



SYNAGO ADJUSTABLE HEIGHT BED

727T0045



Instructions for installation and use

Translation of the original instructions

TABELLA REVISIONI

Revisione	Data	Note
0.0	15/11/2016	Prima edizione

CONTENT

1. GENERAL SPECIFICATIONS.....	7
1.1 Presentation of the manual	7
1.2 Customer support service	7
1.3 Conventions.....	7
2. GENERAL WARNINGS	8
2.1 Manufacturer.....	8
2.2 Intended use.....	8
2.3 Essential performance of the bed	8
2.4 Use environment restrictions	8
2.5 Life expectancy	8
2.6 Identification.....	9
2.7 Command identification	9
3. SAFETY	10
3.1 Safety standards	10
3.1.1 Definitions.....	10
3.2 General provisions.....	10
4. GENERAL DESCRIPTION	11
4.1 Description of the bed	11
4.1.1 Models	11
4.1.2 Name of the main parts	12
4.2 Technical features	14
4.2.1 Dimensional data	14
4.2.2 Electrical data	15
5. PUSH BUTTON PANEL/CONTROL	16
5.1 Free push button panel.....	16
5.1.1 Command lock from free push button panel (optional)	16
5.2 Control Box - commands locking device (optional code 82700018)	17
5.2.1 Control box command locking	17
5.3 Bilateral foot pedal (optional code 82700077).....	17
5.4 Supervisor control panel (optional code 82700067).....	18
5.4.1 Command locking from Supervisor	18
5.5 Command panels for 4 folding side rails kit (optional Code 82700087) 19	
5.5.1 Internal panel for patient use.....	19

5.5.2	External panel for caregiver use	20
5.5.3	Command locking from side rail command panel	21
6.	INSTALLATION	22
6.1	Transport and delivery	22
6.2	Lifting	22
6.3	Storage	23
6.4	Installation	23
6.4.1	Preparation for the installation area	23
6.5	Parts supplied control.....	23
6.6	Assembly	24
6.7	Assembling the collapsible side rails (code 7300007A)	24
6.8	Electrical connection	25
6.9	Functional testing.....	25
7.	OPERATION AND USE	26
7.1	Warnings	26
7.2	Safety position.....	26
7.3	Emergency positions	26
7.4	Moving the bed.....	29
7.5	Locking and releasing the bed	29
7.6	Alarm on castors for bed without brake (accessory 82700090).....	30
7.7	Courtesy light device (accessory 82700086 or included in side rail panels kit 82700087).....	30
7.8	Lifting and lowering the bed.....	31
7.9	Lifting and lowering the back section	33
7.10	Lifting and lowering the femoral section.....	35
7.11	Simultaneously lifting and lowering the back section and the femoral section (Autocontour)	37
7.12	Trendelenburg and Reverse Trendelenburg	39
7.12.1	Trendelenburg.....	39
7.12.2	Reverse Trendelenburg	41
7.13	Comfort position (chair).....	43
7.14	CPR totally resetting the positions to zero	45
7.15	Emergency Trendelenburg.....	46
7.16	CPR back release emergency device	47
7.17	Night safety position.....	48
7.18	Lifting and lowering the leg section	50

7.18.1 Adjust the leg section with the rack mechanism.....	50
7.18.2 Adjust the gas spring leg section (optional code 82700089).....	50
7.19 Integrated bed extension (optional code 82700038).....	51
7.20 4 section side rail movement (optional code 7300009A)	52
7.21 Collapsible section side rail movement (optional code 7300007A).....	53
7.22 Dismantling the collapsible side rails (code 7300007A).....	54
7.23 Equipotent connection.....	55
7.24 Extractable base surfaces	55
8. ACCESSORIES.....	56
9. SANITATION	60
9.1 Sanitising products.....	60
9.2 Sanitation with products containing halogens	60
9.3 Sanitation with acid products.....	60
9.3.1 Chlorinated products	60
9.3.2 Chemical products that release oxygen.....	60
9.4 Sanitation frequency	61
9.5 Automatic sanitation.....	61
9.6 Manual sanitation	61
10. MAINTENANCE	62
10.1 Periodic control	62
10.2 Technical support	62
10.3 Storage	62
10.4 Demolition and disposal	63
10.5 BATTERY	63
10.6 Troubleshooting	64
11. WARRANTY	64
12. ELECTRICAL WIRING DIAGRAM.....	65

Dichiarazione di conformità CE

Company: Pam Mobility s.r.l.
s.r.l.
Address Via Verdi, 39 - 42043 Gattatico (RE)
Product: Adjustable hight bed SYNAGO
727T0045

The product is compliance with

Document N°	Title	Edition / Date of issue
93/42/CEE	Directive 93/42/CEE of Council, of 14th june 1993 and subsequent changes and additions, concerning the Medical Devices	14th June 1993
CEI UNI EN 60601-2-52	Electro-medical devices Part 2: Particular specifications on the fundamental safety and essential performance of beds for medical use	August 2011

Additional information

The products are among the ones ruled by Community Directive n. 42/1993 class I according to rule 1 point III of annex IX and are subject to the procedure provided by art. 11 point 5 of 93/42/EEC and following modifications and integrations (Directive 2007/47/EC).

Progressive system attributed to MD: 1317253/R

Gattatico, 15th November 2016

Managing Director Andrea Muzzini

1. GENERAL SPECIFICATIONS

1.1 Presentation of the manual

This manual has the purpose of providing the user with all the necessary information so that he or she, other than adequately using the machine, can manage it in the most autonomous and safest manner possible.

It includes information on technical aspects, operation, machine stoppage, maintenance, spare parts and safety.

Read the warnings and instructions carefully contained in this manual as they provide important instructions on SAFE USE AND MAINTENANCE.

Before carrying out any operations on the machine, the caregivers and qualified technicians must read the instructions carefully contained in this publication.

If in doubt on how to correctly interpret the instructions, contact our office for any necessary clarifications.

The descriptions and illustrations provided in this publication are intended as non-binding. Pam Mobility reserves the right to make any changes it considers appropriate for improvement purposes, without having to update this documentation.

The illustrations and images contained in this manual are solely intended as examples and can differ from practical situations.

This manual forms an integral part of the machine and must be stored with utmost care by the purchaser. It must therefore be positioned in the immediate vicinity of the machine, in a specific container and, above all, protected against liquids and anything else that could compromise its legibility.

The manual must accompany the machine if granted to a new user.

The content of this manual complies with the Directive 93/42/EEC dated 14.06.93 (class I) and subsequent amendments and integrations (Directive 2007/47/EEC), on medical devices.

It is forbidden to diffuse, change or use this manual for personal purposes.

Caregiver and patient safety and regular operation depend on the instructions described here being complied with and strictly followed.

1.2 Customer support service

Customer and product support are important aspects of the PAM MOBILITY S.R.L. corporate structure.

Customer Support is available for any further information on use, maintenance and support of this product.

1.3 Conventions

This manual uses the following graphic symbols:



ATTENTION! Placed before certain procedures. Its non-compliance can cause damage to the item.



WARNING! Placed before certain procedures. Its non-compliance can cause harm to the caregiver or the patient or damage to the item.

2. GENERAL WARNINGS

2.1 Manufacturer

The item described in this manual was manufactured by:



Pam Mobility s.r.l.

Via Verdi 39 – 42043 Gattatico (RE) - Italy

Tel 0522 473859 - Fax 0522 1548244

E-mail: info@pammobility.com

<http://www.pammobility.com>

2.2 Intended use

- Type of device: electric bed.
- The bed is intended for use in diagnoses, in the treatment and monitoring of a patient.
- Use environment: hospitals and medical clinics in 2 or 3 application environments. The installation premises must be equipped with an electrical installation in compliance with standards in force.
- Staff intended to use the product: specialist caregivers and medical staff.
- Supervision and responsibility: the bed must be used under the supervision of a doctor.
- Warning: the bed cannot be used in a potentially explosive or inflammable atmosphere.
- Use restrictions: the bed can only be used as described in this manual.

2.3 Essential performance of the bed

The essential performance of the medical bed is:

- **Trendelenburg position:** the Trendelenburg position is reached in any condition using the handset in a time of less than 30s;
- **Horizontal frame level:** it is possible to bring the frame level to a horizontal position in any condition using the handset in a time of less than 30s;
- **Horizontal back section:** it is possible to bring the back section to the horizontal position in any condition thanks to the mechanical CPR lever in a time of less than 30s.

2.4 Use environment restrictions



WARNING! *The bed cannot be used in a potentially explosive or inflammable atmosphere.*

The working environmental conditions of the bed must adhere to the following instructions:

- Temperature: 0° C ÷ +40° C
- Humidity: 10% ÷ 70% (no condensate).

The device must be positioned in a strictly dry environment.

Environmental conditions differing from those indicated can cause serious damage to the bed.

Positioning of the bed in environments non-compliant with those indicated can cause the warranty to become void.

2.5 Life expectancy

The bed was designed and built to work risk-free for property and people in the ordinary use conditions defined in this manual for 10 years. This duration can however only be reached in compliance with the specifications outlined in this manual and by contacting Pam Mobility s.r.l. support if any faults occur on the bed. You are advised to replace the entire bed after 10 years of use.

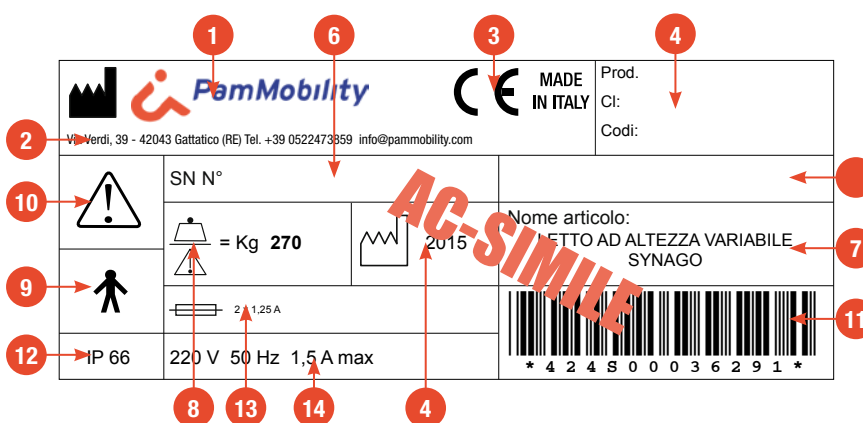
2.6 Identification



ATTENTION! It is forbidden to remove the label from the device for any reason.

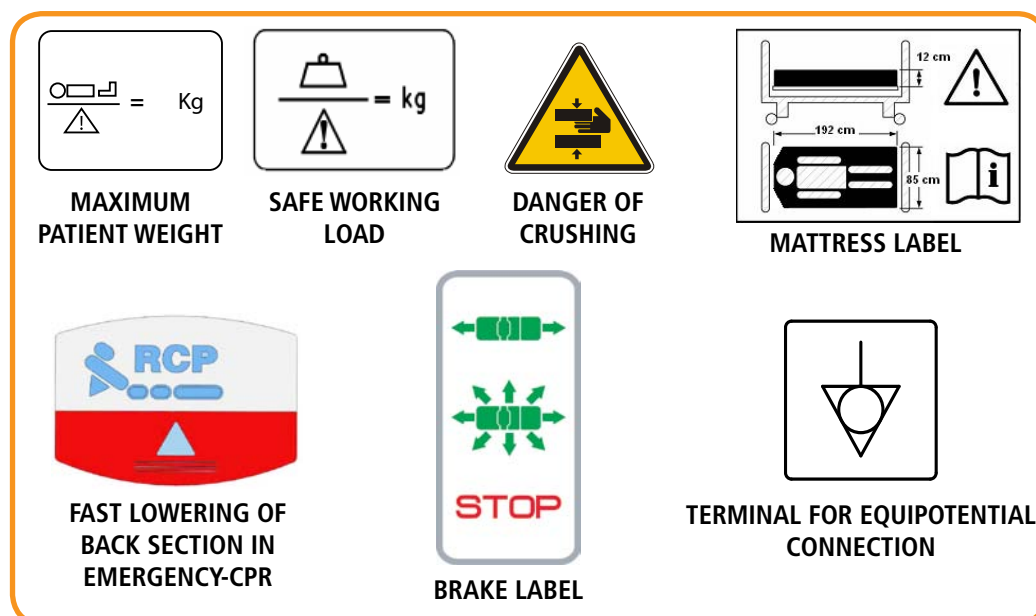
The item is identified by the plate on the base which outlines the following data:

1. Company logo;
2. Name and address of the manufacturer;
3. CE mark;
4. Load number, manufacturing data;
5. Item code;
6. Serial number;
7. Item name;
8. Safe working load;
9. Maximum patient weight;
10. Type B applied part;
11. Attention: Read the instructions for installation and use;
12. Bar code;
13. IP level of protection;
14. Voltage, frequency and power supply;
15. Operation.



2.7 Command identification

Commands and devices are identified by the labels placed near or on the devices.



3. SAFETY

3.1 Safety standards

3.1.1 Definitions

The following terms are used, in relation to safety, in this manual:

Danger zone:	each zone inside and/or near the bed in which the presence of an exposed person poses a risk for the health and safety of that person.
Exposed person:	anyone entirely or partly inside the danger zone.
Caregiver:	the person responsible for installing, operating, adjusting, carrying out maintenance, cleaning, repairing and transporting the machine.
Pam Mobility technician:	a qualified technician made available by Pam Mobility s.r.l. or its agent to carry out complex operations, installation and tuning.
Safety component:	component specifically designed by the manufacturer and sold separately from the machine to carry out safety functions; therefore a safety component can be defined when the non-functioning of the component prejudices the safety of the people exposed.

3.2 General provisions



WARNING! Improper use and maintenance can cause harm to people and damage property.



WARNING! WARNING FOR THOSE WITH BLOOD RELATED ILLNESSES: to reduce the risk of exposure when using the bed, follow the maintenance instructions outlined in this manual, as well as the staff safety specifications prepared by the Manager of the Emergency Medical Service.

Caregivers must read this manual carefully, comply with the instructions contained in it and be familiar with the correct use and maintenance procedures of the bed. Use and carry out maintenance of the item only as described in this manual and exclusively use original spare parts and Pam Mobility s.r.l. support. Do not use the bed for purposes other than those for which it was designed. Always warn the patient before making any adjustments to the bed. During rest periods, always lock the bed using the brakes. Never leave the bed unguarded when a patient is on it. Keep this manual for consultation and support during staff training. Both the product and the manual must be transferred together in the event of sale or passage to new users.

4. GENERAL DESCRIPTION

4.1 Description of the bed

The electric bed was designed for use in specialist recovery or semi-intensive therapy wards. Pursuant to the Directive 93/42/EEC, the bed should be used as an active, non-therapeutic device (class I).

