

EN Instruction manual

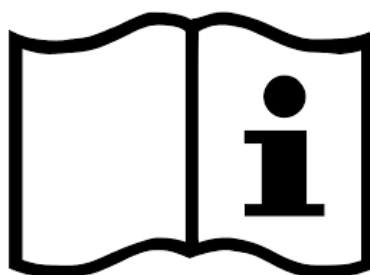


Height adjustable bariatric electric shower trolley

BARIA

3500.00





WARNING

**IT IS IMPERATIVE TO READ THE INSTRUCTIONS FOR USE BEFORE
STARTING UP YOUR SHOWER TROLLEY**

SUMMARY

CONTENTS

PAGES

FOREWORD

TERMS USED IN THIS USER MANUAL	2
LABELLING OF THE MEDICAL DEVICE	2

INTENDED USE

3

LIFETIME OF THE EQUIPMENT

3

SAFETY INSTRUCTIONS AND WARNINGS

4

DESCRIPTION

5

DIMENSIONS

6

TECHNICAL DATAS

7

OPERATION

UP/DOWN	8
PLATFORM TILTING	8
BASK REST	8
POSITION MEMORIZATION	8
CENTRALISED BRAKING / DIRECTIONAL GUIDING	9
LATERAL BARRIERS	9
EMERGENCY STOP	9
OFF-ON BUTTONS	10
LED INDICATION STATUS ON BATTERY	10
LED INDICATION STATUS ON THE HAND CONTROL	10
BATTERY CHANGE	10
BATTERY RECHARGE	11
ADJUSTING THE LENGTH OF THE MATTRESS	11

WIRELESS REMOTE CONTROL (3500.10 OPTION)

OPERATION	12
PROCEDURE FOR PAIRING WIRELESS CONTROL WITH THE RECEIVER	12
HOW TO CLEAR THE PAIRING FUNCTION ?	12

360° ELECTRIC WHEEL ASSISTANCE (3500.20 OPTION)

PRODUCT DESCRIPTION	13
IMPORTANT SAFETY INSTRUCTIONS	14
USE	15
USER INTERFACE ELEMENTS	15
PREPARATIONS	16
DRIVING	16
SIDEWAYS DRIVING	17
EMERGENCIES	17
BATTERY LEVEL INDICATION	18
CHARGING	18
KEY LOCK	19
IMMOBILIZER	19
TIMERS	19
AFTER USE	19
MAINTENANCE	19
SERVICE MODE	20
QUICK DEBUGGING GUIDE	21

USE OF THE SHOWER TROLEY

TRANSFER FROM A BED	22
FORWARDING OF A PATIENT	22
TOILET OF THE PATIENT	22

MAINTENANCE

DISASSEMBLING THE DRAIN PIPE	23
DISASSEMBLING THE MATTRESS	23

CLEANING & DISINFECTION

STORAGE & PRE-CLEANING	24
CLEANING	24
INTERMEDIATE RINSING	24
DISINFECTION	24
FINAL RINSING	25
DRYING	25

PERIODIC INSPECTION

26

MAINTENANCE FORM (LOGBOOK)

27

FOREWORD

TERMS USED IN THIS USER MANUAL :

CAUTION !

This is a security warning. Any misunderstanding or non-observance of this warning may result in injury to the operator or patient.

ATTENTION !

Failure to follow instructions may result in damage or malfunction to the equipment.

NOTE

Useful information on operation. Does not affect security

LABELING OF THE MEDICAL DEVICE



This logo indicates the name and the address of the manufacturer.



This logo indicates the date of manufacture of the equipment.



This logo indicates the reference of the equipment.



or These logos indicate the serial number or batch number of the equipment.



This logo indicates that the user must read the operating manual before commissioning.

INTENDED USE

This shower trolley is intended for patient transfers and showering.

The shower trolley is intended to be used in institutional environments such as hospitals, retirement homes, specialized homes, E.H.P.A.D., etc ...

The shower trolley is intended for indoor use only.

We disclaim any responsibility if the product is used, modified or assembled without respecting the instructions of the user manual.

All use of the shower trolley must be carried out by qualified and qualified persons having first read the user manual and warnings.

! We disclaim any responsibility if the product is used, modified or assembled without respecting the instructions of the user manual.

LIFETIME OF THE EQUIPMENT

BARIA shower trolleys are designed to have a service life of 10 years.

The batteries (for electric models) have a lifespan of 2 to 5 years depending on storage conditions, frequency of use and charging frequencies.

The wheels, hand controls, mattresses, pillows, drain pipes are wear parts and may require replacement during the life of the shower trolleys.

SAFETY INSTRUCTIONS AND WARNINGS

CAUTION !

Never use the device in an oxygen-rich environment or close to flammable products !

CAUTION !

Never leave the patient unattended !

CAUTION !

Always use the shower trolley on a flat, firm floor with a slope of less than 1.5 °

CAUTION !

Never use other electrical equipment near the device !

CAUTION !

Never exceed the maximum load capacity of use !

CAUTION !

Always check that the wheel brakes are activated before transferring the patient to the shower trolley !

CAUTION !

Always use the mattress made for this purpose !

CAUTION !

Never use damaged mattresses !

CAUTION !

Never position the patient at the platform end !

CAUTION !

Never place the patient in contact with the safety barriers during the toilet !

CAUTION !

Always check the temperature of the water before the patient's shower !

CAUTION !

Never obstruct the drain hole !

CAUTION !

Check that the safety barriers are locked to prevent the patient from falling !

