

User Manual e-Mobby

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User Manual e-Mobby

Revision history

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User Manual e-Mobby

1. Introduction

Before the e-Mobby is being used, carefully read this user manual to get familiar with all its possibilities and limitations. Use this manual as a reference work and guideline, make sure the operator is well familiar with all functionality and options.

1.1 Contact information

Dear user, thank you for choosing and using the e-Mobby. The e-Mobby is a mobility product that is designed, manufactured and marketed by Special Mobility BV.

If you need support, additional information or are having a problem with the device, please contact your local distributor or Special Mobility BV:

Address: Special Mobility B.V.
Handelsweg 10
7041GX 's Heerenberg
The Netherlands

E-mail: info@specialmobility.eu

Internet: www.specialmobility.eu

Telephone: +31 (0)314 – 667 210




Fax: +31 (0)314 – 667 194

1.2 Abbreviations / Definitions

Name	Explanation
Mobby	Product of Special Mobility for manual transportation of a person not able to walk long distances
Li-ion	Lithium ion

1.3 Used symbols

To ensure proper understanding of the information provided in this manual, the following symbols are introduced. These symbols are used to indicate warnings, cautions and notes that are important for a correct use and understanding of the vehicle.

Symbol	Explanation
	WARNING:
	Warnings are statements which -if not followed- can lead to fatal or serious injuries to a passenger, operator or bystanders.
	CAUTION:
	Cautions are statements which -if not followed- can lead to damage to the device or present surroundings and may lead to environmental pollution.
	NOTE:
	Notes provide additional advice and highlight remarkable points. A note must be seen as complementary and not as an instruction.

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1.4 General warnings, cautions and notes



WARNING:

The e-Mobby is a battery-powered vehicle with A-class drive components. Never compromise this installation and only use the built-in battery charger for charging the batteries.



WARNING:

It is highly recommended that only trained operators or operators who are very familiar with comparable devices control and drive the e-Mobby. Inexperience may lead to serious injuries to the passenger, bystanders and/or the operator!



NOTE:

Since the e-Mobby is available in multiple configurations and with multiple accessories, the pictures used may not always exactly represent the model you have purchased.

1.5 Included parts

Depending on the way of transportation, the e-Mobby is properly packed to ensure the integrity of the device is not compromised during transport. Before using the vehicle, please make sure there are no traces of damage, contaminations and/or moisture. If this is the case, please immediately contact your local distributor or Special Mobility B.V.

Along with the e-Mobby, the following parts are added:

Qty.	Description	Reference Special Mobility
1	User manual	UM0002-LL**
1	Technical manual	TM0002
1	Declaration of Conformity	DoC0002
1	Final Test Report	FTR - <i>serial nr.</i>
2	Dead man's button	CAD.EMV.NDSTP.02
2	Key main switch	CAD.EMV.SLETL.04

** : "LL" indicates the user manual language and is dependent on to which country the e-Mobby is sold to.

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2. Product description

This chapter contains general information about the device, the environment in which it is used and for which purposes to be used.

2.1 Description of the product

The e-Mobby is an electric driven device, manufactured by Special Mobility BV. It is designed for safe transportation of a person, not able to walk long distances for whatever reason. The operator can walk behind the e-Mobby or stand on a platform while driving the e-Mobby. The device is designed for a maximum timeframe of ± 30 minutes for transportation of a passenger.

The e-Mobby is designed to be used by skilled personnel and to be deployed in environments where it can be used to facilitate in transporting people. The e-Mobby is suitable for professional purposes only, thus not for domestic purposes.

A maximum of two additional Mobby's can be linked at the front of the e-Mobby which means a total of three persons can be transported with the e-Mobby. A luggage car can be linked at the back side of the operator platform to carry luggage.

The e-Mobby is designed to operate in an indoor-environment only with flat floors. The drive system and wheels are suitable for smooth surfaces but can handle small irregularities. The e-Mobby is equipped with several safety measures to ensure safe use and precautions while driving. These measures are explained in this manual.

2.2 Intended use

The intended use for the e-Mobby is the motorized transportation of a person, not able to walk long distances, in an indoor environment.

2.3 Intended users

Four user types can be addressed and are identified below as primary and secondary users:

1. Primary user: Operator

The operator is the person who operates the e-Mobby and knows all functionalities of the device.

Expertise and training: No specific education is required to operate the device. Study of the accompanying documentation and proper practice with the e-Mobby are highly recommended. Depending on the company policy, additional requirements (e.g. compulsory training program, written approval, etc.) may be applicable.

2. Primary user: Passenger

The passenger makes use of the facilities, offered by the company which operates the vehicle. The e-Mobby is used as a transportation vehicle for moving the passenger from A to B.

Expertise and training: No expertise or training is applicable other than following the instructions of the operator.

3. Secondary user: Service technician

Is responsible for maintaining and repairing the device and supports the operator in case of improper functionality of the device.

Expertise and training: The service technician must have educated knowledge of mechanical and electrical installations. To execute proper maintenance, the technical manual must be followed. For understanding the use of the device, this user manual should be used.