4.1.1 Models

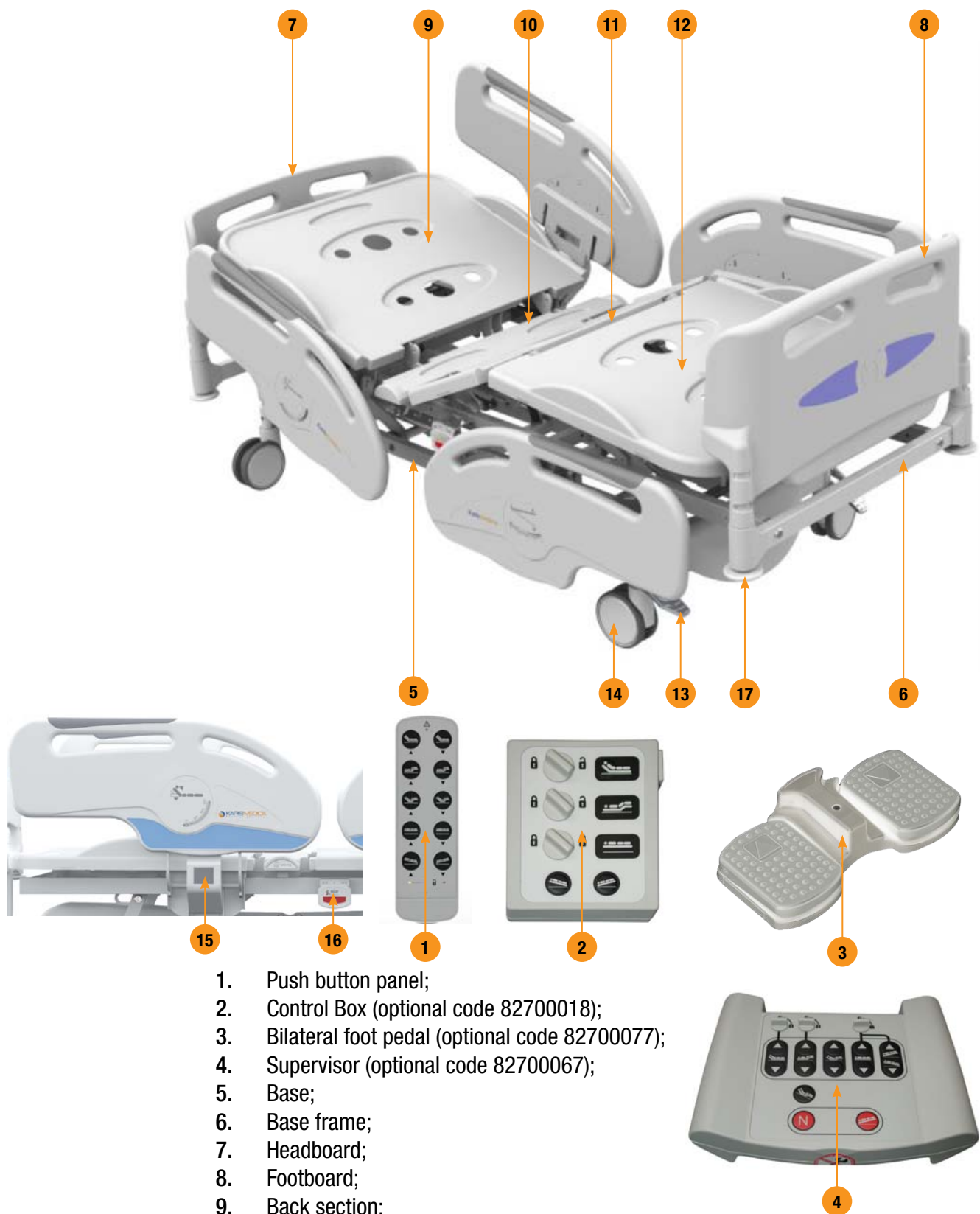
A list follows of all the line models of electric bed with adjustment height covered in this manual and the main features.



Code 727T0045

Bed with adjustable height with Trendelenburg 3 joints 4 sections, electrically adjustable, engineering plastic surface and separate headboard.

4.1.2 Name of the main parts



1. Push button panel;
2. Control Box (optional code 82700018);
3. Bilateral foot pedal (optional code 82700077);
4. Supervisor (optional code 82700067);
5. Base;
6. Base frame;
7. Headboard;
8. Footboard;
9. Back section;
10. Pelvis section;
11. Femoral section;
12. Leg section;
13. Brake;
14. Castor;
15. Side rail release handle;
16. Fast lever release on back section;
17. Bumper.

1. Push button panel

Control with hold control with deactivating commands. Push button panel with 10 keys and 5 functions with membrane, level of protection IP66.

2. Control Box - commands lock (optional code 82700018)

The function locking panel is used when the patient's position must be carefully controlled by medical staff. The panel is fastened to the frame of the bed out of the patient's reach and used to block free control functioning.

3. Bilateral foot pedal (optional code 82700077)

Bilateral foot pedal to adjust the height of the frame level. Based on both sides of the bed, it enables easier operation from various positions and leaves your hands free to treat the patient. Equipped with a safety device to avoid involuntary activation.

4. Supervisor (optional code 82700067);

Control panel used both as a command control and as a locking device. All the functions can be activated using the consent for movement buttons with hold control. Fast emergency keys are also present for CPR, comfort position and Trendelenburg.

5. Base

Perimeter tubular structure in welded steel covered in epoxy paint, covered by an ABS casing.

6. Base frame

Structure in longitudinal metal on which the various sections rest.

7-8. Head and foot board

The head and foot boards are on the ends of the bed. They are shaped to enable a convenient grip when moving the bed and have a pleasant aesthetic appearance. They are available in various configurations.

9. Back section

Part of the rest surface that supports the patient's head and back.

10. Pelvis section

Central part of the rest surface that supports the pelvis. It is stationary.

11. Femoral section

Part of the base that enables femoral section lifting.

12. Leg section

Part of the base that enables lifting of the leg section using a "Rastomat" 6 position trigger mechanism.

13. Brake

Pedal that enables locking or release of the castors and their setting in the direction lock.

14. Castors

Connected to the base, they enable movement of the bed.

15. Side rail release handle

If there are semi-rails in engineering plastic, they can be lowered and lifted.

16. Fast lever release on back section (CPR)

Lever that enables fast release of the back section if an emergency arises.

17. Bumper (optional)

Castors in plastic that absorb any knocks when moving the bed.

4.2 Technical features

4.2.1 Dimensional data

HEIGHT ADJUSTABLE ELECTRIC BEDS		727T0045
Sections	-	4
Surface dimensions	mm	2000 x 880
Height	mm	380 ÷ 780
Overall dimensions	mm	2260 x 1010
Back section	mm	700
Pelvis section	mm	108
Femoral section	mm	310
Leg section	mm	730
Back section adjustment	deg	0 ÷ 71
Back section regression	mm	90
Femoral section adjustment	deg	0 ÷ 30
Trendelenburg adjustment	deg	0 ÷ -15°
Reverse Trendelenburg adjustment	deg	0 ÷ 15°
Leg section adjustment	deg	0 ÷ 30
Safe working load	kg	270
Patient's weight	kg	230
Standard castor diameter	mm	150
Mattress dimensions	mm	2000 x 850 x 180 h
Weight	kg	130

4.2.2 Electrical data

HEIGHT ADJUSTABLE ELECTRIC BEDS 727T0045		
Power supply	V	0 - 230
Mains frequency	Hz	50/60
Operating voltage	Vcc	24
Max absorbed current	A	1.5
Sound level emitted when occupied	dB	<60
Electrical protection class	mm	I
Applied part	-	Type B
Electrical protection level	-	IP66
Fuses	n°	2x1,25 A
Intermittent operation	min/hr	10% or 2 minutes of operation followed by 18 minutes pause
Battery capacity	Ah	1,2
Battery re-charge time	h	10-12
Reference standards		CEI UNI EN 60601-2-52

5. PUSH BUTTON PANEL/CONTROL

5.1 Free push button panel

The electric beds support a free push button panel with 10 keys and 5 functions.



ATTENTION! Before making any movements, consult the paragraph relating to manoeuvres to make.

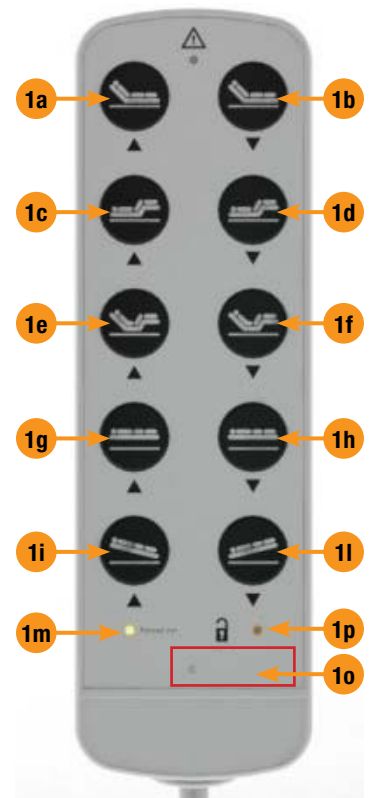
Movements executed via the push button panel are as follows:

- 1a. Lift the back section;
- 1b. Lower the back section;
- 1c. Lift the femoral section;
- 1d. Lower the femoral section;
- 1e. Simultaneously lift the back section and the femoral section (Autocontour);
- 1f. Simultaneously lower the back section and the femoral section (Autocontour);
- 1g. Lift the bed;
- 1h. Lower the bed/Night safety position;
- 1i. Reverse Trendelenburg;
- 1l. Trendelenburg;
- 1m. Led Power-On: if on, it indicates the power supply is connected;
- 1n. Magnetic key: allows you to lock and release the push button panel;
- 1o. Magnetic key sensitive area;
- 1p. Push button panel lock/release led.

5.1.1 Command lock from free push button panel (optional)

To lock the commands on the push button panel, proceed as follows:

- **ACTIVATE THE COMMANDS:** passing the key (1n) once over the sensitive area (1o) the push button panel activates and all movements will be permitted; the led (1p) turns **GREEN**;
- **ACTIVATE THE TRENDLENBURG FUNCTION:** passing the key (1n) twice over the sensitive area (1o) of the push button panel, it also permits Trendelenburg movement (1l); the led (1p) turns **ORANGE**.
NOTE: the push button panel will automatically lock after 10 seconds of non-use in this mode.
- **ACTIVATE THE NIGHT SAFETY POSITION:** passing the key (1n) again over the sensitive area (1o) of the push button panel, it also permits regulation of the night safety position (1h); the led (1p) turns **ORANGE**.
NOTE: the push button panel will automatically lock after 10 seconds of non-use in this mode.
- **DEACTIVATION OF ALL COMMANDS:** passing the key (1n) again over the sensitive area (1o) all the movements will be blocked and the led will switch off.



5.2 ControlBox-commandslockingdevice(optionalcode82700018)


The electric beds can support a Control Box locking console that enables the caregivers to lock free push button panel functions.

Description:


- 2a. Selector to enable/disable movement of the back section;
- 2b. Selector to enable/disable movement of the femoral section;
- 2c. Selector to enable/disable height movement of the bed and, if available, the Trendelenburg/reverse Trendelenburg position;
- 2d. Reverse Trendelenburg position adjustment button;
- 2e. Trendelenburg position adjustment button.

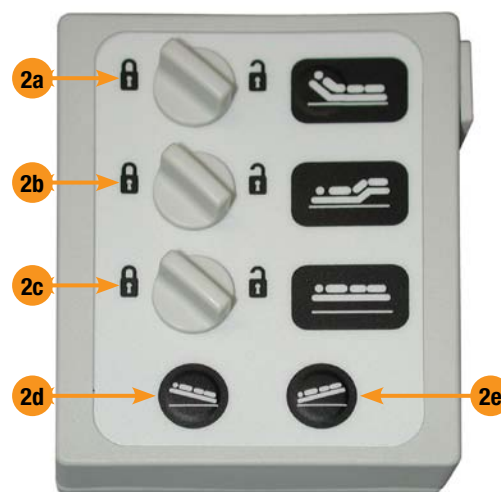
5.2.1 Control box command locking

To **lock** the Control Box commands, proceed as follows:

- turn the selector (2a), (2b) or (2c) in an anti-clockwise direction towards the closed lock symbol  to lock the desired function.

To **release** the Control Box commands, proceed as follows:

- turn the selector (2a), (2b) or (2c) in a clockwise direction towards the open lock symbol  to release the desired function.



5.3 Bilateral foot pedal (optional code 82700077)

The electric beds can support a bilateral foot pedal that enables caregivers to lift or lower the bed.



ATTENTION! Before making any movements, consult the paragraph relating to manoeuvres to make.

Movements executed via the bilateral foot pedal are as follows:

- 3a. Lift the bed;
- 3b. Lower the bed.



5.4 Supervisor control panel (optional code 82700067)

The beds can have a SUPERVISOR command system that enables the caregiver to control, activate and lock the functions of the free push button panel.

Fast emergency keys are also present for CPR, comfort position and Trendelenburg.




ATTENTION! Before making any movements, consult the paragraph relating to manoeuvres to make.

Description:


- 4a. Selector to enable/disable movement of the back section;
- 4b. Selector to enable/disable movement of the femoral section;
- 4c. Selector to enable/disable height movement of the bed and, if available, the Trendelenburg/reverse Trendelenburg position;
- 4d. Button to enable back section lifting/lowering;
- 4e. Button to enable femoral section lifting/lowering;
- 4f. Button to simultaneously enable femoral and back section lifting and lowering (“Autocontour”);
- 4g. Button that enables lifting/lowering the bed and adjustment of the night safety position;
- 4h. Button for Trend. and Reverse Trendelenburg positioning;
- 4i. Button for the comfort position (armchair);
- 4l. Button for CPR total resetting to zero;
- 4m. Button for emergency Trendelenburg positioning.

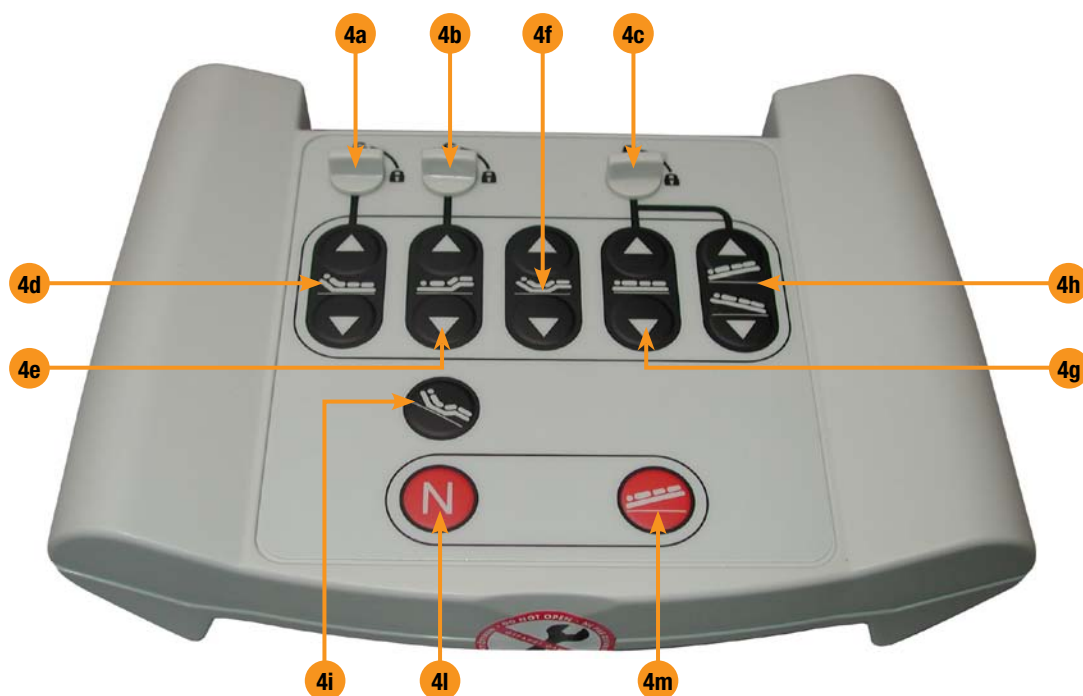
5.4.1 Command locking from Supervisor

To **lock** the Supervisor commands, proceed as follows

- turn the selector (4a), (4b) o (4c) in clockwise direction towards the closed lock symbol  to lock the desired function.

To **release** the Supervisor commands, proceed as follows:

- turn the selector (4a), (4b) o (4c) in an anti-clockwise direction towards the open lock symbol  to release the desired function.



5.5 Command panels for 4 folding side rails kit (optional Code 82700087)

5.5.1 Internal panel for patient use

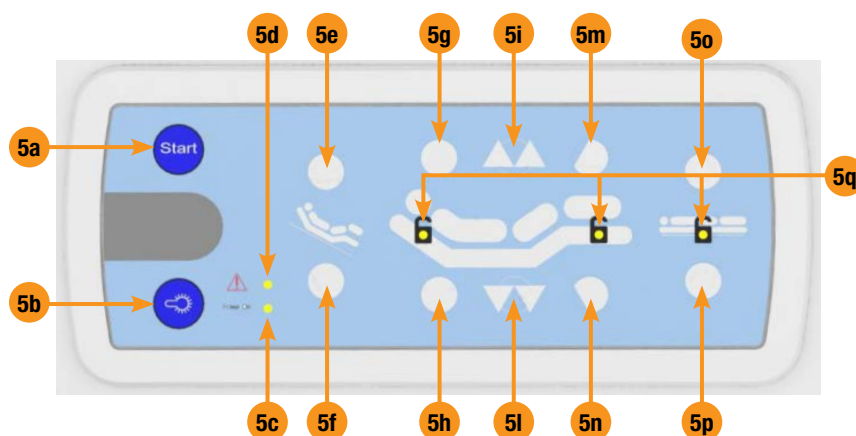
The electric beds equipped with the 4 folding side rails kit (7300009A) support an internal command panel for patient use built into the side rail, enabling adjustment of the bed positions and switching on/off the night light.