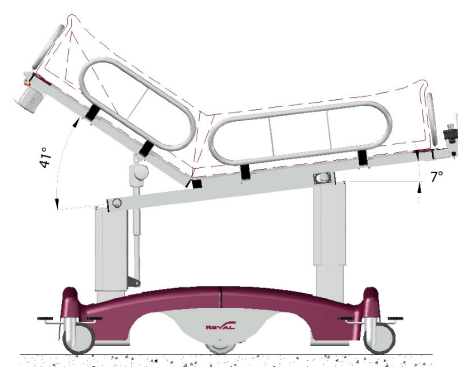
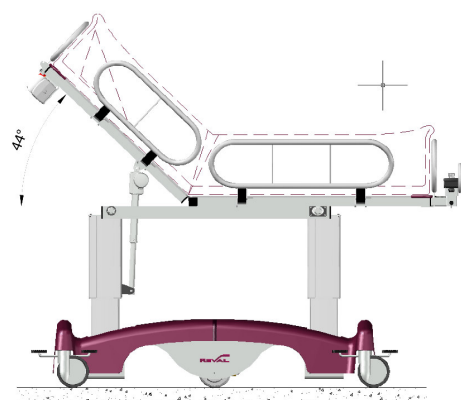
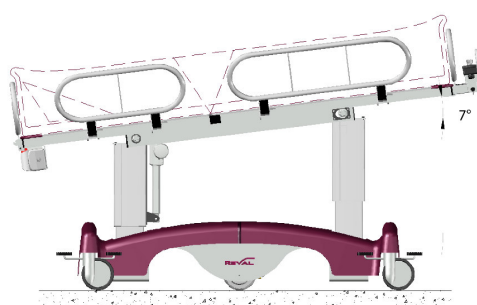
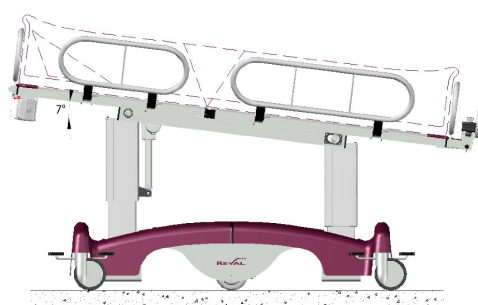
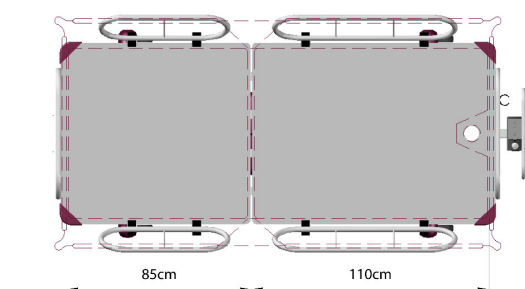
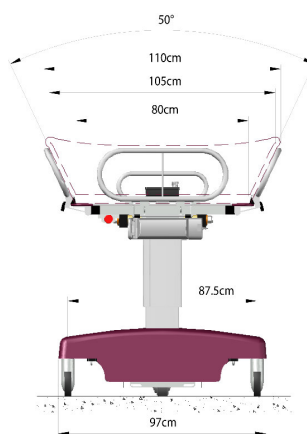
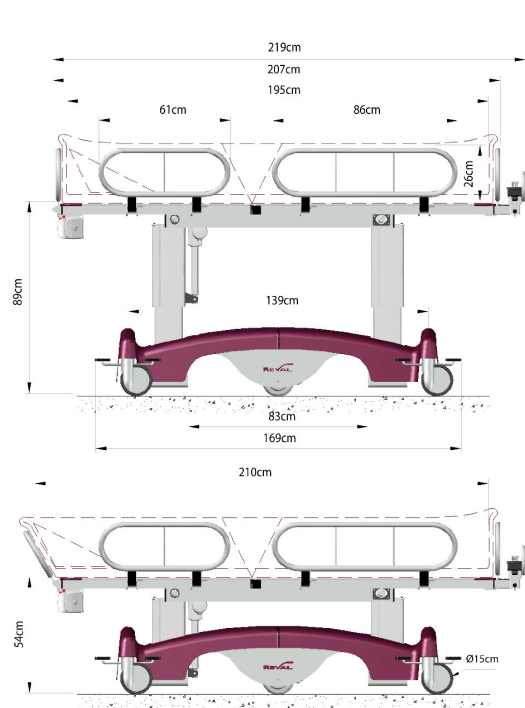
CAUTION !

To avoid injury to the patient or caregiver, at least two caregivers must be present at the transfer !

DESCRIPTION



DIMENSIONS



TECHNICAL DATAS

SPECIFICATIONS:

Chassis

- Aluminium & paint finished rolling chassis.
- ABS plastic chassis covers.
- x 4 Guiding and braking castors.
- Steering handle.

Platform

- x2 Articulating patient support sections in polypropylene.
- Stainless steel articulating hinges and fixations.
- x6 Stainless steel security side rails with locking functions.
- Tilting stainless steel head rail.

Mattress

- Soft PVC waterproof mattress designed for heavy usage, double thickness.
- Drainage outlet and waste water hose at foot end Ø40mm.
- Triangular headrest, in soft durable waterproof PVC material.

Electric components

- 24Vdc IPX6 rated variable height platform columns.
- 24Vdc IPX6 rated backrest actuator
- IPX6 Control module
- IPX6 10 function hand set with position memorization and charge indicators
- 5Ah / 24V Battery
- 24V battery and charger module.
- Emergency stop button.

