PamMobility

SYNAGO BED WITH VARIABLE HEIGHT

727T0045 - 727T0045C

CE

Instructions for use and maintenance

original instructions

REVISION TABLE		
Revision	**Data**	**Note**
0.0	15/11/2016	First edition
0.1	02/07/2018	Update general description, technical data, data sheet, lower section of the legs
0.2	23/10/2019	Insertion variant 727T0045S
0.3	14/04/2021	CE marking according to Regulation (EU) 2017/745
1.1	22/03/2023	Insertion variant 727T0045C
1.2	19/04/2023	Data update, label

Summary

Dichiarazione di conformità UE

Il fabbricante:

Azienda: Pam Mobility s.r.l.

Indirizzo: Via Verdi, 39 - 42043 Gattatico (RE) - Italia

SRN: IT-MF-000027951

Dichiara, sotto la propria ed esclusiva responsabilità, che il/i dispositivo/i

Codice	Modello	ID BD/RDM	UDI-DI DI BASE
727T0045	Letto ad altezza variabile Synago	2322647/R	805577420727T0045VS
727T0045S	Letto ad altezza variabile Synago	2322649/R	805577420727T0045SZH
727T0045C	Letto ad altezza variabile Synago	2392251/R	805577420727T0045CYH

Destinazione d'uso: Il dispositivo è destinato ad essere utilizzato nella diagnosi, nel trattamento e nel monitoraggio di un paziente adulto sotto la stretta sorveglianza e supervisione del personale medico.
Ambiente d'uso: ambiente di applicazione 2 o 3 ai sensi della CEI UNI EN 60601-2-52.
Personale destinato all'uso del prodotto: paziente, operatori specializzati e personale medico.
Il letto non può essere utilizzato in atmosfera potenzialmente esplosiva o infiammabile.

Classe di rischio: Classe I (conformemente alla Regola 13, Allegato VIII del Regolamento (UE) 2017/745)

È conforme ai seguenti atti legislativi dell'Unione:

(UE) 2017/745	Regolamento (UE) 2017/745 del Parlamento europeo e del Consiglio, del 5 aprile 2017, relativo ai dispositivi medici, che modifica la direttiva 2001/83/CE, il regolamento (CE) n. 178/2002 e il regolamento (CE) n. 1223/2009 e che abroga le direttive 90/385/CEE e 93/42/CEE del Consiglio
2006/42/CE	Direttiva 2006/42/CE del Parlamento europeo e del Consiglio, del 17 maggio 2006, relativa alle macchine e che modifica la direttiva 95/16/CE
2014/35/UE	Direttiva 2014/35/UE del Parlamento europeo e del Consiglio, del 26 febbraio 2014, concernente l'armonizzazione delle legislazioni degli Stati membri relative alla messa a disposizione sul mercato del materiale elettrico destinato a essere adoperato entro taluni limiti di tensione
2014/30/UE	Direttiva 2014/30/UE del Parlamento europeo e del Consiglio, del 26 febbraio 2014, concernente l'armonizzazione delle legislazioni degli Stati membri relative alla compatibilità elettromagnetica
2011/65/UE	Direttiva 2011/65/UE del Parlamento europeo e del Consiglio, dell'8 giugno 2011, sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche con modifica da parte della direttiva delegata 2015/863 del 31 marzo 2015

È conforme alle seguenti norme armonizzate/norme tecniche/specifiche comuni:

CEI EN 60601-1:2007 + EC:2010 + A11:2012 + A1:2014 + A12:2015 + A2:2022 - Apparecchi elettromedicali
Parte 1: Prescrizioni generali relative alla sicurezza fondamentale e alle prestazioni essenziali

CEI UNI EN 60601-2-52:2016 - Apparecchi elettromedicali
Parte 2: Prescrizioni particolari relative alla sicurezza fondamentale e alle prestazioni essenziali dei letti medici

Il dispositivo è assoggettato alla procedura di valutazione di conformità prevista all'articolo 52, punto 7 del Regolamento (UE) 2017/745

Gattatico,
27 aprile 2023

Consigliere Delegato
Andrea Muzzini

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ID8520

1. GENERAL PROVISIONS

1.1 Presentation of the manual

This manual is intended to provide the user with all the necessary information so that, in addition to proper use of the device, it is able to manage the same in the most autonomous and safe way possible.
It includes information regarding the technical aspect, operation, device downtime, maintenance, spare parts and safety.
Please read the warnings and the instructions contained in the manual as they provide important information regarding the SAFETY OF USE AND MAINTENANCE.
Before carrying out any operation on the device, qualified operators and technicians should read carefully the instructions contained in this publication.
In case of doubts about the correct interpretation of the instructions, contact our office to obtain the necessary clarification.
The descriptions and illustrations given in this publication are intended as non-binding. Pam Mobility reserves the right to make changes that it deems convenient for improvement purposes, without committing to updating this documentation.
The illustrations and images in this manual are intended only as examples and may differ from practical situations.
The content of this Manual complies with Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No. 178/2002 n. 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC.
Any person may not disclose, modify or use this manual for his or her own purposes. The safety of the operator and the patient and the smooth operation of the patient depend on compliance with the instructions described here.

