectivity (See Picture49), and purple for utility cards (See Picture51).



Picture48 : Example of a drive function header



Picture50 : Example of a seat function header



Picture49 : Example of a connectivity function header



Picture51 : Example of a utility function header

The text in the middle of the header is programmable and serves to identify the function. The icon to the left of the header indicates the type of primary input assigned to the selected function. These are indicated in the following table.

Table 8 : Primary Input Icons

Icon	Description	Icon	Description
	REM400		REM2xx CR400
	Input module or third-party interface		Main board
	Attendant control unit		User command
	Drink & eat	-	-

4.3.7 – Function Card

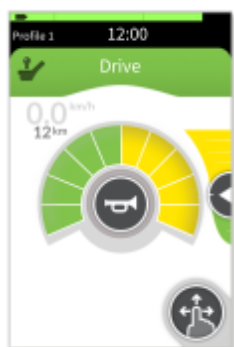
Function cards are the main interface for the user with the LiNX system.

There are four types that can be added to a profile:

Drive card (see Picture52)

Seat function card (see Picture53)

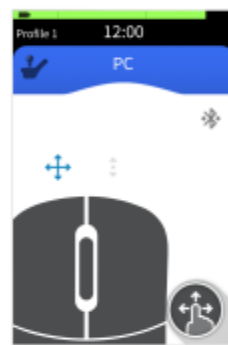
Connectivity card (see Picture54)



Picture52: Example of a drive card



Picture53: Example of a seat function card



Picture54 : Example of a connectivity card

A drive card is selected when the user wants to drive the wheelchair, control the wheelchair's speed, operate the lights, and sound the horn.

A seat function card is selected when the user wants to reposition the seat.

A connectivity card is selected when the user wants to communicate with an external device, such as moving the cursor on a computer with the mouse movement function.

A utility card is selected to easily control lighting, the horn, and other control outputs using the primary 4Q and 3Q inputs.

4.3.8 – Function Information

To provide the user with additional function-specific information, the area in the bottom left of the function card can display indicators related to: Gyroscope status/ Locked drive status/ Ignore drive lock

- Gyroscope status



Gyroscope enabled



Gyroscope disabled

- Locked Drive Status



Indicates if the gyroscope module is enabled or disabled for the current function. No indicator is shown if a gyroscope is not installed or connected.

If the function is operating in a locked drive mode, the locked drive status indicator reminds the user which type of locked drive has been selected. No indicator is shown if locked drive is not enabled for the selected function. See table 15 for all indicators.

- Ignore Drive Lock



If the drive operates with the "Drive LockOut ignored" function enabled, the Ignore Drive Lock indicator reminds the user that a drive lockout does not occur in this function.

4.4 – DIRECTION

The joystick controls the direction and speed of driving and seating functions (See Picture55). It can be configured to operate in proportional or discrete mode.



Picture55 : joystick

Direction Control - Driving

By default, when the joystick is moved from the neutral position, the wheelchair moves in the same direction as the joystick. However, this default behavior can be modified by configuring the joystick rotation angle, swapping joystick axes, or reassigning joystick quadrants. See the LiNX system installation manual for more details.

Direction Control - Seating

For seating functions, the direction of seat movement (extension/retraction) depends on the input command configuration. See the LiNX system installation manual for more details.

Speed Control – Proportional Mode

In proportional mode, the speed of the driving or seating function is proportional to the joystick's deviation, so the further the joystick is from the neutral position, the faster the driving or seating function moves.

Speed Control – Discrete Mode

In discrete mode, the speed of the driving or seating function is fixed and is activated when the joystick is moved beyond a configurable threshold - see Joystick Switch Threshold in the LiNX system installation manual.

Generally, to stop driving or to stop a seating movement, return the joystick to the neutral position or release the joystick, and it will automatically return to the neutral position. However, this operation does not work for locked drive modes. For locked drive, refer to the LiNX system installation manual.



Warning

When the joystick is tilted, the space between the joystick skirt and the top of the module body decreases. This can be a pinch hazard. The user should release the joystick if a part of the body is pinched.

4.5 – DRIVE CARD

A drive card is selected to drive the wheelchair. The drive card includes a speed dial, a speed slider, and a speed indicator/odometer (see Picture56) to visualize and control the wheelchair's speed while driving.

Drive cards also provide access to the lights (see 4.7 Lighting Control and Dashboard) and the horn (see 4.8 Sounding the Horn).



Picture56 : Drive card showing the speedometer/odometer, speed dial, and speed slider



Note

The speedometer/odometer must be calibrated before use, as its accuracy will vary depending on wheelchair models and their variations. Refer to the LiNX system installation manual for more information on speedometer/odometer calibration.

4.6 – SPEED DISPLAY AND CONTROL

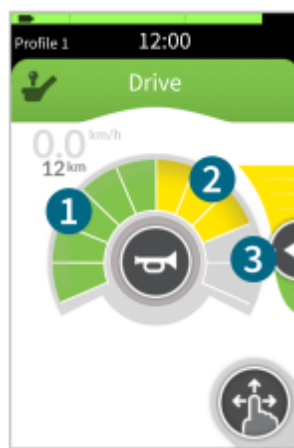
Speed Dial:

The speed dial displays the user's and wheelchair's speed settings (see Picture57). It is divided into ten segments, representing the wheelchair's speed range. Each segment can display one of three colors: green, yellow, and gray.

Green zone (1 in 4.5) shows the speed range of the driving function, which is set by the user with the speed slider position - see the next section Speed Slider.

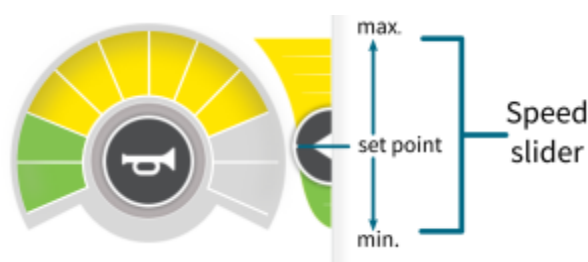
Yellow zone (2 in 4.5) indicates the maximum possible range available for the user in this driving function.

Grey zone (3 in 4.5) indicates the wheelchair's maximum range; no gray area is available for this driving function.



Picture57 : Drive Card - at rest

The speed slider



Picture58 : The speed slider

The speed slider is adjusted by the user to reduce the maximum speed of the selected drive function. The proportion of the green and yellow zones (and in 4.5) corresponds to the position of this slider. Move the slider down to decrease the available speed. As the available speed decreases, the green zone decreases and the yellow zone increases (Picture59).

Move the slider up to increase the available speed. As the available speed increases, the green zone increases and the



yellow zone decreases (Picture59).

Picture59 : Using the Speed Slider (minimum setting, left, and maximum setting, right)

To adjust the speed slider in touch-slide mode, press and hold the speed slider and drag it up or down. Release the slider at the desired setpoint (see Picture60).

To adjust the speed slider in tap-only mode, press the top of the speed slider to increase the setpoint, and press the bottom of the speed slider to decrease the setpoint. In tap-only mode, plus and minus symbols are displayed on the speed slider to indicate where to press (see Picture61).



Picture60 : Adjusting the speed slider in touch-slide mode



Picture61 : Adjusting the speed slider in tap-only mode

The speedometer and odometer on the drive card (see Picture62) display while driving. The speedometer shows the current speed of the wheelchair, and the odometer shows the distance traveled by the wheelchair since it was last reset or zeroed out.



Picture62 : Drive card - in motion



Note

The odometer can display up to a maximum distance of 9999 km or miles, after which it resets to zero



Note

When there is a drive request, the navigation button and speed slider are removed from the drive card to reduce visual clutter - see 2.5. They return when the drive request is removed.

The units for the speedometer/odometer can be set by the user to metric or imperial: Changing display settings and Resetting the odometer and changing units.

4.7 – LIGHTING & DASHBOARD

For systems with lighting, the lighting control button and lighting dashboard are displayed. The lighting control button, at the top of the card, opens and closes the lighting button panel. The lighting dashboard, displayed under the horn button, shows the four lighting indicators (left and right turn signals, hazard lights, and position lights) which light up



when they are active.

Picture63 : Drive card with and without lighting

To control the wheelchair's lighting, press the lighting control button to display the lighting control panel. Press any lighting button to turn the lights on or off. Press the lighting control button to close the lighting control panel. The activated lights are displayed using the indicator lights (left and right turn signals, hazard lights, and position lights) on the lighting dashboard (see Picture64).