ATTENTION! Before making any movements, consult the paragraph relating to manoeuvres to make.

Description:

- 5a. Panel activation button;
- 5b. Switch on/off courtesy light under bed (accessory code 82700087);
- 5c. Led Power-On;
- 5d. LED Attention, battery low or charging;
- 5e. Comfort position adjustment (up);
- 5f. Comfort position adjustment (down);
- 5g. Lift the back section;
- 5h. Lower the back section;
- 5i. Simultaneously lift the back section and the femoral section (“Autocontour”);
- 5l. Simultaneously lower the back section and the femoral section (“Autocontour”);
- 5m. Lift the femoral section;
- 5n. Lower the femoral section;
- 5o. Lift the bed;
- 5p. Lower the bed;
- 5q. Luminous led placed on the “lock” symbol; if off, it indicates movement was deactivated by the caregiver.



5.5.2 External panel for caregiver use

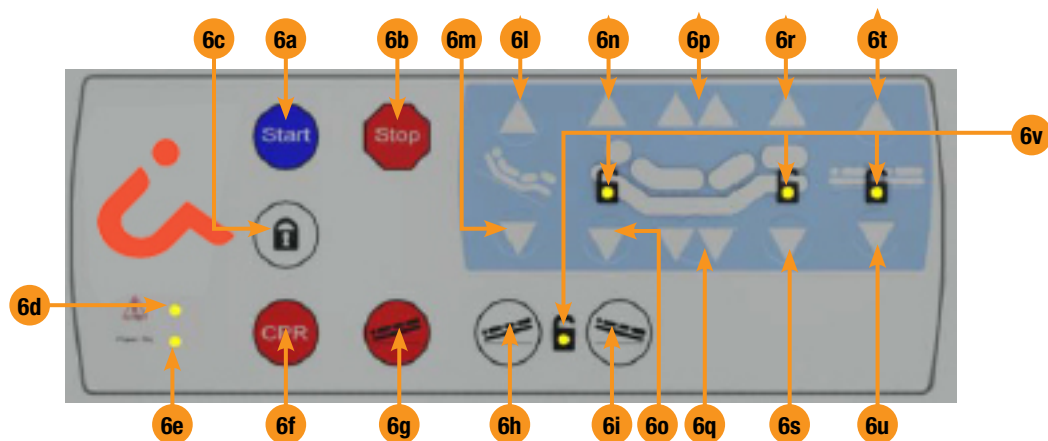
The electric beds equipped with the 4 folding side rails kit (7300009A) support an external command panel for caregiver use built into the side rail, enabling adjustment of the bed positions and locking of the side rail internal panel commands for patient use.



ATTENTION! Before making any movements, consult the paragraph relating to manoeuvres to make.

Description:

- 6a. Panel activation button;
- 6b. Panel deactivation button;
- 6c. Button to deactivate movements;
- 6d. LED Attention, battery low or charging;
- 6e. Led Power-On;
- 6f. CPR emergency total resetting to zero;
- 6g. Emergency Trendelenburg;
- 6h. Trendelenburg position adjustment;
- 6i. Reverse Trendelenburg position adjustment;
- 6l. Comfort position adjustment (up);
- 6m. Comfort position adjustment (down);
- 6n. Lift the back section;
- 6o. Lower the back section;
- 6p. Simultaneously lift the back section and the femoral section (“Autocontour”);
- 6q. Simultaneously lower the back section and the femoral section (“Autocontour”);
- 6r. Lift the femoral section;
- 6s. Lower the femoral section;
- 6t. Lift the bed;
- 6u. Lower the bed/Night safety position adjustment;
- 6v. Luminous led: if on, the corresponding function is on: if off, the corresponding function is off.



5.5.3 Command locking from side rail command panel

With the external command panels with folding side rails you can lock the folding side rail internal command panels.

To **lock** the commands, proceed as follows:

- enable the panel by pressing the Start button (6a);
- press the (6c) button and then one of the commands relevant to the function you want to lock: for example, if you want to lock the back section press the button (6c) and the button (6n); the led corresponding to the function will be OFF;
- press the Start (6a) button again to activate the lock set and terminate the operation.

To **activate** the commands, proceed as follows:

- enable the panel by pressing the Start button (6a);
- press the (6c) button and then one of the commands relevant to the function you want to release: for example, if you want to release the back section press the button (6c) and the button (6n); the led corresponding to the function will be ON;
- press the Start (6a) button again to release the lock set and terminate the operation.



ATTENTION! After 30 seconds of non-use all the control functions are automatically locked.

6. INSTALLATION

Movements described in this chapter must be carried out exclusively by qualified staff specifically trained to carry out loading, unloading and movement of packages in complete safety using lifting tools such as cranes or forklifts. Local staff should be aware of accident prevention rules.



ATTENTION! Ensure the vehicles and the logical structures used comply with the use permitted and that they are in perfect condition; keep your distance from suspended loads, ensure the ropes or straps used for lifting are in perfect condition and adequately inserted in the specific hooks.

6.1 Transport and delivery

Transport can be carried out using the following communication routes: road, rail, sea and air.

The weight of the item is deducible from technical features and the packaging. Movement of the individual item must be carried out using suitable means of movement such as a self-propelled forklift or a manual forklift.

Apply the necessary attention for safe work.

The device is delivered assembled wrapped with a knock-proof, bubble wrap film.



ATTENTION! On receiving the device, check with the carrier that the material is intact, that it was not damaged during transport or it was not voluntarily opened and parts removed from within. Check the supply corresponds with the order specifications and use the delivery documents to ensure the delivery is complete.

If the packaging is damaged externally, open it in the presence of the carrier and check the bed was not damaged.

Note any damage on the delivery documents and immediately inform Pam Mobility s.r.l.

If the packaging is not damaged, check the bed externally within 24 hours of delivery. If damage is attributed to transport, immediately inform the carrier and insurance company, as well as Pam Mobility s.r.l.

6.2 Lifting



WARNING! Lifting and movement operations must be carried out by specialist staff trained for this type of movement.



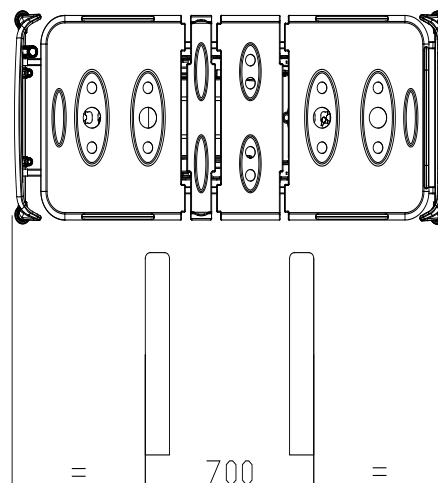
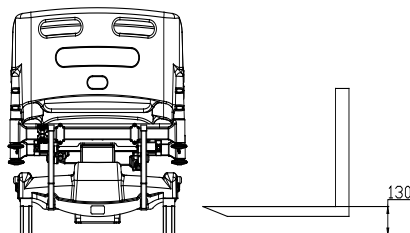
ATTENTION! When lifting slowly tighten the straps and check there are no components unsuitable to support the weight of the unit.

To guarantee safe movement of the bed, strictly comply with the following indications:

- Ensure the lifting vehicles are suitable for the weight of the bed.
- Exclusively use flat lifting straps.
- Place the lifting straps near the trolley frame and not the base frame.
- If forklifts are used, place the bed over a suitable platform, locking the four castors.
- Lift the bed off the ground as little as possible.



ATTENTION! During movement, check no part of the bed is crushed against the lifting vehicle.



6.3 Storage

In the event of prolonged storage, position the bed so it is protected against rain and wind and in a dry place.

In particular, ensure the electrical parts and all the parts most sensitive to humidity and low temperatures are well protected.

The bed can be stored in dry premises with a temperature of between -10°C and $+50^{\circ}\text{C}$, with relative humidity $20\% \div 90\%$ without condensate.

6.4 Installation

Installation takes place under the management and responsibility of a qualified Pam Mobility technician



ATTENTION! it is strictly forbidden to assemble and install the bed without the support of a qualified Pam Mobility s.r.l. technician. Similarly, it is strictly forbidden to dismantle the bed for subsequent re-installation without the support of a qualified Pam Mobility s.r.l. technician.

- Check there is a power supply socket near the installation zone.
- Check the installation surface is sufficient considering the additional space necessary for assembly.
- Ensure the space left beside the bed is sufficient for a person to pass around it.
- Ensure the specific capacity of the floor is sufficient to support the weight of the bed.

6.4.1 Preparation for the installation area

The installation location must: have a hard, horizontal and flat floor.

6.5 Parts supplied control

The packaging contains:

- an electric bed (version ordered);
- further ordered accessories;
- the instructions for use manual.

6.6 Assembly



ATTENTION! The assembly area must be clean and free of obstruction; it must be at least 4x3 m to enable assembly operations.

The assembly location must have the following features:

- flat floor, not subsiding;
- lighting 400 LUX;
- have an electricity supply socket suitable for the features of the item (see identification plate) installed in compliance with CEI standards.

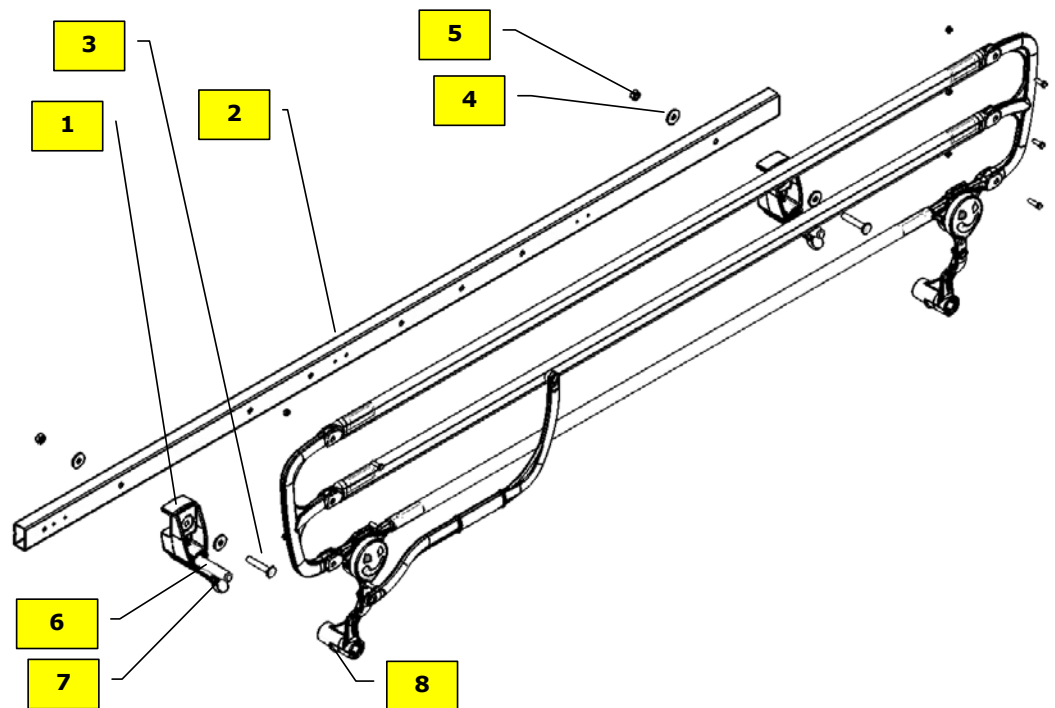
6.7 Assembling the collapsible side rails (code 7300007A)



WARNING! Incompatible side rails can create risks.

To assemble the collapsible side rails, proceed as follows:

- assemble the clamp (1) on the beam (2) of the bed frame by fastening it with the screws (3), washers (4) and self-locking nuts (5) supplied;
- insert the side rail in the clamp pins (6), until the lever is released (7), not blocking the lower part of the joint arms (8);



- repeat the operations for the other side rail.

Note: the correct assembly direction of the side rail is with the lifting handle turned towards the foot side.



ATTENTION! it is strictly forbidden to assemble and install the side rail without the support of a qualified Pam Mobility s.r.l. technician. Similarly, it is strictly forbidden to dismantle the side rail for subsequent re-installation without the support of a qualified Pam Mobility technician.

6.8 Electrical connection



WARNING! The electric beds cannot be used in a potentially explosive or inflammable environment (such as a hyperbaric chamber).



ATTENTION! Danger of electrocution. The wires must be positioned so they are not crushed, trapped, stretched, treadable, bent, wet or an obstruction for other mobile parts.



WARNING! The power supply cable should not obstruct the caregiver.



WARNING! Check the voltage and frequency of the mains corresponds to that specified in the item (see identification plate).

- prepare a SCHUKO socket;
- connect the plug to the electrical power supply;
- wait 6/8 hours to recharge the buffer battery.

6.9 Functional testing



ATTENTION! The following control must be periodically repeated to check the efficiency of the product.

Before using the item:

- run the “Periodic control” planned in the *Maintenance* chapter;
- if the control has a positive outcome the item is ready for regular use. On the contrary, immediately contact Pam Mobility Customer Service.

7. OPERATION AND USE



7.1 Warnings

ATTENTION! The electric beds cannot be used in a potentially explosive or inflammable environment (such as a hyperbaric chamber)

ATTENTION! Before moving the bed, ensure the power supply cable is removed and coupled to the bed.

ATTENTION! Sanitise the bed as per the methods described in the SANITATION chapter.

WARNING! It is the responsibility of the care giving staff to authorise the patient to use the bed functions.

ATTENTION! The electrical part was designed for continuous use of 2 minutes with an 18 minute interval between one use and the next as outlined in the identification plate on the control unit. Using the bed without complying with these restrictions will not harm the patient or the caregiver, but could damage the device.

WARNING! Warn the patient before making any adjustments to the bed.

WARNING! Always lift the safety side rails on the bed when a patient is on it. During rest, always lock the bed using the brakes.

WARNING! When the PATIENTS' conditions (such as disorientation due to medication or particular clinical conditions) can lead to ENTRAPMENT OF THE PATIENT with the SIDE RAILS/ENDBOARDS, the MATTRESS SUPPORT PLATFORM must be left in the safe position with the horizontal base surface lowered when the patient is left alone (unless otherwise requested by medical staff due to special or particular circumstances).

ATTENTION! Do not use the bed for purposes other than those for which it was designed and intended.

7.2 Safety position

The bed is in the safety position when the base surface is in the horizontal position in the lowest position with the side rails lifted, the push button panel commands deactivated, the integrated bed section (if available) closed and the brake inserted.

7.3 Emergency positions

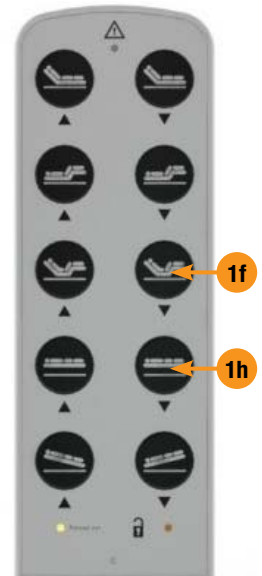
The bed can reach two emergency positions, according to the type of patient emergency:

1. The bed is in the emergency position when the base surface is in the horizontal position in the lowest position (totally reset to zero), with the side rails lowered.
2. The bed is in the emergency position when all the sections of the bed are reset to zero and the base surface is in the Trendelenburg position with the side rails lowered.

To bring the bed to **EMERGENCY POSITION 1**, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- activate the push button panel with the magnetic key (see paragraph 5.1 Free push button panel);
- press button **1f** on the push button panel to reset the bed sections to zero;
- press button **1h** on the push button panel to lower the bed;
- lock the push button panel commands using the key (see paragraph 5.1 Free push button panel);
- lower the side rails (see reference paragraph).