Performances:

- SWL – Max load 350Kg
- Weight of appliance – 119Kg
- Weight of appliance including the electric wheel option – 141Kg
- Usage capacity - max 18 cycles @ 350Kg
- Usage capacity - max 26 cycles @ 260Kg
- Up/down speed 9mm/s @ 350kg
- Action radius of the electric wheel on full battery : 10 to 15km
- Max assisted speed with the electric wheel : 4.5km/h

Options & Accessories:

- 3500.10 10-button wireless remote + receiver + support
- 3500.20 «Effortless» 360 ° electric wheel assistance
- 3500.30 Additional battery
- 3500.40 Extra charger and base for batteries

Garanty:

- 2 years

Conformity:

- 93/42/CEE (Medical Equipment Directive)
- NF EN 12182 (Tech. support systems for less abled persons)
- ISO 14971 (Medical Devices – Application of Risk)

OPERATION

CAUTION !

Make sure that there are no obstacles under the platform when lowering or tilting the platform!

CAUTION !

Make sure that the side rails are raised and locked before changing the height!

NOTE

Check beforehand that the emergency stop is not engaged and that the battery is activated otherwise none of the controls will be active.

Unlock the emergency stop if necessary, for this turn the red button in the direction of the arrows.

UP/DOWN

To raise or lower the platform, press the buttons on the remote control.



PLATFORM TILTING

To tilt the platform forward or backward press the buttons on the remote control.



BACKREST

To tilt the backrest press the buttons on the remote control.



POSITION MEMORIZATION

The remote control is fitted with a position memorization system.
Three positions can be stored.

To memorize a position, press and hold simultaneously on the M and P1 buttons for 3 seconds.

The indicator light on the remote control will flash 3 times to confirm the memorization.



OPERATION

CENTRALIZED BRAKING / DIRECTIONAL GUIDING



Position « directional guiding »



Central position « free »



Position « braking »

LATERAL BARRIERS

To unlock a safety barrier, simultaneously rise the 2 safety black parts.
Once unlocked, the safety barrier can pivot down.



To lock a safety barrier, rotate it towards the up until hearing the automatic locking of black parts on the tray.



LOCKED POSITION



UNLOCKED POSITION

CAUTION !

Visually check that the black parts are in place: the black parts must be resting on the tray.

EMERGENCY STOP

An emergency stop button, located behind the backrest platform, allows to stop immediately all the electric functions of the device.

To unlock the emergency stop button turn it in the direction of arrows indicated on the button, then press on the button « ON » of the battery.



CAUTION !

This emergency stop is intended to stop the ascent, descent, and tilting functions of the platform.
This emergency stop does not stop the functions related to the electric wheel.

OPERATION

BOUTONS OFF-ON

To avoid any discharging of the battery, press the button OFF during more than 3 seconds as soon as the device is not anymore used.
To switch on the battery, press the button ON during more than 1 second.

LED INDICATION STATUS ON BATTERY

CONTINUOUS GREEN (slow flashing):> 80% capacity

FLASHING GREEN (slow flashing 1s / 1s): <80% capacity

FLASHING GREEN (long flash 0.5s / 4s):> 25% capacity

FLASHING ORANGE (long flash 0.5s / 4s): <25% capacity

OFF: <20%, under protection.

FIXED ORANGE: battery failure



LED INDICATION STATUS ON THE HAND CONTROL

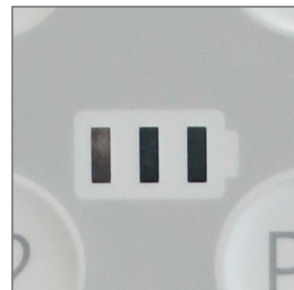
The remote control has two LEDs:

An LED indicating the use of the electric actuator (above the buttons of the remote control)
An LED indicating the state of charge of the battery (located at the bottom of remote control)

- 3 green bars : Battery above 75 %
- 2 green bars : Battery about 75 %
- 1 green bars : Battery about 25 %
- 1 orange bars : Battery inferior 25 %



When the charge state LED is orange, the battery needs to be reloaded.
Le télécommande de contrôle comporte deux voyants :



BATTERY CHANGE :

To remove the battery pack from its socket, press and hold the lock lever located and the top of the battery
Then slowly pull the battery pack towards you (heavy load).

To replace the battery, reposition the back of the battery in the control box.
Align it with the control box and fold it down completely.
A click must be clearly heard.



OPERATION

RECHARGE DE LA BATTERIE

To recharge the battery we must remove it from the control box and place it in a mobile charger support

1. Position the battery on its support.
2. Connect the charger plug to the socket.
3. The green LED next to the socket indicates that the power is turned on.
4. Connect the charger to a 230V outlet.
5. The light on the charger indicates the status of the battery.

● Orange LED : battery charging.

● Green LED : charged battery.

Charging time between 3 and 6 hours



CAUTION !

The charger must be connected only to an outlet with a voltage of 220/230 V located in a dry environment.

CAUTION !

The electric recharge of the batteries is prohibited in a bathroom.

NOTE

The battery is Lead-Acid , waterproof and maintenance free, it is charged on delivery.

A battery slowly discharges when not in use.

They must be stored and recharged at least every 6 months.

Because of the self-discharge according to the temperature the battery will lose little by little its power even without use.