Picture64 : Drive card

4.8 – SOUNDING THE HORN



Picture65 : Horn Button Location

The horn button is displayed at the center of the speedometer on the drive card. Press to sound the horn. The horn sounds for as long as the horn button is activated (see Picture65).)

4.9 – EMERGENCY STOP

If the user needs to quickly stop the wheelchair or quickly stop a seating movement, the power button can be pressed to perform an EMERGENCY STOP. If driving, the wheelchair stops quickly; the speed at which it stops is defined by the Emergency Deceleration parameter.

Chapter V – POSITIONS & STANDING

Warning

Whether your wheelchair is in power mode or freewheel mode, it is possible to stand. However, if you are in freewheel mode, it is strongly advised to engage the parking brakes before attempting to stand.

Warning

Always ensure the backrest is in an upright position before standing. To stop the movement, release the joystick. It is possible to stop at any intermediate position.

Note

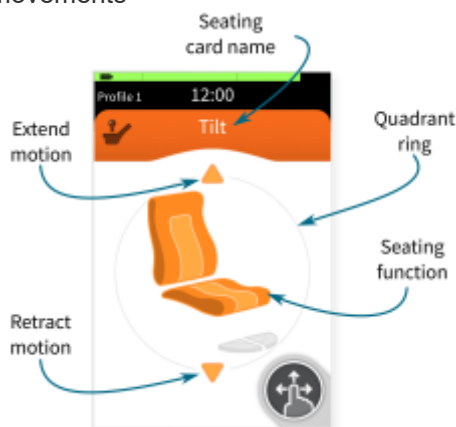
In case of contraction during standing, proceed in stages, with intermediate relaxation periods.

5.1 – SEAT CARD

A seat card is selected by the user to use a seating function.

Typically, a seat card includes:

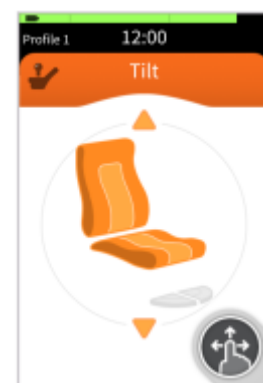
- The seat card name
- One or more seating functions
- The circular dial
- One or more movements



Picture66 : Example of a seat card

The seat card name is at the top of the card and is defined using programming and diagnostic tools.

A seat card can be dedicated to a single seat function (Picture67) or can offer multiple seating functions (Picture68). The seat images identify the functions performed with the seat card; the full range is displayed in Table 11.



Picture67 : E Example of a seat card with two dials



Picture68 : Example of a seat card with four dials

For each seat function, a number of movements are available that the user can select and control. The movements are displayed as arrows on or near the circular dial (Picture69): an upward-pointing arrow means "extend"; a downward-pointing arrow means "retract". An arrow with a bar indicates the movement is locked. A striped movement indicates the movement is inhibited..

Table 9: Seat Movements – Extension and Retraction

Action	Display	action	Display
Stand up		Sit down	
Standing		Seated	
Standing inhibited		Seated inhibited	

Table 10: Seat Movements – Extension and Retraction Locked

Action	Display	Action	Display
Standing lock		Seated lock	
Standing lock active		Seated lock active	
Standing lock inhibited		Seated lock inhibited	



To show the user which movements are available and how to use them, the movements are displayed in one of the four dials (front, back, left, and right) of the circular dial.

A user operates a movement by activating the configured input (joystick or control button) in the direction indicated by the movement's position on the circular dial.

Picture69 : Circular Dial

For example, in Picture69, the seat card shows a seat function with two dials with two movements:

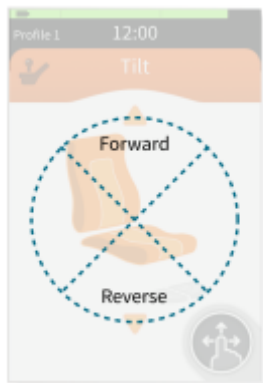
1. Extend (the orange arrow pointing up in the front dial)
2. Retract (the orange arrow pointing down in the reverse dial).

To operate the stand-up movement, the user must activate the configured user input for a forward operation, such as pushing the joystick forward. To sit down, the user must activate the configured user input for the reverse operation, such as pushing the joystick backward.

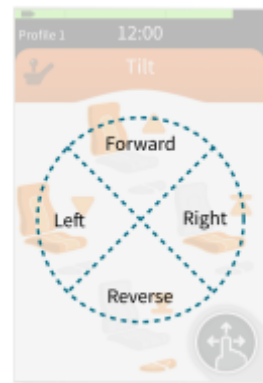
Similarly, in Picture71, the seat card shows four dials with four movements:

1. Extend tilt (front dial);
2. Both legs retract-lock (reverse dial);
3. Retract tilt (left dial);
4. Elevate extend-lock (right dial);

In this example, to operate the elevate and lock movement, the user must activate the configured user input for the correct operation, such as pushing the joystick to the right.



Picture70 : Seat Card – 2 Dials



Picture71 : Seat Card – 4 Dials



Picture72 : Display of Active and Inactive Movement

During the execution of a movement, the navigation button is removed from the screen for the duration of the operation. At the same time, the movement arrows change according to the user input — see figure72 and Tables 9 & 10.

5.2 – STANDING UP

To Stand Up

Select the standing card



Standing icon



Push the joystick in the direction of the arrow indicating standing up (upward)

To Sit Down

Select the standing card

Standing icon



Push the joystick in the direction of the arrow indicating the sitting position (downward)



Warning

When the seat exceeds 6° of inclination, an indicator will appear on the touchscreen and the wheelchair will only be able to move at 10% of its maximum speed.

Once back in the sitting position, the indicator will automatically turn off and the wheelchair will regain its nominal capabilities.



Warning

Before moving in a standing position, ensure that the anti-tip wheels are in contact with the ground.

5.3 – RELAX FUNCTION

To position your wheelchair in Relax mode

Select the backrest card



Backrest tilt icon



Push the joystick in the direction of the arrow indicating upward, to tilt the backrest forward

Push the joystick in the direction of the arrow indicating downward, to tilt the backrest backward



5.4 – BACKREST TILT

To adjust the tilt of the backrest:

Select the backrest card.

Push the joystick in the direction of the arrow pointing up to tilt the backrest forward.

Push the joystick in the direction of the arrow pointing down to tilt the backrest backward.

Backrest tilt icon



Note

If the joystick is not maintained in the direction of the arrow, the movement stops.

5.5 –LEG REST TILT

To adjust the tilt of the leg rest:

Select the leg rest card.

Leg rest tilt icon.



Push the joystick in the direction of the arrow pointing up to tilt the leg rest forward.

Push the joystick in the direction of the arrow pointing down to tilt the leg rest backward.



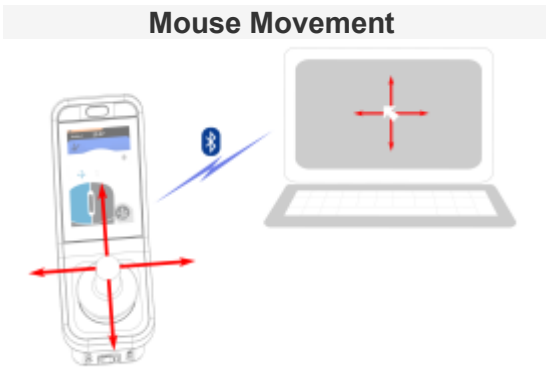
Note

If the joystick is not maintained in the direction of the arrow, the movement stops.

Chapter VI – Connectivity

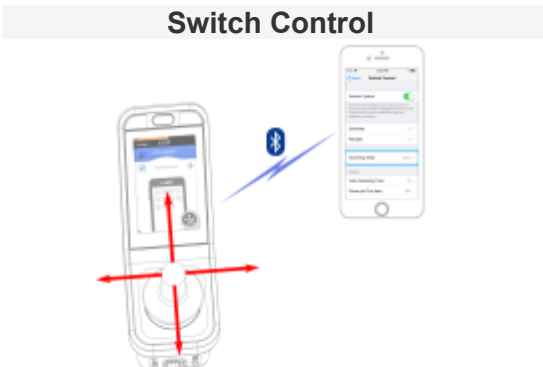
6.1 – CONNECTIVITY

Connectivity cards allow the user to wirelessly interact with external devices. Two connectivity functions are available: **Mouse Movement** and **Switch Control**.



Picture73 : Mouse movement

Mouse movement allows the user to control the cursor on a PC or laptop screen from a user input on the wheelchair, such as the joystick on the remote module, touchscreen buttons, or buttons connected via command inputs.



Picture74 : Switch control

Switch control is an accessibility feature that allows the user to navigate and select items on their iOS or Android device using any primary input, command inputs, or the touchscreen of the REM400/500.