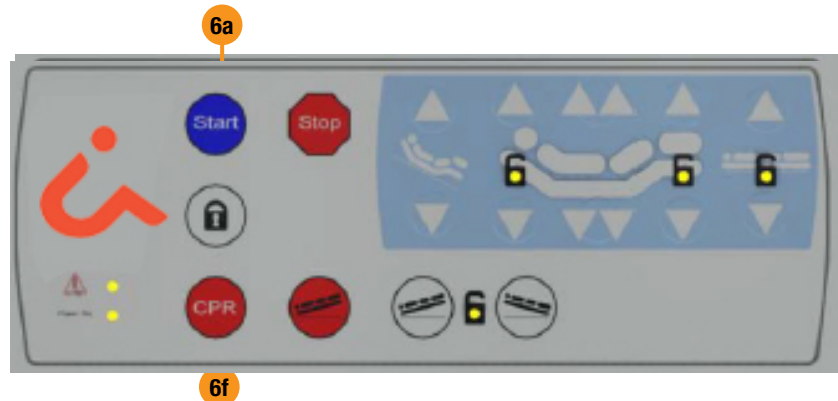
FROM THE SUPERVISOR CONTROL PANEL

- press button **4l** on the control until you reach the desired position: the command resets the base surface and goes to the minimum height;
- lower the side rails (see reference paragraph).



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

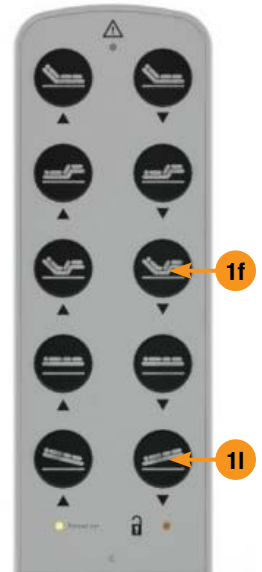
- press button **6a** to switch on the panel;
- press button **6f** on the control until you reach the desired position: the command resets the base surface and goes to the minimum height;
- lower the side rails (see reference paragraph).



To bring the bed to **EMERGENCY POSITION 2**, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- activate the push button panel with the magnetic key (see paragraph 5.1 Free push button panel);
- press button **1f** on the push button panel to reset the bed sections to zero;
- press button **1l** on the push button panel to bring the bed to the Trendelenburg position;
- lock the push button panel commands using the key (see paragraph 5.1 Free push button panel);
- lower the side rails (see reference paragraph).



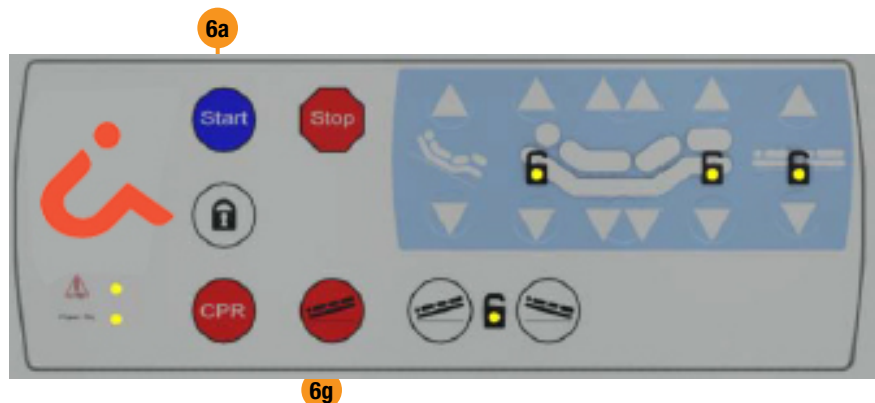
FROM THE SUPERVISOR CONTROL PANEL

- press button **4m** on the control until you completely reach the position: the command resets the base surface and goes to the Trendelenburg position;
- lower the side rails (see reference paragraph).



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel;
- press button **6g** on the control until you reach the desired position: the command resets the base surface and goes to the Trendelenburg position;
- lower the side rails (see reference paragraph).



7.4 Moving the bed



WARNING! Always warn the patient before moving the bed.



WARNING! Before moving the bed, ensure the power supply cable is disconnected from the mains socket and that it is adequately secured to avoid obstructing movement.



WARNING! Movement must only occur on hard, flat surfaces and with the side rails up. Always lock the bed after movement.

To move the bed, proceed as follows:

- ensure the side rails are up;
- take the power supply plug out and wind the cable;
- release the brakes;
- push or pull the bed, grabbing it by the head or footboard;
- after the journey, lock the bed.

7.5 Locking and releasing the bed

The bed is equipped with four braking and rotating castors, one of which has a directional lock.

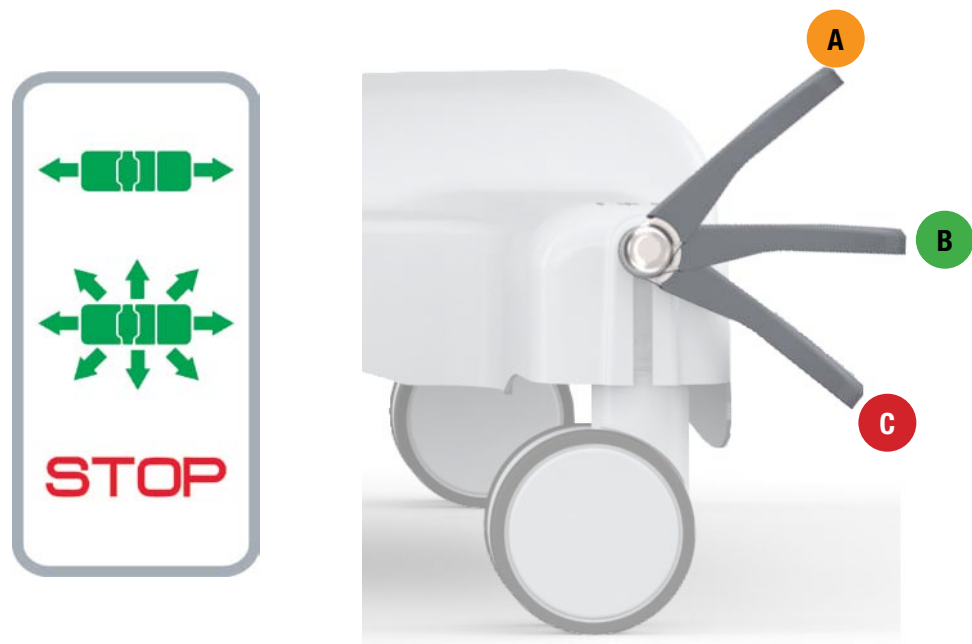
The command positions are:

Position **A**: three castors are free and a directional castor on the head side.

Position **B**: the castors are free and turning.

Position **C**: the castors are locked.

Position the pedal with one foot to obtain desired functioning.



7.6 Alarm on castors for bed without brake (accessory 82700090)

The brake alarm is an alarm device on electric beds. The device warns the caregiver using an acoustic alarm that the brakes are off.

7.7 Courtesy light device (accessory 82700086 or included in side rail panels kit 82700087)

Courtesy LED light placed under the frame of the bed; the on/off button is placed on the caregiver control.

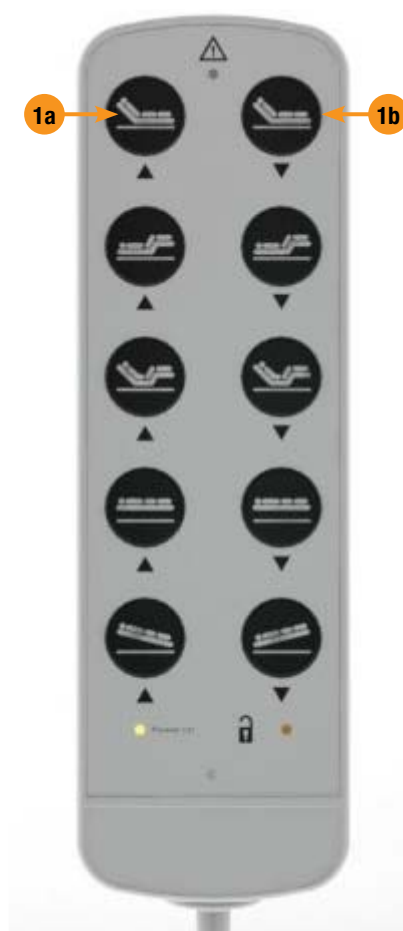
To activate the service light, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- simultaneously press buttons (1a) and (1b) on the push button panel..

FROM THE SIDE RAIL INTERNAL COMMAND PANEL

- press the button (5b).



7.8 Lifting and lowering the bed



WARNING! Always warn the patient before adjusting the height of the bed.

Height adjustment of the bed is obtained using two electrical actuators controlled from the free push button panel, from the Supervisor control panel, from the foot pedal and from the side rail internal and external control panels.

To adjust the height of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



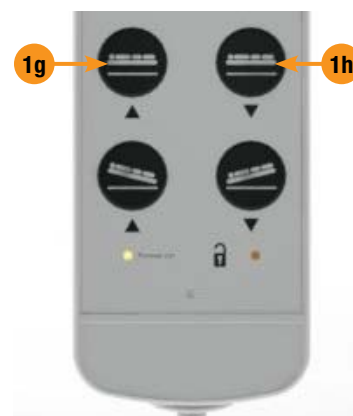
WARNING! Never place hands or objects between the base and the moving part. Never manually intervene on the moving parts and comply with instructions.



To adjust bed height, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- press button **1g** to **lift** the bed;
- press button **1h** to **lower** the bed.



FROM THE BILATERAL FOOT PEDAL

- using your foot, press pedal **3a** to **lift** the bed;
- using your foot, press pedal **3b** to **lower** the bed.



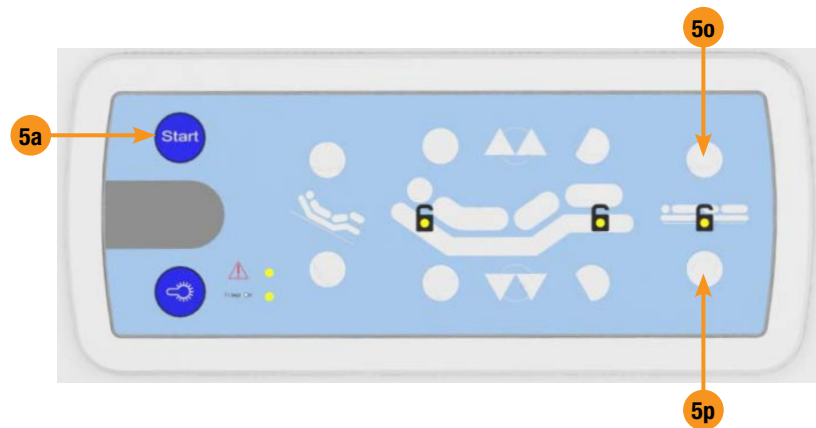
FROM THE SUPERVISOR CONTROL PANEL

- press button **4g** (up arrow) to **lift** the bed;
- press button **4g** (down arrow) to **lower** the bed.



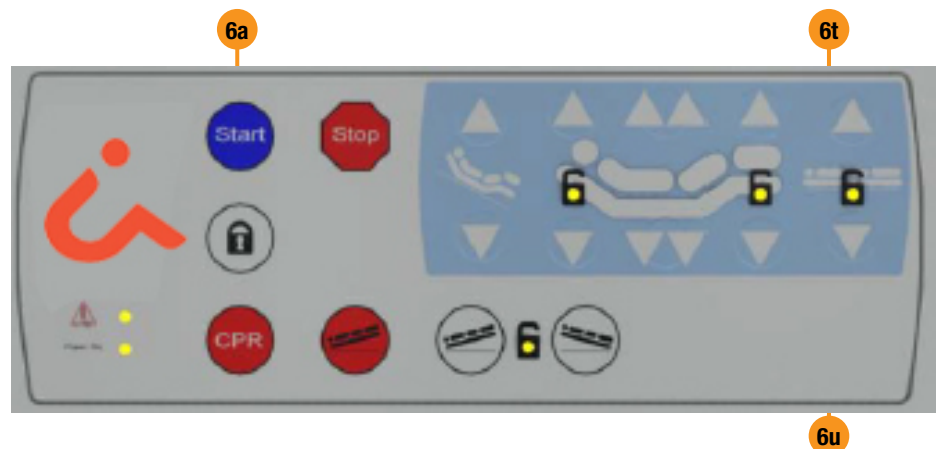
FROM THE INTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **5a** to switch on the panel, then press button **5o** to **lift** the bed;
- press button **5a** to switch on the panel, then press button **5p** to **lower** the bed.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel, then press button **6t** to **lift** the bed;
- press button **6a** to switch on the panel, then press button **6u** to **lower** the bed.



7.9 Lifting and lowering the back section



WARNING! Always warn the patient before adjusting the back section of the bed.

Back section of the bed adjustment is obtained using an electrical actuator controlled from the free push button panel, from the Supervisor control panel and from the side rail internal and external control panels.

To adjust the back section of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



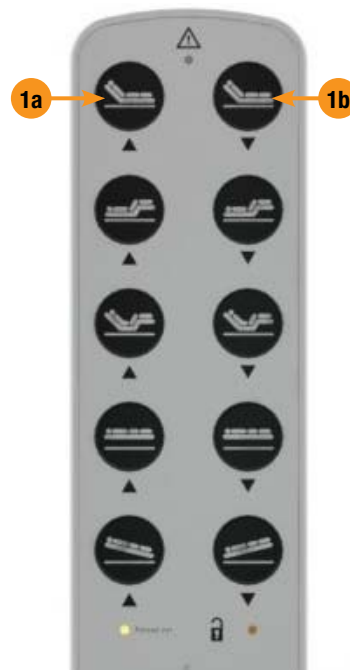
WARNING! Never place hands or objects between the back section and the frame of the base surface. Never manually intervene on the moving parts and comply with instructions.



To adjust the back section, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- press button **1a** to **lift** the back section;
- press button **1b** to **lower** the back section.



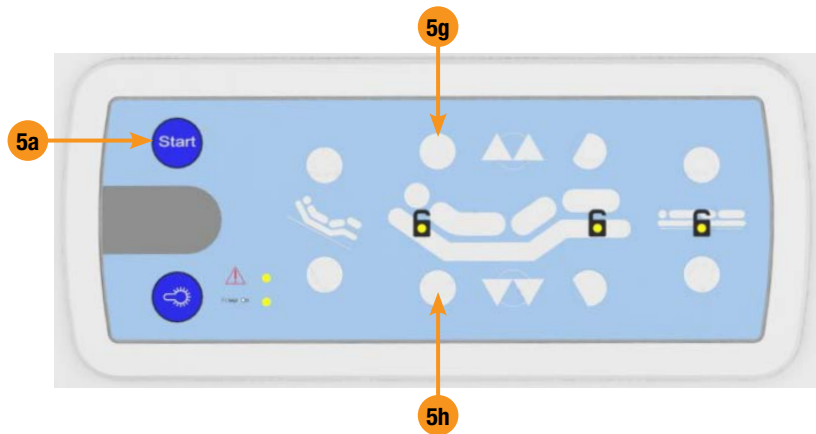
FROM THE SUPERVISOR CONTROL PANEL

- press button **4d** (up arrow) to **lift** the back section;
- press button **4d** (down arrow) to **lower** the back section;



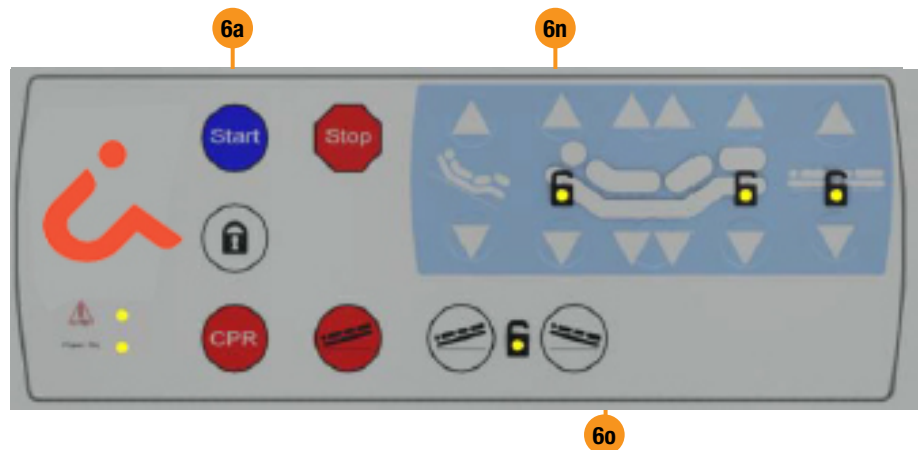
FROM THE INTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **5a** to switch on the panel, then press button **5g** to **lift** the back section;
- press button **5a** to switch on the panel, then press button **5h** to **lower** the back section.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel, then press button **6n** to **lift** the back section;
- press button **6a** to switch on the panel, then press button **6o** to **lower** the back section.