The lower the storage temperature, the lower the self-discharge

Self-discharge of 25% at 20 ° C is achieved in 6 months

Self-discharge of 25% at 15 ° C is achieved in 15 months

Self-discharge of 25% at 30 ° C is achieved in 3 months

The life of this type of battery is optimized if it is frequently and fully recharged.

NOTE

In case of heavy use of the shower trolley, it is recommended to use two batteries; one in service and the other in recharging position.

ADJUSTING THE LENGTH OF THE MATTRESS

It is possible to increase the shower surface by adjusting the position of the head rail.

Raise the head rail and tilt it backwards in order to be able to move the triangular pillow.



WIRELESS HAND CONTROL OPTION (REF. 3500.10)

OPERATION

Wireless control can operate up to 5 to 7m from the receiver.

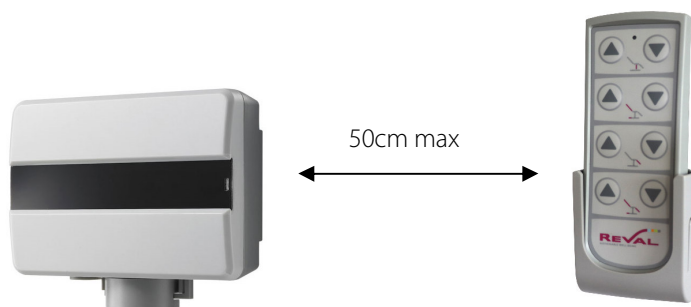
The communication protocol is IEEE802.15.4

The receiver has a socket for connecting a second wired remote control.

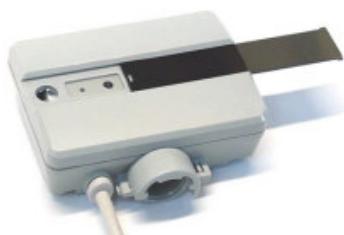
PROCEDURE FOR PAIRING WIRELESS CONTROL WITH THE RECEIVER

1°) Put two AAA batteries inside the hand control.

2°) Place the hand control and receiver together with the distance between them equaling less than 50cm.



3°) Open the cover of the receiver.



4°) Press the top buttons on the hand control together for five seconds, activating the pairing setting mode.



5°) Then, the LED on the hand control will blink for seven seconds.

If you do not successfully pair up within seven seconds, the pairing function will fail and exit automatically.

6°) Press and hold the pairing button on the receiver, and wait for the LED to blink twice. This indicates that the pairing procedure has successfully completed. Push back the cover of the receiver and make sure it fits properly.

HOW TO CLEAR THE PAIRING FUNCTION ?

Press together the buttons on the second line of buttons for seven seconds, then LED on the hand control will flash three times. After that, the pairing function is cleared. This procedure does not require the receiver.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

PRODUCT DESCRIPTION

Le système dispose d'une roue motrice électrique qui fournit une assistance électrique pour avancer, reculer et pour les déplacements latéraux. L'assistance électrique signifie que l'utilisateur exerce une certaine force pour pousser et tirer le chariot. Le système multiplie cette force pour entraîner la roue. Grâce à cette technique, le kit sensitif permet de déplacer des chariots de manière naturelle, que la distance soit longue, sur de la moquette, sur des niveaux différents ou des pentes ou avec des manœuvres dans des espaces réduits. Le chariot douche est ainsi déplacé comme s'il ne pesait que quelques kilos.

The systems feature an electric drive wheel that provides power assist drive functionality for forwards, backwards and sideways movement. Power assist means that the user uses some force to push and pull the trolley. The system multiplies these forces to drive the wheel. With this technique the system makes it possible to move trolleys in a natural way, whether the routes are long, on carpet, over thresholds, on slopes or while maneuvering in small spaces. Heavy trolleys are moved around as if they only weigh a couple of kilograms.



360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

IMPORTANT SAFETY INSTRUCTIONS

CAUTION !

Trolleys equipped with the system may only be used by professional, well trained and adult users aware of all instructions in this manual.

CAUTION !

When using the system, at all times stay focused on the task of maneuvering the trolley. Do not use the system when focus on this task is not possible for any reason or when using any medication for which it is advised not to use machines or participate in traffic.

CAUTION !

Make sure the intended route of the trolley is free of obstacles and people.

CAUTION !

Always ensure good sight in walking direction during movement of heavy trolleys.

CAUTION !

Adjust the speed of the trolley to a level that makes it possible to respond timely on (suddenly) oncoming people and obstacles.

CAUTION !

Make sure the intended driving path of the trolley is free of obstacles and people.

CAUTION !

Do not use trolleys with system on slopes exceeding a 6 degree angle. Trolleys must not be used on slopes unsuitable for unpowered pushing and pulling of trolleys.

CAUTION !

The system ensures that heavy trolleys can be maneuvered with much lower push and pull forces. Please make sure to adjust your driving style.
Activation of the system only requires minimal forces on the sensor handles. Avoid high and sudden push and pull forces on the sensor handles.

CAUTION !

Always switch the system off when the trolley is not in use or is left unattended.

CAUTION !

Make sure the system is not used in combination with other electrical or mechanical means for propulsion of the trolley. These may harm the components. When certain criteria are met towing of trolleys at low speeds (up to 10 km/h) is allowed. Please contact your trolley supplier for advice.

CAUTION !