1.2 Customer service

Customer Service and product support are important aspects of the Pam Mobility SRL corporate structure.
Customer Service is available for further information on the use, maintenance and service of this product.

1.3 Conventions

The following symbols have been adopted in this manual:

ATTENTION! It is placed before certain procedures. Failure to do so may cause damage to the article.

WARNING! It is placed before certain procedures. Failure to do so may cause harm to the operator, the patient and the article.

2. GENERAL ASSETS

2.1 Constructor

The article described in this manual is produced by:

Pam Mobility s.r.l.
Via Verdi 39 - 42043 Gattatico (RE) -
Italy Tel 0522 473859 - Fax 0522
1548244
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info@pammobility.comhttp:
www.pammobility.com

2.2 Intended use

- Device type: electric bed.
- The device is intended for use in the diagnosis, treatment and monitoring of an adult patient* under the strict supervision of medical personnel.
- Use environment: hospitals and medical clinics in application environments 2 or 3. The installation room must be equipped with electrical installation in accordance with current standards.
- Personnel for use of the product: specialized operators and medical personnel.
- Supervision and responsibility: the bed should be used under the supervision of a doctor.
- Warning: The bed cannot be used in a potentially explosive or flammable atmosphere.
- Limits of use:the bed can be used only as described in this manual.

* Adult means a person weighing 40 kg or more, of a height of 146 cm or more and having a body mass index (BMI) of 17 or more.

2.3 Essential performance of the bed

The essential benefits of the medical bed are:

- Trendelenburg location: the Trendelenburg location can be reached in any condition via a push-button in less than 30 seconds;
- horizontal network plane: it is possible to bring the network plane in any condition horizontally through a push-button in a time less than 30 s;
- horizontal backrest: it is possible to bring the backrest section in any condition in horizontal position thanks to the mechanical lever CPR in less than 30 s.

2.4 Environmental limits of use

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

The working environment of the bed shall be as follows:

- Temperature: 0
- Humidity: 10% 70% (not condensed).

The device must be placed in absolutely dry environment.
Environmental conditions other than those indicated may cause serious damage to the bed. The placement of the bed in rooms not corresponding to the above makes the warranty void.

2.5 Expected life

The bed has been designed and constructed to operate without risk to property and persons under the normal conditions of use defined in this manual for 10 years. However, this duration can only be achieved by complying with the

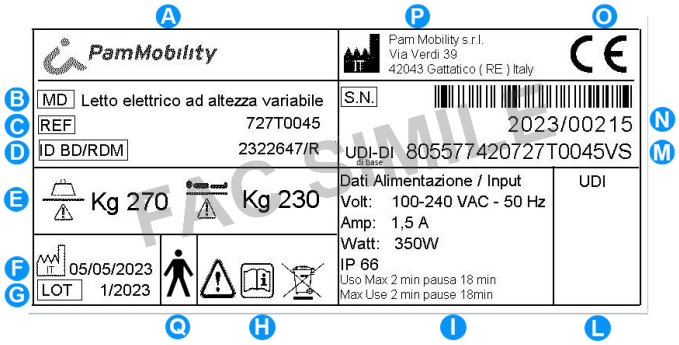
requirements of this manual and contacting the assistance of Pam Mobility s.r.l. whenever a bed failure occurs. After 10 years of use it is recommended to replacethe interoletto.