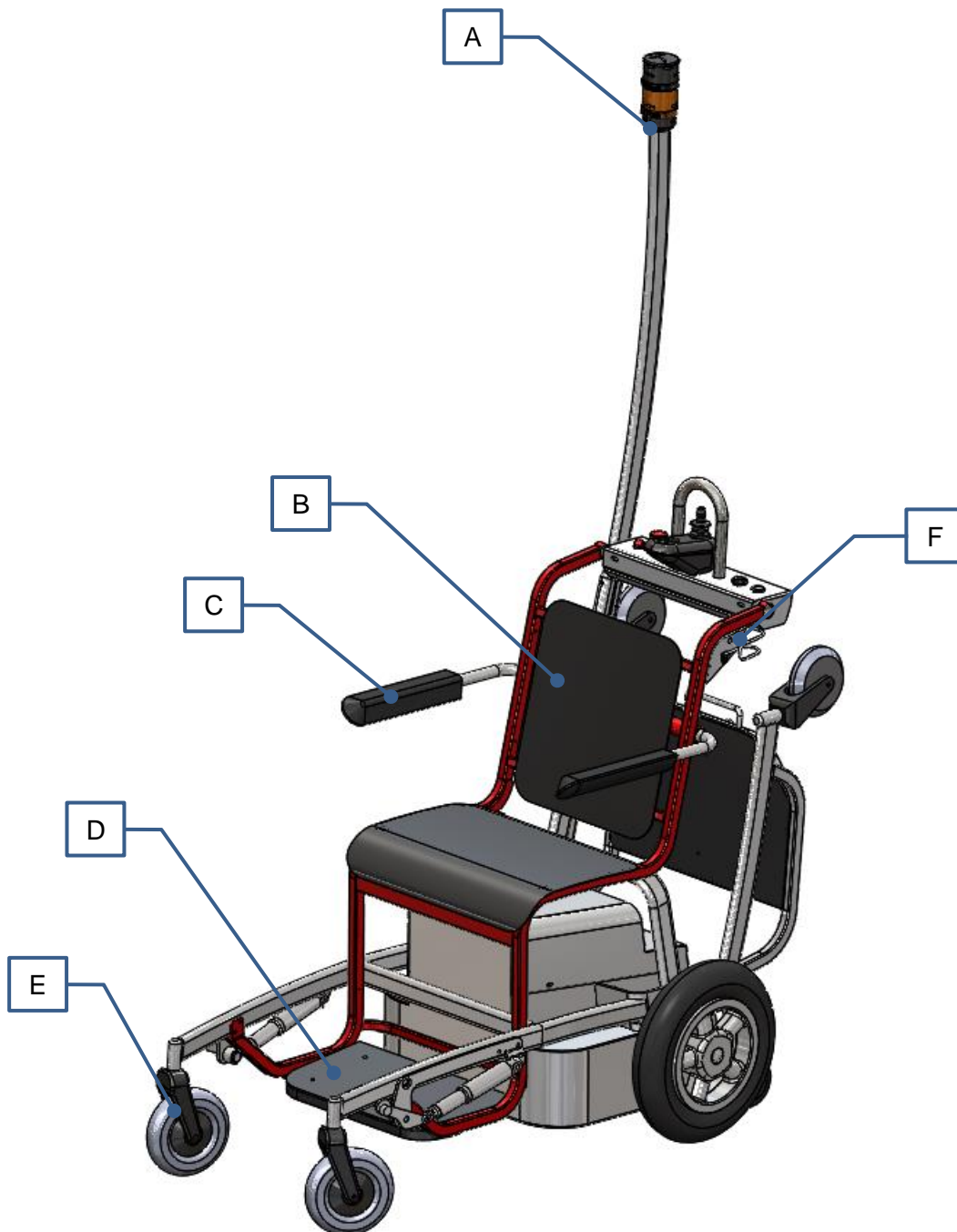
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4. Secondary user: Cleaning person

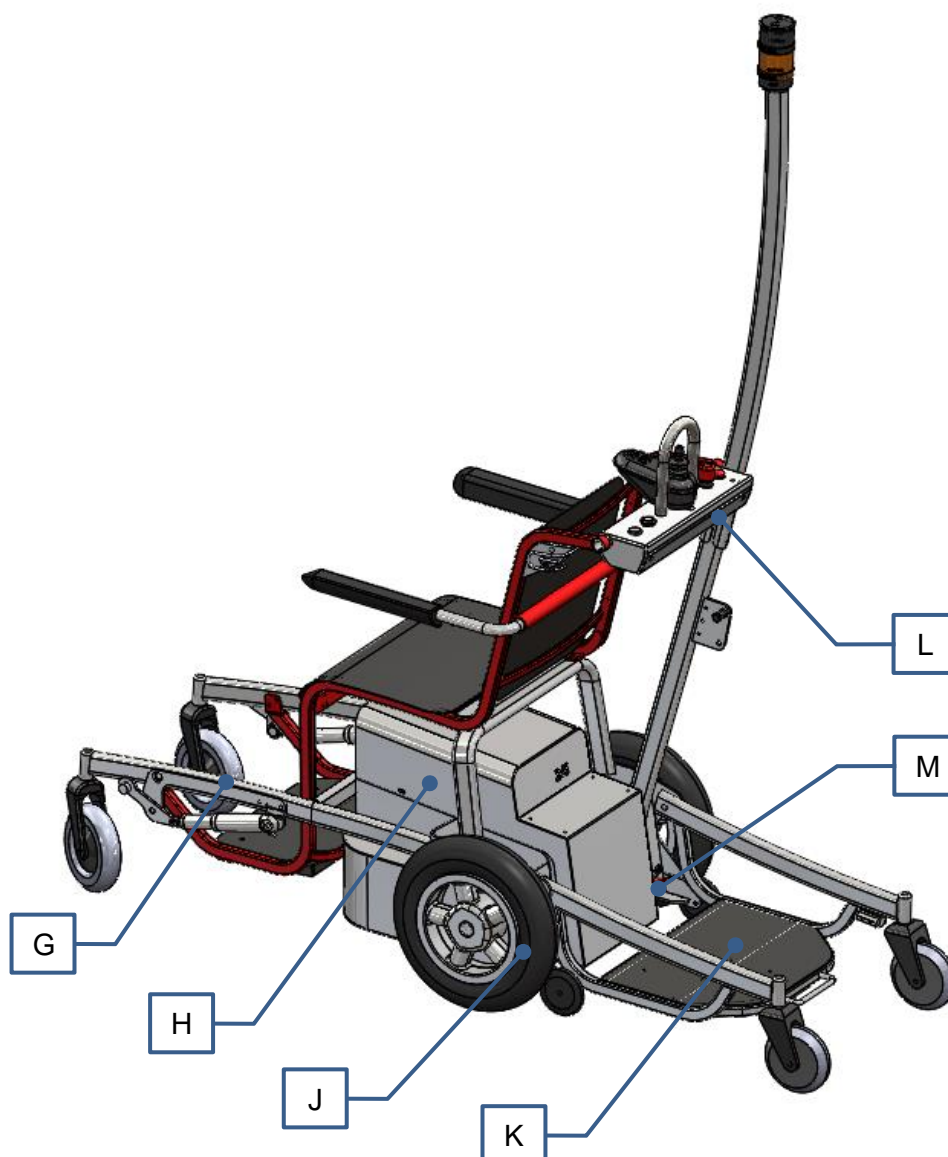
Is responsible for cleaning the device in a correct way.

Expertise and training: No special training or education is necessary. It is important that the cleaning instructions, described in this user manual, are followed to ensure proper functionality and lifetime.