7.10 Lifting and lowering the femoral section



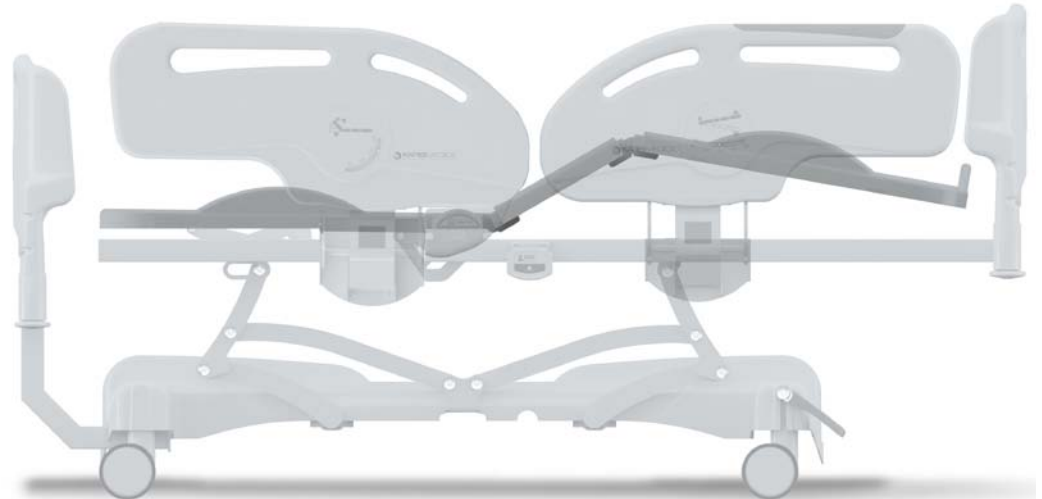
WARNING! Always warn the patient before adjusting the femoral section.

Femoral section of the bed adjustment is obtained using an electrical actuator controlled from the free push button panel, from the Supervisor control panel and from the side rail internal and external control panels.

To adjust the femoral section of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



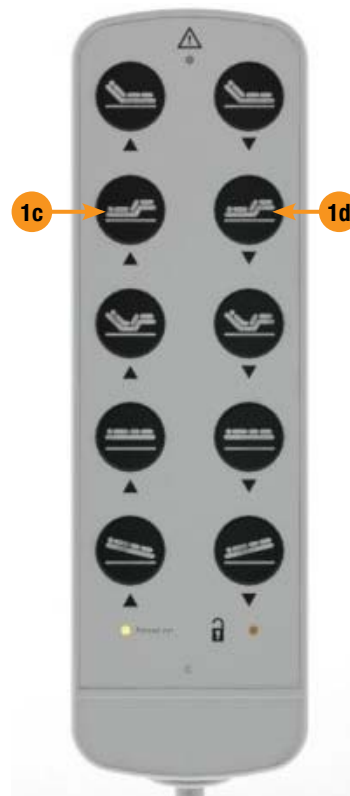
WARNING! Never place hands or objects between the femoral section and the frame of the base surface. Never manually intervene on the moving parts and comply with instructions.



To adjust the femoral section, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- press button **1c** to **lift** the femoral section;
- press button **1d** to **lower** the femoral section.



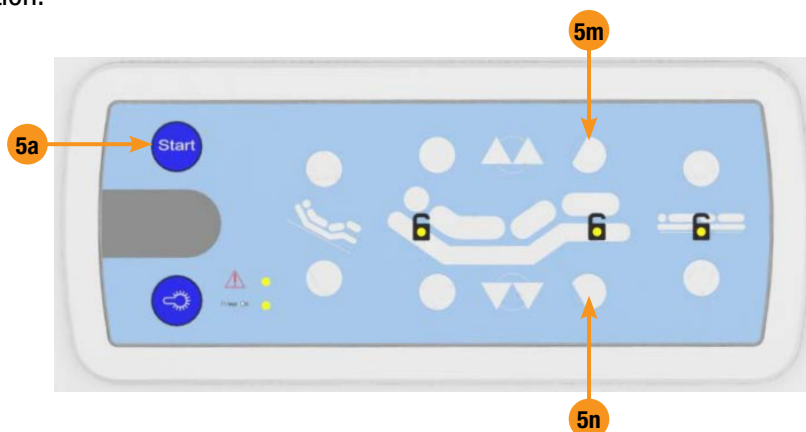
FROM THE SUPERVISOR CONTROL PANEL

- press button **4e** (up arrow) to **lift** the femoral section;
- press button **4e** (down arrow) to **lower** the femoral section.



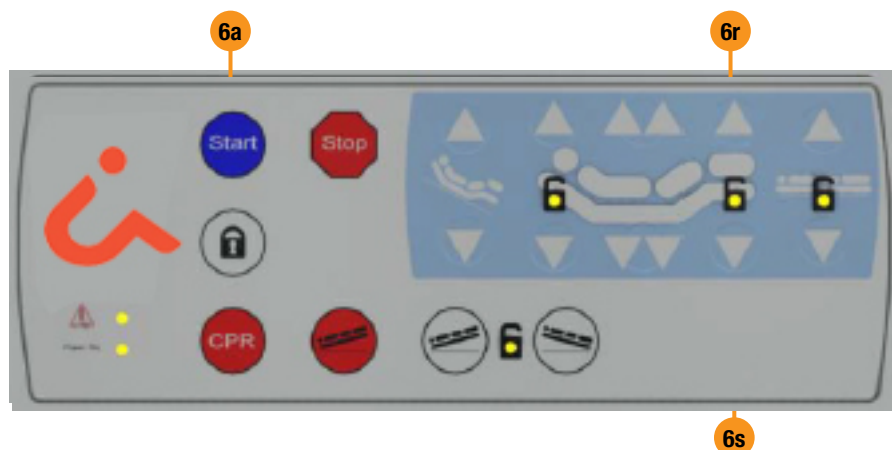
FROM THE INTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **5a** to switch on the panel, then press button **5m** to **lift** the femoral section;
- press button **5a** to switch on the panel, then press button **5n** to **lower** the femoral section.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel, then press button **6r** to **lift** the femoral section;
- press button **6a** to switch on the panel, then press button **6s** to **lower** the femoral section.



7.11 Simultaneously lifting and lowering the back section and the femoral section (Autocontour)



WARNING! Always warn the patient before adjusting the sections.

Simultaneous adjustment of the back and femoral sections of the bed is obtained using two electrical actuators controlled from the free push button panel, from the Supervisor control panel and from the side rail internal and external control panels.

To adjust the Autocontour position of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



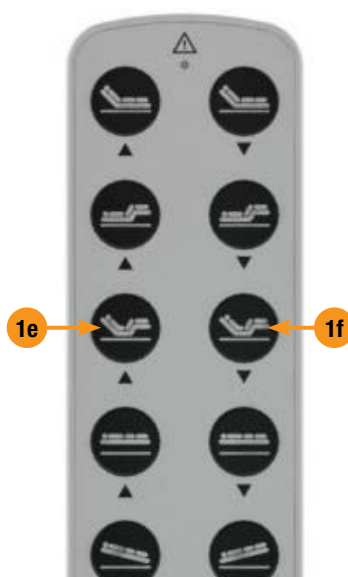
WARNING! Never place hands or objects between the sections and the frame of the base surface. Never manually intervene on the moving parts and comply with instructions.



To adjust the Autocontour position, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- press button **1e** to **simultaneously lift** the back and femoral section;
- press button **1f** to **simultaneously lower** the back and femoral section.



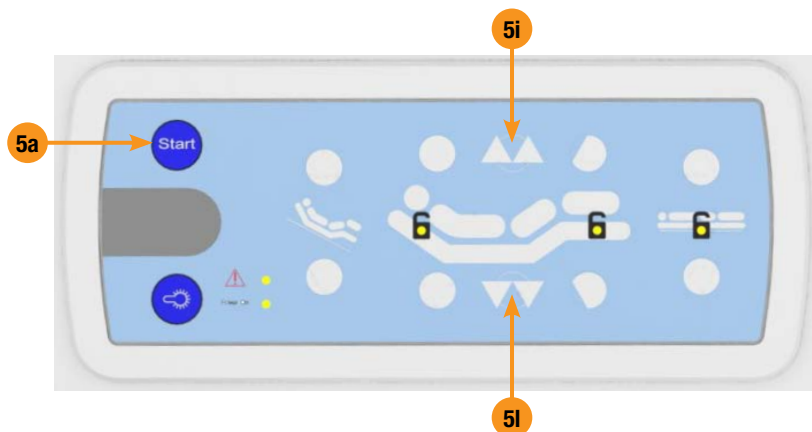
FROM THE SUPERVISOR CONTROL PANEL

- press button **4f** (up arrow) to **simultaneously lift** the back and femoral section;
- press button **4f** (down arrow) to **simultaneously lower** the back and femoral section.



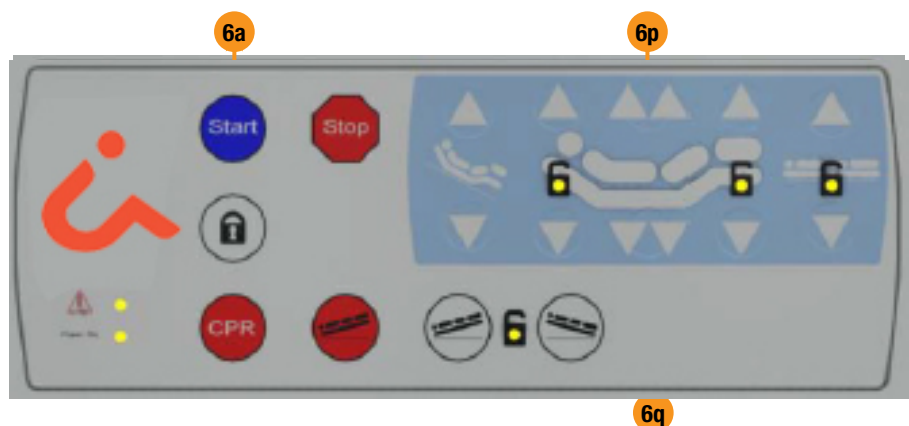
FROM THE INTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **5a** to switch on the panel, then press button **5i** to **simultaneously lift** the back section and femoral section;
- press button **5a** to switch on the panel, then press button **5i** to **simultaneously lower** the back section and femoral section.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel, then press button **6p** to **simultaneously lift** the back section and femoral section;
- press button **6a** to switch on the panel, then press button **6q** to **simultaneously lower** the back section and femoral section;



7.12 Trendelenburg and Reverse Trendelenburg

7.12.1 Trendelenburg



WARNING! Always warn the patient before carrying out any adjustments.

Trendelenburg position adjustment is obtained using an electrical actuator controlled from the free push button panel, from the Control Box, from the Supervisor control panel and from the side rail external control panels.

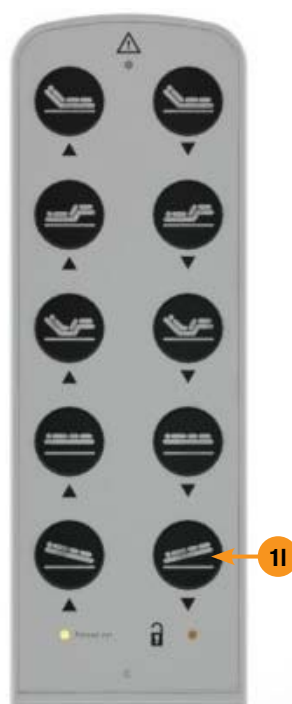
To adjust the Trendelenburg position of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



To adjust the Trendelenburg position, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- activate the position with the magnetic key (see paragraph 5.1 Free push button panel);
- press button **11** until you reach the desired position.



FROM THE CONTROL BOX

- press button **2e** until you reach the desired position.



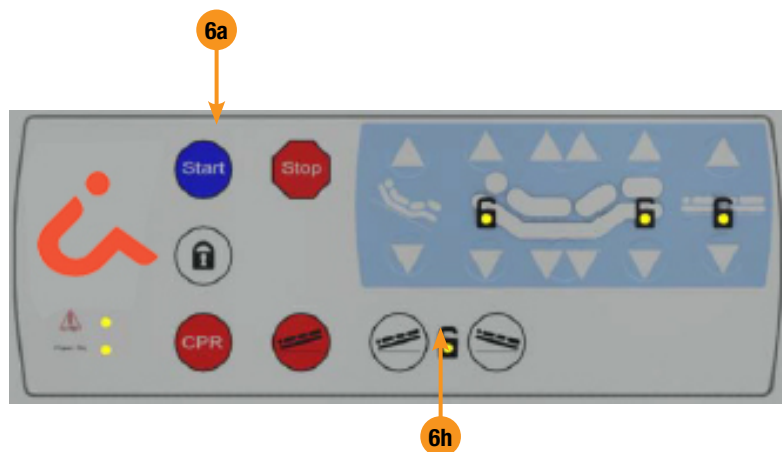
FROM THE SUPERVISOR CONTROL PANEL

- press button **4h** (up arrow) until you reach the desired position.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- activate the position (see paragraph 5.5.2 External panel for caregiver use);
- press button **6a** to switch on the panel, then press button **6h** until you reach the desired position.



7.12.2 Reverse Trendelenburg



WARNING! Always warn the patient before carrying out any adjustments.

The reverse Trendelenburg position adjustment is obtained using an electrical actuator controlled from the free push button panel, from the Control Box, from the Supervisor control panel and from the side rail external control panels.

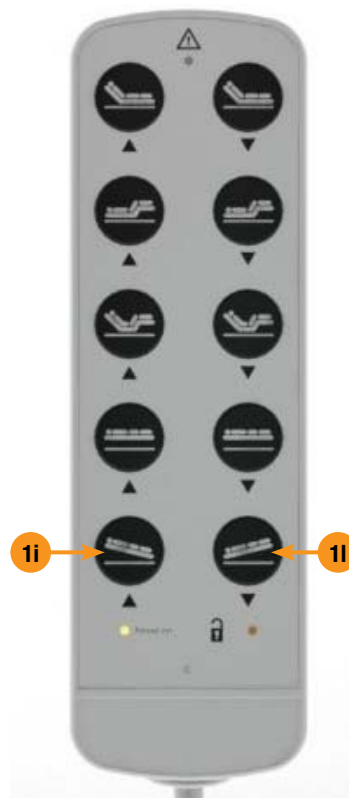
To adjust the reverse Trendelenburg position of the bed, the specific command must be enabled (see the specific paragraphs in the “PUSH BUTTON PANEL/CONTROL” chapter).



To adjust the reverse Trendelenburg position, proceed as follows:

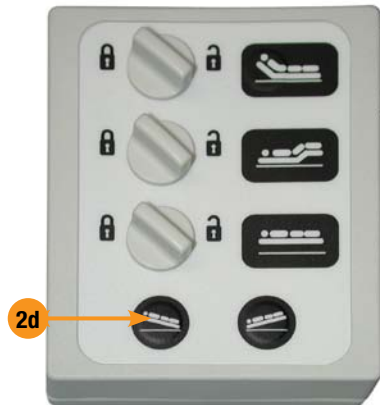
WITH THE FREE PUSH BUTTON PANEL

- activate the position with the magnetic key (see paragraph 5.1 Free push button panel);
- press button **1i** until you reach the desired position.



FROM THE CONTROL BOX

- press button **2d** until you reach the desired position.



