

OutCHAIR₂



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OUTCHAIR - S AND L MODELS

THE ALL-TERRAIN CHAIR.

LOGO  SILVER
by **AMYLOR**

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I. INTRODUCTION

I.1. ABOUT THIS MANUAL

First of all, we would like to thank you for your confidence in our products. We hope that your new 4x4 electric wheelchair will bring you a lot of satisfaction.

This Owner's Manual provides the user and attendant with all the necessary knowledge regarding the safety, use, construction, and maintenance of the OUTCHAIR. The operating manual contains information necessary for the safe use of this 2 or 4-wheel drive vehicle and provides information on how to identify the cause of possible malfunctions plus how to eliminate them.

It is imperative that you read the contents of this user manual in order to use the OUTCHAIR in complete safety. The user and attendants must read this manual carefully before using the wheelchair for the first time. This ensures that the OUTCHAIR performs to its fullest capacity in complete security.

If you have questions or are unsure of whether your wheelchair is in optimal operating condition, contact your dealer.

Wheelchair users have many different needs. It is up to qualified medical personnel to decide whether the model is suitable for your particular situation.

We decline any responsibility in the case of a wheelchair being maladjusted for the handicap of the user.

We are not responsible for damages resulting from failure to observe the user guide, improper maintenance or abnormal use. In general, our responsibility is limited to the replacement of defective parts.

Some adjustments and maintenance work require specialized technical training and must be performed by your dealer or an authorized representative.

This user manual has been developed based on standard NF EN 62079 «User manual design - structure, content and presentation». It comprises 12 chapters.

Pictograms and warning terms:



DANGER !

Warning against possible physical hazards and death



WARNING !

Warning against possible material damage



NOTES

Important tips and information.



ENVIRONNEMENT

Note on the protection of the environment

I.2. USE IN ACCORDANCE WITH INSTRUCTIONS

The OUTCHAIR is intended for the individual use of persons with total or partial motor disability of the lower limbs, providing a safe driving performance for their independent movement outside the home.

The OUTCHAIR must only be associated with the features mentioned in these instructions for use and vice versa. Logo Silver, manufacturer of the OUTCHAIR, is not responsible in the case of combination with medical devices and / or accessories not included in the list of options and from other manufacturers.

Any use other than that mentioned is not considered to be in conformity. The responsibility for personal injury or material damage resulting from improper use rests with the user and not the manufacturer.

Only duly informed persons can use the OUTCHAIR. Being informed of the operation of the OUTCHAIR is one of the conditions in place to use the OUTCHAIR properly and safely and to protect people from potential hazards.

I.3. RESPONSIBILITY

The liability of the manufacturer can only be incurred if the maintenance, operation and care instructions and servicing intervals of the OUTCHAIR are observed. The manufacturer expressly states that only spare parts authorized by the manufacturer may be used. Logo Silver refuses all liability for damages arising from the use of unauthorized parts by the manufacturer and damage resulting from use not in accordance with the instructions. This warranty is subject to French civil and commercial law.

I.4. INDICATION FOR THE REUSE OF THE PRODUCT

The OUTCHAIR has been designed to be reused.

As with all used machines or vehicles, reused products are subject to particular constraints. The modification of features and performance must not compromise the safety of persons during the life of the product.

Due to market observation and the state of the art, the manufacturer has evaluated the use of the OUTCHAIR as 6 to 8 years, provided that it is used in accordance with the instructions and that the care and maintenance guidelines are followed. This duration does not take into account storage times at the manufacturer or at the supplier. It should be noted that if the Out Chair is maintained according to the instructions, it will be dependable beyond the period defined above.

In order to be reused; the OUTCHAIR must first be cleaned thoroughly. Then the condition, wear and damage of the OUTCHAIR must be checked by an authorized specialist. All worn or damaged parts and components that do not fit or are not suitable for the new user must be authorised by Logo Silver and replaced depending on the options available.

The maintenance manual contains a schedule of the maintenance operations to be carried out for each model as well as detailed information on the list of necessary tools.

I.5. MAINTENANCE

The maintenance manual contains a schedule of maintenance operations to be carried out for each model as well as detailed information and the list of necessary tools.



NOTES

Overhaul and repair of the OUTCHAIR must only be performed by qualified personnel approved by Logo Silver. In case of problems, please contact the specialist retailer who was responsible for the sale.

I.6. CONTACT

For all questions regarding this material, please contact your supplier first. If you want to contact us directly, here are our contact details:

- Silver Logo, 32 rue de Comboire, 38130 Echirolles, France
- Phoning from France: 0476212219
- Phoning from abroad: +33476212219
- Email: sav@logo-silver.fr

II. SAFETY

2.1. STANDARDS AND GUIDELINES

All safety information in this manual relates to the current French legislation and the provisions of the European Union. In other countries, the relevant legislation and provisions must also be respected.

The OUTCHAIR has been manufactured in accordance with current technical regulations for safe operation. The safety of the OUTCHAIR is certified by the CE marking, the declaration of conformity is certified according to EN 12184.

2.2. DECLARATION OF CONFORMITY

As a manufacturer, Logo Silver declares under its own responsibility that the OUTCHAIR complies with specifications 93/42 and 2007/47 relative to the European directives for medical devices.

The design, development and manufacture of the OUTCHAIR are in full compliance with safety with the following technical requirements:

- Risk analysis and management according to NF EN ISO 14971 standards
- Design requirements NF EN 12182 and NF EN 12184

Dynamic Stability, Static Stability, Fatigue Testing, Static load promotional literature, Use and Maintenance Guide, Labelling, Determining Energy Consumption, Determining Speed, Acceleration and Deceleration, ability to climb the maximum safety slope, ability to climb obstacles.

Compliance with the NF EN 12184 standard means among other things that the values required for an incline, an obstacle crossing, and a speed are reached or exceeded by the OUTCHAIR.

2.3. GENERAL SAFETY INSTRUCTIONS

- The OUTCHAIR can only be used in accordance with instructions.
- Only duly informed and authorized persons can use the OUTCHAIR.
- Only one person at a time can travel in the OUTCHAIR.
- For safety reasons, it is imperative that the user always wears a helmet and fastens their seat belt.



DANGER !

For safety reasons, it is imperative that the user always wears a helmet and fastens their seat belt.



NOTES

All safety instructions contained in this operating manual and in all valid associated documents must be observed and followed. This notice must be available to the user at all times.

- Do not use the wheelchair under the influence of alcohol, drugs or any other narcotics restricting your driving ability.
- Do not lean forward, over the sides or over the top edge of the wheelchair, especially if the ground is sloping.
- To transfer, get as close as possible to the new seat.

- Do not go out unaccompanied or without a means of reaching someone you trust for journeys in isolated areas or when the weather conditions are very bad.
- The cushion and the backrest fabric are not easily flammable but can catch fire. The use of fire or a lit cigarette should be exercised with extreme caution.
- The mode and profile changes; outdoor, indoor, crossing, seat position, backrest, casters, footrest and low to high speed must all be done at a standstill.
- Check that the motors are engaged to allow the wheelchair to activate.
- Do not connect any electrical equipment to your wheelchair. Entrust any potential installation to your authorized Logo Silver dealer.



DANGER !

This chair has several moving parts driven by powerful cylinders. Be careful that people around you do not get hurt. Be careful in particular of children's fingers, which may be crushed by the wheel lift system and seat tilt system.



WARNING !

Only the manufacturer's original components or options may be used. The optional components must be mounted exclusively by a technician authorised by Logo Silver. Failure to comply with this recommendation will result in loss of warranty rights.

2.4. SAFETY REQUIREMENTS FOR TRANSPORTATION, STORAGE AND ASSEMBLY

- The OUTCHAIR must be transported in “wooden crate” packaging, designed by the Logo Silver company, or in packaging approved by Logo Silver, or transported in another vehicle, fixed with a sufficient number of straps. The OUTCHAIR must only be lifted by the frame parts.
- Only lifting equipment of a sufficient size may be used for transport.
- It is essential that the chair be attached with straps to the 3 anchor points provided for this purpose.
- During transport, the electrical part of the OUTCHAIR will be switched off via the Joystick. The engine brakes will then be locked.

- It is forbidden to travel seated in the OUTCHAIR during transport.
- Avoid loading the wheelchair into a vehicle with the driver still in the chair.



DANGER !

If the wheelchair needs to be loaded in with its driver via a ramp, an attendant must stand by the wheelchair to avoid it tipping over. When using a ramp, a maximum speed of 3 km / h should be applied.



DANGER !

Do not use the electric wheelchair as a seat in a vehicle.

- To ensure a lifetime from your OUTCHAIR, it should be stored in a safe place protected from moisture and extreme temperatures (between +5° and +30 ° maximum).
- After each adjustment or settings change made to the OUTCHAIR, the fastening screws and nuts must be screwed back in firmly.

2.5. OPERATION AND SAFETY REQUIREMENTS

The user has the obligation to ensure, before each use, that the OUTCHAIR is in a safe state and in accordance with the instructions, including the safety functions. The OUTCHAIR should only be activated if all safety functions, such as the brakes, are in working order. Defective brakes can cause serious accidents and injuries that can put the user's life at risk.

- Do not exceed the speed limits indicated in the technical specifications section.
- Only one person at a time can use the chair.
- The operational and safety conditions of the OUTCHAIR must be checked at least once a year by an authorized specialist.
- The OUTCHAIR only works at temperatures of between +5 ° C and + 35 ° C.
- The maximum load supported by the OUTCHAIR is 140 Kg.
- Before each use, a visual inspection must be carried out to check that the groove depth and the tyre pressure are sufficient (see tyre wear indicator).
- The chair must be turned off when making transfers.
- Obstacles such as sidewalks must be crossed perpendicularly at a moderate pace following the procedure described in section 7.2. Driving Profile "Crossing".

- Do not cross over obstacles greater than 4 cm when driving uphill and downhill.
- The OUTCHAIR can be driven on ascents and descents of 10 °.
- For safety reasons, when driving on a descent greater than 5 °, reduce the speed to 5km / h, avoid braking suddenly and have a seat inclination of 10 ° toward the rear.
- For safety reasons, when driving on an ascent greater than 5°, reduce the speed to 5km / h, avoid accelerating suddenly and have a seat inclination of 0 ° and the backrest as vertical as possible.
- Do not drive the wheelchair on side slopes greater than 5°.
- In 4 Wheel Drive, on most ground, use the outdoor profile, the «crossing» profile is only useful to clear obstacles (e.g. pavements).
- Manoeuvres must only be performed at reduced speeds.
- Mode changes such as seat, backrest, caster and footrest positioning, low and high speeds must be performed at a standstill.
- Approach right angle obstacles in forward gear.
- Never descend or climb an obstacle in reverse.
- When crossing over an obstacle (sidewalk for example), use the “crossing” mode, cross the front wheels over it gently (2km / h maximum). Follow the procedure in chapter 7.2. driving profile “crossing”.
- If there is a risk of skidding on the sloping ground, stop the wheelchair before it skids and leaves the wheelchair in a position that would prevent you from restarting.
- If you have the steering lock option, it is advisable to use it to lock the right wheels when crossing over obstacles, uneven ground, or when you lack traction (skidding).
- When getting out of the wheelchair, avoid putting all of your weight on the footrests.
- Do not leave your seat on a slope.
- In case of manual thrust, do not leave the brakes disengaged if the terrain is sloping.
- Do not use the «indoor» mode when the casters are retracted, as it is not optimized for 4WD use.
- Electronics such as the joystick, the power module, and the OUTCHAIR's connectors are protected according to the protection class IP54 (protection against dust and some water splashes) but cannot, therefore, be used in bad climatic conditions (example: in case of rain).
- The OUTCHAIR may generate electromagnetic interference that may disrupt the operation of other devices. Therefore, it is best to turn off the power when not in use.



DANGER !

Defective brakes can cause serious accidents and injuries that can put the user's life at risk.



DANGER !

If any errors, faults or other hazards that could cause personal injury are detected, the **OUTCHAIR** must be taken out of service immediately.



DANGER !

It is forbidden to take climbs or descents whose inclination is greater than 10 °.