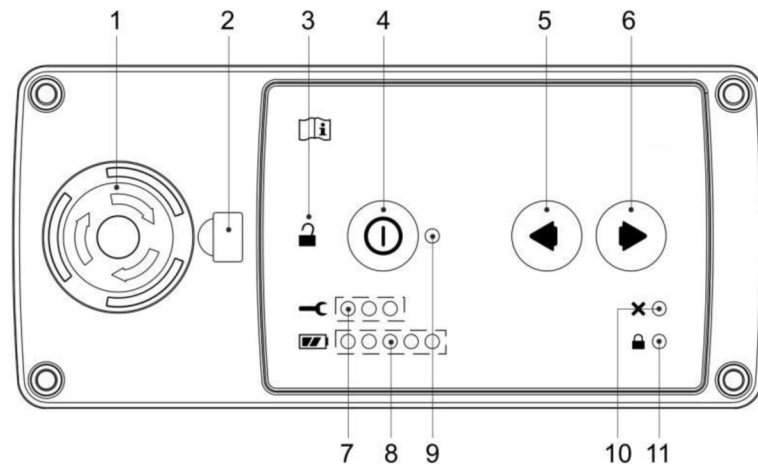
The system is controlled by sensitive sensors in the sensor handles. Ensure at all times that the sensor handles can move freely and no forces are exerted on it other than the forces required for the continued pushing of the trolley.
Prevent objects, to push against the sensor handles.
Do not hang clothes, bags, etc. on the handles. Take care that no objects are clamped between the sensor handles and other surfaces.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

USER INTERFACE ELEMENTS

The user interface panel for all versions is equal. Depending on the system version however, not all switches and indication lights are active. Indication lights are invisible when they are inactive.

Elements in below table can be identified.



1. Emergency switch (Active on all versions)
2. USB connector (Active on all versions)
3. Magnet key lock (Optional functionality, to be activated by the trolley supplier)
4. On/Off switch (Active on all versions)
5. Left docking switch (Active on the 360° versions)
6. Right docking switch (Active on the 360° versions)
7. Service indication (Active on all versions, but only lit in case of service errors)
8. Battery indication (Active on all versions)
9. System status indication (Active on all versions)
10. Immobilizer indication (Optional functionality, to be activated by the trolley supplier)
11. Key lock indication (Optional functionality, to be activated by the trolley supplier)

Indication lights can either be on, off or blinking. Blinking indications are provided in two different speeds. Fast speed is five blinks per second. Average speed is one blink per second.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

PREPARATION

The system is activated by pushing the on/ off switch briefly. At start up a short beep sounds. Directly after activation the system requires a few seconds to calibrate the force sensors inside the sensor handles. During this calibration the system status indication blinks green in average speed. When calibration is finished a second beep sounds and the system status indication changes to continuously lit green. The system is now ready for use.

CAUTION !

Before switching the system on, make sure that the sensor handles are completely free of external forces.

Prevent objects, such as cutlery or blankets, to push against the sensor handles.

Do not hang clothes, bags, etc. to the handles. Take care that no objects are clamped between the sensor handles and other surfaces.

In extreme situations such external forces during calibration may lead to unexpected behavior of the drive system.

NOTE !

Do not place your hands on the sensor handles immediately after activation of the system. The sensor handles shall not be moved or touched during calibration. If this happens the system will postpone calibration until the sensor handles are released. When calibration is postponed by more than ten seconds a warning beep sounds every two seconds. Remove hands or other objects from the sensor handles in this situation. The system status indication will continue to blink green until calibration is performed successfully.

In case calibration was not successful within one minute the system will switch to service error mode. See paragraph 'Service mode' for reference. The drive system is switched off. Failure of calibration may be caused by an external reason, as described above, but may also be caused by a failure in the sensor handle. Please contact your trolley supplier in case the error persists.

NOTE !

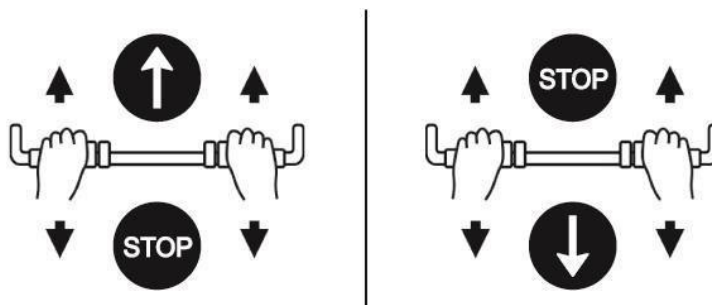
Please make sure the brakes of the trolley castors are released before use of the system.

DRIVING

Power assisted forwards and backwards driving of the trolley is done in the same manner as forwards and backwards driving of a trolley without assistance system. The power assisted drive is automatically activated by placing both hands on the sensor handle and pushing and pulling the trolley quietly forwards and backwards. Driving corners is done by applying more force with one hand than the other.

Power assisted driving is by standard maximized on a speed of 4.5 km/ h. For specific products this setting can be altered. Please contact your supplier for details.

The system will automatically brake and come to a stop within a few meters in case the sensor handle is released during driving. The trolley can also be actively braked by practicing force on the sensor handle in opposite direction of the direction of travel.



The trolley can be braked actively by practicing force on the sensor handles in opposite direction of the direction of travel.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

DRIVING (FOLLOWING)

The system also provides powered drive when moving a trolley up and down on slopes. In case a trolley is released on a slope it will brake and will gradually drive down slowly.

CAUTION !

Never use trolleys on slopes exceeding a 6 degree angle.

NOTE !