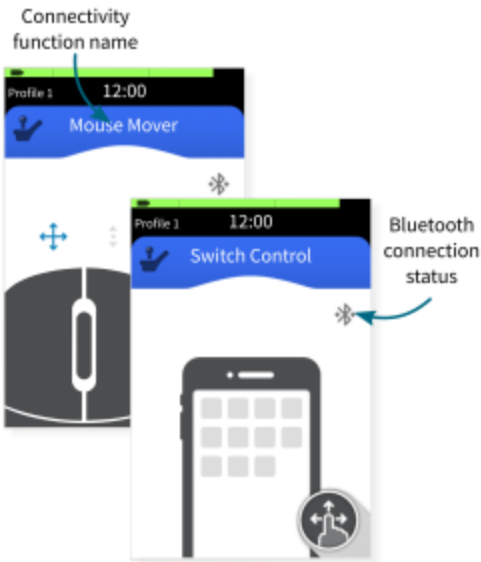
A connectivity card, which has a blue header, typically includes

- Connectivity card name
- Bluetooth connection status

The name is used to uniquely identify the purpose of the card, e.g., a PC to connect and control the cursor on a computer.

The Bluetooth connection status indicator shows when the Bluetooth connection between the LiNX system and the user's device is:

- ✖ Disconnected
- ✖ Connecting
- ✖ Connected



Picture75 : Example of a Connectivity Card

6.1.1 – Configuring a Connectivity Card

The following configuration procedure assumes that a connectivity card is available and selectable in one or more profiles. It also assumes that the user's device (PC, laptop, iOS, or Android), to which the LiNX system connects, has an active Bluetooth connection.

Before you can use a connectivity card, you must:

- Pair the LiNX system with the user's device
- Link the connectivity card with the user's device

These actions are described in more detail below.



Note

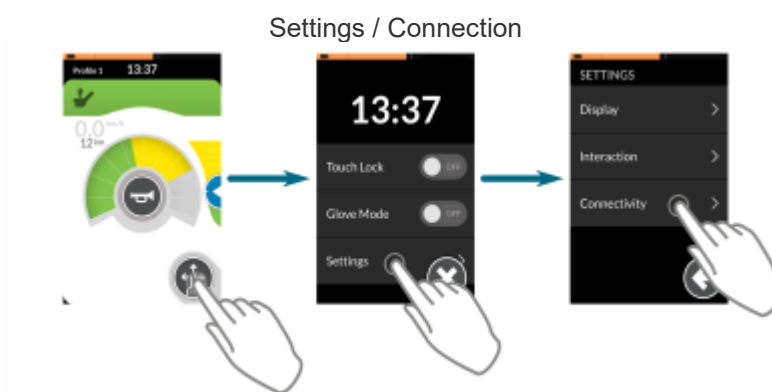
Generally, you only need to pair a device once (unless you forget it intentionally — see "Forgetting Devices" on page 49), while a device can be linked to multiple functions.

6.1.1.1 – Pairing the LiNX Manipulator with the User's Device

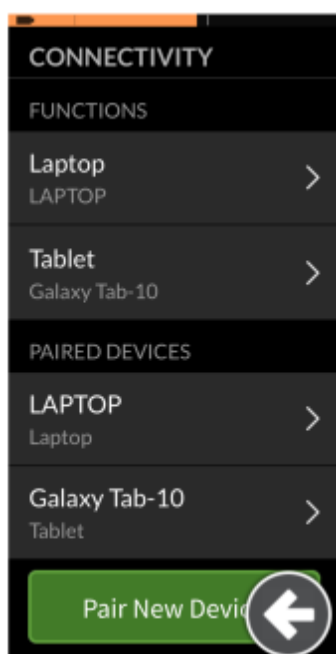
To pair the LiNX system with the user's device (PC, laptop, iOS, or Android), open the connectivity settings menu. To open this menu, press and hold:

Navigation Button

Until the status and settings screen appears, then press



Picture76 : Opening the Connectivity Settings Menu

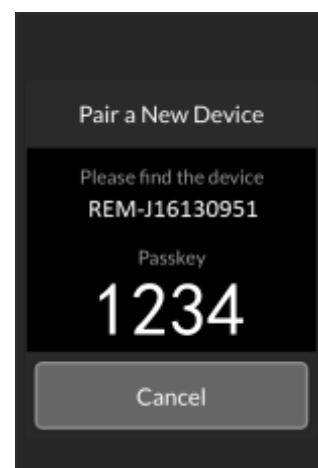


Picture77 : Connection Menu

The connection settings menu appears. This menu is divided into two sections (see Picture77):

- ☐ Functions (**Upper part**)
- ☐ Paired Devices (**Lower part**)

At the bottom of this menu, press the "Pair a New Device" button. The pairing password appears on the touchscreen with the name of your LiNX device to pair — for example: REM-J16130951 (see Picture78).



Picture78 : A Pairing a New Device

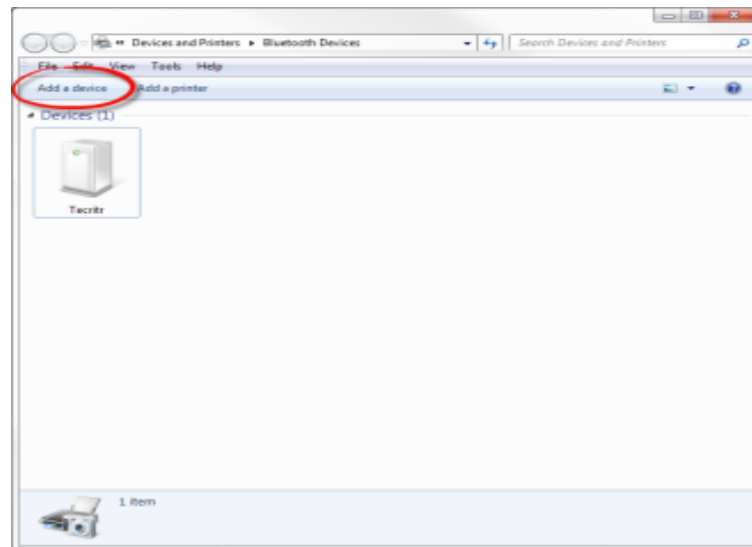
Depending on your device, follow one of the three pairing instructions below:

- ☒ Pairing with a PC or laptop
- ☒ Pairing with an iOS device
- ☒ Pairing with an Android device

Pairing with a PC or Laptop

In the PC or laptop Windows dialog box, open the Devices and Printers dialog box. There are several ways to do this:

- Start -> Devices & Printers, or
- Start -> Control Panel -> Devices & Printers, or
- Icon tray -> click on the Bluetooth device icon



Picture79 : Add a Device

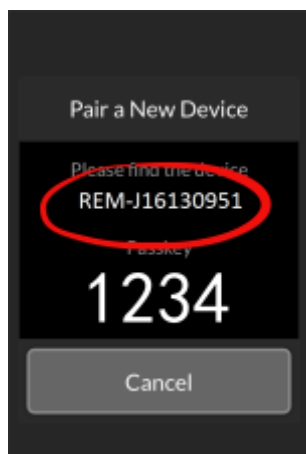
In the Devices and Printers dialog box, click the Add a Device button. Locate the name of the LiNX device displayed on the touchscreen (e.g., REM-J16130951). Click Next.

Pairing with an iOS Device

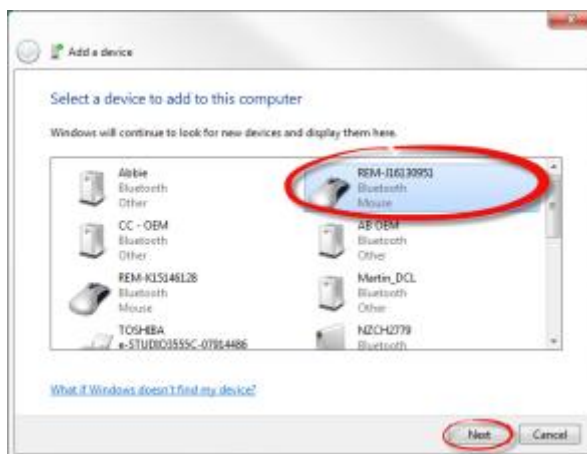
On your iOS device, go to the Bluetooth menu:
If Bluetooth is not enabled, turn it on now.