2.4 Overview of the device



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Ref.	Description
A	Signal pole
B	Passenger seat
C	Passenger arm rest
D	Passenger foot rest
E	Front swivel wheels
F	Walking stick holder
G	Electronic chair coupling (optional)
H	Base frame
J	Electric driven wheels
K	Operator foot board (optional)
L	Control panel
M	Location of main switch and fuses

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2.5 Configurations





The e-Mobby is available in two major versions and multiple options or customizations. Also, software wise several customer specific configurations are applicable.

2.5.1 Major versions

The main difference between the two available versions is the power supply:

- Version A: Power supply by a lead acid sealed battery accompanied by a matching built-in charger. This is the standard version for the e-Mobby.
- Version B: Power supply by a lithium ion battery accompanied by a built-in matching charger. This battery has more capacity (thus requires less charging) and is more suitable for opportunity charging compared to the lead acid sealed version.

The main difference between the two versions is within the enclosure of the e-Mobby. Nevertheless, indicators identify the version:

Version A (Lead Acid):	Version B (Lithium Ion):
Battery indicator:	
	
Charger indicator:	
	

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2.5.2 Customizations

Besides the choice in power supply, the e-Mobby is highly configurable to customer needs. The following summary gives an overview of the available customizations:

- Customer specific color of the body parts
- Customer branding
- Type of seat; perforated panels (standard) or upholstered seats
- Customer specific notifications while operating the e-Mobby (e.g. drive sounds, additional horn, visual signals)

2.5.3 Options

The e-Mobby has different options to complement the product and making daily use of the e-Mobby even more convenient. The following options are available:

- Foot board for operator
- Wider passenger's seat base, making the e-Mobby suitable for larger passengers
- Unbreakable polycarbonate luggage cradle
- Electric powered lifters (for lifting a Mobby to couple in front of the e-Mobby)
- Towing bracket for luggage cart

2.6 Accessories

For the e-Mobby, the following accessories are available:

- Luggage cart, to be towed behind the e-Mobby using the accompanying towing bracket underneath the foot board. This luggage cart has a capacity of about 3 cabin size suitcases.
- Mobby, which can be coupled in front of the e-Mobby with a maximum of two Mobby's to transport a total of three passengers.



NOTE:

Please contact Special Mobility or your local reseller for detailed information about the application and limitations of these accessories.

2.7 Commissioning

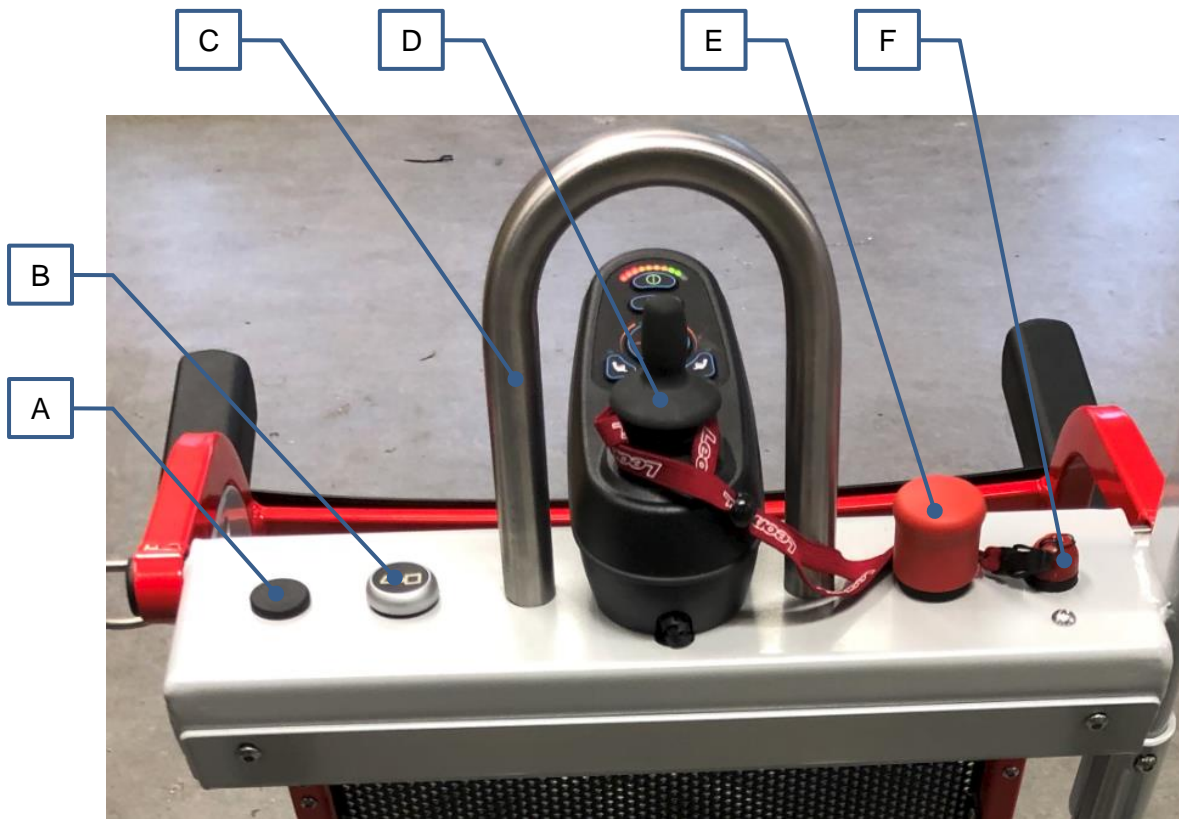
Commissioning of the e-Mobby must be done by the service technician. Instructions for this activity are available in the technical manual (see TM0002).

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3. Operating instructions

3.1 General overview operator controls and functions

As addition to the overview of the e-Mobby (see §2.4) below a sum up of the applicable controls for the operator. These controls are explained further on in this manual.