Always push and pull the sensor handles gently. In exceptional situations, if too much force is put on the sensor, the system automatically switches to service error mode and drive functionality is switched off. In this case the power assisted drive is switched off and service indication lights are lit. To reset the system in this situation the sensor handles shall be released and the system shall be switched off and on again.

SIDEWAYS DRIVING

The trolley can be maneuvered fully sideways. Make sure the trolley is standing still. Place the index finger on the left or right docking switch. Push the right switch to move the trolley to the right and push the left switch to move to the right. Hold the switch to drive the trolley with a slow constant speed. Use the hand that is placed centered on the trolley to guide the trolley while driving.



NOTE !

In case the trolley is still driving forwards or backwards, the sideways driving functionality will not work immediately. Pushing the docking switches will first actively brake the trolley to stand still before the trolley starts driving sideways.

EMERGENCIES

The system is equipped with an emergency switch. Pressing this switch immediately switches off power assist drive. The switch shall be used only when control over the trolley is lost.

After pressing the emergency switch all indication lights will start blinking in normal speed. The emergency switch can be unlocked by turning it clockwise. After unlocking, all indication lights will remain blinking. The system can be reactivated by pressing the on/ off switch briefly.

CAUTION !

The emergency switch is not a brake. The switch is intended to switch the drive wheel off. Any power assist drive or braking is immediately stopped and the drive wheel switches to free wheel mode.

Special notice shall be taken that this can lead to a sudden high increase in required push and pull forces when driving up and down slopes. Any active braking on slopes will also be stopped, causing the trolley to roll on through.

NOTE !

The emergency switch is subject to wear and is not designed for switching off the system. Only use the switch in case of emergency. Use the on/ off switch to switch the system off.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

BATTERY LEVEL INDICATION

The system is provided with an intelligent battery that provides sufficient capacity for over 15 kilometers of power assist drive. For these systems the battery indication on the user interface shows the approximate percentage of battery capacity left.

The battery indication consists of 5 lights; one orange, one yellow and three green. Below table shows the meaning of the various indications.

BATTERY INDICATION	REMARKS
	100%
	Immediate charging required

Battery indication is displayed only when the system is switched on

CHARGING

The charger for the motorized wheel is the same as for the batteries in the shower trolley.

Connect the charger to a power outlet and connect the other end to the charging plug located at the end of the cover.



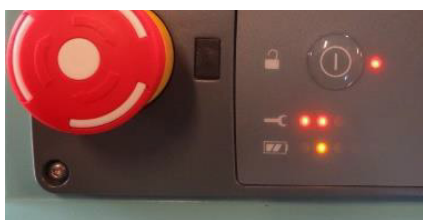
The battery provides power for up to 15 kilometers of driving. In most use situations this is sufficient for days of use.

NOTE !

It is strongly recommended to recharge the battery regularly for 8 hours continuously when only the first three battery lights remain on (red, orange and 1 green)



Charging of the battery can both be done with the system switched off and the system switched on. When the system is switched on during charging, a charge indication is showed and drive functionality will be switched off.



It is the charger light that indicates the charging progress.

Even when the battery is fully charged the drive remains disabled as long as the cart or charger is plugged into the outlet. It is essential to reset the system after each charge cycle by pressing the "On / Off" button

Charging a completely empty battery takes at least 8 hours.

It is advisable to charge the batteries overnight regularly.

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

KEY LOCK

Key lock functionality is optional. The function offers a simple way to block use of the drive functions by unauthorized personnel. Please contact your supplier for details on the status of this function on your system and options to activate or deactivate it.

When the key lock function is active, the system is automatically locked at start-up. The key lock indication is lit. When the sensor handle is pushed with the key lock in this state a beep will sound every two seconds and drive functionality remains switched off.

The key lock can be unlocked and locked in two ways, by pressing the hidden key lock switch or by using the optional key lock magnet. Press the hidden key lock button four times in a row to unlock or lock the system. Alternatively lock or unlock the system by holding the magnet for one second in front of the key lock icon.

When the key lock function is active the key lock will automatically lock when the system is not used for a certain period of time. By default, this time is set on five minutes. This default setting may have been altered for your system. Please contact your supplier for details.

IMMOBILIZER

An immobilizer function is optional. This function offers a simple way to prevent activation of the power assist drive when the trolley is not ready for use. Conditions can for example be that the trolley is on its mechanical brake or parts of the trolley are outside the trolleys wheel base.

Please contact your supplier to learn if, and for what conditions this function is activated on your trolley.

When the immobilizer is switched on the immobilizer indication will be lit. Power assist drive is switched off and a beep will sound every two seconds when the sensor handle is pushed.

TIMERS

Two timers limit operation when the system is not used for a certain period of time. A first timer deactivates the assisted driving. By default this timer is set to 5 minutes of inactivity. You must briefly press the on / off button to reactivate the assisted driving.

When the lock function is activated, the automatic timer for the lock function replaces the timer.

A second timer turns off the system completely. By default this timer is set to fifteen minutes of inactivity. You must perform a full restart to continue moving.

The default settings may be different on your cart. Please contact us for more information.

AFTER USE

Always switch the system off after use or when the trolley is left unattended. The system is switched off by pressing the on/ off switch for a second. All lights on the user interface will switch off.

MAINTENANCE

The sensor handles, user interface and drive wheel can be cleaned with a well-wrung wet cloth. Use an ordinary, non-abrasive detergent (pH 5.5-8).

Regularly check the axis of the drive wheel for accumulation of hair and dust. Carefully remove any windings from the axis

360° ELECTRIC WHEEL ASSISTANCE (REF. 3500.20)

MAINTENANCE (FOLLOWING)

CAUTION !