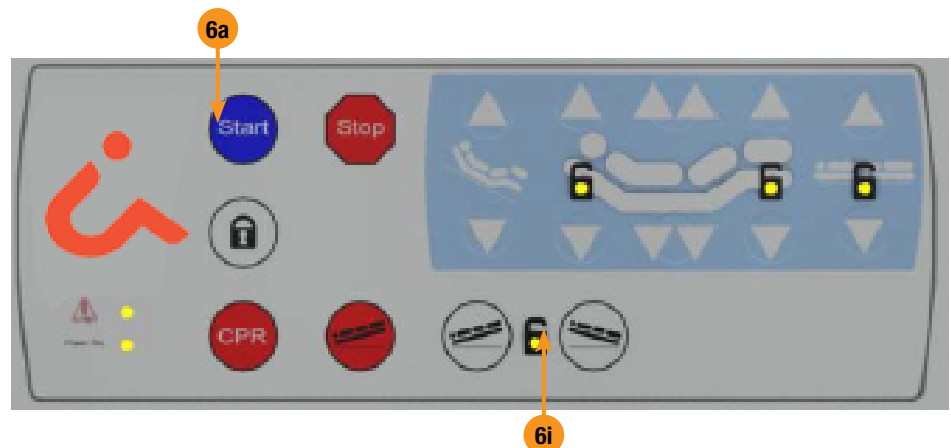
FROM THE SUPERVISOR CONTROL PANEL

- press button **4h** (down arrow) until you reach the desired position.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- activate the position (see paragraph 5.5.2 External panel for caregiver use);
- press button **6a** to switch on the panel, then press button **6i** until you reach the desired position.



7.13 Comfort position (chair)



WARNING! Always warn the patient before adjusting the sections of the bed.

The comfort position (or chair) is obtained by combined movement of the back section, the femoral section and reverse Trendelenburg inclination.

It is obtained using three electrical actuators controlled by the Supervisor control panel and the internal and external side rail control panels.



WARNING! Never place hands or objects between the moving sections and the frame of the base surface. Never manually intervene on the moving parts and comply with instructions.



To adjust the comfort position, proceed as follows:

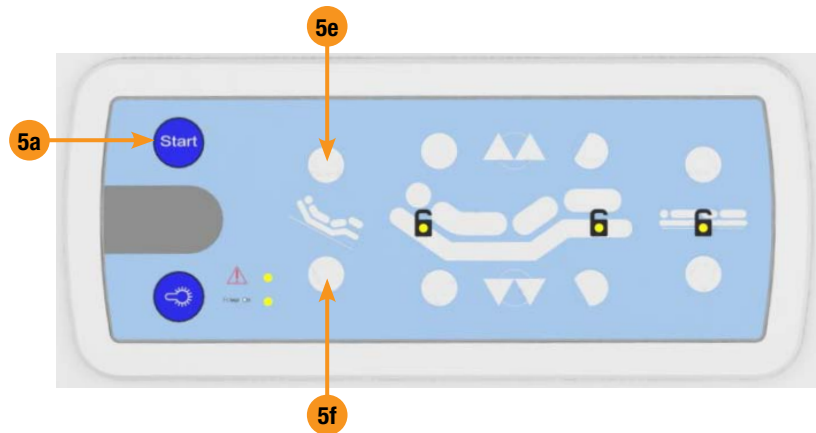
FROM THE SUPERVISOR CONTROL PANEL

- press button **4i** until you reach the desired position;
- to **reset the position to zero** press the total reset to zero button **4I** or individually lower each section, with reference to the previous, relevant paragraphs.



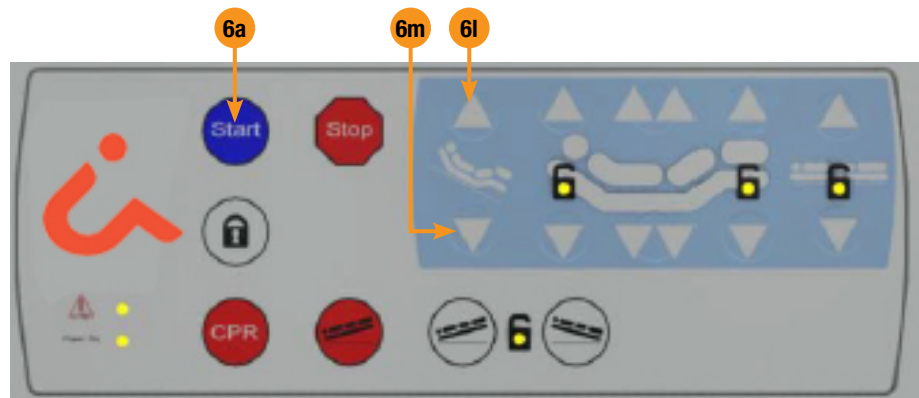
FROM THE INTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **5a** to switch on the panel, then press button **5e** to **adjust** the comfort position;
- press button **5a** to switch on the panel, then press button **5f** to **reset** the comfort position to zero.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel, then press button **6l** to adjust the comfort position;
- press button **6a** to switch on the panel, then press button **6m** to reset the comfort position to zero.



7.14 CPR totally resetting the positions to zero

Automatically totally resetting the positions to zero enables prompt intervention in emergency operations. It is obtained using electrical actuators controlled by the Supervisor control panel and the external side rail control panels, exclusively for caregiver use.



WARNING! Never place hands or objects between the moving sections and the frame of the base surface. Never manually intervene on the moving parts and comply with instructions.



To automatically totally reset the positions to zero, proceed as follows:

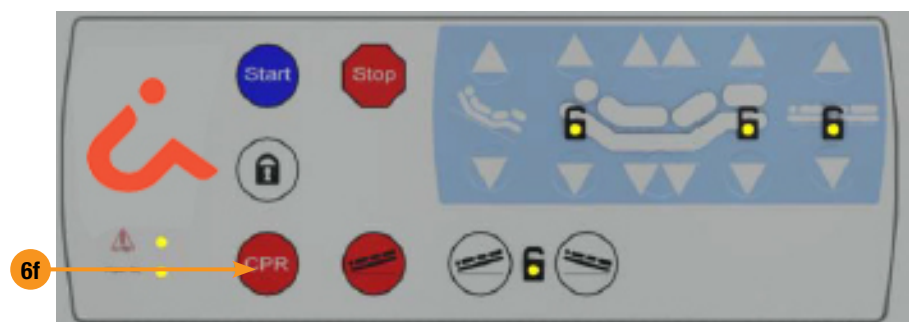
FROM THE SUPERVISOR CONTROL PANEL

- press button **4i** until you reach the desired position: the command resets the base surface and goes to the minimum height.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6f** until you reach the desired position: the command resets the base surface and goes to the minimum height.



7.15 Emergency Trendelenburg

Adjustment of the Trendelenburg position with all the sections lowered is obtained using an electrical actuator controlled by the Supervisor control panel and the external side rail control panels, exclusively for caregiver use.



ATTENTION! The emergency Trendelenburg can only be activated if the command locking selector is in the “release all commands” position”.



To adjust the emergency Trendelenburg position, proceed as follows:

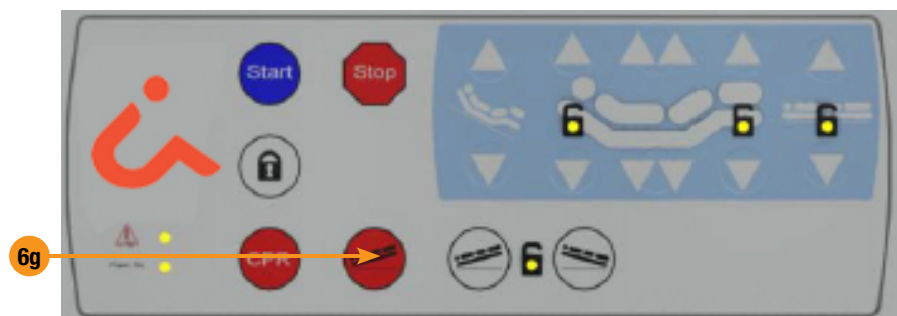
FROM THE SUPERVISOR CONTROL PANEL

- press button **4m** until you reach the desired position: the command resets the base surface and goes to the Trendelenburg position.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6g** until you reach the desired position: the command resets the base surface and goes to the Trendelenburg position.

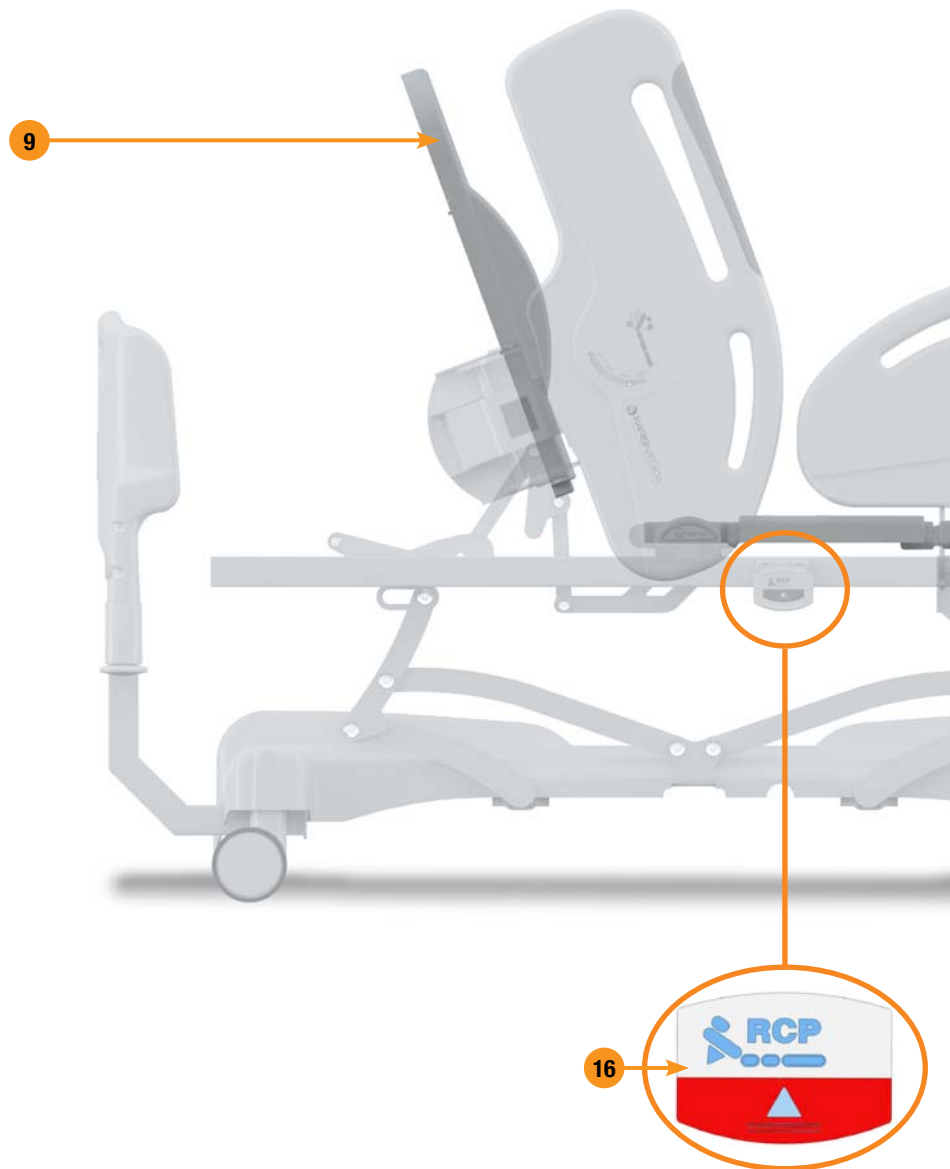


7.16 CPR back release emergency device

The CPR back release device allows you to quickly lower the back section in the event of an emergency. It is activated using a bilateral lever (16) positioned under the base surface.

To lower the back section, proceed as follows:

- release the back section (9) by gripping it with one hand and turning the CPR release handle (16) pulling it upwards;
- lower the back section (9) holding it as it moves down.



7.17 Night safety position

The bed is equipped with a “night safety” position, or rather a function that automatically brings the surface of the bed to the minimum height of 380 mm from the floor.

This position is obtained using an electrical actuator controlled by a control with a magnetic key, from the Supervisor control panel and the external side rail control panels, exclusively for caregiver use.



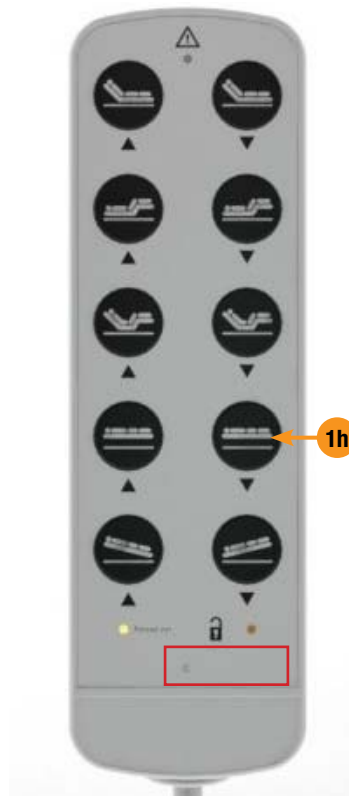
ATTENTION! The night safety position can only be activated if the command locking selector is in the “release all commands” position”.



To bring the bed to the programmed “night safety” position, proceed as follows:

WITH THE FREE PUSH BUTTON PANEL

- activate the position with the magnetic key (see paragraph 5.1 Free push button panel);
- press button **1h**: the bed lowers to the standard minimum height;
- **press button 1h again** until the night safety position is completely reached.



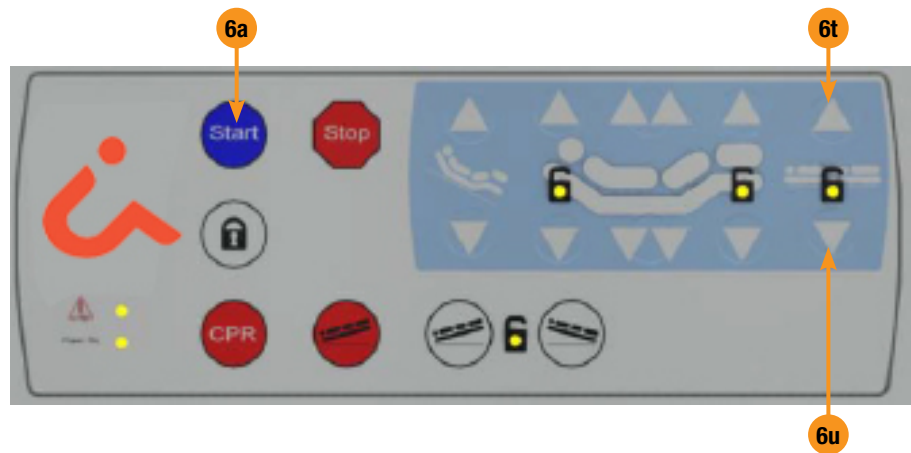
FROM THE SUPERVISOR CONTROL PANEL

- press button **4g**: the bed lowers to the standard minimum height;
- **press button 4g again** until the night safety position is completely reached.



FROM THE EXTERNAL COMMAND PANELS FOR FOLDING SIDE RAILS

- press button **6a** to switch on the panel;
- press button **6u**: the bed lowers to the standard minimum height;
- **press button 6u again** until the night safety position is completely reached.



7.18 Lifting and lowering the leg section



WARNING! Always warn the patient before adjusting the leg section of the bed.

The leg section can be adjusted using two “Rastomat” triggered mechanisms with 6 positions (standard) or two, continuous adjustment gas springs (optional code 82700089).



WARNING! Do not place hands or objects between the leg section and the base surface or the side rails.