DANGER !

Never attempt to climb or descend stairs greater than 1 step.



DANGER !

Do not sit in, get out of or park the chair without turning off the electrical system. This will prevent you from activating the chair accidentally.



WARNING !

When operating, the **OUTCHAIR** must not be exposed to temperatures above + 30 ° C and below + 5 ° C.



WARNING !

The load on the chair must not exceed 140kg.



WARNING !

The ground clearance of 10 cm does not allow to cross a stone for example greater than 10 cm in the middle of the wheels, you could damage the underbody of the chair.



WARNING !

If you need to brake in an emergency, simply release the control lever; this will bring the wheelchair to a standstill. If you brake by pushing the joystick backwards or pressing the start / stop button, it causes a sudden and violent stop.

- Charging batteries can produce short circuits. Therefore, the following safety precautions must be taken: chair must be off (joystick and reinforced circuit breaker off).
- Check the function of the front wheel shock absorbers.

Regarding the tyres, the following observations must be taken into account:

- The OUTCHAIR's tyres contain chemicals that may cause reactions with other chemicals (e.g. cleaning products, acid).
- Direct exposure to the sun (UV) accelerates tyre aging. This results in a hardening of the surface of the tyre profile that cracks at the edges.
- Regardless of their wear, the tyres must be changed every 5 years.
- Prolonged use or heating of the tyres (if the OUTCHAIR is near a radiator or exposed to sunlight through a window) causes permanent deformation of the latter. Therefore, be sure to keep sufficient distance from heat sources.



DANGER !

Be careful not to put the plus or minus parts of the battery in contact due to risk of being exposed to an electrocution and / or burn.



WARNING !

In all cases do not exceed an angle of 20 ° relative to the vertical backrest incline while moving.



WARNING !

In all cases do not exceed an angle of 10 ° relative to the horizontal seat incline while moving.

2.6. SAFETY TIPS FOR 2-WHEEL DRIVE WITH CASTERS (IF OPTION AVAILABLE)

The retractable caster option allows you to switch from an outdoor wheelchair with 4-wheel drive to a classic wheelchair with two-wheel drive as the retractable caster system lifts the front wheels up.

When the casters are released you must be:

- Stationary.
- On a flat and level surface.
- Put the front wheels straight, so as not to damage the front engines, the tires or the caster system, when the rollers come out.

- Remove the casters as far as they will go so that the caster supports are perpendicular to the floor.
- Check that the front wheels are no longer turning and do not touch the ground.
- It is advisable to lock the right-hand drive if you have chosen the additional steering lock option.
- After the casters are retracted, use the indoor mode (see chapter 7.2. Driving Profile “Indoor”) which is optimized for this operating mode.
- Do not cross over obstacles greater than 1 cm at more than 1 km / h.



WARNING !

Do not exceed 3 km / h and avoid obstacles bigger than 1 cm, this could damage the cylinder and the caster system.

2.7. SAFETY REQUIREMENTS FOR MAINTENANCE, CARE AND DISPOSAL

- OUTCHAIR maintenance must be performed by qualified personnel approved by Logo Silver. This also applies to all repairs and adjustments carried out. An incorrect setting may void the manufacturer’s warranty and conformity assessment.
- The joystick must be turned off and the batteries disconnected for all maintenance work.
- After removing special screws, nuts or washers; replace them with identical components at all points if damaged and screw them back in firmly.
- The OUTCHAIR can be cleaned with water and a soft cloth.



ENVIRONNEMENT

Defective batteries must be returned to the suppliers or Logo Silver for recycling in accordance with environmental specifications.

2.8. USER REQUIREMENTS

- The use of the OUTCHAIR is reserved for competent users. For this reason, the user must be instructed by qualified and authorized Logo Silver personnel on how to operate the OUTCHAIR.
- The user must have read and understood this manual completely.
- Before the first use, practice driving the OUTCHAIR on flat ground in good visibility, then increase the difficulty, with obstacle crossing, descents and climbs. This training helps to avoid dangerous situations.
- It is strongly advised that the user wear a helmet.
- When going out into the forest, be careful not to scratch (legs, hands, arms ...) with branches, stones or any other object on your route.
- It is strongly recommended to use a helmet, gloves, high shoes and long pants especially when going out on marked trails.
- When you are on the road, sitting in your chair, you are not visible to motorists. Before crossing a lane, check that traffic is complete and proceed with caution.
- Drive at reduced speed in congested or narrow passages such as doors, paths lined with bushes or stones.
- If you are driving on the road, you must be visible (lights on) and you must drive near the right edge of the road in the direction of travel.



DANGER !

It is forbidden to use the OUTCHAIR in the event of severe fatigue or under the influence of alcohol or medication.

2.9. SECURITY FEATURES



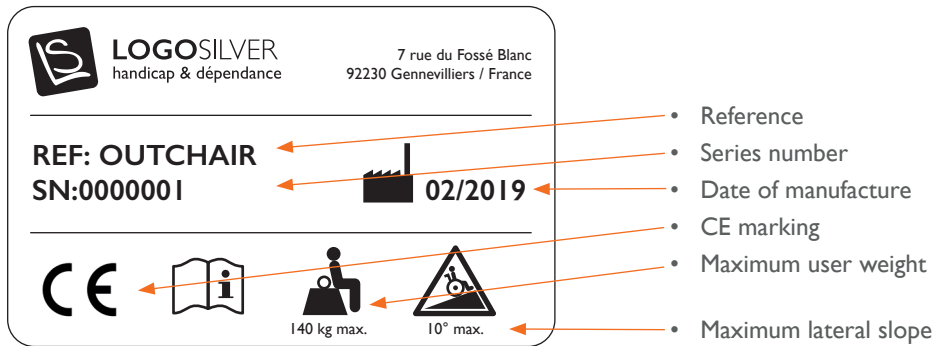
NOTES

In the event of danger, the OUTCHAIR can be switched off at any time using the joystic.

- If the engines overheat, allow the chair to cool down before restarting.
- The chargers will automatically shut off as soon as the batteries are charged (charge indicators will turn green).

2.10. Plaques d'avertissement et plaques signalétiques

2.10. WARNING PLATES AND NAMEPLATES



2.11. ELECTROMAGNETIC COMPATIBILITY

The electromagnetic compatibility of this wheelchair has been tested in accordance with international standards. However, there is a risk of disruption to the wheelchairs' electronic system in the event of proximity to a source of strong electromagnetic radiation.

The following precautions must be taken:

- Avoid immediate proximity to powerful transmitters (radio, television, telephone).
- Check that your transmitters (mobile phones or others) have no influence. If in doubt, only use them when the wheelchair is turned off.
- If your vehicle should start moving by itself or if the brakes come loose, turn the wheelchair's electronic system off as soon as possible.
- Report to your supplier any undesired chair movements that have occurred, including the loosening of the electric brakes.
- It should also be noted that the addition of electrical accessories can significantly alter the chairs' electromagnetic compatibility.

III. TECHNICAL CHARACTERISTICS

	OUTCHAIR S	OUTCHAIR L
Accessibility	interior and exterior; all-terrain	
Configuration	4 wheel drive	
General dimensions	length: 1000 mm with legrests	1100 mm without legrests
	width: 680 mm	
	height: 1430 mm	
Seat height	from 550 to 610 mm	
Seat width	from 380 to 610 mm	
Seat depth	from 380 to 560 mm	
Armrest height	from 150 mm to 370 mm	
Backrest height	from 400 to 710 mm	
Battery weights	50 kg (80Ah) and 66 kg (110Ah)	90 kg
Wheelchair weight	from 187 to 220 kg with batteries	240 kg with batteries
Maximum user weight	140 kg	
Speed	10 km / h	
Braking distance	210 cm	
Turning radius	110 cm	120 cm
Turn-around width	240 cm	260 cm
Static stability	15°	
Dynamic stability	10°	
Slope ability	10°	
Maximum slope	10°	
Obstacle mounting	15 cm	
Autonomy	from 25 to 35 km	50 km
Motors	350W x 4	
Gel batteries	12V 80Ah or 12V 110Ah x 2	12V 135Ah x 2
Electronic	R-Net	
Electric seat inclination	from 0° to 23°	
Electric backrest and legrest inclination	optional	
Battery charging	by joystick	
Front wheels	350 mm	
Rear wheels	350 mm	
Suspension	front wheel pneumatic shock absorbers	

IV. PRODUCT DESCRIPTION

The OUTCHAIR is a compact all-terrain power wheelchair. Highly efficient and with great crossing ability, it is ideal for roaming over uneven terrain, in the forest, on the sand, in the snow... It will accompany you everywhere in your daily life, on your nature outings and your sports activities.

- Equipped with 4 wheel drive with 350W of power on each engine, it can reach speeds of up to 10 km / h.
- With its LCD Joystick, you can switch intuitively between different driving modes and easily operate the chair settings.
- With its two large capacity batteries (optional), the OUTCHAIR can travel up to 50 km on flat ground.
- Its two shock absorbers are adjustable and adjust the suspension according to the user.
- In «Indoor» drive mode, this option provides for an optimized turning radius.
- Available in 2 versions:

OUTCHAIR S (short version) and OUTCHAIR L (long version).



The OUTCHAIR is characterized by:

- Its ability to adjust the seat angle
- Its ability to adjust the foot rests according to angle and length of the legs
- Its ease of transfer including retractable armrests
- Its considerable autonomy including powerful battery capacity
- Its individual adjustment possibilities thanks to the features and custom manufacturing.

Numerous options for fitting or adjusting the controls make it possible to adapt the OUTCHAIR depending on the total or partial disability of the upper and lower limbs.

The OUTCHAIR has been specially designed for users able to move independently with this vehicle. In addition, the following must be considered:

- Size and weight (max load : 140 Kg)
- The physical and psychological state of the user.

The main components of the OUTCHAIR:



Fig. I

V. TRANSPORT AND STORAGE



DANGER!

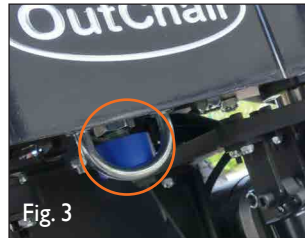
Risk of injury in the event of improper transport!



DANGER!

Under no circumstances can the seat of the OUTCHAIR be used as a seat during transport.

The OUTCHAIR must be strapped to the vehicle's anchorage points on the trailer or transport vehicle with front and / or rear protection (Fig. 2 et 3). The joystick must be turned off and the engine brakes locked.



If the OUTCHAIR remains in storage you must:

- Turn off the joystick.
- Avoid direct exposure to sunlight (UV accelerates tire aging).
- Store in a dry place with ambient temperatures between -5 ° C and + 35 ° C.
- Check that the batteries are charged.
- Inflate the tires to 1.5 bar to prevent deformation of the tires.

VI. DELIVERY AND SETUP

6.1. DELIVERY

Delivery includes:

- An OUTCHAIR
- Instructions for use
- A charger and a power cable for charging
- A high-pressure pump to adjust the air dampers



NOTE

The optional components contained in the delivery depend on the composition of the product purchased by the buyer. The OUTCHAIR delivered by the specialist dealer is ready to be driven. All the adjustments made correspond to the indications of the order form or are carried out by the specialist dealer directly on site. The OUTCHAIR is adjusted according to the personal needs of each user. The operation of each component can be checked in accordance with Chapter 7 and 8.

6.2. INITIAL CHARGING AND SETUP

Before setup, recharge the batteries with the help of the charger provided by connecting the power cord to the front of the joystick for a minimum of 5 hours, the charger indicators must be green (they can also be orange: completely dead or moderately low). See charging details in chapter 7.10 Batteries and recharging.

To charge the chair, make sure that the circuit breaker does not switch off the general power supply of the chair (if your wheelchair has one).



Circuit breaker on



Circuit breaker off

VII. USE

The OUTCHAIR is equipped with a joystick controller to guide it.

The PROFILE button is used to navigate between the different driving profiles.