Regularly check the components for loose parts and wear. In case of any irregularities stop use of the system and contact your supplier.

CAUTION !

Always switch the system off before maintenance is carried out.

CAUTION !

Maintenance on the electrical system shall be performed by qualified service personnel only.

NOTE !

Avoid the use of aggressive detergents/ solvents and excess of water. The components are not designed for exposure to large amounts (jets) of water. The system is not suitable for machine washing.

NOTE !

Even when the system is not used, the battery slowly drains. A fully drained battery can get damaged. Such damage is excluded from guarantee. It is strongly advised to fully charge the battery at least every three months. Damage to the battery due to the battery not being charged for a long time can be monitored and is excluded from warranty.

SERVICE MODE

If the system encounters an error during use that cannot be automatically repaired it switches to service mode. Power assist drive is switched off, the system status indication will blink orange in fast speed and one or more service indication lights are lit.

The pattern of service lights represents a code for the cause of the error. Your supplier is trained to interpret these codes and solve any issues.

In case your system switches to service mode, first switch the system off and on again. Please contact your supplier in case the error persists or in case the error is noted frequently.

Your supplier may ask for the code of the service indication. Please use below table for reference.

SERVICE INDICATION	NUMBER	DESCRIPTION
	1	System error
	2	Pushbar error
	3	Interface error
	4	Drive error
	5	Steel error
	6	Battery error

QUICK DEBUGGING GUIDE

In case your system fails operation, perform following steps:

Check if the system is still switched on. The system switches off automatically when it is not used for a period of time. This period is set on fifteen minutes by default.

Make sure the sensor handle is not touched for a few seconds directly after starting the system. The sensor need some time for calibration. In case the sensor handle is touched during calibration the calibration will be postponed. If calibration is postponed for more than ten seconds a beep will sound every two seconds. If calibration failed for one minute the system will switch to service mode and a full restart is required.

Switch the system off and on again. Let the system reboot and check if the system operates normal again.

Check if the emergency switch is pressed. All lights on the user interface will blink if this is the case. The emergency switch can be unlocked by first turning it clockwise and secondly pressing the on/ off switch briefly.

Check the remaining battery power. If the orange light on the battery indication is blinking charging of the battery is required.

Check if the trolley is connected to the mains with a power cord or if the battery is connected to a separate charger. During charging the battery indication will animate as described in paragraph 'Charging' and power assist drive is switched off. Disconnect the power cord and check if the system operates normal again.

Check if one or more service indication lights remain lit after switching the system off and on again. If this is the case the system is switched to service mode and power assist drive is switched off. Please contact your supplier in case the error persists or in case the error is noted frequently.

Your supplier may ask for the code of the service indication. Please use the table in paragraph 'Service mode' for reference.

In case the system operates unexpectedly, perform following steps:

Switch the system off and on again. Let the system restart and check if the system operates normal again. Please contact your supplier in case the problem persists.

Check if the sensor handle can move forward and backward freely and make sure no objects are connected to or hanging from the handles. Remove any obstacles and check if the system resumes operation.

Please contact your supplier in case above steps did not solve the problem.

UTILISATION DU CHARIOT DOUCHE

1- TRANSFER FROM A BED:

- Fold down the safety barriers under the shower trolley, pivoting in the same time the both black parts.
- Bring the trolley at the level of the mattress of the bed.
- Bring the trolley near the bed, the mattress is partly on the bed.
- Interlock the brakes.
- Proceed to the patient's transfer.
- Raise the safety barriers and make sure they are locked.

CAUTION !

Check that the side safety barriers are locked to prevent the patient from falling.

CAUTION !

Check that the brakes are activated during transfer and shower operations.

CAUTION !

To avoid injury to the patient or caregiver, at least two caregivers must be present at the transfer.

2- FORWARDING OF THE PATIENT TO THE BATHROOM:

- Once the patient transfer made, put the pillow under the head of the patient.
- Unblock the brakes and separate the shower trolley from the bed.
- Rise the safety barriers engaging the 2 safety blocks.
- Proceed to patient forwarding.

CAUTION !

Check that the side safety barriers are locked to prevent the patient from falling.

CAUTION !

Check that the brakes are activated during transfer and shower operations.

CAUTION !

To avoid injury to the patient or caregiver, at least two caregivers must be present at the transfer.

3- TOILET OF THE PATIENT:

- Install the shower trolley in such a way that the draining located on the patient feet side be above:
 - or - a ground trap.
 - or - a shower cabinet, a bathtub, a bidet ...
- Lock the braking pedals so that the shower trolley is completely immobile.
- Adjust the height of the shower in such a way that the working conditions be optimized.
- Wash the patient. To wash one's hair, inverse the triangular pillow under the neck of the patient.
- Once the toilet finished, the patient can be dried and dressed on the shower trolley.
- Return to the bedroom is made on the same way than the forwarding to the bathroom.

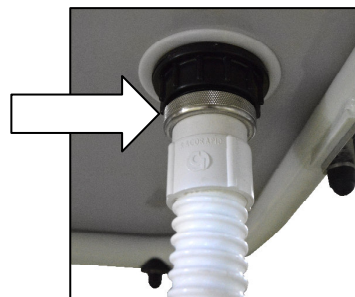
WARNING !

The side barriers are barriers of protection, on no account the patient has to take support above during the toilet.

MAINTENANCE

DISASSEMBLING THE DRAIN PIPE

To remove the drain hose, unscrew the nut by turning it in the direction counterclockwise.