Settings | Bluetooth

Bluetooth 

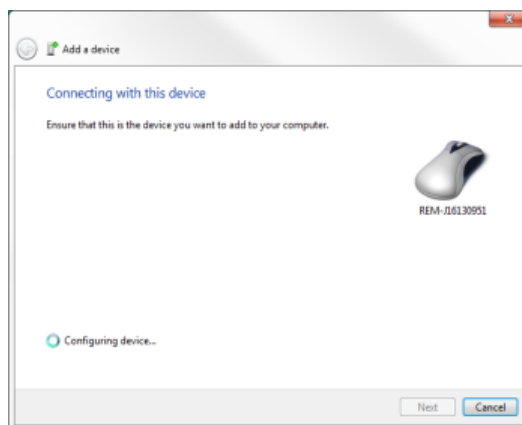


Picture80 : Pair a New Device



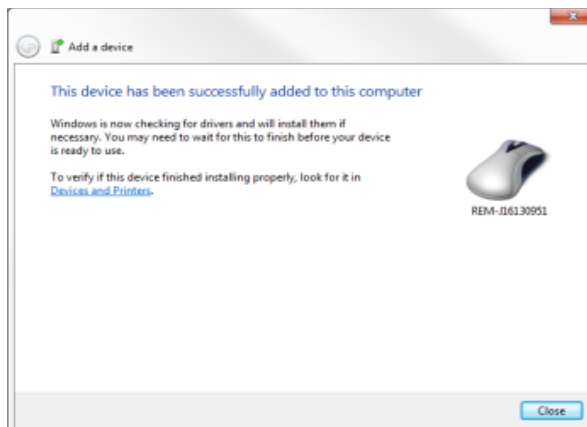
Picture81 : Selecting a Device to Add

Wait for the device to connect. Click **Next**.



Picture82 : Device Setup.

Click the Close button to complete the Add a Device action.



Picture83 : Close Add a Device

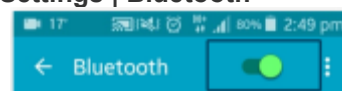
From the list of Bluetooth devices displayed on your iOS device, locate and tap on the name of the LiNX device you want to pair with (e.g., REM-J16130951). The Bluetooth status of the selected LiNX device changes to "Connecting" while attempting to pair..

REM-G16138663	Not Connected	ⓘ
REM-J16130896	Connected	ⓘ

Pairing with an Android Device

On your Android device, open the Bluetooth menu
If Bluetooth is not enabled, turn it on now.

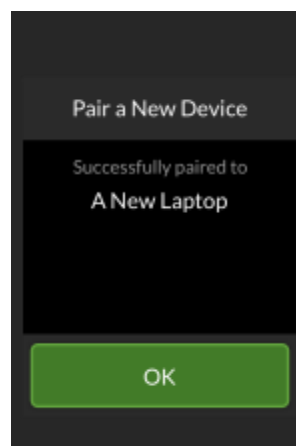
Settings | Bluetooth



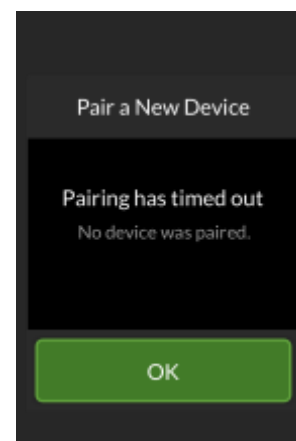
From the list of Bluetooth devices displayed on your Android device, locate and tap on the name of the LiNX device you want to pair with (e.g., REM-G16138663). The Bluetooth status of the selected LiNX device changes to "Connecting" while attempting to pair.

If the device pairs successfully, a confirmation screen appears on the remote module. Press the OK button to proceed (see Picture84).

If no device pairs within the timeout period, a message appears: "No device paired." Press the OK button to proceed (see Picture85).



Picture84 : Successfully Paired



Picture85 : Timeout Expired



Note

The LiNX system allows pairing with up to 10 devices simultaneously. If you have reached this limit and need to add more devices, consider "forgetting" already paired devices — see 2.8.6 Forgetting a Device.

6.1.1.2 – Linking the Connection Card with the User Device

Connection cards need to be linked to a paired device. To link a connection card to a device, open the "Connection Settings" menu by pressing and holding:

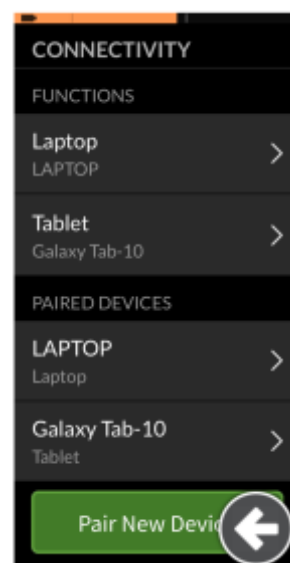
Navigation Button

Then press

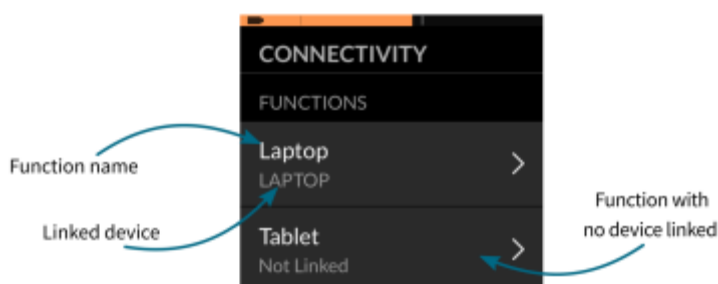
Settings | Connection Settings

The connection settings menu will appear, divided into two sections (see Picture 86):

- Functions
- Paired Devices



Picture86 : Menu connexion

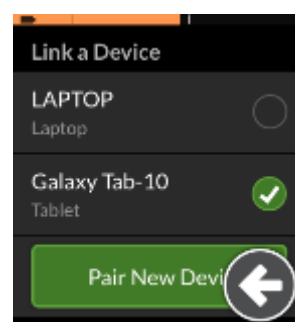


Picture87 : linked function & device

The names of connectivity cards are displayed in the Functions section (upper part of the menu). For each menu item, the name of the connectivity card appears at the top, and the user's device, if any, is displayed below. If the connectivity card is not linked to a device, "Not Linked" is displayed (see Picture 87).

For unlinked connectivity cards, press the appropriate menu item..

For unlinked connectivity cards, press the appropriate menu item.



Picture88 : Pair new device

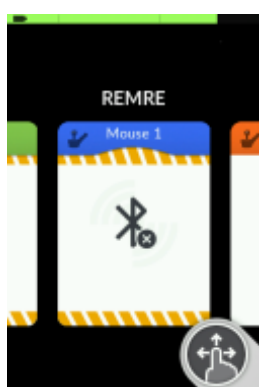
6.2 – PERIPHERAL CONNECTION

To connect to a peripheral device, select the appropriate connection function from a profile. If the connection function is associated with a device and the device is linked to the function, it will attempt to connect to the device via Bluetooth.

The Bluetooth connection status indicator appears when the Bluetooth connection between the LiNX system and the user's device is:

	Disconnected
	Connecting
	Connected

If Bluetooth fails to connect, the status reverts to Disconnected. To attempt to reconnect, reselect the connectivity function from the profile (i.e., deselect and then reselect it).



Picture89 : Select a mouse mover connectivity card from a profile

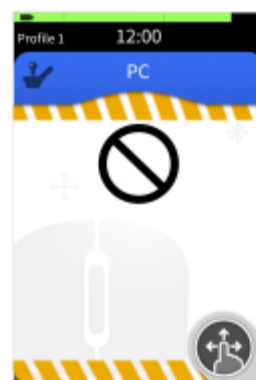
If a connectivity card from the profile is not fully configured or is subject to an error, it is classified as unusable. An unusable card is identified by an orange chevron border with an error icon indicating the type of error (see Picture 91).

Several reasons can cause a connectivity card to be unusable, including:

1. The main input for the function is missing.
2. There are hardware errors in the Bluetooth module.
3. No device is linked.
4. Bluetooth has been disabled.