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G



H

J

K

Ref.	Description	Explanation
A	Position for battery indicator	Only applicable in case of Li-ion batteries
B	Horn	For operating the additional installed horn
C	Stainless-steel grip	For extra support while controlling and driving
D	Control panel	For operating and driving the e-Mobby
D1	Battery indicator	Only applicable in case of lead acid batteries
D2	Power button	For switching on the drive system
D3	Horn	For operating the internal horn of the control panel
D4	Speed indicator	Shows the set maximum speed limit
D5	Speed down button	For decreasing the maximum speed
D6	Speed up button	For increasing the maximum speed
D7	Activating lifting device	For electric lifting-unlocking coupled Mobby (optional)
D8	Activating lifting device	For electric lifting-unlocking coupled Mobby (optional)
E	Emergency stop	For shutting down the e-Mobby in case of an emergency
F	Dead man's button	For shutting down the e-Mobby in case the operator falls off

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G	Charger cable with strain relief	For charging the batteries. Plug type and connection value may vary depending on country
H	Kill switch	For cutting off the power and physically separating the battery connection with the system
J	Thermal fuse	For protecting the drive motors in case of overheating
K	Fuse	For protecting the sound and visual signals located on top of the pole

3.2 Switching the e-Mobby ON and OFF

To switch on the vehicle, follow the steps below:

1. Make sure the emergency stop is not active (pulled out).
2. In case the charger is connected to mains, unplug the connector and store the connector in the available space within the enclosure.
3. Make sure the dead man's button is positioned onto the dedicated terminal.
4. Push the power button located onto the control panel to initiate the drive system.
5. Once initiated, the indicator lights on top of the control panel are continuously on.
6. The e-Mobby is now ready to drive, a flashing beacon combined with an audible signal indicates that the device is ready for use.



NOTE:

In case of a Li-ion version, the separate battery indicator may be activated to check the battery level. A detailed explanation can be found further on in this manual.



WARNING:

The vehicle may only be activated and driven by skilled and authorized operators or service technician.

Switching off the vehicle can be done in the following ways:

- A. Push the power button located at the control panel.
- B. Remove the dead man's button from the terminal, the drive system switches to a locked condition and will shut down after x minutes (depending on the set parameters).
- C. Push in the emergency button.
- D. Kill the power by operating the main switch.



CAUTION:

Option "D" is not recommended for shutting down the vehicle and -in rare cases- may cause damage to the drive or power system.

NOTE:



The timer for switching off the vehicle is an adjustable parameter and is normally set to ± 2 minutes. In case of doubt please consult your service technician or reseller for the correct value.

3.3 Driving conditions

Besides switching on the e-Mobby, several conditions must be met before the operator can drive:

1. The drive system is fully initiated and active
2. The dead man's button is present onto the terminal
3. All lights on the control panel are continuously on

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If all conditions as described above are met, the operator can drive the e-Mobby.

**NOTE:**

When driving the e-Mobby, along with the flashing beacon a (predefined) audio signal plays continuously to notify bystanders.

**NOTE:**

The drive system is equipped with a brake function which is enabled if the e-Mobby is not moving. Once the operator activates the joystick for moving forward or backwards, the brake is released.

**NOTE:**

If -despite all conditions are met- it is not possible to drive the e-Mobby, please contact your local reseller or service technician.

**WARNING:**

While driving always hold on to the stainless-steel grip and do not compromise the balance of the e-Mobby to maximize a safe condition for the operator.

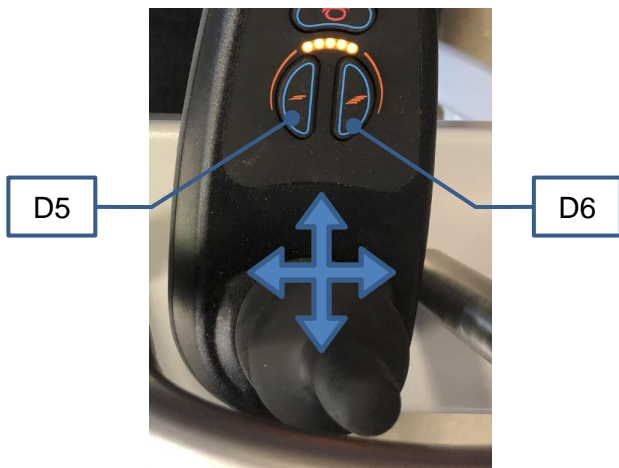
**WARNING:**

Always wear the band of the dead man's button around your wrist while driving!

**WARNING:**

Before using the e-Mobby, always perform an overall check if the device is undamaged and fully functional. If this is not the case, label the vehicle as "out of order" and contact your local reseller or service technician.

3.4 Driving the e-Mobby



Driving the e-Mobby is very straight forward and is done with the control panel as shown in §3.1.

Start by selecting the desired speed with the buttons D5 & D6. The lights above these buttons represent the set speed. The more lights are on, the higher the maximum speed.

Move the joystick in the desired direction and the e-Mobby starts driving. The joystick is springloaded and always returns to its 0-position so when the joystick is released, the e-Mobby automatically breaks.

**NOTE:**

There is a small delay in the response of the drive system once the joystick is operated. Take this into account when controlling the e-Mobby.

**NOTE:**

Driving backwards is always done at a lower speed, despite the speed setting.

**CAUTION:**

When releasing the joystick, the e-Mobby does not instantly stop but decelerates the speed to zero. Consider that the e-Mobby drives for a certain distance -depending on the set speed- before it completely stops.

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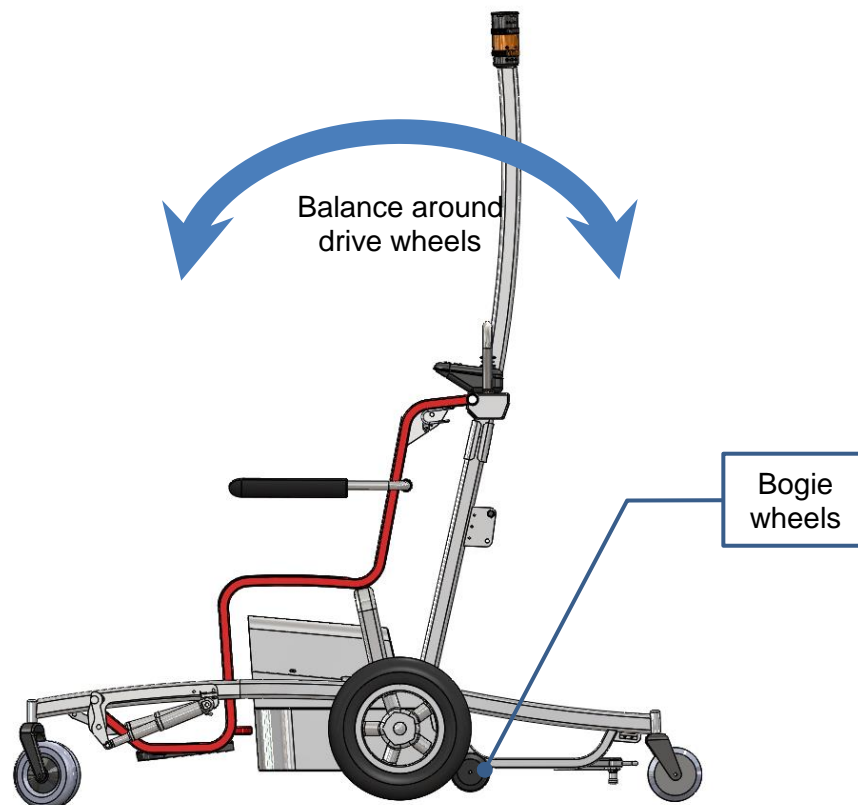


WARNING:

The operator remains responsible for a safe use of the e-Mobby for not only passenger(s) but also the surroundings. Always drive in a defensive way and anticipate to avoid accidents or injuries to persons!