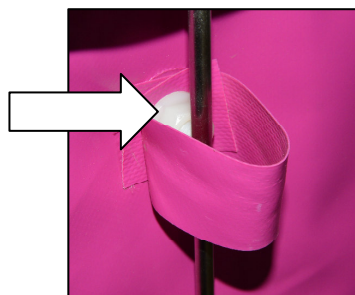


DISASSEMBLY OF MATTRESS

After removing the drain hose, unscrew the black plastic nut.



Then take off the straps holding the mattress at each end. For this, unscrew the white plastic nut.



CLEANING AND DISINFECTION

WARNING !

Before using a disinfectant, read carefully its instructions for use and its safety data sheet.

WARNING!

For safety reasons, always wear goggles and protective gloves when cleaning and disinfecting equipment.

WARNING!

Never clean and/or disinfect the equipment in the presence of a patient.

ATTENTION !

Always check the compatibility of the cleaning products with the equipment beforehand.

ATTENTION !

It is mandatory to clean and disinfect the mattress and tray of the shower trolley after each use.

1 – STORAGE AND PRE-CLEANING

Clear the work area.

Eliminate the largest visible and adherent dirt with a cloth soaked in hot water.

Use a brush if necessary.

Then blow hot water onto the mattress, the drain plug and the drain hose.

NOTE

Pre-cleaning is important because the removal of the coarsest soils can increase the effectiveness of the cleaning and disinfection products that will be applied later.

2 – CLEANING

Remove visible soil with a sponge and detergent. The detergent will facilitate the separation of the stains.

NOTE

The effectiveness of detergent will be increased if its temperature, concentration and time of action are optimized.

3 –INTERMEDIATE RINSING

For rinsing, use clear water.

Rinsing will remove residual stains, remove traces of detergent still present and promote the action of the disinfectant applied to the next step.

4 – DISINFECTION

NOTE

For the disinfection of the shower trolley, Reval recommends using a disinfectant based on Didecyldimethylammonium chloride.

This kind of disinfectant have a Bactericidal, Fungicidal and Virus action.

ATTENTION !

Do not use bleach or chlorine products.

The purpose of disinfection is to reduce the number of microorganisms remaining on surfaces and materials, including pathogens.

CLEANING AND DISINFECTION

4 – DISINFECTION

Spray the disinfectant on all parts of the mattress, tray, pillow, drain and drain hose.

Soak a previously disinfectant cloth and apply the following parts: shower trolley structure, safety barriers, hand control, battery, control box, tilt control ...

Let the disinfectant work following the instructions.

ATTENTION !

The action of the disinfectant will be effective only if the operator respects the action time.

5 – FINAL RINSING

The purpose of rinsing is to remove traces of disinfectant solutions.

Spray or spray water on the inside of the mattress, the drain plug and the drain hose.

ATTENTION !

Do not wash metal parts and electrical equipment with large amounts of water.

6 – DRYING

The purpose of drying is to avoid a new multiplication of micro-organisms that have resisted cleaning / disinfection operations and to limit corrosion.

Remove rinsing water, eg with rubber squeegees, disposable paper or disposable wipes to prevent the spread of micro-organisms.

PERIODIC INSPECTION

1) Periodic inspection of the shower trolley should be undertaken at the time intervals stated by the manufacturer, but at least once a year. By periodic inspection is meant a visual examination (particularly of the shower trolley's load bearing structure and lifting mechanism with attachments, brakes, controls, safety devices and person-support devices) and whatever function tests and maintenance measures may be required, e.g. adjustment of brakes, tightening of fasteners.

Every inspection should include a working load of one (1) lifting cycle with the maximum load.

2) Periodic inspection should be performed by a person who is suitably and properly qualified and well acquainted with the design, use and care of the shower trolley. The scope of the periodic inspection should be included in the manual supplied with the shower trolley.

3) Any observations of importance for the safety of the shower trolley should be noted, preferably in a logbook which should be retained by the person (s) responsible for the servicing/maintenance of the shower trolley.

The date when corrective actions are taken, in response to noted observations, should also be noted in the logbook.

4) A record of the date of inspection of the shower trolley and inspection result should be noted in the logbook together with the signature of the inspector.

Any detachable rigid body support units included in the inspection should be plainly marked for identification and noted in the logbook. The record should include the situation of use (home or type of institution etc...)

5) If periodic inspection reveals any defect, wear or other damage that jeopardizes the safety of the shower trolley, the owner should immediately be notified.

In the event of immediate danger to safety, the shower trolley should immediately be taken out of service. It may then not be used until the deficiency has been eliminated.

6) Defects and damages of importance to the safety of the shower trolley that have occurred between inspections and have already lead to corrective actions should be entered in the logbook.

7) Defects and damages should be reported back to Reval for action.

This feedback should be reported in the logbook.

MAINTENANCE FORM (LOGBOOK)

Control date	Reference of the sling	Tests (350kg)	Observations	Corrections	Agent (name and signature)



FRANCE :

Reval®

Z.A. Fief des Prises

Usseau 17220 Sainte Soulle

Tel: (33) 05.46.42.04.16

www.groupe-reval.com

UNITED KINGDOM :

Reval® Continuing Care Limited

Unit 17 Brynmenyn Busines Centre

St Theodore's Way - Brynmenyn

CF32 9TZ BRIDGEND - WALES

Tel: 01656 721 001

Fax: 01656 720 006

www.revalcc-co.uk