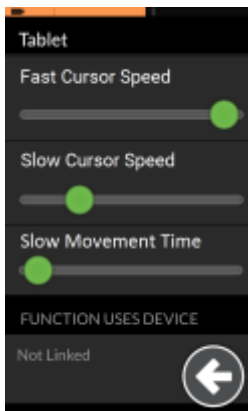
Picture90 : Function performed



Picture91 : Function not possible

6.3 – CONFIGURATION AND OPERATION OF MOUSE MOVEMENT

6.3.1 – Configuration



Picture92 : Cursor sensitivity setting

Cursor speed settings are configured according to individual needs (see Picture 92). These settings are found in the connectivity function menu. To view these settings, press and hold:

Navigation Button

Then press: :

Settings | Connection Settings | [Function Name]

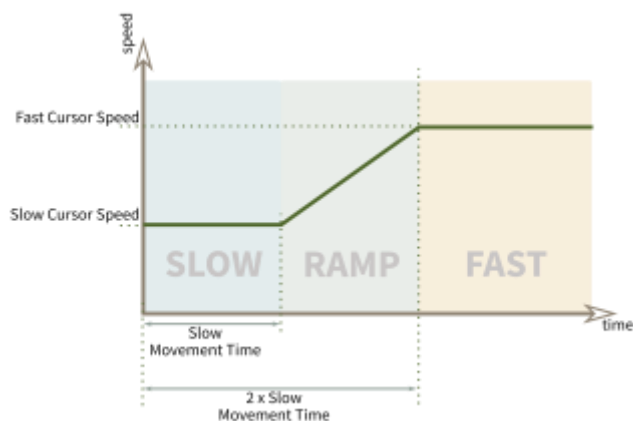
For each mouse movement function, the following cursor settings are available:

- Fast Cursor
- Slow Cursor
- Long Response Time

Fast Cursor Speed: Defines the speed at which the mouse cursor accelerates after the slow movement time expires. During the slow movement time, the cursor moves at the speed defined by the slow cursor speed (see Picture 74). Fast cursor speed is set so the user can move the cursor quickly over long distances. Fast cursor speed should be set equal to or greater than the slow cursor speed.

Slow Cursor Speed: Defines the speed at which the mouse cursor moves when it is first deviated. It remains at this speed for the duration set by the slow movement time (see Picture 74). Slow cursor speed is set so the user can move the cursor slowly over short distances, useful for fine adjustments, especially when moving between screen elements that are close to each other. Slow cursor speed should be set equal to or less than fast cursor speed.

Slow Movement Time: Defines how long the mouse moves at the slow cursor speed before increasing to the fast cursor speed. The ramp time between the end of the slow cursor speed and the start of the fast cursor speed equals the time set by this parameter (see Picture 93).



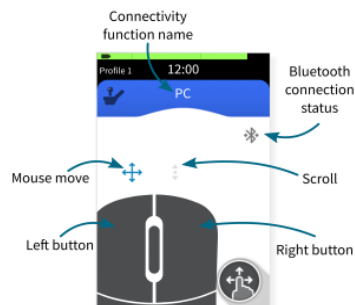
Picture93 : Acceleration ramp

6.3.2 – Operation

The following operation description assumes a connectivity card with a mouse mover function has been configured as described in the previous sections.

6.3.2.1 – Operation Indication

Mouse movement allows the user to control a mouse cursor on a Bluetooth-connected PC or laptop. This includes moving the cursor and performing typical left and right-click actions, such as selecting items and displaying the context menu (see Picture 94).



Picture94 : Mouse mover components

Mouse Movement Indicator



The mouse movement indicator turns from gray to blue when active, meaning the user input controls the connected device's cursor.

Scroll Indicator



The scroll indicator turns from grey to blue when the scrolling function is activated.

Left and Right Mouse Buttons



Tap the left and right mouse buttons on the touchscreen to perform left and right mouse clicks

6.3.2.2 – Cursor Movement

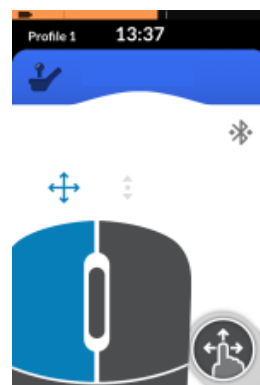
The cursor moves on the user's device in the direction mapped to the input. As mentioned in section 6.3.1, the cursor speed starts slowly, ideal for close or fine movements, and then accelerates after a short period (defined by the slow movement time) to allow the cursor to cover a greater distance in a shorter time.

6.3.2.3 – Left & Right Clicks

To perform a left or right click:

- Tap the corresponding button on the touchscreen, or
- Use external buttons configured via control inputs for right and left clicks.

When a button is selected, it changes color from gray to blue (see Picture 95).



Picture95 : left click example

6.4 – CONFIGURATION AND OPERATION OF CONTROL BUTTONS

6.4.1 – Configuration

Before using the button control, you must identify the buttons you will use and then assign an action to each button. For example, if you want your device to return to its home screen when you press the REM400 touchscreen, you need to identify the REM400 touchscreen as a button input, and then assign the home menu action to this button.

6.4.1.1 – Assigning Actions to Buttons – iOS Devices

To identify and assign actions to buttons

Open the iOS device's switch control menu:

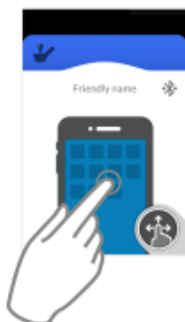
Settings | Accessibility | Switch Control | Switches

- Tap **Switches**
- Tap **Add New Switch**
- Tap **External** — you will be prompted to activate your external button.



Picture96 : External button selection

Activate your external button — for example, press the REM400 touchscreen or move the joystick in one direction (forward, backward, left, or right), then name the external button (e.g., "Touchscreen") so you can identify it later.



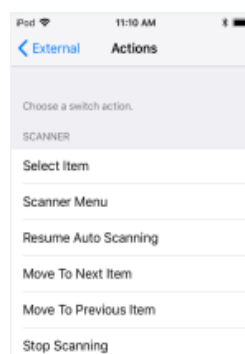
Picture97 : Enable external button



Picture98 : Name the external button

Assign an action to the button. In the **Actions** menu, choose a button action, such as **Home Button** or **Select Item**.

If necessary, repeat the above instructions to add more switches



Picture99 : Assigning actions to buttons

6.4.1.2 – Enabling Button Control



Picture100 : Enable Selection Control

After assigning buttons to actions, enable switch control.

6.4.1.3 – Assigning Actions to Buttons – Android Devices

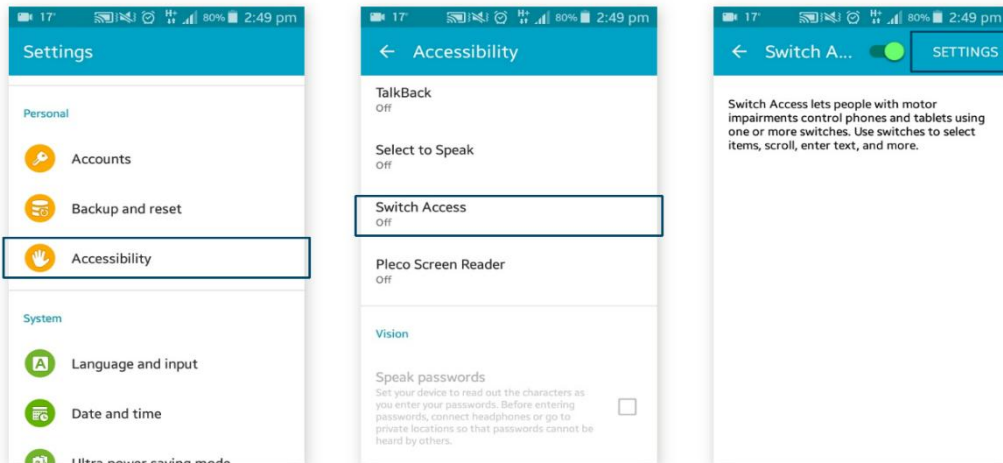


Note

The following instructions are illustrative only, as the steps may vary slightly between different Android versions.

To identify and assign actions to buttons
Open the Android device's **Switch Access** menu:

Settings | Accessibility | Switch Access



Picture101 : Switch Access Selection

Tap **Settings** (upper right corner)

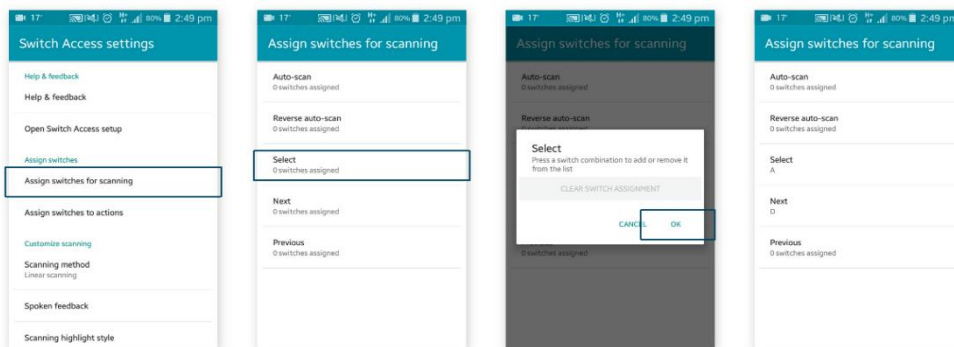


Note

The following instructions are illustrative only. Switches can be assigned to numerous actions, which go beyond the scope of this manual.