It includes 3 or 4 driving profiles (depending on the options chosen):

- «Outdoor» profile: 4-wheel drive wheelchair propulsion, adapted to most terrain with the ability to go at maximum speed.
- «Flexible-Outdoor» profile: 4-wheel drive wheelchair propulsion, adapted to road-type terrain, steep paths, city for more maneuverability when turning.
- «Crossing» profile: 4-wheel drive propulsion, adapted to obstacle clearance (a step, a sidewalk, etc.) with increased instant torque and a maximum speed of 5 km / h. It is advisable to use the steering lock in crossing mode if you have the option.
- «Indoor» profile (optional): 2WD propulsion, adapted to use with indoor casters. This mode increases the gyration speed allowing for standard control of an indoor wheelchair. It is advisable to use the steering lock in indoor mode if you have the option.

The joystick is used to control the special features via the MODE button (seat tilt, retraction of the casters, leg rests, backrest tilt, environmental control...).

7.1. «OUTDOOR» DRIVING PROFILE



WARNING!

Take account of the recommendations in Part 2. Safety
The maximum speed permitted is 10 km / h.



WARNING!

Pay particular attention on flat ground or when climbing, the seat should be positioned as parallel to the ground as possible and the back as perpendicular as possible. When going downhill the seat should be tilted 10 ° backwards (relative to horizontal) and the backrest 20 ° backwards (relative to vertical).

The PROFILE button provides access to the «Outdoor» driving profile. This driving profile makes it possible to reach the highest speed of 10 km / h when the maximum speed is selected.

- Do not attempt to climb obstacles greater than 4 cm in the «Outdoor» mode with a speed greater than 3 km / h, you could damage your wheelchair and you risk falling from your seat.
- This driving profile should be used in all cases, except in the case of occasional obstacle clearance or when the casters are retracted (if option is available).
- In this profile, the acceleration is gentle allowing for the autonomy as described in the technical features.
- There are 5 different driving speeds, these speeds affect the maximum speed in a straight line but also on a corner. If you are in a confined space where you need to manoeuvre accurately, it is easier to be more precise when using a lower speed (speed 2 or 3 for example).
- When you need to cross slopes, make sure that they do not have an inclination higher than those in the technical characteristics (see chapter 3. Technical Characteristics). Make sure you are in a configuration that allows you to cross over these slopes (sufficient adhesion, no obstacles higher than 4 cm in the slope ...).
- On a slope greater than 5°, take care to adopt a gentle drive, avoid jolts and braking suddenly and adjust the seat to be as stable as possible. Do not attempt to do a U-turn on a lateral slope greater than 5°, as you could fall over sideways. If you cannot climb a slope, try to reverse as perpendicular as possible up to it. Limit acceleration on slopes and favour an appropriate momentum.
- If you have the steering lock option, it is advisable to use it to keep the wheels straight. You will find details on joystick control in chapter 7.8.

7.2. «CROSSING» DRIVING PROFILE

This procedure should only be used in case you have to cross over occasional obstacles of more than 4 cm high (sidewalks, bumps, branches ...).



WARNING!

Take account of the recommendations of Part 2. Safety. Do not attempt to use the off-road or indoor driving profile with speeds of greater than 3 km / h for obstacles greater than 4 cm.

The maximum speed limits permitted to cross over obstacles are:

- 1 to 2 km / h when the front wheels are in the climbing stage (risk of tipping back if going too fast)
- 2 to 4 km / h when the front wheels are in the climbing stage (if you do not go fast enough there is a risk that the rear wheels won't make it over the obstacle)
- 1 to 2 km / h when descending from obstacles (risk of tipping forward)

Be careful, occasional obstacles must only be crossed perpendicularly and in forward gear (avoiding the slopes). The seat incline of the chair must be as parallel to the ground as possible and the incline of the backrest as perpendicular to the ground as possible. The safety belt must be worn at all times. Make sure to respect the technical features of the chair (see corresponding chapter).

The PROFILE button provides access to the driving profile «crossing». This driving profile is limited to 5 km / h when the selected speed is at its maximum for the safety and comfort of the user.

If you have the «steering lock» option, it is advisable to engage the lock when the steering is straight. (See chapter 8.3 Steering lock).

The crossing mode makes it possible to cross over obstacles of up to 15 cm in forward gear at low speeds, as it is programmed to have instant maximum torque and power (strong acceleration).

The procedure for mounting a major obstacle such as a sidewalk is as follows:

- Align yourself as perpendicularly as possible to the obstacle.
- If you have the steering lock option, it is advisable to switch it on once the front wheels are aligned. To align the front wheels, you will have to advance forward slightly.
- Approach the obstacle (20 cm minimum) and change the driving profile to «crossing» mode.
- Set the speed between 3 and 5 in order to have enough speed to clear the obstacle (this may vary depending on the wheelchair, the driving style and the weight of the user).

- Be careful as the incline of the seat must be as parallel to the ground as possible and the incline of the backrest must be as perpendicular to the ground as possible. This will avoid any risk of tipping backwards when crossing the front wheels over the obstacle.
- Advance at low speed to transition to the front wheels (between 1 and 2 km / h).
- When the obstacle is underneath the centre of the chair, use this momentum to accelerate and pass the rear wheels over it (3 km / h maximum). It is necessary to accelerate, as this gives the chair the power necessary to transition to the back wheels.
- When dismounting an obstacle, position yourself as perpendicularly as possible to it and descend slowly (1 to 2 km / h) forward.
- When you are in hilly or uneven areas with obstacles of more than 4 cm in height (dips, bumps, stones, branches ...), use the driving profile «crossing» and do not exceed 3 km / h when passing over these obstacles. If you have the steering lock option, it is advisable to use it.
- When you need to climb over slopes, ensure that they do not have an incline greater than those specified by the technical features (see chapter 3. Technical Features). Make sure you are in a configuration that allows you to cross over these slopes (sufficient grip, no obstacles greater than 4 cm on the slope ...). Do not attempt to turn around on a slope greater than that of the maximum lateral slope as you could tip over sideways. If you cannot climb a slope, try as much as possible to reverse perpendicular to it. Limit acceleration on slopes in order to keep momentum, if you do not have enough momentum, the off-road profile will allow you to gain more. If you have the steering lock option, it is advisable you use it to keep the wheels straight.

7.3. «INDOOR» DRIVING PROFILE WITH CASTERS OPTION

This procedure should only be used if you need to release the casters for indoor use in order to have increased manoeuvrability (increased turning radius).

The procedure for the correct use of this option is as follows:

1. Position the front wheels straight while moving forward slightly.
2. If you have the steering lock it is advisable to use it to lock the front wheels straight.
3. When at a standstill, select the casters option with the MODE button while moving the joystick right or left.
4. Push the joystick forward until the casters have released completely.
5. When the casters are out, the front wheels are raised a few centimetres, they can no longer rotate, and the forward gear driving speed is limited to 3 km / h. If this is not the case, refer to section 10.5. Caster (optional) Malfunction.
6. To use the casters, select the “indoor” driving profile, which is more suitable due to its increased rotation speed.
7. To return to 4-wheel drive, stop and select the wheel option with the MODE button by moving the joystick to the right or left.
8. Fully retract the casters by pulling the joystick towards you.

9. The speed limit is now disabled, and the front wheels will once again be powered (4-wheel drive). If this is not the case, refer to section 10.5. Caster (optional) malfunction.
10. You can now use the off-road or crossing profile suitable for 4WD.



WARNING!

Take account of the recommendations in part 2. Security.

Do not attempt to use the off-road driving or crossing profile when the casters are out.

Do not attempt to use the indoor driving profile when driving 4-wheel drive. The front wheels must be positioned straight when the casters are pulled out, otherwise the engines and / or the front wheels will be damaged.

The maximum speed limits allowed to cross over an obstacle of 1 cm in the event of the use of the casters is 1.5 km/h.

Be careful not to cross over obstacles greater than 1 cm in height with the casters. The casters are only intended for indoor use.

Make sure to have the incline of the seat as parallel to the ground as possible and the incline of the backrest as perpendicular to the ground as possible when you are moving about.

Make sure to respect the technical features of the chair (see corresponding chapter).

The caster option allows you to switch from an outdoor chair to an indoor chair, as it allows you to switch from 4WD to 2WD by raising the front wheels and decreasing the turning radius.

7.4. MANUAL MOVEMENT



Fig. 6

The wheelchair motors are equipped with magnetic brakes that prevent the wheelchair from rolling on its own when it is at a standstill. The engine brakes are automatically tightened when the joystick is in the neutral or “off” position. To push the wheelchair, disengage the magnetic brakes.

A lever for disengaging the brakes of the rear wheels is located above the rear engines:

- When disengaged, the engine brakes are turned off. You must therefore be careful that the wheelchair does not move in an uncontrolled manner if the ground slopes.
- Always remember to return the release levers to the «on» position after extensive use.

Motor brake release (Fig. 6):

- Turn off the remote.
- Turn the right motor button clockwise and the left motor button counter clockwise.

Motor brake clutch (Fig. 6):

- Turn the right motor button counter clockwise and the left motor button clockwise.
- If you need to, push the wheelchair by hand to disengage the rear engines and manually position the front wheels in the desired direction.

7.5. ADJUSTMENT POSSIBILITIES



DANGER!

After each adjustment, be sure to tighten the nuts and screws securely.

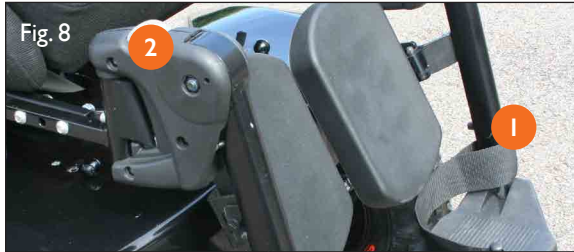
7.5.1. Armrest adjustments

- 1 - Height adjustment of the armrest according to arm length
- 2 - Depth adjustment of the armrest
- 3 - Width adjustment of the armrest



Fig. 7

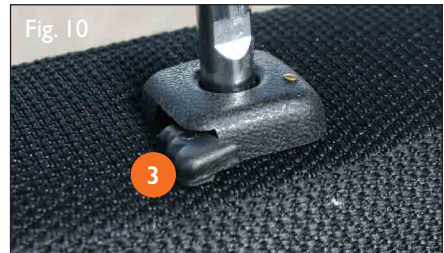
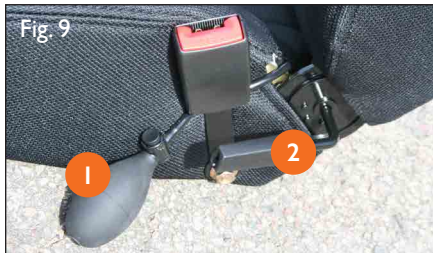
7.5.2. Manual footrest



- 1 - Length adjustment
- 2 - Angle adjustment

7.5.3. Backrest and headrest

- 1 - Folding backrest
- 2 - Lumbar adjustment
- 3 - Headrest height



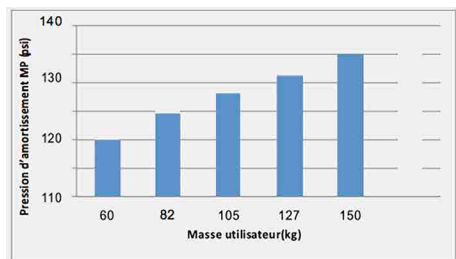
7.5.4. Shock absorber

The A5RR1 shock absorbers can be adjusted via two ATV type valves. The upper valve (MP) must be set to between 100 and 150 PSI (not to exceed 180 PSI), this is the main pressure damping that allows for adjustment of the depression of the damper. The lower valve (NP) must be set between 65 and 100 PSI but must not exceed the main pressure, it is the secondary pressure that manages the rebound damping. The pressure must be adjusted with a special damper pump. Do not adjust the pressure of the shock absorber with a compressor at the risk of damaging it.