7.18.1 Adjust the leg section with the rack mechanism



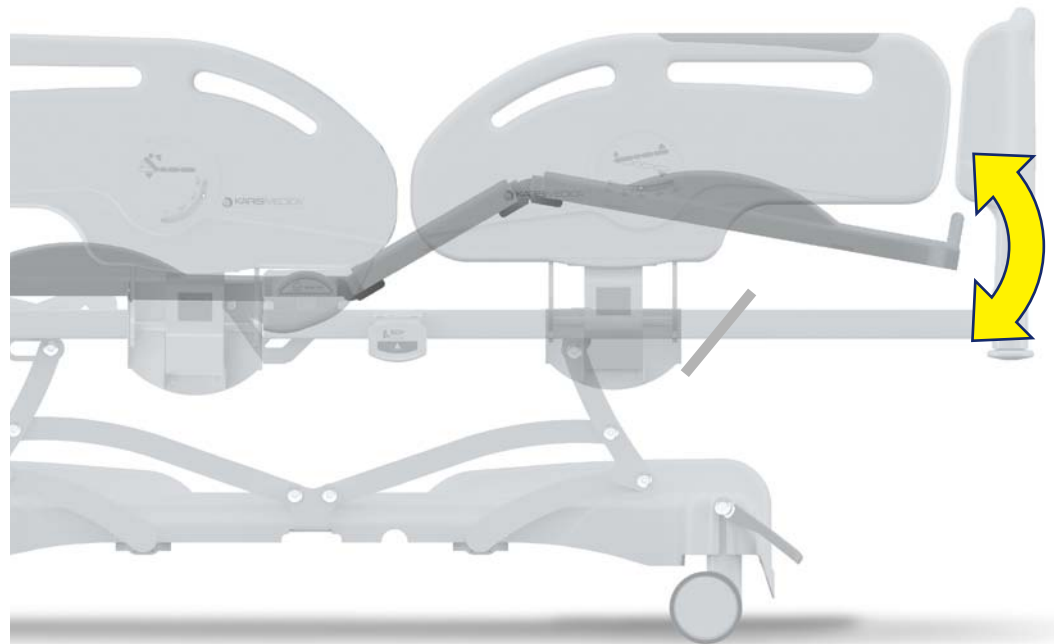
WARNING! Do not release the leg section if you are not sure it is perfectly locked by the locking mechanism.

To **lift** the leg section, proceed as follows:

- grip and lift the leg section (11) to the desired position, checking it is perfectly locked. The rack offers the possibility of adjusting the leg section up to 6 different positions.

To **lower** the leg section, proceed as follows:

- lift the leg section (11) completely to release the rack mechanism, then lower it again delicately until it completely rests on the frame of the base surface.



7.18.2 Adjust the gas spring leg section (optional code 82700089)

Foot board movement mechanism activated using the gradual release gas springs, with adjustment and safety mechanical device. Adjustable using a specific handle on the bottom of the base surface.

To **lift** the leg section, proceed as follows:

- grip the leg section with one hand and use the other to pull the specific lever on the sides of the section upwards;
- lift the leg section to the desired position and release the lever.

To **lower** the leg section, proceed as follows:

- grip the leg section with one hand and use the other to pull the specific lever on the sides of the section upwards;
- lower the leg section to the desired position and release the lever.

7.19 Integrated bed extension (optional code 82700038)



WARNING! *The patient must not be on the bed during this adjustment.*

Bed extension integrated in the frame of the bed. It enables extension of the mattress surface by 18 cm. Manufactured with a steel profile frame protected by an engineering plastic cover.

To **extend the bed**, proceed as follows:

- ensure the bed is released (see par. “Locking and releasing the bed”);
- release the extension by unscrewing the knobs (18), placed on both sides of the bed, and pull the section outwards until it stops (Fig. 2);
- screw the knobs (18) back in to lock the section.



Fig. 1

18

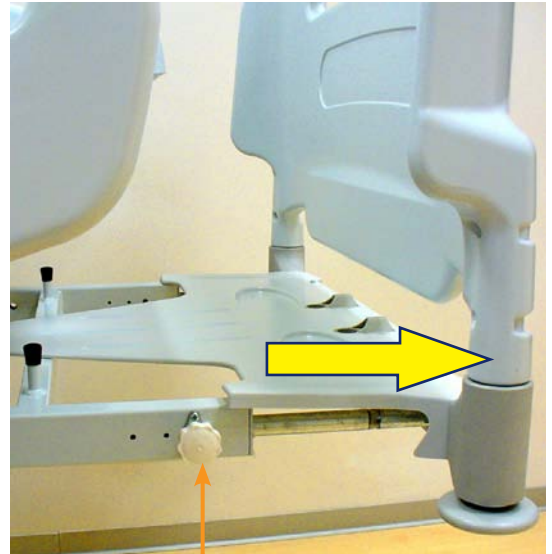


Fig. 2

18

Note: You do not need to unscrew the knobs completely and remove them from the frame to allow the extension to be released and slide forward. Simply unscrew them enough to enable the section to slide.

To **return the bed to its normal length**, proceed as follows:

- ensure the bed is locked (see par. “Locking and releasing the bed”);
- release the extension by unscrewing the knobs (18), placed on both sides of the bed, and push the section inwards until it stops (Fig. 1);
- screw the knobs (18) back in to lock the section.

7.20 4 section side rail movement (optional code 7300009A)



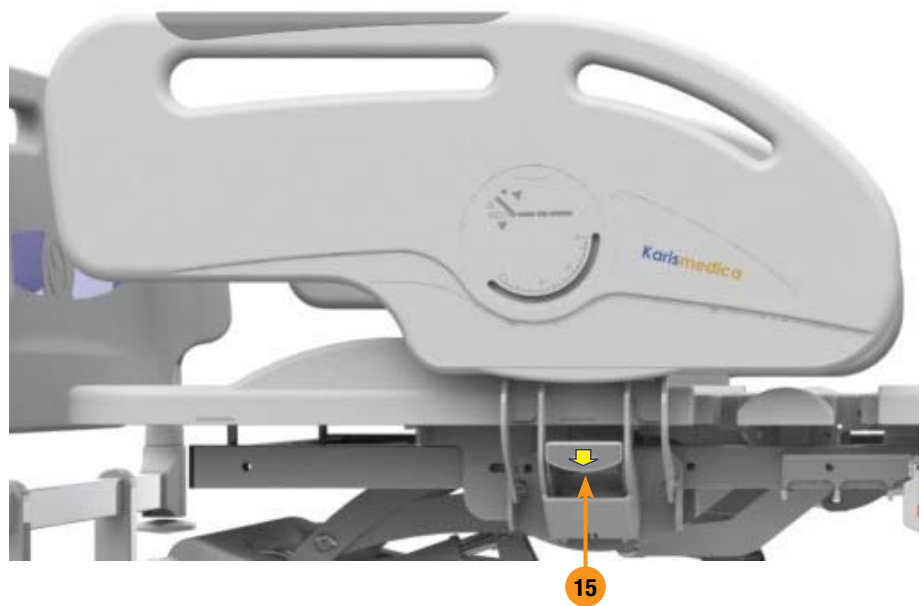
WARNING! Always warn the patient before carrying out any adjustments.

To **lower** the side rails, proceed as follows:

- grab the side rail with one hand and with the other lower the lever in the direction indicated by the arrow (15);
- lower the side rail by turning it downwards.

To **lift** the side rails, proceed as follows:

- grip the rail and lift it by turning it upwards: the locking device supports it in the upright position.



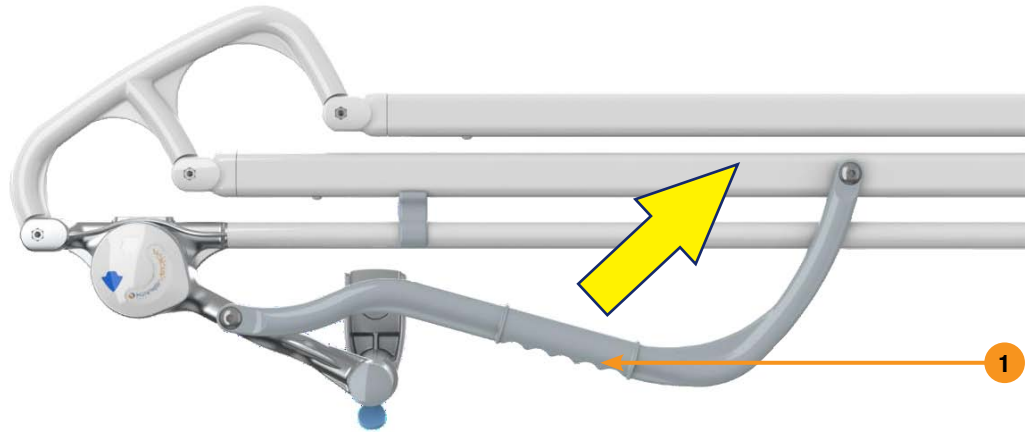
7.21 Collapsible section side rail movement (optional code 7300007A)



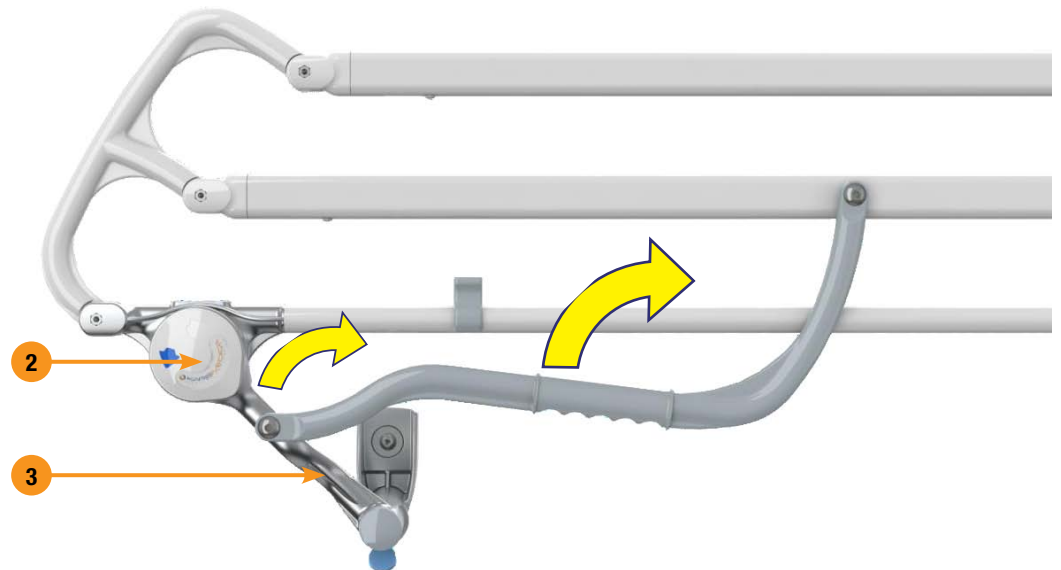
WARNING! Always warn the patient before carrying out any adjustments.

To **lift** the side rails, proceed as follows:

- lift the pulley (1) in the direction indicated by the arrow;

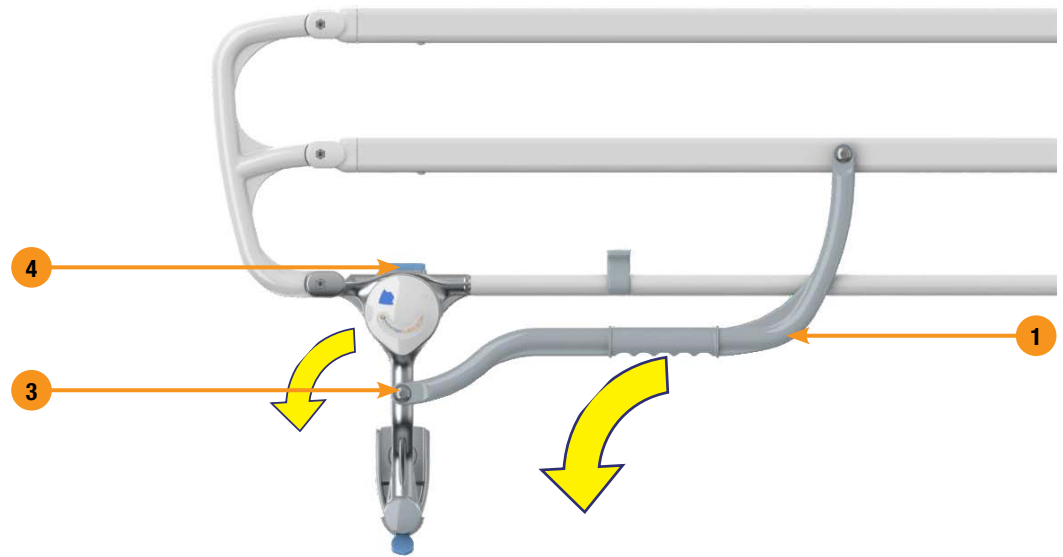


- the side rail support arms (3) must reach the vertical position;
- the side rail is not completely open until the button (2) clicks upwards.



To **lower** the side rails, proceed as follows;

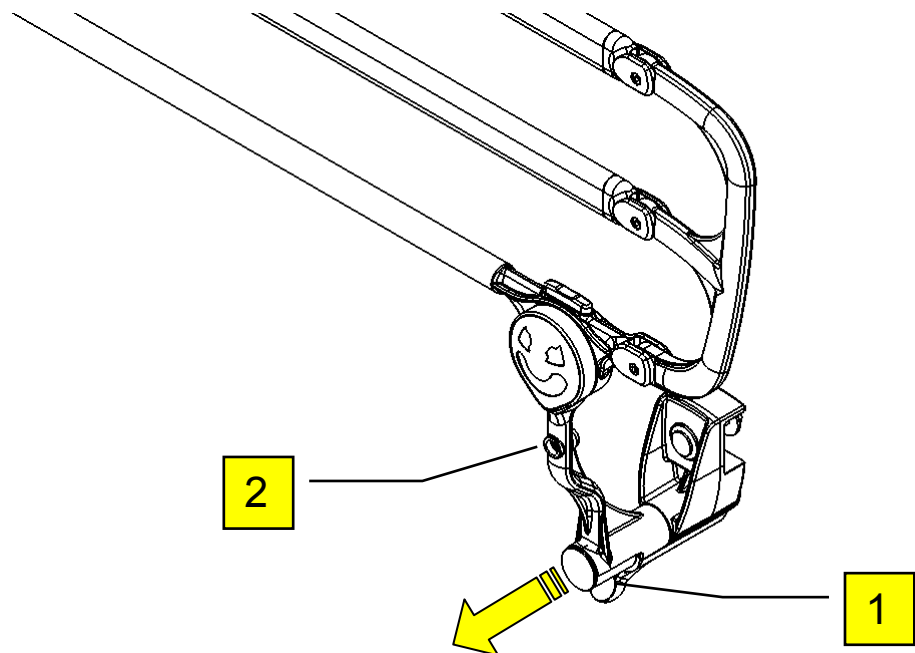
- Press the key (4) to release the side rail;
- Hold the side rail by gripping the pulley (1) turning it downwards. The side rail is equipped with a locking system to prevent involuntary release.



7.22 Dismantling the collapsible side rails (code 7300007A)

To dismantle the collapsible side rails, proceed as follows:

- Press the release lever (1) on the front and rear, downwards;
- Pull out the side rail rotation arms (2) until the clamp pins pop out of their compartment;



- repeat the operations for the other side rail.
- position the side rails in a safe position.



WARNING! Incompatible side rails can create risks.



ATTENTION! it is strictly forbidden to assemble and install the side rail without the support of a qualified technician. Similarly, it is strictly forbidden to dismantle the side rail for subsequent re-installation without the support of a qualified Pam Mobility S.r.l. technician.

7.23 Equipotent connection

The electric beds are equipped with an equipotent connection terminal placed on the head of the bed; the clamp is necessary to equalise electrical potential in all the metal parts without protection.



WARNING! DANGER OF ELECTRIC SHOCK Always use the equipotent connection cable if the patient is connected to intravascular or intracardiac devices. The cable must be connected to the equipotent connection terminal situated on the bed; therefore you must connect the latter to an appropriate equipotent terminal.

7.24 Extractable base surfaces

Base surface in engineering plastic, easily extracted for accurate disinfection and cleaning.



8. ACCESSORIES



Code 82700002 – PATIENT LIFTER WITH TRAPEZE
Patient lifter in chrome tubular steel. Adjustable belt and moulded trapeze.



Code 82700026 – PATIENT LIFTER WITH TRAPEZE AND IV HOOK
Patient lifter in chrome tubular steel with trapeze, adjustable belt and IV hook



Code 82700025 – ADJUSTABLE HEIGHT IV POLE, 4 HOOKS
Adjustable height IV pole with 4 hooks.

Code 82700016 – ADJUSTABLE HEIGHT IV POLE, 4 HOOKS IN STAINLESS STEEL
Adjustable height IV pole with 4 hooks in stainless steel.