Tap **Assign switches** for scanning, or **Assign buttons** to actions
Select one of the actions from the list. For example, tap **Select**.
A notification will prompt you to

Press a button combination to add it to the list or remove it from the list. At this point, activate the external button (e.g., a tap on the remote module touchscreen or a joystick movement in one of four directions: forward, backward, left, and right). This assigns the switch to the selected action. Tap **OK** on the notification. Repeat for as many buttons as need to be assigned. (See Picture102)



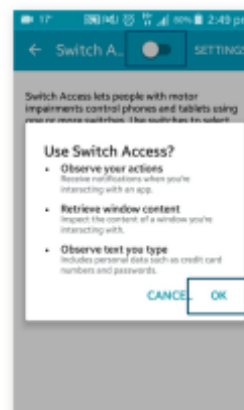
Picture102 : External button selection

6.4.1.4 – Enabling Button Control

After assigning switches to actions, enable Switch Access.

A notification will appear:

- "Use switch access?" — tap OK.



Picture103 : Enable button control

6.4.2 – Operation

The following operation description assumes that a connectivity card with a switch control function has been configured as described in the previous sections.

The switch control function allows the user to navigate and select items on their iOS or Android device. (See Picture104)

The switch control indication varies depending on whether a user's device is connected via Bluetooth and whether a switch control input is active — see below.



Picture104 : Switch control components

Switch Control Indicator – Not Connected



Displayed when a switch control card is selected, but no user device is connected.

Switch Control Indicator – Connected



Displayed when a switch control card is selected and a user device is connected.

Switch Control Indicator – Active



Displayed when a switch control card is selected, a user device is connected, and a button is active.

6.5 – DISCONNECTING A DEVICE

To stop using a connectivity card, select a different function card from a profile. When the connectivity card is deselected, the Bluetooth connection will disconnect.

6.6 – FORGETTING A DEVICE

To forget a device, press and hold:

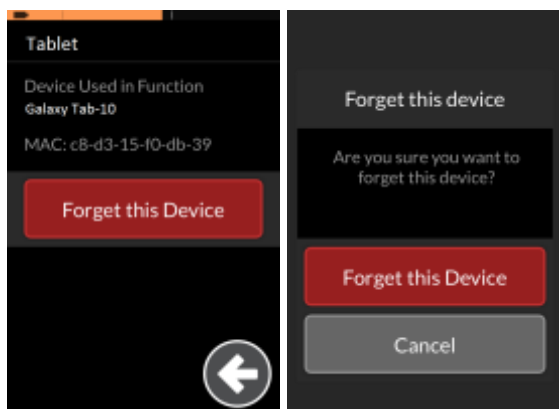
Navigation Button

Then press:

Settings | Connection Settings

Select the paired device under **PAIRED DEVICES**.

Review the details on the next screen, then tap **Forget this device**. Tap **Forget this device** again or tap **Cancel** to cancel this operation.



Picture106 : Forget a device



Picture105 : Connection menu



Note

Forgetting a device will unlink it from all functions it is associated with and disconnect it from the system.

Chapter VII – MAINTENANCE

The chair is equipped with a circuit breaker, switch it to the “OFF” position **before** performing any maintenance.



In this case, the circuit breaker will be indicated on the body by this symbol:

7.1 – BATTERIES & CHARGING

7.1.1 : Lithium Battery Characteristics

Your chair is equipped with a standard 24V 70Ah lithium battery, sealed and maintenance-free, certified UN38.3 & IEC 62133:2017.

- Number of charge cycles: Approximately 1800
- **Dimensions:** Length 300mm, Width 171mm, Height 220mm
- **Weight:** 18.6kg
- Nominal Voltage: 25.9V
- **Minimum Voltage:** 21V (voltage below which the chair will no longer operate)
- Charging Voltage: 29.2V ~ 29.4V
- Max. Charging Current: 35A
- Charging Temperature: -10°C ~ +45°C



Warning

- *Do not charge a battery that is not within the charging temperature range.*
- *Use only a certified lithium battery charger.*

Rated Capacity (25°C): 70Ah (varies with battery temperature)

Lithium batteries have a nonlinear discharge. They maintain a constant voltage for much of their use, then the voltage drops abruptly. It is recommended not to use your chair when the battery charge gauge (on the controller) is red. You must recharge the battery before any further use.



Warning

L'utilisation d'une batterie Lithium déchargée provoquera des dommages irréversibles à celle-ci



Advice

Keep your battery charged between 20% & 80% for optimal long-term use.

7.1.2 : AGM Gel Battery Characteristics

Your chair can be equipped with two AGM-gel TRACTION batteries, sealed and maintenance-free, compliant with DOT and IATA air transport standards, ADR road transport, and IMDG code maritime transport, certified DIN 43534 & IEC8962 & BS6290-pt.4.

- Number of charge cycles: Approximately 600
- **Dimensions:** Length 226mm, Width 135mm, Height 214mm
- Nominal Voltage: 12V
- Charging Voltage: 14.4V ~ 15.0V
- Max. Charging Current: 16.5A
- Charging Temperature: -15°C ~ +40°C
- **Rated Capacity (25°C):** 60Ah (varies with battery temperature)



Warning

To avoid the risks of acid (burns, inhalation, etc.), malfunction, or tampering, the use of lead-acid batteries (such as car starter batteries) is strictly prohibited for this type of vehicle.



Note

These batteries are specifically designed for powering electric wheelchairs:

"Traction" means they can release stored energy over a long period, unlike starter batteries which provide a high amount of energy for only a few minutes.

"Sealed" means they are clean and no acid will spill during charging or if the wheelchair is tipped over or falls. No emissions will be produced during charging.

"Maintenance-free" means there's no need to monitor the electrolyte level in the battery: The only precaution is to ensure proper discharge and then charge.

7.1.3 : Battery Charging

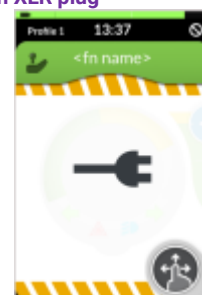
To recharge your wheelchair's battery, connect the appropriate battery charger (Lithium or AGM) equipped with a 5-pin XLR plug into the socket under the REM400 controller screen.



Picture107 : 5-pin XLR plug

The control module's inhibition during charging is indicated with three visual elements on the REM400:

- The lock symbol of the control module in the status bar
- The indication of inoperable function (orange chevron on the header and footer of the function)
- The charger connected overlay



Picture108 : Control inhibited during charging

Battery charge - red when the charge is <20%



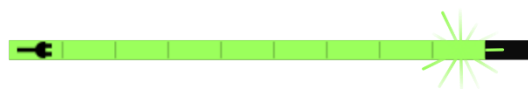
Picture109 : Battery charge less than 20%

Battery charge - orange when the charge is between 20 and 60%



Picture110 : Battery charge 20%-60%

Battery charge - green when the charge is between 60 and 100%



Picture111 : Battery charge 60%-100%



Note

The LiNX system does not need to be powered on when charging the battery. However, if it is not powered on, the battery gauge will not display the charge status.

7.1.4 : Battery Usage Recommendations

The lifespan of batteries depends on several factors:

- **Manufacturing quality:** Only use original batteries that meet the manufacturer's specifications. Using inferior quality batteries can cause damage to electronics or malfunctions.
- **Charging quality:** A complete charge takes several hours. To preserve battery longevity, it's essential to respect full charging times. Partial charges will significantly degrade battery life and autonomy. Depending on battery types and quantity, a full charge can take over 10 hours.
- **Depth of discharge:** The battery charge gauge on your controller provides a valuable indication. The more you use the batteries when the gauge is in the red zone, the deeper the discharge, increasing the required charging time and potentially damaging the battery components, leading to failure and reduced lifespan. Regularly discharging a battery over 90% reduces its cycle count to less than half its theoretical value. For example, a battery with 600 charge cycles will only perform 250 if frequently discharged over 90%.
- **Number of charge cycles:** Batteries have a limited lifespan based on their charge cycle count. Every time you connect your wheelchair charger, you use a charge cycle, even if you don't fully charge the battery. Only charge when necessary.



Advice

Only connect your charger when necessary.

Disconnect your charger only when the batteries are fully charged.