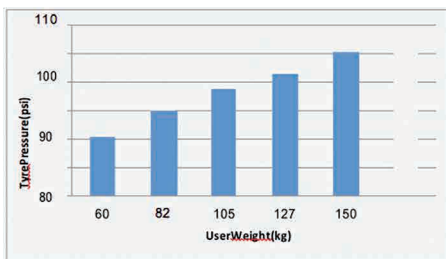


- 1 - Main MP pressure valve
- 2 - Secondary NP pressure valve

Recommended main pressure (MP)



Secondary pressure (NP)



7.5.5. Tyre pressure

The tyre pressure needs to be adjusted according to the terrain. In off-road (bumpy ground, uneven surfaces, fields, path, mud, sand, snow ...) it is recommended to adjust to a low pressure (between 0.4 and 0.5 bar), this will mean a greater comfort of use. Less inflated tyres provide better traction in mud, sand and snow.

To drive on firmer and smoother surfaces (asphalt), tyres can be inflated to a maximum pressure of 1.6 bar depending on the user's weight, preferences and driving ability. The table below can help you adjust the pressure of your tyres on the asphalt. It is recommended not to inflate the tyres above 1.65 bar.

Tyre inflation should be checked weekly. All tyres are equipped with automotive type valves and can be inflated with most hand or foot pumps, or with a compressor.



DANGER !

Over-inflated tyres can burst and cause injury. The recommended pressure is also shown on the flank of the tyre.

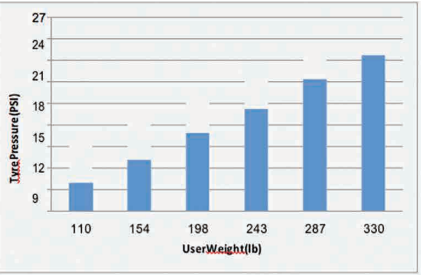


WARNING!

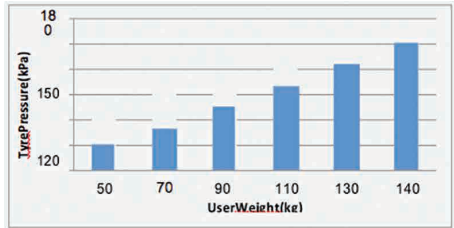
Under-inflated tyres can be dangerous and are more at risk of puncture. Poor inflation pressure can affect chair performance and pose risks.

Tyre	Description	Recommended off-road operating pressure	Maximum tyre pressure according to their capacity
All tyres	Black, low pressure, serrated	5 psi (38 kPa) Max 7 psi (48 kPa)	24 psi 165 kPa

Recommended tyre pressure on asphalt depending on user weight (Metric system)



Recommended tyre pressure on asphalt depending on user weight (Imperial system)



7.5.6. Seat angle (Fig. 13)

- The chair is equipped with a seat tilt that allows the user to relax the support points (avoiding the occurrence of pressure sores) and have more comfort to rest.
- You can access this setting in the MODE menu by choosing «Seat inclination» when scrolling through the options to the right or left using the joystick. Rear adjustment is done by pulling the joystick towards you and pushing it forward.

7.5.7. Normal seat position when driving (Fig. 14)

For normal use on the flat, uphill and over obstacles, position the seat as parallel to the ground as possible with the backrest as perpendicular to the ground as possible. When going downhill, you must tilt the seat 10 ° backwards from the ground and the backrest 20 ° backwards from the vertical. These settings are specified to prevent the user from tipping the chair over which could cause injury. These settings should not prevent the user from paying attention when shifting to certain user position limits.



WARNING!

Depending on the terrain, be careful not to be angled too far forward or backward. There is a risk of tipping the wheelchair over, follow the recommendations for normal driving seat position. See also Part 2. Security.



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17

7.5.8. Joystick positions (Fig. 16 et 17)

The joystick is mounted on a pantograph that can be folded backwards and to the side of the armrest to position it near a table, for example.

7.5.9. Folding the Recaro backrest (optional) (Fig. 15)

The RECARO seat handles, when pushed upward, fold the seat forward to gain 15 to 20 cm in height for transport in a vehicle.

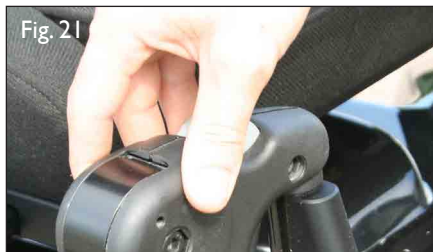
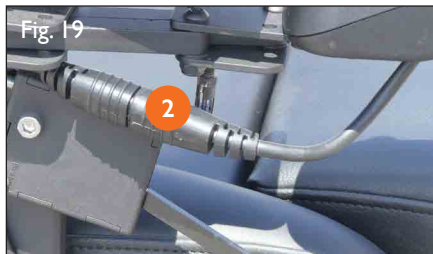
7.6.TRANSFER INTO THE CHAIR



DANGER !

Switch off the joystick (lights off), and make sure that the engine brakes are engaged.

- The retractable armrests of the chair allow for lateral transfer.To do this, unscrew the armrest height adjustment knob (16) in order to remove it. If you make the transfer on the joystick side, consider unhooking the joystick cable (17) before removing the armrest.
- Retractable leg rests allow for a front transfer.To do this, you need to remove the leg rests by pressing on the button (18), this unlocks the leg rests to the sides. Once the leg rest is unlocked to the side it is detached by lifting it up.
- You can also transfer from the front of the chair by shifting the leg rests to the sides.After a few attempts, the user will be able to transfer from his chair into the OUTCHAIR and vice versa in complete autonomy.



7.7. SWITCHING ON AND OFF



DANGER !

Danger of death in case of malfunction of the engine brakes. When using the OUTCHAIR the engine brakes must be engaged and in working order.

7.7.1. Electronic system protection

The chair's electronic control system is equipped with a current control device to prevent circuit damage in the event of overload.

When the motors are subjected to considerable effort for a prolonged period, the power supplied by the device is gradually reduced to prevent overheating.

This decrease in power can continue until the complete standstill of the chair. This phenomenon occurs more quickly when the ambient temperature is raised.

Stopping for several minutes may then be necessary in order to return to maximum power. When driving is blocked by an impassable obstacle and the user continues forward, forcing the engines to stall for more than 10 seconds, the electronic system automatically turns off the power.

7.7.2. Fuse breaker

In addition to the protection described in the previous paragraph, the entire wheelchair electrical system is protected against overload by a circuit breaker fuse located behind the seat. The circuit breaker shouldn't blow during normal operation. However, this can happen in the case of a low battery and an excessive load.

The circuit can be cut via the red button on the circuit breaker. This action cuts power to the controller and other electrical devices. It also prevents the batteries recharging.

Do not reset the circuit breaker several times in succession because if a problem persists this could damage the electronic systems.

Do not reset the circuit breaker until there has been a complete inspection of the entire electrical system (see paragraph V Battery replacement). If the problem persists, contact us or a distributor.

To replace a damaged fuse due to a short circuit, contact your dealer.



Fig. 23

Switch on the circuit breaker (armed)

7.7.3. Switching on

The electronic system will turn on if:

- The circuit breaker is armed (if model with circuit breaker)
- The joystick is on
- The electromagnetic brakes must be engaged otherwise the wheelchair will not move

7.7.4. Switching off

- Turn off the joystick
- Check that the brakes are engaged so that the wheelchair does not move
- Be careful not to leave the chair at a standstill with empty batteries as this could affect its autonomy.

7.8. JOYSTICK CONTROL

The joystick controls can be personalized, and different models are available depending on the needs of the user.

7.8.1. Joystick

The joystick controls the speed and direction of the wheelchair. Push the joystick in the direction of your choice. The more you incline it, the faster you will go. When you release the joystick, the chair will automatically brake and stop.

7.8.2. Powering the joystick

If the wheelchair does not move as intended, release the joystick immediately and turn off the chair. Unless the joystick is damaged, the chair should stop.

If the joystick is not in the neutral (centered) position when you start the chair, you risk causing a system malfunction. Release the joystick and restart the chair to reset the system.



WARNING!

Always turn the chair off when at a standstill to avoid unexpected movement.

7.8.3. Rain and water

The joystick box is **NOT WATERPROOF**. The joystick module resists splashes but can be irreparably damaged if water passes through the rubber seals (such damage is not covered by the warranty). We recommend carrying a plastic bag large enough to cover the joystick module and the user's hand in case of rain.

7.8.4. Joystick cable

If, for any reason the joystick cable is disconnected, be careful not to force it back in again. The plug is polarized and can only be inserted in one direction.



WARNING!

Do not insert the plug in the wrong direction, as this may cause irreparable damage to the electronic system. Also, be sure to place the cable so that it cannot get caught in the seat frame or the base of the wheelchair.

7.8.5. The control programme

The control programme affects the speed, acceleration, deceleration, and braking of the chair. The drive mode settings are pre-programmed at the factory. If your distributor changes these settings, please take note.



WARNING!

Do not try to reprogram your chair yourself. This task must only be carried out by the wheelchair manufacturer, an authorized representative of the manufacturer or a qualified technician.

7.8.6. Precautions for use

The R-net cannot take into account circumstances that place the chair or controller beyond the specified operating conditions, and it is therefore important that the user takes the following precautions:

Do not drive the chair:

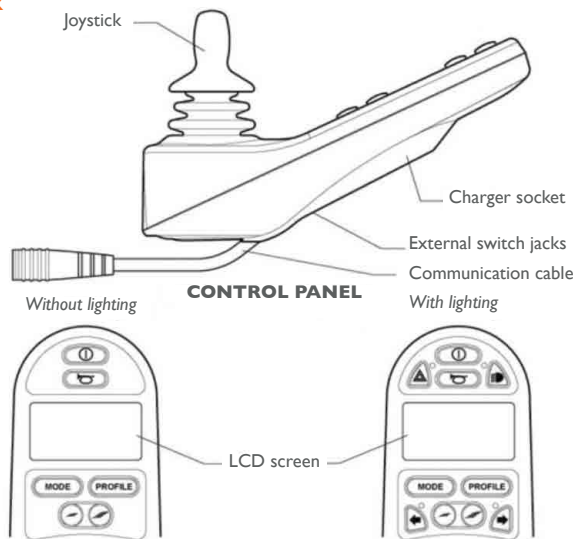
- Beyond the restrictions specified in the chair manual, for example regarding the maximum inclination, the maximum height of the sidewalk, etc.
- On surfaces where loss of adhesion could be dangerous, for example on a wet grass slope.
- It is known that the controller or another essential component needs to be repaired.



WARNING!

Logo-Silver assumes no liability for any type of damage resulting from the unforeseen breakdown of the wheelchair or bad programming of the control system, improper use of the wheelchair or control system, or if one of the criteria detailed in this document has not been respected.

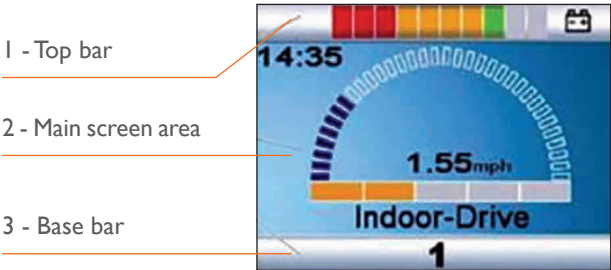
7.8.7. LCD joystick























Symbol	Control	Description
	Power	This button turns the R-net control system on and off. Do not use this button to stop the chair, except in case of emergency.
	Horn	This button activates the wheelchair horn.
	Mode	The Mode button allows the user to browse through the operating modes available in the control system.
	Profile	The Profile button allows the user to browse the operating profiles available in the control system.
	Reduce / Increase	Reduce and increase the maximum speed setting.
	Lighting	This button turns the headlights on and off. The LED will illuminate when the headlights are on.
	Warning	This button turns the hazard lights on and off. The LED will flash when the hazard lights are on.
	Blinkers	This button turns the left indicators of the chair on and off. The LED will flash when the left indicators are on. This button turns the right indicators of the chair on and off. The LED will flash when the right indicators are on.