3.5 Balance

The e-Mobby has the best stability when a passenger is seated, when driving without a passenger make sure to balance the e-Mobby in order to have maximum control. When leaning too much backwards, the front wheels may lose contact with the floor. The e-Mobby contains additional bogie-wheels to avoid tilting backwards.



3.6 Operating the e-Mobby features

The e-Mobby contains several standard and additional features which are explained in this paragraph.

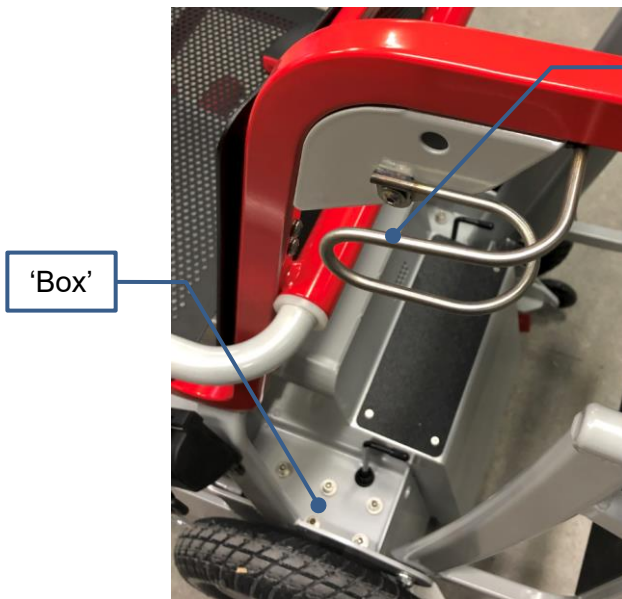


NOTE:

Some explained features may not be applicable for your version of the e-Mobby.

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3.6.1 Walking stick holder



The walking stick holder is a standard feature and can hold up to two walking sticks, depending on size. The holder is placed at the left side of the e-Mobby (seen from operator perspective).

Place the foot of the stick in the 'box' as indicate in the picture at the left and hook the upper part of the stick in the dedicated bracket. Repeat in case of two walking sticks.

3.6.2 Operator foot board (optional)

For more convenience, an optional footboard covered with a non-skid material for the operator is available. The operator does not have to walk behind the e-Mobby but can stand on a platform. In case this is not required, the platform is folding.

For lowering the foot board, pull the spring-return knob while holding the foot board with the other hand (see pictures below). Gently lower the board until the swivel wheels touch the ground. You can now stand on the foot board and drive the e-Mobby.

Folding the foot board is done in reverse order. Gently pull up the foot board and lift it up until it 'clicks' behind the springloaded knob. The foot board is now locked and folded.



Foot board in folded position

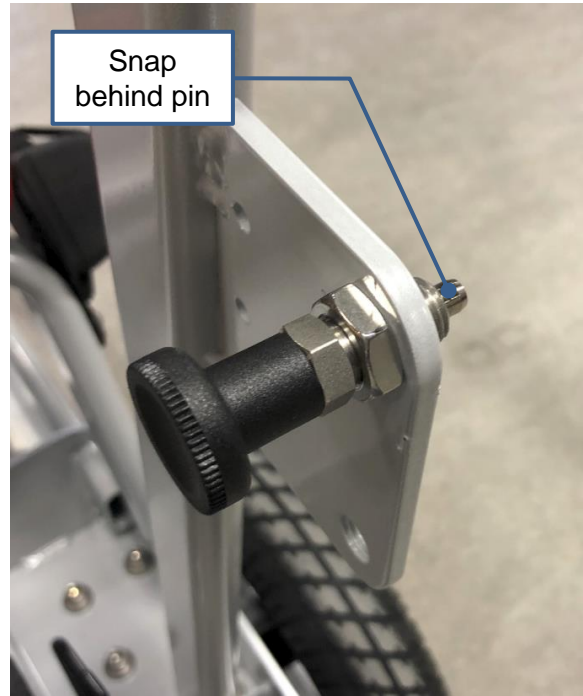


Pull knob and gently lower foot board

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Foot board in lowered position



Springloaded knob; when lifting the foot board, it snaps behind the pin of the knob



WARNING:

Make sure you gently lower the foot board by hand. Dropping the foot board may cause serious injuries when dropped onto a limb!



CAUTION:

(Accidentally) dropping the foot board may cause damage to the structure and/or swivel wheels. Always gently lower the foot board by hand.



CAUTION:

Although the foot board is covered with a non-skid material, make sure the surface is clean and undamaged before use. A slippery or dirty surface may result in losing grip and thus falling from the foot board.

3.6.3 Wide seat base

The standard version of the e-Mobby contains a chair base, suitable for most passengers. In case transport of larger passengers is required, a different chair base with a wider frame is available. This does not compromise the functionality of the e-Mobby.



NOTE:

The wider seat base results in a larger total width of the e-Mobby. Take this into account when driving the e-Mobby, especially when driving in narrow spaces.

3.6.4 Luggage cradle

At the backside of the enclosure, an optional luggage cradle can be mounted. This cradle is made of unbreakable polycarbonate and can hold one piece of cabin-sized luggage. It is designed in such a way that it can be combined with the optional foot board:

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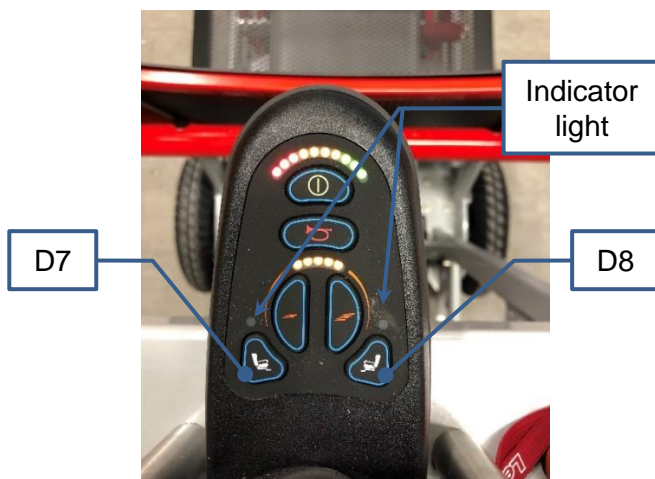
NOTE:

Make sure the stored luggage stays in place while driving the e-Mobby to avoid damage to the luggage and/or e-Mobby.