Long-term Storage or Wintering of the Wheelchair

Turn off the wheelchair according to the model:

- Remove the 60A fuse from the battery circuit
- Use the circuit breaker on the front panel

If the wheelchair is immobilized for a long time, recharge once a month to maintain optimal charge.



Advice

New AGM gel batteries need a break-in period of 5 to 10 charge/discharge cycles to reach full capacity.

7.1.5 : Wheelchair Autonomy

- The wheelchair's autonomy is estimated at about 30km under normal driving conditions on a flat and clear road. Autonomy is influenced by factors such as:
- Batteries: battery wear, charge/discharge cycles, battery temperature
- Environment: ambient temperatures, road surface composition, terrain
- Total vehicle weight: sum of the wheelchair, user, accessories, and any other additional weight (pushing or towing another vehicle, carrying a second passenger, etc.)
- Usage: use of lighting, seat functions, tire wear and pressure, acceleration



Advice

For outdoor use, ensure your batteries are charged over 90% to guarantee a safe return.

7.2 – TIRE INFLATION

Solid tires require no maintenance.

Inflatable tires require regular (monthly) pressure checks. Respect the pressure indicated on the tire sidewall. Proper inflation affects ride comfort and brake performance.

To prevent punctures, consider anti-puncture tires (which make the ride less smooth) or install tubes with a sealant. Check tire wear and replace them to avoid punctures.

In case of a puncture, you can have your tire repaired by your PowerStand dealer or a bike shop. Alternatively, remove the wheel by loosening the 4 M8 screws (with a 6mm hex key), open the rim to retrieve the tube by removing the 5 M8 screws (with a 6mm hex key), repair or replace the tube, reinsert the slightly inflated tube into the tire, close the rim by tightening the 5 M8 screws, and reattach the wheel to the wheelchair.



Warning

Before working on the wheelchair's wheels, ensure it is securely anchored and in a seated position

7.3 – CLEANING AND MAINTENANCE

7.3.1 – Cleaning:

For optimal mechanical performance, regularly clean your wheelchair, especially after use in the rain. Dry it thoroughly.

- For painted parts: clean with slightly soapy water.
- For upholstery: use a soft, damp cloth.

For hygiene, clean and disinfect all parts in contact with the body: seat, backrest, armrests, headrest, leg supports, joystick, etc.



Warning

Do not use abrasive, corrosive products, or high-pressure cleaners. Sand and seawater can damage ball bearings, joints, motors, and electronic boxes. Only use controlled and recognized disinfectant products (spraying and wiping allowed)

7.3.2 – Maintenance :

Your electric wheelchair should undergo regular technical checks. You can perform some checks yourself, but it is recommended to have the wheelchair inspected annually by an authorized dealer. Replace parts with approved components to ensure wheelchair performance. With proper care, your wheelchair should function perfectly throughout its lifespan.



Warning

Unauthorized modifications will void your warranty and may cause injury. Unauthorized intervention on wheelchair components by an unauthorized person will void the warranty. Unauthorized modifications by PowerStand constitute a remanufacturing of the wheelchair. The person or group making modifications will be fully responsible for the wheelchair according to the Therapeutic Goods Act (TGA).

7.3.3 – Daily Checks:

To ensure your wheelchair functions properly and safely, it is recommended to:

- Check the condition of the joystick bellows (Replace in case of cracks and/or cracks).
- Check the status of the manipulator (screen and connection).
- Check the correct functioning of the brakes (Once the joystick is in operation, move the joystick slightly in each direction then release it, make sure you hear the sound of the brakes engaging).
- Check the correct functioning of the lights (headlights, indicators and position lights)

- Check the condition and inflation of the tires

Chapitre VIII – Transportation

8.1 - TRANSPORTING THE CHAIR BY CAR

8.1 1 - Transporting the chair without a passenger

To transport the chair in a vehicle, its overall size can be reduced by folding down the backrest and the footrest platform.

When **EMPTY of a passenger**, the chair can be secured to the vehicle using suitable straps attached at the rear and front to the vehicle's rails.

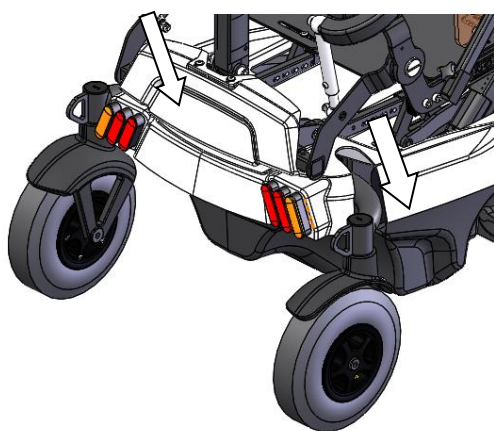


Figure 2 : Lifting eye / hoist anchor ring

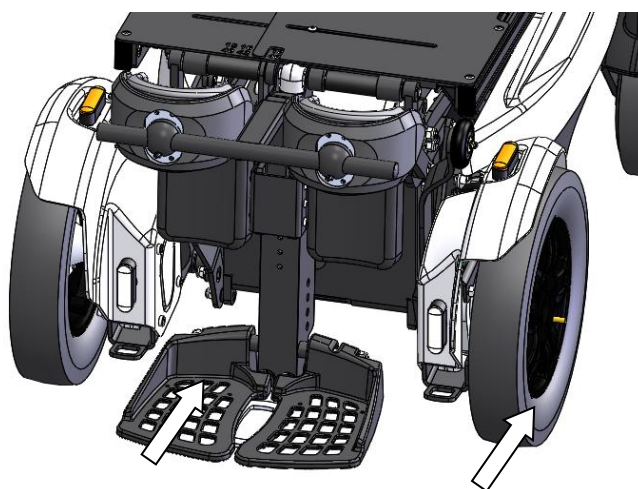


Figure 3 : Front motorization ring

8.1.2 - Transporting the chair with a passenger – ISO 7176-19.



Warning

The chair must **under no circumstances** be used as a vehicle seat.



The chair is not designed for transporting passengers.

For obvious safety reasons, it is therefore strictly forbidden to travel by car while seated in the chair.

8.2 TRANSPORTING THE CHAIR BY AIR

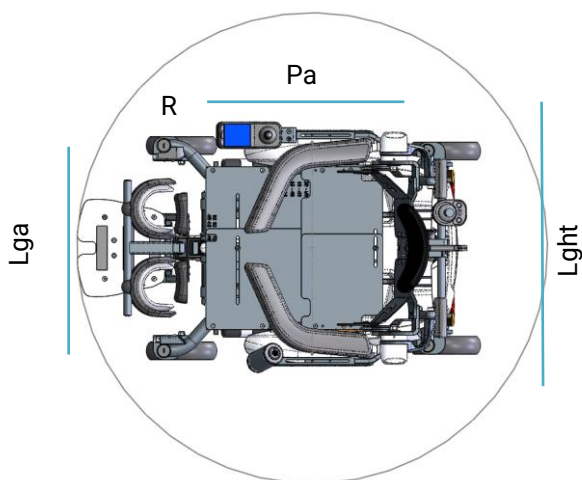
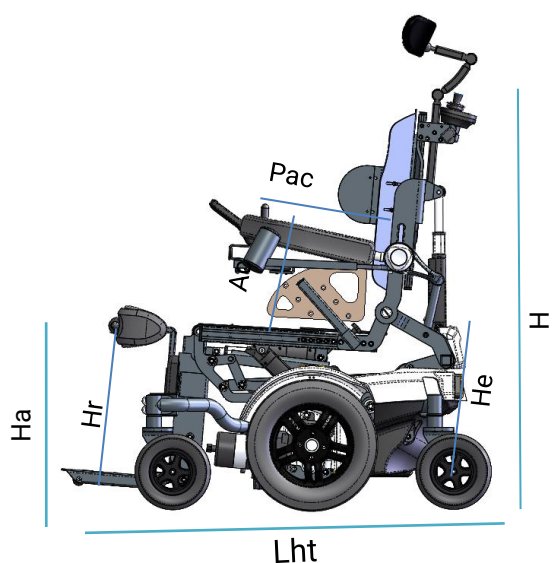
The wheelchair is equipped with **LiFePO₄ lithium batteries**, compliant with the **IATA UN 38.3** standard. Please comply with the airline's requirements.

Pour **For checked baggage:**

- Raise the footrest platform.
- Disconnect the backrest actuator and fold down the backrest.
(See photo § 2.1 – Unpacking).