7.8.7.1. LCD screen control system Indicators

The colored LCD screen is divided into three information zones:

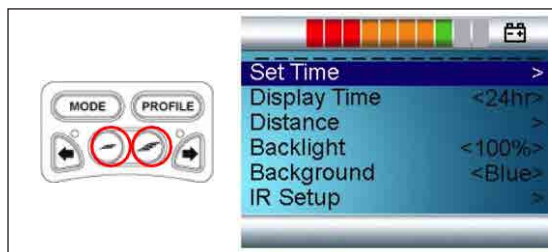


Area	Symbol	Indication	Description
1		Battery Indicator	Displays the available charge on the battery and indicates the status of the battery.
		Lightbulb	When multiple controllers are installed, the one that currently controls your chair displays this symbol.
2	Indoor-Drive	Current profile	View the name of the selected profile.
	14:35	Clock	Displays the current time in digital format. The clock is adjustable by the user.
		Speed	Gives a display proportional to the speed of the wheelchair
		Maximum speed indicator	Displays the current maximum speed setting.
	1.55mph	Digital Speed Display	Displays the actual speed of your electric wheelchair.
		Limited speed	The wheelchair speed is limited.
		Inhibition	The wheelchair drive is inhibited.
3	1	Current profile	Displays the profile name selected.
		Engine temperature	This symbol means your control system has reduced its own power to protect against heat damage.
		Control System temperature	This symbol means your control system has reduced its own power to protect against heat damage.

Symbol	Indication	Description
	Action Mode	Displays the sections of the chair selected for movement.
	Bluetooth mode	When Bluetooth mode is enabled, the following screen is displayed.
	Message Window	The R-net Control System displays warning icons and informational messages in an allocated message window.
	Restart	The control system requires a restart.
	Timer	This symbol appears when the control system is moving from one state to another.
	Standby	This symbol will be displayed for a short time before the R-net goes on standby.
	Checkmark	Process performed correctly (check mark).
	Cross	Process not performed correctly (cross mark).
	E-stop	If you have an external profile switch and you turn it on while operating your chair or an actuator, the action will stop, and this symbol will be displayed.
	Displaced joystick	If you manipulate the joystick before or just after turning on the control system, the displaced joystick icon will flash on the screen. If you do not return the joystick to the central position within five seconds, your chair will not move. Turn off the control system and turn it back on to reset it.
	Locked control system	The control system can be locked using a sequence of joystick movements or with a physical key. See «Locking the Control System» for a detailed description of the locking and unlocking procedures.
	Diagnostics Screen	When the safety circuit begins preventing wheelchair movement, the diagnostic screen is displayed.

7.8.7.2. Basic programming and configuration

Basic programming can be performed by simultaneously pressing and holding the increase / decrease buttons. This will take you to the Settings menu :



Adjusting the time:

- Shift the joystick once to the right to open the clock settings. Set the time using the joystick.
- Display format: the options given are 12 hours, 24 hours or turned off. Shift the joystick to the left or right to scroll through the options.

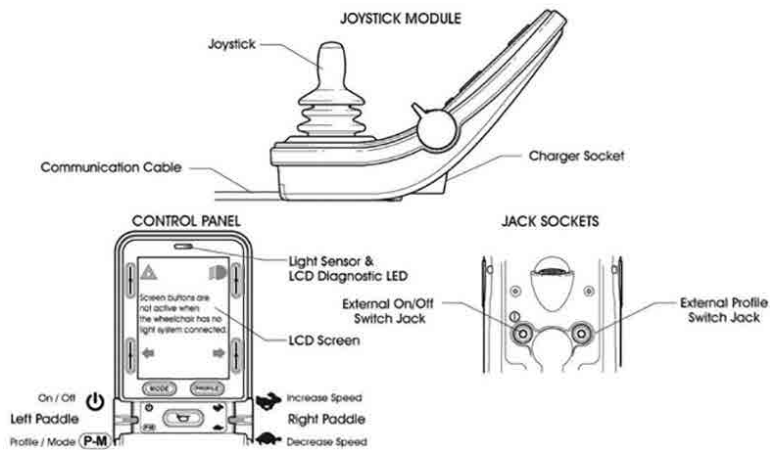
Distance:








- Total distance: Displays the total distance travelled in your current power module.
- Journey distance: Displays the total distance travelled since the last reset.
- Distance display: Defines whether the total distance or the distance of the journey must appear on the odometer.
- Clear journey distance: Shift the joystick to the right to clear (reset) the distance value of the trip.

Other adjustments :

- Exit: Shift the joystick to the right to return to the Settings menu
- Backlighting: Sets the backlight intensity of the LCD screen. The adjustment range is from 0% to 100% in increments of 10%. The adjustment is made by shifting the joystick to the left or to the right.
- Background: Sets the colour of the wallpaper. Shift the joystick to the left or right to scroll through the options.
- Choose «Blue» or «White» to display the background colour specified in all profiles. Choose «Auto» for a background that will be blue for slower indoor modes and white for faster outdoor modes.
- Exit: Exit the Settings menu to return to normal operation.

7.8.8. Joystick CJS2-BT (optional)



Symbol	Control	Description
	On / Off	Activated by pushing the left switch forward.
	Profile/Mode	Selects available driving profiles and operating modes by pulling the left switch backward.
	Speed	Sets the system speed setting.
	Horn	This button activates the wheelchair horn.
	Mode	The Mode button allows the user to browse through the operating modes available in the control system.
	Profile	The Profile button allows the user to browse the operating profiles available in the control system.
	Warning, lights, turn signals left and right.	<p>These buttons operate the lighting functions: Danger, lights, left indicator and right indicator. The function of each button is illustrated by the icon displayed next to each button on the screen. If no lighting system is available on the chair, these buttons will remain inactive.</p> <p>The upper left button opens the settings menu when held down for a few moments.</p>

7.8.8.1. Indications on the control system screen

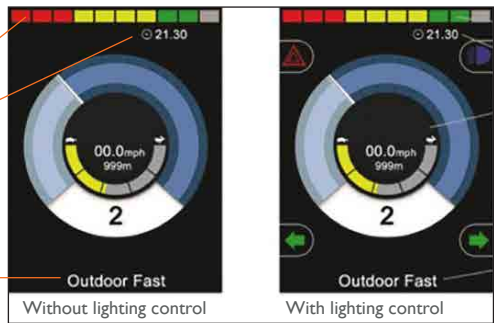
The color LCD is divided into four areas of information:

1 - Battery indicator






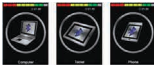











2 - Information icons

3 - Main area

4 - Base bar



Area	Symbol	Indication	Description
1		Battery Indicator	Displays the available battery charge and indicates the status of the battery: <ul style="list-style-type: none">- Fixed: Everything is running ok.- Slow blinking: Charge the battery as soon as possible.- Incrementing: The wheelchair batteries are loading.
2		Lightbulb	When multiple controllers are installed, the one currently controlling your chair displays this symbol.
		Bluetooth	A Bluetooth module is connected to the system. The symbol is blue when connected with a Bluetooth device and blank when not connected.
		Engine Temperature	The control system has reduced engine power to protect against heat damage.
		Control System Temperature	The control system has reduced its own power to protect against heat damage.
		Clock	Displays the current time in digital format. The clock is user adjustable.
3		Current profile	The selected profile is displayed in digital format.
		Speed	Gives a display proportional to the speed of the wheelchair.
		Maximum speed	Displays the current maximum speed setting.

Area	Symbol	Indication	Description
3		Digital Speed	Displays the actual speed of your wheelchair.
		Odometer	Displays the total distance travelled by the chair, or the distance travelled since the last reset.
		Limited speed	The wheelchair speed is limited.
		Inhibition	The wheelchair drive is inhibited.
		Lock	The control system is lock.
		Seat settings	Displays the part of the chair selected for adjustment, and a direction arrow.
		Bluetooth	When Bluetooth mode is enabled, one of the following screens appears.
		Limp	A user switch has been disconnected and the control system is programmed to continue to allow slow speed operation.
		Restart	The control system requires a restart.
		Timer	The control system is moving from one state to another.
		Standby	This symbol will be displayed for a short time before the R-net goes to sleep.
		Green tick	Process performed correctly.
		Red Cross	Process performed incorrectly.
		E-stop	Emergency stop: If you have an external profile switch and turn it on while operating your chair or an actuator, the action will stop and this symbol will be displayed.
		Displaced joystick	If you move the joystick before or just after turning on the control system, the displaced joystick icon will flash on the screen. If you do not return the joystick to the central position within five seconds, your chair will not move. Turn off the control system and turn it back on to reset it.
		Locked control system	See «Locking the Control System» for a detailed description of locking and unlocking procedures.
		Diagnostics	The safety circuit begins preventing wheelchair movement.
4		Profile name	Displays the name of the selected profile.

7.8.8.2. Basic programming and setup

Press and hold the button in the upper left corner of the screen (Danger button) for 1 second. This action will display the menu:



Adjusting the time:

- Setting the time: shift the joystick once to the right to open the clock setting. Set the time using the joystick.
- Display format: Options are 12 hours, 24 hours or turned off. Shift the joystick to the left or right to scroll through the options.

Distance :

- Total distance: Displays the total distance travelled with your current power module.
- Distance of the trip: Displays the total distance travelled since the last reset.
- Distance display: Defines whether the total distance or the distance of the trip must appear on the odometer.
- Clear journey distance: Shift the joystick to the right to clear (reset) the distance value of the trip.

Other adjustments:

- Exit: Shift the joystick to the right to return to the Settings menu.
- Backlighting: Sets the backlight intensity of the LCD screen. The adjustment range is from 0% to 100% in increments of 10%. The adjustment is made by shifting the joystick to the left or to the right.
- Automatic backlight: The controller has an ambient light sensor. When activated, the screen adjusts its brightness according to the external brightness: Menu de diagnostic : informations de diagnostic du système de contrôle :



- Exit: Exit the Settings menu to return to normal operation.

7.8.8.4. Pairing the CJS2-BT



Enter the «CJS2 Setup» menu and select «Bluetooth». The names of the preprogrammed devices should appear. Logo-Silver has preprogrammed the following devices:

- iPad
- iPhone
- PC
- Android device: Press and hold the top left screen button (Danger button) for 1 second to enter the settings menu.

To start the pairing process, turn on the device by pushing the joystick to the right. After turning on the device, turn on the controller. Select the item you wish to pair by scrolling through the drop-down menu, and select the device by pushing the joystick to the right.

7.8.8.5. “Discovery” Mode

- Push the joystick forward for 10 seconds until it sounds, then pull it back until it sounds. There should now be a blinking Bluetooth icon on the CJS2 screen. This means that the CJS2 is detectable.
- Select the device (e.g. Tom's iPad) to connect and search for Bluetooth devices; this launches the connection to the R-net. Once connected, «Tom's iPad» will appear in the Connected Devices window and you will be able to navigate from the iPad using the CJS2-BT from the R-net.
- To connect to an additional device (e.g. Tom's PC), select the device and repeat the process above. Up to four devices can be connected.

Selection of different connected devices:

Once the devices are paired, they will stay connected to the R-net. When entering the «My Devices» mode, the last device connected will always be the option selected in the menu. To select another device, scroll to the desired device and push the joystick to the left or right. After a few seconds, a fixed Bluetooth icon will appear on the CJS2 screen, and navigation from the new device will begin.

Disabling connected devices:

To turn off a connected device and delete it from the menu displayed in «My devices», select «Bluetooth» in the settings menu. The devices can be disabled by pushing the joystick to the right.

Note: It is not necessary to pair the device again if it is turned on at a later stage.

7.8.8.6. Control through infrared (IR)

The CJS2-BT includes an infrared transceiver that replicates most common infrared remotes. (Note: The CJS2-BT is not compatible with all infrared devices.)

These devices include:

Televisions, audio-visual systems, electric curtains, DVD players, soundbars, media managers, VCRs, Blu-ray, auxiliary devices, set tops, projectors, door opening mechanisms, CD players, receivers / preamplifiers, air conditioning systems, home theatre systems, switches, lighting...

If you have questions about a particular device, make sure you provide the make, type and model of device.

Example: Panasonic, Home theatre set, SA-BT set with Blu-ray...