3.6.5 Electric powered lifters

The e-Mobby works with the patented Mobby-system to easily connect Mobby with each other. Normally, this action is done manually, but for the e-Mobby this can be done by actuators. The regular fixture is replaced by an actuator-mechanism which electrically lifts a Mobby. Operating the lifters is done as follows:

1. Make sure the e-Mobby is activated and at a standstill
2. Activate the actuator control by pressing button D7 or D8; the indicator above the knobs turns orange, driving function is disabled.
3. Use the joystick to operate the actuators, pushing forward lifts the fixture, pulling backwards lowers the fixture thus releasing the docked Mobby.
4. Pressing one of the speed control buttons de-activates this function and activates the driving function.



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Lifters down



Lifters up



NOTE:

Docking a Mobby in front of the e-Mobby is explained in further on in this manual



CAUTION:

Pinching hazard; always check if everything is clear before operating the lifters

3.6.6 Towing hook for luggage cart

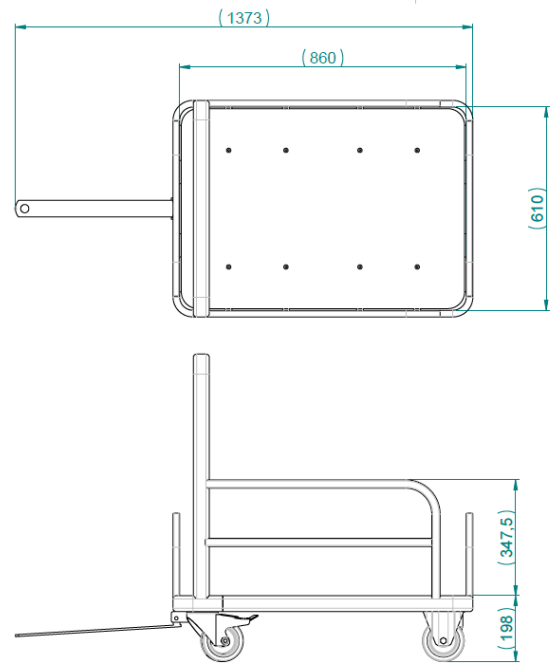
This option requires the foot board as described in §3.6.2. A towing hook can be mounted underneath this foot board for towing a luggage cart. The pinion of the towing hook fits the Special Mobility luggage cart. This cart can hold up to three pieces of cabin sized luggage.

Lift the footboard a bit to position the pinion above the hole of the luggage cart tow bar. Gently lower the pinion until it snaps in the tow bar. You can now drive with the luggage cart attached to the e-Mobby. Decoupling the luggage cart works exactly the other way around.



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3D impression of luggage cart



3.6.7 Passenger seat

Standard, the seat for the passenger is made from low-maintenance perforated panels. As an option, these panels can be exchanged by upholstered panels which give more comfort to the passenger. Below two pictures showing both options:

Perforated seat panels



Upholstered seat panels



NOTE:

The holstered seat gives more comfort but may also be more subject to wear than the perforated option.

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3.6.8 Miscellaneous customizations

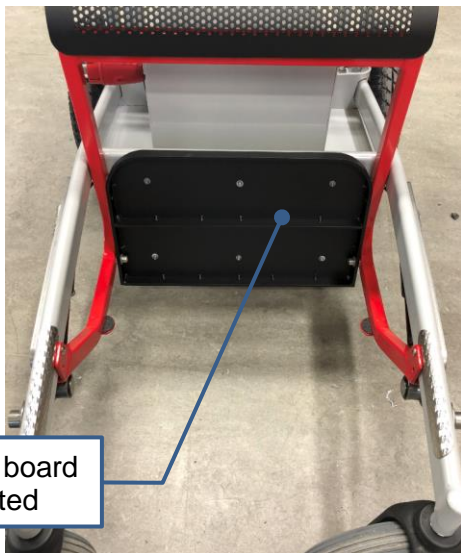
Besides the described options, several customer-specific customizations may be applicable. Since it may vary for each user, these options are not fully explained in this manual. One can of the following:

- Specific colorization
- Customer specific branding
- Specific charger cable
- Specific drive sounds and/or notifications
- ...

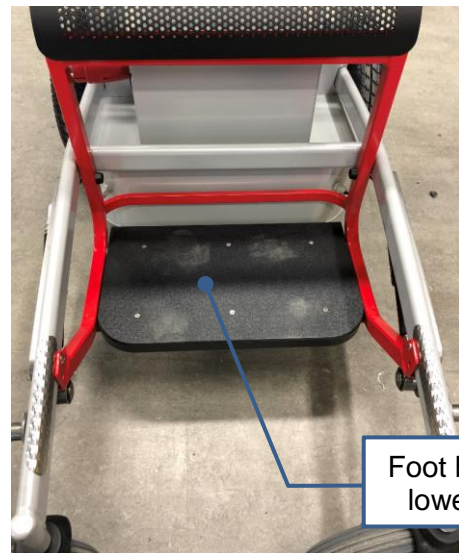
3.7 Positioning of the passenger

Positioning the passenger is a straight forward procedure. The e-Mobby has some features to make sitting down more convenient. One way is to let the passenger stand between the two front wheels with the face facing front. If needed lift the passenger foot board (see pictures below). Guide the passenger while sitting down and make sure to fasten the seatbelt. If applicable, lower the foot board.

The other way is to lift an armrest (both left and right can be lifted) so that the passenger can sit down from the side of the e-Mobby. After sitting down, the passenger can face forward, the armrest can be lowered. Once seated, fasten the seatbelt.



Foot board
lifted



Foot board
lowered



Arm rest
lifted



Arm rest
lowered

Seat belt

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WARNING:

Always make sure to guide the passenger while taking a seat. Make sure that all limbs, clothes and luggage of the passenger stay within the e-Mobby's enclosure to avoid serious injuries.