Chapter IX – Technical Specifications

Overall length with footrest raised:	95 cm
Overall length with footrest lowered:	113 cm
Overall width:	64 cm
Seat height:	50 cm at the front, with a 3° slope to the rear.
Footrest height: adjustable from 33 to 41 cm	
Axle height:	30 cm
Backrest height: adjustable from 85 à 95 cm	
Armrest height: adjustable from 28 à 38 cm	
Armrest depth: adjustable from 32 à 35 cm	
Turning radius:	66 cm
Weight without battery:	110 kg
Weight with 1 Lithium battery	130 kg
Weight with 2 AGM gel batteries:	140 kg
Maximum user weight:	120 kg
Frame: Rigid steel, epoxy paint.	Rigid steel, epoxy paint
Seat width:	
Adjustable from 40 à 50 cm in 2 cm increments	
Seat depth	
Adjustable from 40 à 50 cm in 2 cm increments	
Backrest adjustable from -5° to 45° relative to the seat	
Central drive wheels:	Ø360 x 80 mm inflatable
Front & rear wheels:	Ø200 x 50 mm maintenance-free solid tires
Electrically adjustable backrest:	type electric actuator LA 20-2500-100.
Electrically adjustable leg rest:	type electric actuator LA 20-2500-100.
Electrically compensated leg rest:	type electric actuator C35-2200-100
Electrically verticalizing:	2 LA 20-2500-250 type electric actuators.
Electric propulsion motorization:	2 motors of 350 watts
Speed	6 ou 10 km/h selon version.
Autonomy (depending on version)	> 20 km with 2 44 Ah GEL batteries, > 30 km with 1 70 Ah Lithium battery.
Charger :	1 Charger 8 Ah / 24 volts.

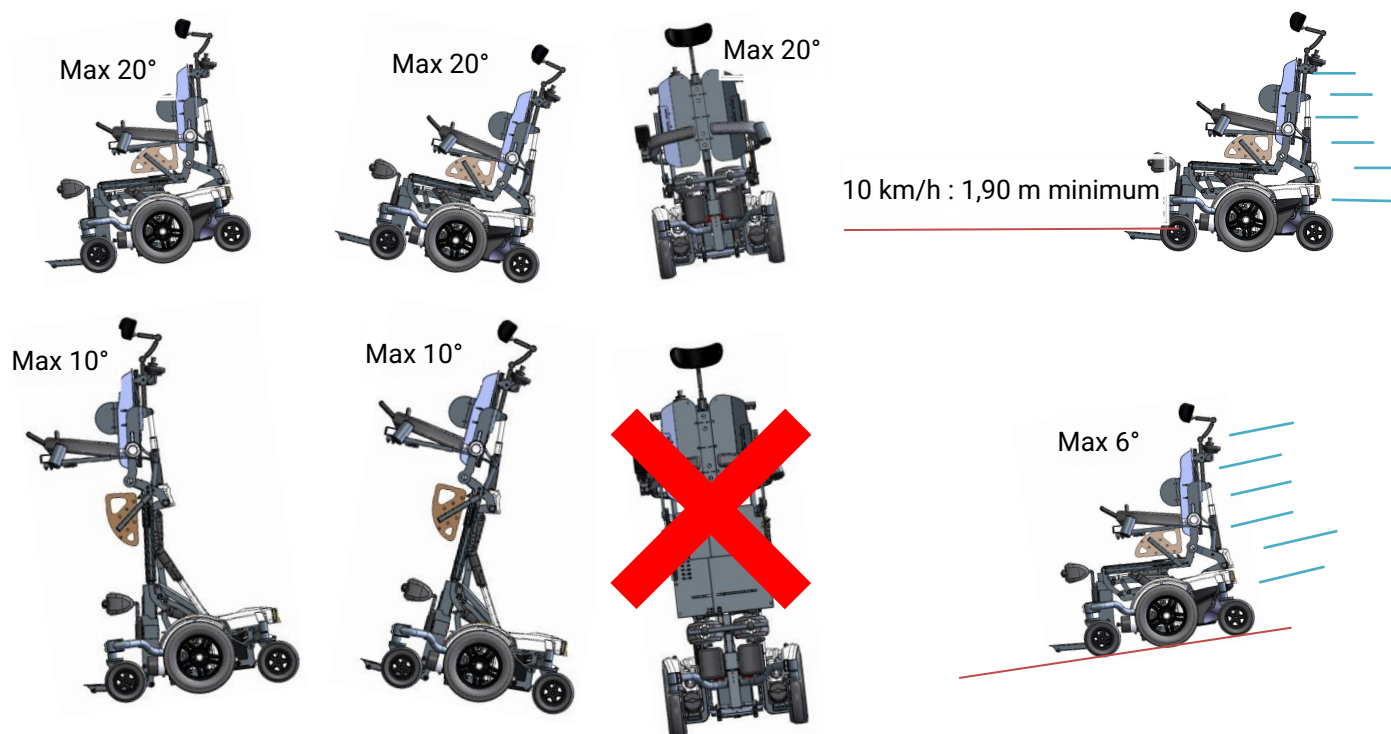


9.1 – STABILITY

The P6-Compact is a class B electric wheelchair that meets the following stability criteria

Static

Dynamic

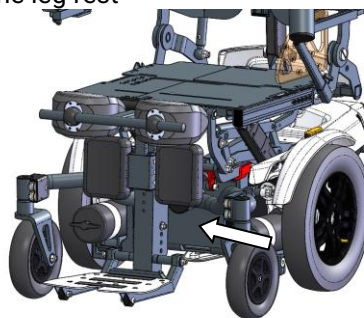


9.2 – LIFESPAN

The P-eStand electric wheelchair is designed to operate for 6 years under normal usage and following maintenance and cleaning instructions. Battery lifespan depends on the number of charges, see section 7.1.

9.3 – IDENTIFICATION

You will find the commercial designation and the serial number of your wheelchair on the front of the chassis behind the leg rest



Picture112 : Identification label

Chapter X : STANDARDS AND CERTIFICATIONS

10.1 - CE CONFORMITY MARK

The device complies with Annex I of Directive MDR 2017/745 of the European Union, as evidenced by the CE label.



10.2 - COMPLIANCE WITH ISO 7176 STANDARD

The chair complies with standard ISO7176-8: 2014 for a 120 kg test dummy.

10.3 - ELECTROMAGNETIC COMPATIBILITY

This wheelchair has been tested according to European and international standards ISO 7176-21 and ANSI/RESNA WC vol 2. However, there may be a risk of malfunction in the presence of electromagnetic fields:

 **Warning**
Electrical and electronic devices (TV, radio, mobile phone, industrial machines, electronic medical devices, etc.) may cause electromagnetic interference that could affect the proper operation of the electric wheelchair. Avoid getting close to them.

 **Warning**
Consider the risks of interference from electromagnetic radiation if electrical parts or accessories are added to the electric wheelchair.

10.4 – RECYCLING

Respect the environment and dispose of your used batteries at a recycling center for electrical and electronic equipment in compliance with Directive (WEEE) 2002/96/EC, or simply return them to your dealer.



 **Warning**
Batteries contain harmful substances to the environment. At the end of their life, do not throw them in the trash!

Chapter XI - WARRANTY

Warranty: To be kept by the user.

The wheelchair is warranted from the date of delivery:

- TWO years against any mechanical manufacturing defects.
- ONE year against any manufacturing defects for electrical parts (motor, actuator, electronics, etc.).
- SIX months for batteries and charger.

Section I: Warranty Scope

The warranty includes free labor and replacement supplies for recognized defective parts after assessment by us.

Section II: Warranty Exercise Conditions

The warranty only applies if the equipment was supplied by a PowerStand authorized dealer and used under normal operating conditions.

The warranty does not cover incidents arising from:

- Normal wear and tear (e.g., tires, brakes, upholstery, battery).
- Unusual or non-compliant operation (e.g., pinching or cutting of the remote control cord, charger drop, etc.).
- Neglect of maintenance.
- Modification outside the manufacturer's control. Similarly, it does not apply to metal parts that have been modified by anyone since delivery, either by transforming the original parts or by installing new non-original parts.

Exchanges and repairs of parts under warranty do not extend the warranty period.

PowerStand's liability is expressly limited as indicated above. The manufacturer cannot be held responsible for any loss, damage, or third-party claims arising from any defect covered by the warranty.

For factory returns, the transportation to and from is at the customer's expense.

B - Warranty Certificate: To be cut out, completed, and returned to the manufacturer.

Name: First Name:

Address: Phone:

Social Security Number: /.../.../.../.../.../.../.../.../... Age: Height: Weight:

Pathology: Wheelchair No.: Model:

Electric Kit No.: Purchase Date:

Complete dealer information:

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