IR Mode (mode IR) :

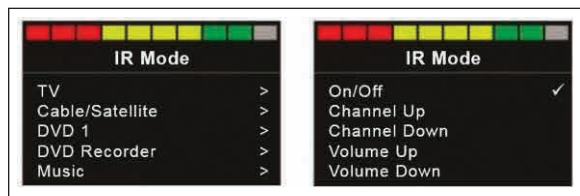


The «IR Mode» is accessible by selecting Mode on the menu. This mode will only be available if the IR codes have been saved in the CJS2-BT.

Once you are in IR mode, a list of IR devices is displayed along with the IR commands associated with each device.

In the case of a TV, for example, commands such as these would be available: On / Off, Channel Up, Channel Down, Volume Up, and Volume Down. When the CJS2-BT transmits the selected command, it is highlighted with a red background.

IR Setup (IR configuration):



The «IR Setup» menu is accessible from the «Settings Menu». When you enter the «IR Setup» menu, the default devices are displayed. Select a device to display its commands. If a command is checkmarked, it means that an IR code has been stored. If there is no checkmark, no IR code has been saved for this command.

Learning the IR codes:

To learn the CJSM2-BT an IR code, access the «IR Setup» menu and select a device.

- Select the command to be learned (for example: TV> Channel Up)
- Select «Learn Code» using the right button while the command is highlighted.
- Point the TV remote at the LED CJSM2-BT Receiver and press the «Channel Up» button on the TV remote control twice. You will hear a «beep» after each press. After the first press, the «2x» on the LCD is changed to «1x» which will then ask you to confirm the code by pressing the «Channel Up» button once again.
- A green checkmark indicates that the instruction has been successful.
- A red cross indicates a failure, in this case, repeat the procedure.
- Once the code is learned, select «Exit» to return to the TV control menu.
- There is now a checkmark next to the newly learned command, since an IR code is now stored for this command.

Note: The first time an infrared code has been learned, switch off then on the CJSM2-BT and make sure it is working properly.

Learning the IR code sequence:

Saving an IR code sequence allows you to execute multiple IR commands with a single command from your CJSM2-BT, such as turning on both a DVD player and a TV.

To save a sequence:

- Select the command used to begin the sequence. Take for example, use TV> On / Off to begin the sequence.
- Select «Learn Code» using the right button while the command is highlighted.
- Point the television remote control at the LED CJSM2-BT receiver and press the «On / Off» button on the TV remote control twice.
- After each successful instruction, a checkmark appears momentarily on the screen, select «Learn Code» once more.

- Point the television remote control at the CJS2-BT Receiver LED and press the «On / Off» button twice.
- After each successful instruction, a check mark appears momentarily on the screen, select «Learn Code» to add a new code to the sequence or «Exit» if the sequence is complete.
- Now, the On / Off command has a checkmark followed by 3 dots to indicate that a sequence has been learned.
- Use the same process to teach multi-digit channels. You can choose to store specific channels instead of numbers in your «Channel Selection» menu.

Enabling and disabling IR codes:

IR codes can be enabled or disabled using the «IR Set Up» menu.

- To deactivate an IR code, select the - key on the front panel of the CJS2-BT. Deactivated IR codes are displayed with an X next to the highlighted command.
- To activate an IR code, select the + key on the front panel of the CJS2-BT. Active IR codes are displayed with a check mark next to the highlighted command.


Deleting IR codes:

- To remove the infrared code from a command, highlight the specific command in the device menu and press the right button. Then select the «Delete code» option.
- To delete all IR codes from a device, select «Delete All Codes». Then switch off then on the CJS2-BT to make sure it is working properly.

7.8.9. Locking the control system

The control system can be locked using a sequence of buttons on the numeric keypad or with a physical key. This will be set at the factory.

Keyboard lock:

- When the control system is activated, hold the On / Off button down.
- After one second, the control system will beep. Release On / Off button.
- Shift the joystick forward until the control system emits a beep.
- Shift the joystick backwards until the control system emits a beep.
- Release the joystick, a long beep will sound.
- The wheelchair is now locked.
-  The following screen will be displayed next time the control system is started up.

Wheelchair lock:

- If the control system is off, press the On / Off button.
- Shift the joystick forward until the control system emits a beep.
- Shift the joystick back until the control system emits a beep.

- Release the joystick, a long beep will sound.
- The chair is now unlocked.

Locking with the key:

Once the control system has been turned on, insert and remove the supplied PGDT key from the charger jack on the joystick module. A short beep will sound. The wheelchair is now locked.



The following screen will be displayed next once the control system is started.

To unlock the wheelchair: If the control system is off:

- Press the On / Off button.
- Insert and remove the supplied PGDT key from the charger jack on the joystick module.
- A short beep will sound.
- The wheelchair is now unlocked.

7.8.10. Screen

- Avoid hitting the control system, especially the joystick.
- When transporting your wheelchair, make sure that the control system is well protected.
- To prolong the life of the control system, avoid exposing it to extreme conditions as much as possible. Always clean your control system if it gets contaminated with food or drink.
- To clean it, use a damp cloth and dishwashing liquid diluted in water. Do not use abrasive or alcohol-based cleaning agents.

7.9. DRIVING TIPS

The OUTCHAIR can be driven on climbs and descents of 10°. In order to guarantee a safe downhill descent, it is necessary to reduce speed depending on the gradient and to avoid sudden braking. In order to guarantee a safe climb, reduce speed and do not accelerate too hard. Obstacles must be cleared at reduced speed. If obstacles greater than 15 cm obstruct the path, they must be bypassed.



WARNING!

We recommend that the user wear light or reflective clothing in the dark and / or activate the lighting of the OUTCHAIR (optional). Once the power has been turned on (§ 7.4), select the Outdoor profile.



WARNING!

The profiles must be activated at a standstill.



WARNING!

Ground that is too uneven could cause uncontrollable driving. That's why you must constantly adjust your speed.



DANGER !

It is prohibited to drive on a slope (transverse incline) greater than 5°.



DANGER !

It is prohibited to climb or descend inclines higher than 10°.



DANGER !

It is prohibited to cross over a height greater than 15 cm on the OUTCHAIR.

7.10. BATTERIES AND RECHARGING

7.10.1. Batteries

Your electric wheelchair uses long-lasting electrolyte gel batteries that are sealed and require no maintenance. There is no need to check their electrolyte level. Despite being similar to

car batteries, these are different. Car batteries are not designed for long and deep discharge, and their use in electric chairs could be dangerous.



WARNING!

The battery terminals and their accessories contain lead, wash your hands after handling them.



WARNING!

Batteries contain corrosive chemicals. Only use AGM or gelled electrolyte batteries to reduce the risk of leakage or volatile conditions.



WARNING!

When changing the batteries, make sure that their terminals do not touch the wheelchair frame.



WARNING!

Car batteries and chargers should not be used with an electric wheelchair.

7.10.2. Charging the batteries

We recommend only using a supplied, high quality battery charger with your electric wheelchair. Use only the external charger provided or a Logo Silver approved charger. Do not use a car battery type charger.

Fully charge new batteries before use. Drive the electric wheelchair at home or on private property; do not go too far until you get used to the commands. After this first use, fully charge the batteries. After four or five cycles, the batteries will operate at their maximum potential. The charger will not work if the batteries have been depleted at an extremely low voltage. If this happens, contact your dealer for assistance.

7.10.3. Breaking in the battery

It is especially important to take good care of the battery during the «break-in» period to optimize its lifespan.

Procedure:

- Make sure the battery is fully charged before its initial use.
- Use the chair as normal during the day, avoid excessive battery discharges during the first five cycles.

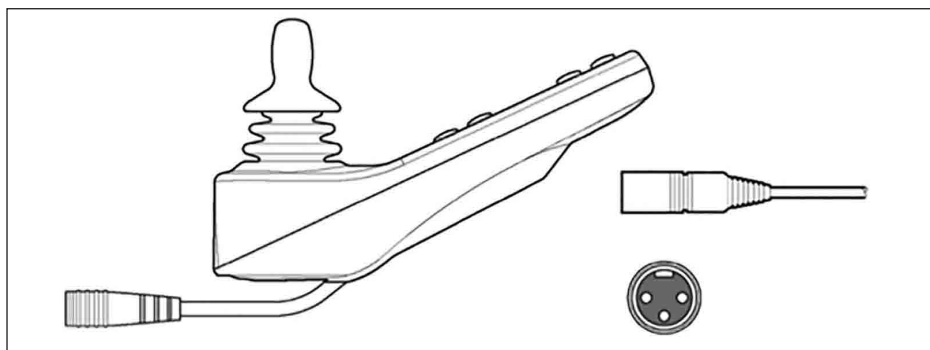
- Fully charge the chair at night, checking that the charger indicates that the battery is fully charged (switches to charge maintenance mode).
- Repeat steps 2 and 3 the first 20 times (cycles) to complete the «break-in» procedure.



NOTES

The battery capacity is limited when it is new, this is perfectly normal, and this will improve during the breaking-in process.

7.10.4. Charging procedure



The battery is charged via a socket located on the joystick module. When the charger is plugged in, the module recognizes it and stops the chair from moving. The following procedure is applicable for the recommended charger brand (See separate charger instructions if using an alternative charger).

- Make sure the chair is off using the on / off joystick button.
- Make sure the circuit breaker fuse is armed so as not to prevent the batteries recharging.
- Make sure the charger is turned off before plugging it into the chair.
- Plug the charger into the jack on the joystick module.
- Connect the charger to the 220 V mains.
- Please refer to the manual supplied with your charger for detailed instructions.

Here are some tips for taking care of your batteries:

- Avoid ultra-deep discharges (total discharges reduce the life cycle).
- Do not leave batteries on a low charge for a long period (for example, after a day of use, completely recharge the batteries during the night).

- Once the batteries are empty, recharge them completely (this may take more than eight hours).
- Protect the charger from moisture and extreme temperatures.
- Avoid placing the charger near a heat source such as a radiator or exposing it directly to sunlight.
- Only use extension cords in good condition.



WARNING!

Always protect the batteries from freezing and never try to charge a frozen battery. You could hurt yourself and damage the battery.



WARNING!

Avoid the risk of electric shock.



WARNING!

Do not use the charger if it has been dropped or damaged.



WARNING!

Do not place the charger on the chair seat during recharging, as it may become very hot. Always place the charger on the floor or near the chair when in use.

To optimize the life of your batteries:

- Fully charge the batteries before moving around
- Make sure tyre pressure is correct for the weight and surface
- Avoid stopping too frequently; try to keep a constant speed
- Try to avoid inclines
- Limit the weight of onboard luggage



DANGER !

Do not operate the control system if the battery is almost empty. Failure to do so may leave the user immobilized in a dangerous position, such as in the middle of a road. Logo Silver claims no responsibility for losses of any kind resulting from a failure to follow these instructions.

7.10.5. Battery gauge on the LCD screen



The batteries are charged if the battery gauge reads red, yellow and green.



You need to charge the batteries as soon as you can if the battery gauge only indicates red and yellow.



You must charge the batteries immediately if the battery gauge only indicates a steady or slowly flashing red.

How does the battery gauge work?

- The battery gauge lets you know what the remaining charge is in the batteries. The best way for you to use the gauge is to know how it behaves as you drive the wheelchair. Like the fuel gauge in a car, it is not completely accurate, but it will help you to avoid running out of «fuel».
- When you turn on the control system, the battery gauge gives an estimate of the remaining charge. The battery gauge gives a more precise reading about a minute after you have started driving the Wheelchair.
- The level of charge in your batteries depends on how you use your wheelchair, the battery temperature and age. These factors affect the distance you can travel in your chair. All wheelchair batteries will gradually lose their capacity as they age.
- If the measurement of the battery gauge appears to be falling faster than usual, your batteries may be exhausted. When you change old batteries, replace them with batteries recommended by Logo Silver. If you use another type, the battery gauge is likely to be inaccurate.

7.10.6. Public transport

Gelled electrolyte batteries are approved by the FAA (Federal Aviation Administration) and can be transported safely on-board aircraft, buses and trains. However, Logo Silver recommends you check the requirements of the carrier in advance. When you want to fly with your chair, contact the airline to communicate the required information.