CAUTION:

Make sure the passengers wear their seatbelt for their own safety. If applicable, make sure the luggage is properly secured before driving.

3.8 Docking a Mobby

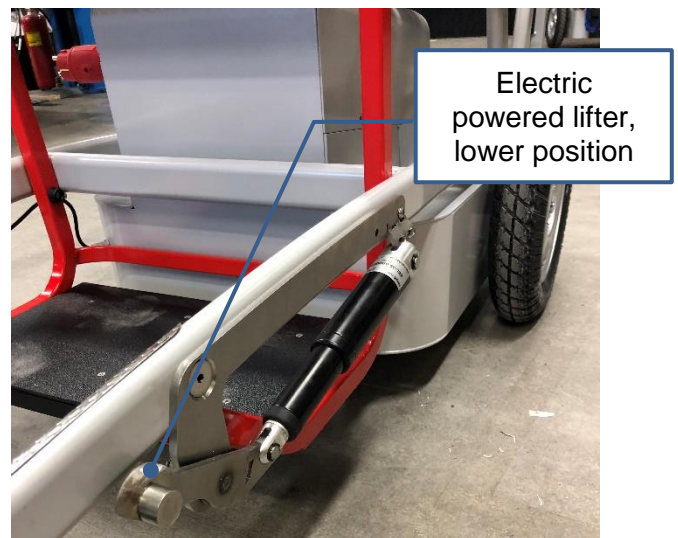
As mentioned in this manual, the e-Mobby can hold up to two Mobby's in front. Positioning the passenger onto the Mobby is the same procedure as for the e-Mobby. For linking the Mobby's, proceed as follows:

3.8.1 Manual docking

1. Position an empty Mobby in front of the e-Mobby (or other Mobby) and make sure the fixture is just in front of the lifting knobs.
2. Use the handle at the back to lift the Mobby and slide-pull the Mobby backwards until the fixture is positioned over the knobs. The rear wheels of the Mobby are now cleared from the floor.
3. Seat a passenger onto the docked Mobby according to §3.7 and repeat again to dock a second Mobby.

3.8.2 Electric powered docking

1. Make sure the electric lifters are in lower position (see §3.6.5)
2. Position an empty Mobby in front of the e-Mobby and make the sure the fixtures are above the knobs of the lifters
3. Operate the electric powered lifters to lift the Mobby and make sure the lifters are fully in upper position. The rear wheels of the Mobby are now cleared from the floor.
4. Seat a passenger onto the docked Mobby according to §3.7 and follow the procedure in §3.8.1 to dock a second Mobby.



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Mobby fixture
in front of
lifting knob



CAUTION:

Before driving, make sure the docked Mobby (or Mobby's) are properly fixed and their rear wheels do not touch the floor.



NOTE:

The Mobby can be docked while a passenger is seated onto the e-Mobby, but when possible dock the Mobby onto an empty e-Mobby for more convenience.



NOTE:

Take into account that docking one or two Mobby's onto the e-Mobby influences the driving behavior of the e-Mobby.

3.9 Charging the batteries

The e-Mobby is equipped with a built-in charger, dedicated for charging the battery pack. The charger cable contains a country-specific plug and fits a regular wall socket.

Follow the steps below for charging the batteries:

1. Switch off the e-Mobby (see §3.2).
2. Make sure the main switch is switched on.
3. Pull out the charger cable from the retractor and plug the connector into the wall socket.
4. The battery indicator switches on and shows the charge status of the battery pack. See §2.5.1 for the location of the indicator.

To stop charging, unplug the connector and pull the cable a bit until the retractor takes in the cable. You can now activate and drive the e-Mobby.



CAUTION:

Before charging, always make sure the e-Mobby is shut down according to the regular procedure. If this is not the case, restart the e-Mobby and shut down as instructed before charging the batteries. NEVER charge the e-Mobby with a deviated shutdown procedure!



CAUTION:

Only if your e-Mobby is equipped with lead acid batteries: To keep the battery pack in an optimal status, always perform a full charging cycle, avoid partial charging of the batteries.

CAUTION:

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Before charging, always check that the charger cable and plug are undamaged. If this is not the case, label the e-Mobby as “out of order” and contact your service technician or local reseller. NEVER charge the vehicle with a damaged charger cable!



NOTE:

While charging, all controls are blocked to avoid accidental use of the e-Mobby. Once the charger cable is unplugged, the controls are released and regular procedures can be used to activate the e-Mobby.



NOTE:

Charging the batteries eventually reduces the total capacity of the battery pack. This is normal behavior and unavoidable. Please follow the charging instructions to minimize wear of the battery pack.

4. Safety statement

The e-Mobby is a product, specially designed for the transportation of persons in an indoor environment. The device has an A-class drive and safety system which work seamless together. Although Special Mobility put all their effort in delivering a quality product, the operator is responsible for using the e-Mobby in a correct way and may never fully rely on the safety facilities.

5. Maintenance and cleaning

5.1 Cleaning

Is required, first use a brush to remove the large particles and/or dirt. Next it is recommended to clean the e-Mobby with a damp cloth. The use of general available cleaning agents is permitted, do not soak the vehicle with fluids.

5.2 Precautionary safety measures

In case there are structural damages to the device or situations which may lead to injuries, kill the power supply by operating the main switch. Remove the key and label the vehicle as “out of order”. Have the vehicle repaired by an authorized service technician or local reseller prior to further use.

5.3 Regular maintenance, trouble-shooting

Service and maintenance may only be performed by an authorized service technician. See the technical manual for further details.

5.4 Brake override

In case the e-Mobby enters an error state or malfunctions, there is a facility to manually move the device. The e-Mobby has two drive motors, where each motor has a release lever to override the internal brake. Turn both levers towards the indicated position (see pictures below). Once in the correct position, you are now able to manually push the e-Mobby to a safe place.