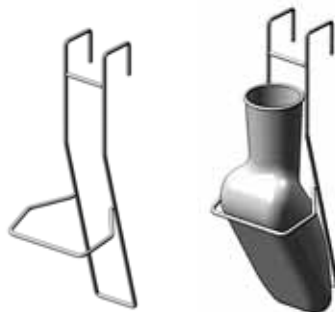
Code 82700028 – IV POLE PLASTIC BOTTLE HOLDER
IV pole plastic bottle holder.



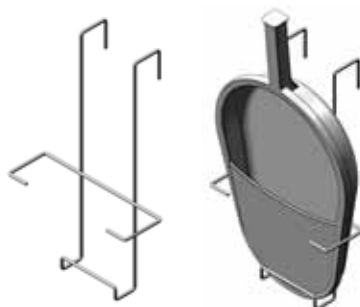
Code 82700007 – URINE BAG HOLDER
Urine bag holder in tubular steel to be attached to the frame of the bed.



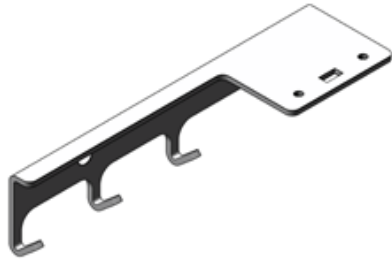
Code 82700008 – BED CRADLE IN ALUMINIUM
Bed cradle in aluminium.



Code 82700009 – URINE PAN HOLDER
Urine pan holder in tubular steel.



Code 82700010 – BEDPAN HOLDER
Bedpan holder in tubular steel.



Code 82700035 – SET OF TWO DRAINAGE BAG HOLDERS/ ACCESSORIES

Set of two drainage bag holders/accessories in steel with 3 hooks for placement on both sides of the bed.



Code 82700022 - A3 FORMAT CHART HOLDER FOR LAMINATED ENDBOARDS

A3 format chart holder for laminated panels, engineering plastic frames and stainless steel laminated panel endboards.

In semi-opaque methacrylate.



Code 82700055 – A4 FORMAT CHART HOLDER FOR ENGINEERING PLASTIC ENDBOARDS

A4 format chart holder for endboards in engineering plastic. In semi-opaque methacrylate.

Code 82700056 - A3 FORMAT CHART HOLDER FOR ENDBOARDS IN ENGINEERING PLASTIC

A3 format chart holder for endboards in engineering plastic. In semi-opaque methacrylate.



Code 82700064 – WRITING SHELF/MONITOR TRAY FOR ENDBOARDS IN ENGINEERING PLASTIC

Collapsible writing shelf/monitor tray for endboards in engineering plastic.



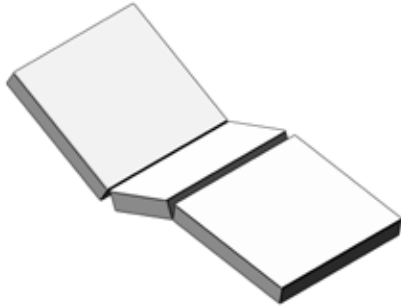
Code 82700059 – ROTATING MONITOR HOLDER FOR BEDS

Rotating monitor holder to position at the end of the bed. Height adjustable surface in methacrylate. Equipped with a fastening belt.



Code 82700041 – UPRIGHT OXYGEN TANK HOLDER, 5 LITRES

In painted steel, suitable for 5 litre tanks.

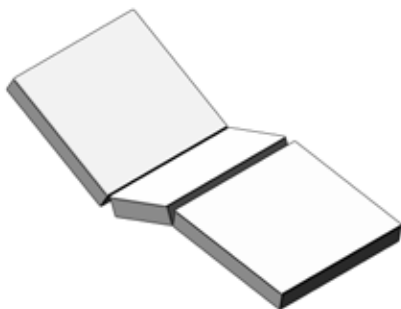


Code 62610027 – 3 SECTION MATTRESS H 120 MM.

Mattress in three sections made of expanded polyurethane foam, 30 Kg density per m³. Fire retardant and 100% shrink proof, pure cotton cover. It is packaged with a zip to enable opening along the long and short side.

Fire reaction class 1IM.

Dimensions Length 1980 mm x Width 850 mm x Height 120 mm.

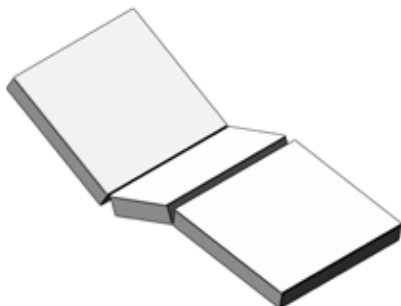


Code 62610028 – 3 SECTION MATTRESS H 140 MM.

Mattress in three sections made of expanded polyurethane foam, 30 Kg density per m³. Fire retardant and 100% shrink proof, pure cotton cover. It is packaged with a zip to enable opening along the long and short side.

Fire reaction class 1IM.

Dimensions Length 1980 mm - Width 850 mm - Height 140 mm.



Code 62610035 – 3 SECTION MATTRESS H 160 MM.

Mattress in three sections made of expanded polyurethane foam, 30 Kg density per m³. Fire retardant and 100% shrink proof, pure cotton cover. It is packaged with a zip to enable opening along the long and short side.

Fire reaction class 1IM.

Dimensions Length 1980 mm - Width 850 mm - Height 160 mm.

9. SANITATION

9.1 Sanitising products



ATTENTION! The sanitising agents are corrosive.

The best sanitising and disinfecting agents are those used more commonly in the industrial sector. Always comply with the manufacturers instructions supplied for the specific application. If possible, ask the manufacturer to guarantee the corrosion level of the solutions used.

Any changes to these features could damage the item.

It is highly important to follow the specifications on concentration, temperature and the reaction times. Any changes to these features could damage the machine.

During the sanitation phases, only use:

- cold mineral water;
- hot water max. 95°C;
- alkaline solutions max. 80°C;
- acid solutions;
- disinfectant solutions.

Do not use sulphuric acid or mineral acids such as HCl, H₂SO₄, HNO₃ e H₂SO₃.

9.2 Sanitation with products containing halogens



ATTENTION! Do not use products containing halogens when sterilising the closed circuit, the bed could be damaged.

If used incorrectly, these products can corrode the steel, specifically if the pH is low. Accurately check before using these solutions.

If the machine has to be sanitised using sanitising products containing halogens (e.g. chlorine), follow these instructions:

- the pH must be over 10;
- the temperature must not exceed 40°C;
- the solution must not stay in contact with the bed for more than 20 min.;
- use a max concentration of 50 ppm of active chlorine;
- after sanitation, rinse with plenty of water.

9.3 Sanitation with acid products



ATTENTION! After each sanitation cycle with acid products, the bed must be immediately and well rinsed with water.

9.3.1 Chlorinated products



ATTENTION! Ensure the chlorinated concentration in the chemical washing solution is lower than 50 ppm. If the concentration exceeds the previous value, the parts in contact with the product could become corroded.

9.3.2 Chemical products that release oxygen



ATTENTION! These agents could produce reactions with the gasket and rubber parts of the bed and could destroy them during prolonged treatment with a closed circuit (not recommended). You are advised to only carry out brief disinfection of this type before operating the bed.

9.4 Sanitation frequency

The sanitation frequency is defined by the user, based on requirements, while taking into consideration the instructions outlined in this manual and those outlined on the sanitation products used.

9.5 Automatic sanitation

Automatic sanitation (autoclave) is defined by the client, based on requirements, while taking into consideration the instructions outlined in this manual and those outlined on the sanitation products used.

9.6 Manual sanitation

Manual sanitation (autoclave) will be defined by the client, based on requirements, while taking into consideration the instructions outlined in this manual and those outlined on the sanitation products used.



***ATTENTION!** Always check the safety data sheets of the materials used for sanitation. In case of contact/inhalation and/or ingestion, comply with the specifications indicated in the prescribed data sheets.*

10. MAINTENANCE

10.1 Periodic control

The user staff must inspect the item at least once a year; the inspection must include a visual inspection for any damage that could compromise the integrity and correct functioning of the item. Such as:

- power supply cables and plugs must be intact;
- power supply cable correctly connected;
- screws tight;
- correct insertion and fastening of any accessories;
- castors clean and product in general clean.



ATTENTION! If damage is found, immediately place the product out of service until repaired or replaced.



ATTENTION! Cleaning and maintenance operations must be carried out with the bed disconnected from the electricity mains.



WARNING! Technical staff must check the efficiency of the batteries at least 3 times a year.

To check the efficiency of the batteries, proceed as follows:

- remove the electricity plug from the mains socket;
- execute at least two movement cycles for each of the adjustments you can implement on the bed.

10.2 Technical support

Requests for customer technical support must be sent via fax or via e-mail to the following address:



PamMobility

Pam Mobility s.r.l.

Via Verdi, 39 42043
Gattatico (RE)

Specifying:

- the code of the product, the serial number, the batch code, the year of installation;
- defects found;
- the exact address of the location where the bed is installed.



ATTENTION! all support intervention must only be carried out by Pam Mobility staff. Support intervention by unauthorised staff can compromise bed functioning and cause damage to property or harm people. Pam Mobility s.r.l. cannot be held in any way liable for damage to property or harm to people due to support intervention carried out by unauthorised staff.

10.3 Storage

In the event of storage of the product for long periods, you must:

- position it in a dry place away from sunlight;
- protect it from dust by covering it with a nylon cloth;
- grease the parts that could rust or get damaged if dry.

10.4 Demolition and disposal

The materials composing the bed essentially consist of:

- painted ferrous or galvanised steel;
- plastic material in abs;
- elastomers.

Dismantle the bed by separating the individual parts based on the material used to manufacture them. It is compulsory to dispose of the various materials in compliance with the standards in force in the country in which the bed is being disposed.

For disposal of consumable products, do as follows.

Sanitation products

- The products used for sanitation must not be poured down drains.
- Learn the orders in place on the disposal methods in the local authorities.

Batteries

- The control unit batteries controlling the motors should be regularly replaced by an electrician. The batteries used should not be disposed of with common waste, but should be taken to the specific disposal centres.

10.5 BATTERY

The bed is equipped with a buffer battery to work in the event of a power cut.

The charging time is approx. 10-12 hours when the battery is completely flat.

You are advised never to let the batteries get completely flat, but frequently recharge them to ensure they last longer.

The batteries must be replaced, based on use, at least after 3 years.

To ensure the batteries last longer, the control units must be connected to the mains as much as possible. The batteries must be recharged at least every 3 months. On the contrary, they will be damaged and automatically flat.

20 complete movements can be carried out when the bed is powered only by the supplementary battery.

When the battery is 50% charged an alarm sounds on each movement.

You are advised to run a functionality test at least once a year.

The batteries must only be replaced with the following model types with technical and electrical features:

- KOBE 1.2-6 (6V, 1.2 Ah)
- YUASA 1.2-6 (6V, 1.2 Ah)
- PBQ 1.2-12 (12V, 1.2Ah)
- KOBE 1.2-12 (12V, 1.2Ah)

Periodically check the air vent is intact. The air vent enables gas from the battery to be released, but does not enable water penetration.



ATTENTION! The battery does not have a capacity to guarantee bed operations for long periods of time, but is only used as a buffer in the event of temporary power cuts. Reconnect the bed as soon as possible to the power socket.

10.6 Troubleshooting

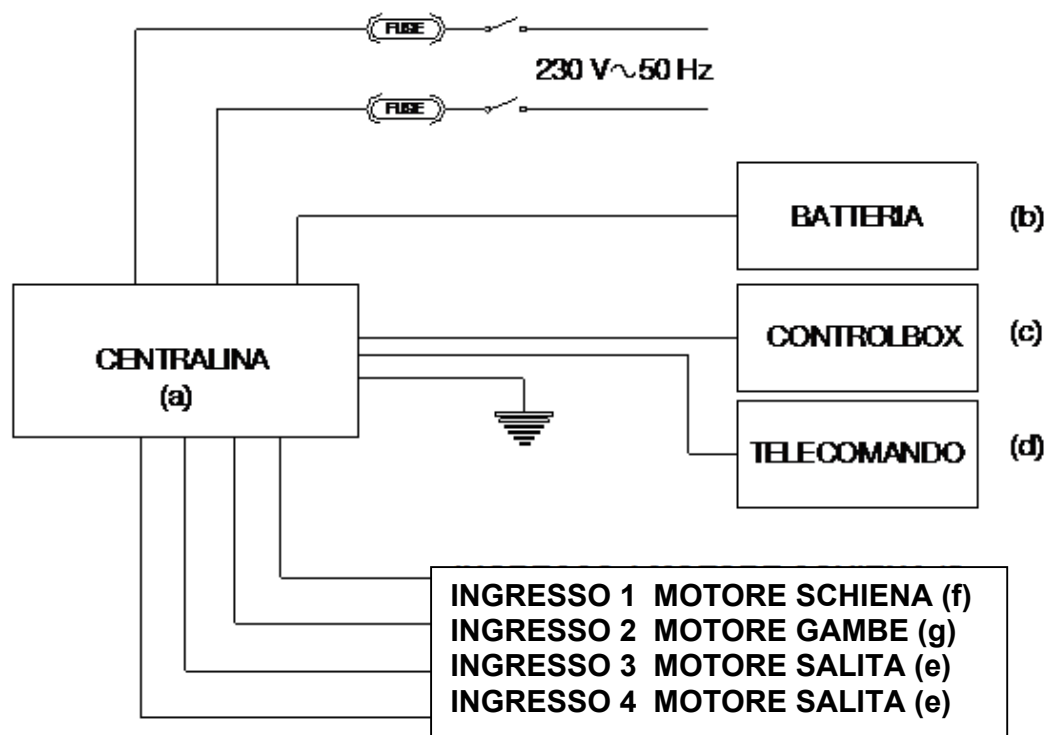
FAULT	POSSIBLE CAUSE	INTERVENTION
The power supply device will not switch on	Not connected to the mains.	Connect to the mains.
	Faulty power supply cable.	If the cable is interchangeable, replace with a new one. If the cable is fixed, send it to a support centre.
	Faulty control unit.	Send the control unit for repair.
The power supply device switches on but the actuator is not working. The relay triggers on the control unit	The actuator plug is not properly inserted in the control unit socket.	Insert the actuator plug in the control unit.
	Faulty actuator.	Replace the actuator.
	Faulty actuator.	Replace the actuator.
The power supply device switches on but the actuator is not working. No relay noises are heard coming from the control unit	Faulty actuator.	Send the control unit for repair.
	Faulty control.	Send the control for repair.
The control unit battery is completely flat and the relay triggering cannot be heard.	Battery completely flat.	Recharge the battery.
	Faulty battery.	Replace the battery.
A control unit output only allows one direction advancement of the connected actuator.	Faulty control.	Send the control for repair.
	Faulty control unit.	Send the control unit for repair.
The actuator does not support the maximum load planned.	Ruined safety clutch (if LA 38)	Send actuator for repair.
	The actuator is damaged.	
Actuator noise but no movement.	The actuator is damaged.	Send actuator for repair.
The motor rotates but the rapid release is noisy and not working.	The disconnection arm of the clutch has rotation under 75°.	Adjust the command cable.
The actuator only moves inwards but not outwards.	The safety nut has activated.	Send actuator for repair.

11. WARRANTY

For the entire duration of the warranty period, the manufacturer is committed to eliminating any faults and/or defects provided the bed was used correctly and in compliance with the instructions outlined in this use and maintenance manual.

Parts replaced with other parts non-compliant with Pam Mobility s.r.l. specifications, if on the market, or not supplied by Pam Mobility s.r.l. if to drawing, will cause the warranty to become null and void, as well as in the case of the improper use of the bed.

12. ELECTRICAL WIRING DIAGRAM



POS.	DESCRIPTION
a	Control unit MCL care 4 outputs 230V IP 66 830.90.77807
b	Buffer battery AG7 DEWERT 830.90.47204
c	Control Box 830.90.33816 3-4 outputs IP66
d	Control 10 keys 830.90.43971 IP66 with magnetic key
e	Lift trolley actuator MCZ 4KN 6000 NW 830.90.77769
f	Back actuator LA31.31750B+0126002P IP66 closed 475mm
g	Actuator MCZ 51491 2000NW SP Pelvis 830.90.51491

Notes:



Via Verdi, 39 - 42043 Gattatico (RE)
Tel. +39 0522 473859 - Fax +39 0522 1548244
info@pammobility.com - www.pammobility.com