7.10.7. Disposal and recycling of batteries

If you encounter a damaged or cracked battery, contact your dealer for instructions on the safest way to get rid of it. We advise you to contact your Logo Silver dealer who will have all the information you need to recycle your batteries.

VIII. OPTIONS

8.1. JOYSTICK CJS2 WITH BLUETOOTH

See chapter 7.8.8. CJS2-BT joystick.

8.2. RAISED POWER LEGRESTS

Raised power legrests are controlled via the joystick by pressing the mode button. When you are in the mode screen you can control:

- The raising and lowering of both legrests by pressing right or left on the joystick to select the “leg raise” mode.
- The left legrest is raised and lowered by pressing right or left on the joystick to select the «raise left leg» mode.
- The right legrest is raised and lowered by pressing right or left on the joystick to select the «raise right leg» mode.
- The legs are raised by pushing the joystick forwards and they are lowered by pulling the joystick towards you when you have selected the desired mode.

8.3. STEERING LOCK

The steering lock allows you to lock the wheels straight to enable manoeuvres in reverse, over obstacles, into a vehicle, on slippery surfaces...



- I** This lock is activated and deactivated using the lever.

- To lock the steering, first put the front wheels as straight as possible and pull the lever upwards.
- To unlock the steering; push the lever down and shift it to the side to prevent it from moving.

8.4. CASTERS

This option is only available with the OUTCHAIR L (Long). The procedure for this option is explained in chapter 7.3. «Indoor» driving profile with the caster option.



8.5. BATTERIES

With the OUTCHAIR S (short) there are two battery options:

- 2 x 80 Ah gel batteries or 25 km of driving autonomy
- 2 x 110 Ah gel batteries or 30 km of driving autonomy

With the OUTCHAIR L (longer by 10 cm) there are 2 x 135 Ah gel batteries for 50 km of driving autonomy;

8.6. RECARO SEAT

This high-end seat is available in the manual and electric version.

- The manual version has backrest and lumbar tilt adjustment via knobs on the sides of the backrest.
- The electric version has a power backrest tilt adjustment that can be controlled via the joystick by pressing the mode button and selecting the “backrest tilt” mode.

8.7. OTHER OPTIONAL ELEMENTS

The other options or adjustments will be added to this notice as a related addendum in this chapter.

IX. MALFUNCTION AND TROUBLESHOOTING

9.1. DIAGNOSIS AND TROUBLESHOOTING

Electronic repairs should only be carried out by authorized service providers. Improper or incorrect repair can result in an unsafe adjustment to the wheelchair. Logo Silver accepts no responsibility or losses or damages of any kind that could result from any improper or incorrect repair carried out.

The electronic system can detect any unusual circumstances concerning motors, brakes, wiring or the electronics module itself. The security code number is indicated by a flashing error message with this code.

Depending on the severity, the system may allow or prohibit driving. In some cases, driving is only possible at reduced speed.

Display of safety circuit codes:

When the safety circuit begins to prevent wheelchair movement, a diagnostic screen will appear, or an LED will flash.

- You can solve simple problems by performing an online diagnosis on:
<http://support.pgdt.com/Online-Diagnostics/Trip-Codes/R-net-Trip-Code-Database.aspx>
- In case of difficulties, contact your provider and give them the information that appears on the screen, so that they can assist you in solving the problem.

In addition, the following should be verified if possible:

- Turn off the joystick
- Make sure all connectors are securely connected and no wires are stuck
- Check that the engine brake is engaged
- Turn on the joystick and try driving the wheelchair again. If the security circuit launches again, switch off the chair and do not try use it again.

No security code displayed:

If the wheelchair cannot move or if it moves at a reduced speed while no security code is displayed on the screen, it is likely that one of the lock switches has been activated for your safety.

Lock switches include; the seat inclination, the reclining backrest, the caster release.

The activation of one of these switches affects the driving performance of the chair. Return the seat to its upright position, make sure that the seat incline is horizontal, retract the casters and check that the problem is resolved.

9.2. SOLVING COMMON PROBLEMS

Problems	Diagnostic	Solving
Centering the Joystick:	The Joystick is off center before and during the switching on of the control system.	Make sure the joystick is centered and turn on the control system. It is better not to touch the joystick when it is being switched on.
Low Battery	The battery voltage is less than 16V.	Check the condition of the batteries and the connections to the control system.
High battery voltage	The battery voltage exceeds 35V.	Check the condition of the batteries and the control system connections.
Brake failure	Problem with the magnetic breaks or their connections.	Check magnetic brakes, cables and connections to the control system. Check that the engine brake is not disabled (see section 7.4 Manual movement).
Engine failure	The engine has been disconnected.	Check the motor, cables and connections to the control system.
Active Inhibition	One of the inhibitor switches is locked and active.	Restart the power. This will reset the lock mode, which can resolve the error. Check all cables and switches connected to the inhibitor input indicated.
Standby	The control system enters sleep mode.	The control system enters sleep mode when it has been idle beyond the Standby time set.
Charging	A charger is connected.	Disconnect the charger from the wheelchair.
Incorrect wiring	A fault in the wiring between two modules.	Check the continuity of all cables and connections as well as for the absence of pinch points. If a cable appears visibly damaged, replace it and restart the armchair cable. Contact your service agent to obtain a replacement cable.

X. CARE AND MAINTENANCE

10.1. GENERAL RECOMMENDATION



NOTES

The OUTCHAIR should be checked once a year by qualified staff approved by Logo Silver. Only Logo Silver spare parts can be used. Failure to comply with this condition results in the loss of warranty rights. If you encounter problems during maintenance, consult your dealer.



DANGER !

If you notice symptoms such as a noisy motor, a frayed wiring harness, damaged connectors, uneven tyre wear, unusual movement, a broken part or any other troubling signs between two maintenance periods, please contact your dealer immediately.



WARNING!

Do not modify or have your wheelchair modified in any way that is not authorized by Logo Silver. Unauthorized modifications constitute a remanufacturing of the wheelchair. The person or group making the changes will be fully responsible for the wheelchair in accordance with the Therapeutic Goods Act (TGA).



WARNING!

The configuration of the electric control box must **ONLY** be carried out by an individual authorised by Logo Silver. Final controller settings may affect other wheelchair activities.



WARNING!

If a non-certified individual performs repairs on any of these devices, the warranty will be void and the equipment may be damaged.



WARNING!

Direct exposure to rain or moisture will cause electrical and mechanical malfunctions and risks rusting the chair prematurely.

- Avoid exposing your electric wheelchair to moisture (rain, snow, fog, salt water or cleaning products). Such exposure could damage your chair - see section 10.2. Protection against corrosion.
- If your electric wheelchair comes into contact with water, sponge it as well as possible with a cloth and let it dry for 10 to 12 hours in a warm room. Check that the joystick and brakes are working properly before using the wheelchair.
- Do not use the wheelchair in the shower and do not leave it in a wet bathroom while you take a shower.
- Do not store the wheelchair outdoors or in a moist environment.
- Avoid hitting the controller, especially the joystick.
- Clean the controller regularly.
- Place the controller cable so that it cannot get caught in the seat frame or base of the electric wheelchair.
- Avoid exposure to extreme temperatures.
- Do not charge the chair under extreme temperatures.



NOTES

Some parts of the wheelchair are vulnerable to extreme temperatures. It is possible that the batteries could freeze. The temperature at which the batteries freeze depends on a certain number of factors, including their chemical composition, charge level and frequency of use. When the temperature is high, the electric wheelchair can run at a scaled down speed. This is a safety function built into the controller to protect the motor and other components.

10.2. PROTECTION AGAINST CORROSION

The power chair has been manufactured using a variety of processes to resist corrosion. Although efforts have been made to ensure the long-term durability of the product, we cannot guarantee the absence of corrosion on the chair throughout its service life. Prevention, protection and maintenance measures are essential to reduce the risk of corrosion on the wheelchair.

The most common causes of corrosion of the electric wheelchair are:

- Paint or undercoat peeling caused by impacts from stones and other hard objects.
- Accumulation of salt, soil and moisture on the frame components.
- Exposure to highly corrosive environments such as seaside, rivers and streams;

10.2.1. Peeling paint

If the paint on the frame of your power chair or other metal components is peeling off and the metal underneath is visible, the following procedure is recommended to repaint the affected area:

- Lightly sand the exposed area to flatten and remove any remaining paint chips. Be sure to remove any visible surface corrosion.
- Apply a cleaning solvent to remove dust, dirt and grease.
- Apply primer to the area to be repainted.
- After a suitable drying time, apply the touch-up paint, making sure it covers all exposed areas. Once dry, the area should now be protected from corrosion.
- If it is not practical to repaint the area, use a «rust converter» type product to neutralize rust and prevent it from spreading.

10.2.2. Beach, salt water and coastal areas

- Salt water and the surrounding environments are highly corrosive.
- Exposure to coastal areas will increase the risk of corrosion, even if the chair is not used on the beach. Seaside air usually contains much more salt than on inland. The highest corrosion rates are generally found about 500 meters from the coast. If you live near the coast or regularly use the wheelchair near the beach, please refer to sections 10.2.4 and 10.2.5. below for maintenance tips.

10.2.3. Snow and Ice, Salt Roads and Pathways

Avoid using the wheelchair on salted surfaces if possible, as salt can have a detrimental effect on wheelchair components. If the chair has been used on wet, icy or salty surfaces, see sections 10.2.4 and 10.2.5. below for maintenance tips.

10.2.4. Cleaning after use

The chair should not under any circumstances be pressure washed. Clean all parts of the chair with a cloth soaked in hot water.

It can also be helpful to remove as much sand and / or salt as possible. The chair must then be stored in a warm and dry environment.

10.2.5. Preventative Maintenance

Before using your chair in a moist or corrosive environment, it is advised you protect it by carefully coating all metal surfaces with a waterproofing product. This product may for example be an oil-based aerosol (such as WD40) or a lanolin-based dispersant (such as Lanotec). This coating should act as a barrier between the water and the painted metal surfaces of your electric wheelchair. A lubricant (such as WD40) can be sprayed onto the tilt mechanisms to protect them.

The underside of the wheelchair (battery compartment and frame components) can also be sprayed with the aid of a ramp or another approved lifting device.



WARNING!

Your wheelchair is equipped with electric motors and must NEVER be driven into water, a river, a stream or the sea.

10.3. DAILY CHECKS

Joystick: Once the control system is turned off, check that the joystick is not distorted or damaged and that it returns to the center when you release it. Make sure that the joystick boot is not torn or cracked and that all electrical connections are properly carried out.



DANGER!

Do not use the joystick if the boot is torn or cracked. If the joystick boot is torn or cracked, have it replaced IMMEDIATELY.

10.4. WEEKLY CHECKS

Parts	Verifications
Electric brakes	<p>This test must be performed on a flat surface with at least one gauge of free space around the chair.</p> <ul style="list-style-type: none">• Turn on the control system.• Check that the battery gauge stays on or flashes slowly after one second.• Push the joystick slowly forward until you hear the electric brakes come into operation. It is possible that the chair might start to move.• Release the joystick immediately, you should hear each electric brake engage after a few seconds.• Repeat the test three times by pushing the joystick backwards, left and right.
Options	If your wheelchair is equipped with headlights, turn signals or a seat adjusting cylinder, check that they are working correctly.
Connectors	Make sure all connectors are plugged in and are not damaged.
Cables	Inspect the cables to make sure they are not damaged.
Joystick boot	Inspect the rubber boot around the base of the joystick to make sure it is not damaged or cracked. Check visually only, do not handle the boot.
Assembly	Make sure the controller is securely attached to your wheelchair. Do not over-tighten the screws.
Tyre pressure	Make sure the tyre pressure meets the specifications given in section 7.5.5. pneumatic pressure.
Tyre	Check tyre wear.



WARNING!

If any of these checks reveal a problem, please contact your dealer for repair.