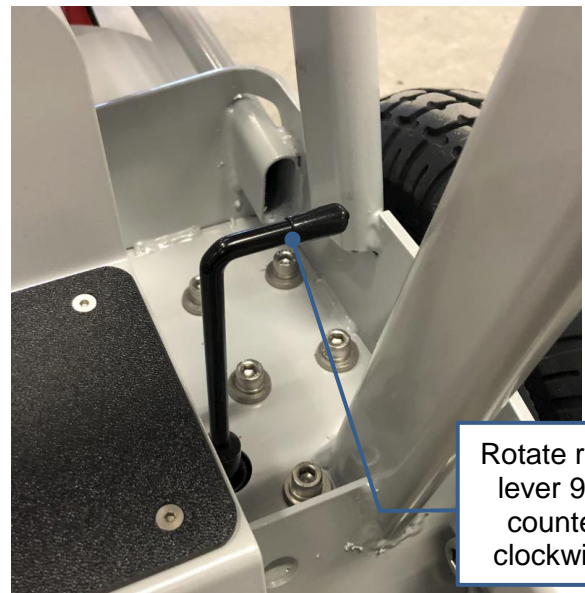
User Manual e-Mobby



Normal position,
lever in drive
direction



Rotate left
lever 90°
clockwise



Rotate right
lever 90°
counter
clockwise



WARNING:

Never park the e-Mobby with released brakes on a slope or comparable surface. The vehicle may roll down the slope and cause serious injury to bystanders.



CAUTION:

Overriding the brake function disables the brake functionality in general. After manually moving the e-Mobby, make sure the brakes are activated again!

5.5 Thermal protection

It may occur that the drive motors are getting too hot. To prevent the motors from overheating, a thermal fuse is installed. If this fuse is activated, driving is blocked and a pin shows up at position J (see §3.1).

To reset this fuse, push the pin inwards and check if it stays in place. If not, the motors are still overheated. Wait for a while and try again. If this state persists, please contact the service technician or local sales representative.

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**CAUTION:**

Wait at least **20 minutes** before resetting the thermal fuse to make sure the drive motors are cooled down properly.

**CAUTION:**

Normally this problem only occurs in very rare cases. Please contact your service technician or local representative in case this problem occurs frequently to avoid severe damage to the drive system.

5.6 Signal protection

The e-Mobby has a dedicated pole for visual and audible signals for alerting bystanders. These signal indicators are protected by a fuse, located at position K (see §3.1). If these functions do not work, first check the fuse and if required, replace it with a new one or contact the service technician.

**NOTE:**

If replacing the fuse does not solve the problem, please contact the service technician or your local reseller.

6. Disposal

The e-Mobby contains many materials and substances which can be harmful for people and the environment. It should be taken care of once disposed.

The e-Mobby is marked with the following symbol:



Follow the local regulations regarding the disposal of the e-Mobby, containing electronic parts.

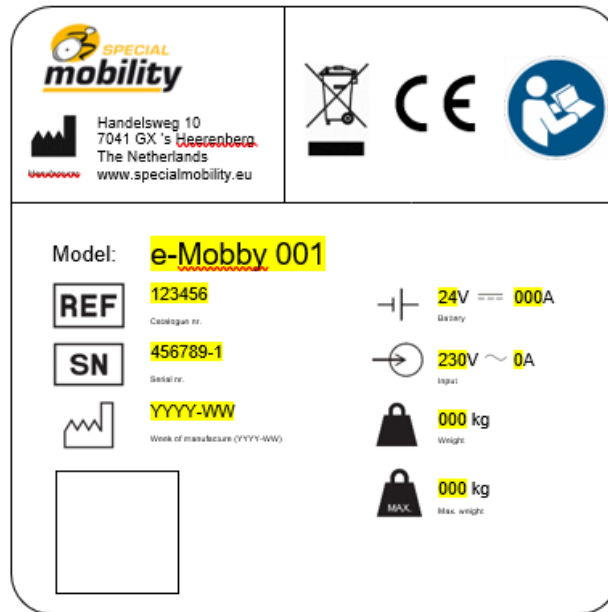
**NOTE:**

Dismantle instructions are available upon request, please contact Special Mobility BV or your local reseller.

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7. Product label and used symbols

7.1 Product label



NOTE:








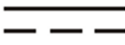

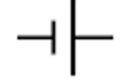




The product label as shown above is only representing the general layout and information. The yellow marked parts are variable and not representative for your vehicle. Please refer to the attached label onto your e-Mobby to retrieve the actual and specific information.

The product label is positioned at the left side of the cover:



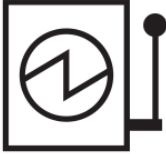



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7.2 Other used symbols

<i>Symbol</i>	<i>Description</i>
	Indicates the catalogue number
	Indicates the unique serial number
	Indicates the manufacturer of the device
	Indicates the date of manufacture
	Indicates that the instructions for use must be followed and read
	Indicates that the product is suitable for direct current only (internal)
	Indicates that the product is suitable for alternating current only (external)
	General symbol for battery
	Symbol for input terminal
	CE-mark, indicating that the product is compliant with the applicable CE-directive
	Indicates that the product is compliant with the WEEE-directive
	Indicates the weight of the product

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	Indicates the max. weight of the product
	Indicates that seat belts must be worn
	Indicates the position of the main switch
	Identifies the button for the horn

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8. Technical specifications

Specification	Description
Application	Motorized transportation of a person, not able to walk long distances in an indoor environment
Model	e-Mobby
Width	±700mm; ±760mm for XL-version
Height	±2000mm (incl. beacon light)
Length	±1400mm with foot board folded ±1800mm with luggage rack unfolded
Used materials	Steel, ABS, rubber, (optional: composition leather, foam)
Turning circle	1900mm, 360°
Empty weight	±150kg
Maximum weight	±300kg; ±450kg including operator onto footboard
Noise emission pressure	<70 dB(A)
Drive system	PG drives system, in combination with 2 electric motors à 750W, 24V
Brakes	Electromagnetic, embedded in motors (2x); manual mechanic override
Max. forward speed	8 km/h (standard setting)
Max. backward speed	2 km/h (standard setting)
Max. slope percentage	8%
Battery capacity	100A @ 24VDC (Lithium-ion batteries) 85A @ 24VDC (Lead batteries)
Charger capacity	25Ah (Lithium-ion batteries) 15Ah (Lead batteries)
Charger power consumption	±1980W (±220V * 9A); Lithium-ion battery charger ±880W (±220V * 4A); Lead battery charger
Max. charging time	±3,5 hours for Lithium-ion battery charger ±4,5 hours for Lead battery charger
Operation environment	Ambient temperature: 10 – 45 °C Relative humidity: 20 – 95%, non-condensing Atm. pressure: 750 – 1030 hPa
Storage environment	Ambient temperature: 0 – 50 °C Relative humidity: 20 – 95%, non-condensing Atm. pressure: 750 – 1030 hPa
Applicable standards	2006/42/EC Machinery Directive 2006/66/EG Battery Directive 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS2) 2014/30/EU Electromagnetic Compatibility Directive (EMC)