10.5. MONTHLY CHECKS

Parts	Verifications
Armrests and lateral sections	<ul style="list-style-type: none">• Check the fasteners.• Check that the armrests can be adjusted without excessive effort.• Check that the armrests are locked in place.
Legrests	<ul style="list-style-type: none">• Check that the legrests click into place properly.• Check that the adjustment options are working properly.
Tyres	<ul style="list-style-type: none">• Check that the tyre pressure is adequate.• Tyre wear varies significantly depending on the road surface. Frequent use on aggressive surfaces such as asphalt results in premature wear.
Front casters / front wheels	<ul style="list-style-type: none">• Check that the front wheel steering turns freely.• Check the attachment of the casters and suspensions.• Check that there isn't excessive pivot clearance.
Electronic system	Check the condition and correct positioning of the wiring and connections.
Seat tilt	<ul style="list-style-type: none">• Check that the two seat tilt bump stops are in good condition.• Check that they are both in contact when the seat is at its maximum inclination.• See section 10.9. Seat tilt malfunction.
Mechanics	<ul style="list-style-type: none">• Check the tightness of the screws.• Check that the wheels are correctly positioned on their axle.• Check that the rotation of the rear axle is sufficient.• Check that the rear wheels turn without buckling.• Check that there is no excessive clearance or unusual sounds.

10.6. ANNUAL CHECK

Once a year, have your wheelchair checked by your dealer who will carry out a full maintenance. Regular maintenance can help to quickly detect damaged or worn parts and thus promote normal wheelchair operation.

10.7. REPAIR OF A TIRE AND / OR AN INNER TUBE



NOTE

Direct exposure to sunlight (UV) accelerates tyre aging. Regardless of their wear, the tyres must be changed every 2 years.

Tools:

- A Hexagonal Allen key, 8 mm
- A shim
- A 17 mm flat wrench
- A large flat screwdriver
- A torque wrench
- A repair kit for tyre with inner tube or a new tube.
- Talc
- Thread sealing lacquer

Disassembling the wheel:

- Lift the wheelchair and prop it to the side of the corresponding wheel.
- Turn off the power (ON / OFF key).
- Unscrew the 4 screws indicated at Fig. 26 , being careful to loosen the 2 locknuts behind the front rim.
- Remove the wheel from the wheel hub.



Wheel assembly:

The assembly is carried out in reverse order. Make sure that the wheel is remounted on the same side and in the same direction as it was during disassembly.

- Tighten 4 screws to 30 Nm
- Tighten both locknuts on two of the four screws indicated at Fig. 26.



WARNING!

If a wheel is not tight enough during assembly and / or the locknuts are not in place it may come off during a movement and cause injury.

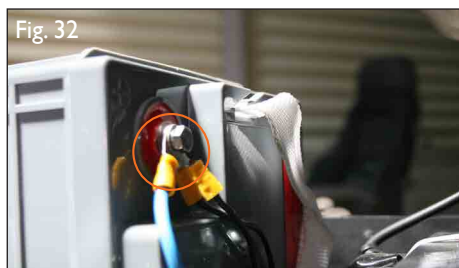
Repair of a tire and/or an inner tube:

- Remove the wheel following the previous procedure.
- Unscrew the valve cap.
- Release the air in the tyre by pressing the spring rod into the valve.
- Remove half of the tyre rim by levering a large flat screwdriver all around between the tyre skirt and the rim edge.
- Repeat the same operation for the other part of the rim.
- Remove the inner tube from the tyre casing.
- Repair the tube and put it in place or replace it, making sure that there is nothing that might pierce the tube in the tyre. (If the old inner tube needs to be repaired and put back in place and if it has been wet during the repair, it is best to apply talc).
- Inflate the tube slightly and place it in the rim.
- Place the outer rim half on the tyre, being careful to pull the valve out of the hole provided for this purpose.
- Place the second rim half (sheeting) on the tyre, making sure to align the holes of the 4 screws indicated in Fig. 26.
- Reassemble the wheel on the hub following the previous procedure.
- Inflate the tyre to the prescribed air pressure.
- Screw in the valve cap.

I0.8. BATTERY REPLACEMENT

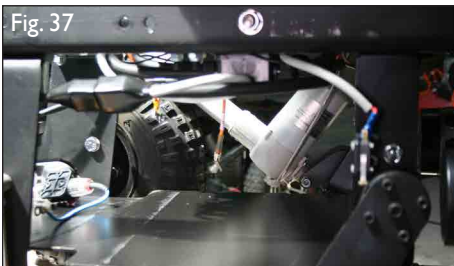
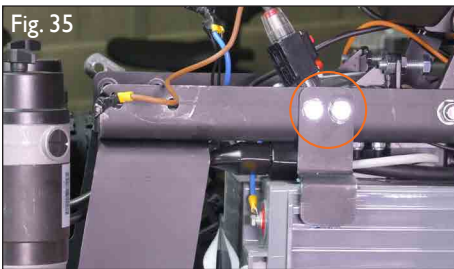
Tools:

- A pair of pliers
- An 11" wrench
- 2 flat 10" wrenches
- 2 flat 17" wrenches
- 1 shim
- A 5 mm BTR wrench
- A 6 mm BTR wrench
- A 8 mm BTR wrench
- A torque wrench



10.8.1. Battery removal

- Disarm the circuit breaker;
- On the OUTCHAIR L, remove the two rear mudguards by unscrewing the mudguard screws. (Fig. 27)
- On the OUTCHAIR S, remove the complete/full body/bodywork by unscrewing the four knobs and tilting the seat. (Fig. 28)
- If you have the castors option, unscrew the cylinder screw. (Fig. 29)
- Unscrew the two screws to each side while holding onto the rear cover in order to remove it. (Fig. 30)
- Unscrew the two screws on the back plate to remove it, this will give you access to the rear battery. (Fig. 31)
- Before unscrewing the terminals from the batteries, note the position of each cable for future reassembly. (Fig. 32)
- Unscrew the upper terminal (+ terminal) of the rear battery being careful not to cause a short circuit (protect the terminals with tape after removing them). (Fig. 32)
- Move the rear battery and place it on level ground in order to unscrew the lower terminal (terminal -). (Fig. 33) Remove the rear battery. (Fig. 34)
- Hold the right rear engine in place and remove the right rear wheel following the wheel disassembly procedure previously described. (Fig. 34)
- Unscrew the two holding screws of the right battery. (Fig. 35)
- Disconnect the terminals from the central battery. (Fig. 36)
- Remove the central battery. (Fig. 37)



10.8.2. Battery reassembly

This is the opposite operation taking care to connect the cables as they were before disassembly;

10.9. SEAT TILT MALFUNCTION

- Every month it is important to check that the two bump stops are in good condition and they are both in contact when the seat incline is at its maximum.
- If this is not the case, contact your authorized Logo Silver dealer to change the stoppers and / or their setting.

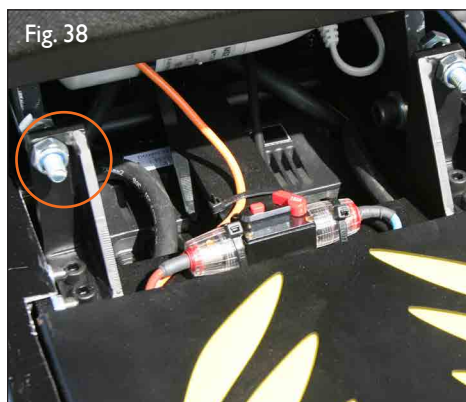


WARNING!

Do not attempt to adjust and / or change these stoppers yourself, you may cause the maximum incline of the seat to malfunction and you risk tipping your chair over.

- If your seat leans too far forward and parts come into contact with your body, you must adjust the position of the front attachment of the seat cylinder.

Seat tilt bump stops



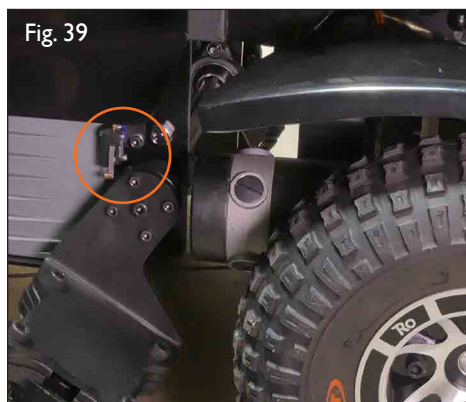
Seat cylinder front attachment



10.10. CASTER (OPTIONAL) MALFUNCTION

- If the front wheels rotate while the casters are out, the left switch may be disconnected and / or incorrectly adjusted. It is also possible that the relays need to be changed.
- If the speed limit is at 3 km / h when your casters are fully retracted, it is possible that the right switch is disconnected and / or incorrectly adjusted.
- If you are not limited to 3 km / h when your casters are out, do not use a speed higher than this one and contact us.
- All repairs to switches and relays must be performed by an authorized Silver Logo dealer.

Right Switch



Left Switch



Front wheel cutoff relay.



10.11. STEERING LOCK (OPTIONAL) MALFUNCTION

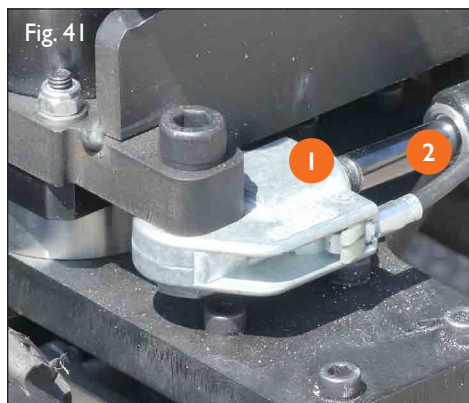
If you notice that the steering lock is not effective enough you can adjust the cable tension by turning the adjustment dial on the control.

If this adjustment of the cable tension does not allow the steering lock to be adjusted correctly, you must:

- Loosen the lock nut (1).
- Screw the cylinder rod (2) for less steering lock.
- Or loosen the cylinder rod (2) for greater steering lock.
- Tighten the lock nut (1) keeping the rod in the desired position.

If the steering lock stays stuck after unlocking the joystick, it is possible that something (such as the bodywork) is blocking the cable of the actuator release head.

Actuator release head cable



10.12. CLEANING THE VEHICLE

The OUTCHAIR should be cleaned regularly, regardless of use or degree of soiling.

When cleaning the vehicle:

- Use only a damp cloth and a mild cleaning agent.
- Do not use abrasive products for cleaning.
- Do not use a pressure washer.

**DANGER !**

When cleaning the OUTCHAIR, water should not come into contact with electronic components and batteries.

Do not use aggressive cleaning agents, solvents or hard brushes.

Risk of damage to the electronic system!

Risk of malfunction!

XI. GARANTIE


The wheelchair is guaranteed for 2 years from the date of delivery, excluding corrosion, normal wear of parts (tyres etc.), abnormal use, usage which does not comply with the instructions of use. The batteries are guaranteed for 1 year.

- The guarantee covers all screws and the quality of materials used and the components under normal conditions of use (parts, labour and shipping) after inspection by an approved agent.
- The repairs under guarantee must be authorised by an approved agent. Do not return parts without having previously obtained an authorisation.

Not guaranteed

- Accidents or impacts
- Negligence
- Abnormal use
- Inappropriate maintenance
- Modifications performed without manufacturer's consent
- Usage not conforming to the instructions of the user's guide supplied with the product or not corresponding to the specifications of the product.
- Removal or destruction of the serial number
- Cold storage or batteries left completely discharged for a long period of time.





Warning signs and signals



LOGOSILVER
handicap & dépendance

7 rue du Fossé Blanc
92230 Gennevilliers / France

REF: OUTCHAIR L
SN:0000001

140 kg max. 10° max.

- Reference
- Serial number
- Date of manufacture
- CE mark
- Maximum user weight
- Maximum slope/gradient

XII. DISPOSAL



ENVIRONMENT

If you dispose of the OUTCHAIR, all components and materials must be disposed of in an environmentally friendly manner, and in accordance with the sorting of waste or recycling.

- Observe the environmental protection regulations in force in your country.
- Used batteries are taken back by your dealer or Logo Silver.
- The OUTCHAIR can be returned to Logo Silver for recycling.

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OutCHAIR

by

LOGO  SILVER
by **AMYLOR**

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