2.6 Identifying

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

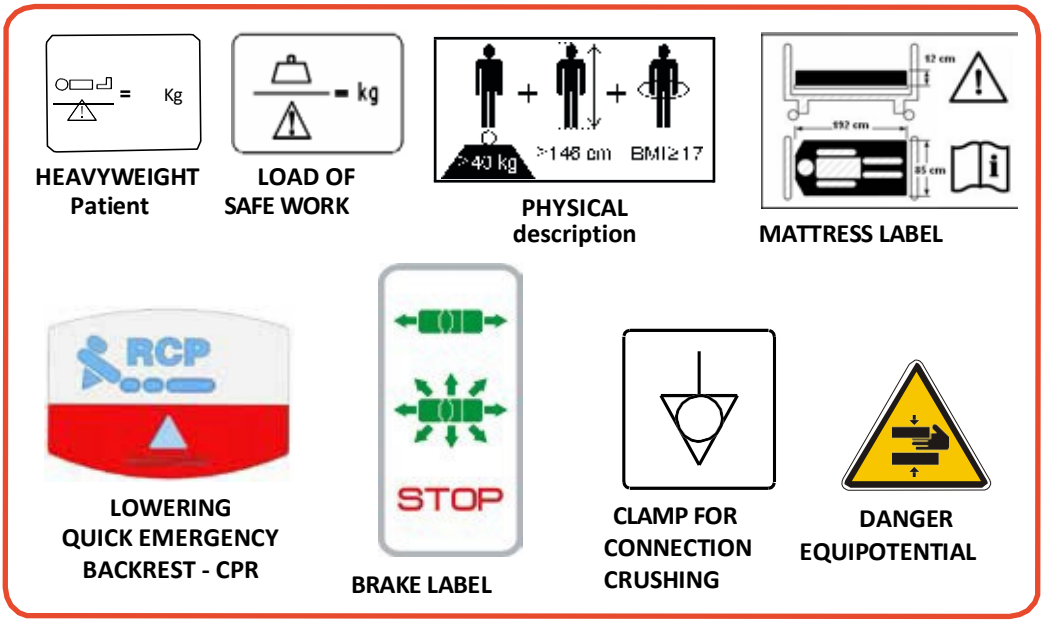
The article is identifiable by the plate on the base in which the following data are shown:

A. Company logo;
B. Device description;
C. Article code;
D. Registration number of the device to the Ministry
E. Safe working load;
F. Date of production;
G. Manufacturing data
H. Warning: Read the installation and operating instructions.
I. Electrical data;
L. Vector UDI (not present)
M. Basic UDI-DI number;
N. Serial number
O. CE marking
P. Name and manufacturer's address
Q. Applied part type B



2.7 Identification of controls

Controls and devices are identified by labels placed nearby or on the devices themselves.



3. SAFETY

3.1 Safety rules

3.1.1 Definitions

The following terms shall be used in this Safety Manual:

Operator:	the person in charge of installing, operating, regular performing maintenance, cleaning, repairing, and transporting the device.
Technic Pam mobility:	qualified technician made available by Pam Mobility s.r.l. or its agent to carry out operations of a complex nature, installation and installation.
Safety components:	specially designed component by the manufacturer and placed on the market separately from the device in order to carry out the safety functions; it can therefore be defined as a safety component when the failure of the component itself affects the safety of the exposed persons.

3.2 General provisions

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

WARNING! NOTICE FOR BLOOD BORNE DISEASES: To reduce the risk of exposure during use of the bed, follow the maintenance instructions in this manual, in addition to the safety requirements for personnel established by the Head of the Emergency Medical Service.

Operators should carefully read this manual, follow the instructions contained in it and familiarize themselves with the correct procedures of use and maintenance of the bed. Use and carry out the maintenance of the article only as prescribed in this manual and use only spare parts and assistance Pam Mobility s.r.l. Do not use Illetto for purposes other than those for which it was designed.
Always advise the patient before making any adjustment of the bed. During the stop, always lock the bed through the brakes.
Never leave the bed unattended when the patient is on it.
Keep this manual for consultation and to support staff training.
Transfer it together with the product in case of sale or transition to new users.

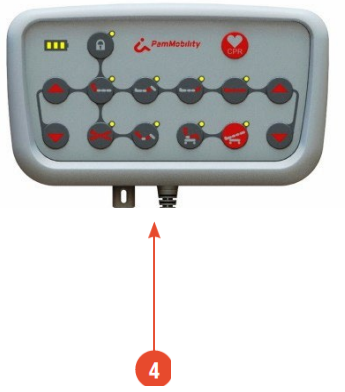
WARNING! Report any serious incident that has occurred in relation to the device to the manufacturer and the competent authority of the Member State where the user and/or patient is established.

3.3 Description of the bed

Bed variable height with Trendelenburg 3 joints 4 sections, electrically adjustable, top in technopolymer, shoulder side head independent.
The electric bed has been designed for use in specialist or semi-intensive care units. For the purposes of the reference Directive the bed is to be understood as an active non-therapeutic device (class I).

3.3.1 Title of main parts

1. Keypad;
2. Control Box (optional cod. 82700018);
3. Bilateral pedals (optional cod. 82700077);
4. Control panel
5. Base;
6. Telaio rete;
7. Headboard;
8. Footboard;
9. Back section;
10. Basin section;
11. Upper section of the legs;
12. Lower section of the legs;
13. Brake;
14. Wheel;
15. Tailgate release handle;
16. Quick release lever back section;
17. Bumper.



1. Push-button
Push-button for patient and/or operator use with maintained action with possibility of deactivable controls.

2. Control Box - Control inhibitor (optional cod. 82700018);
The function inhibitor panel is used when the patient's position needs to be carefully controlled by the medical staff. The panel is fixed to the bed frame out of the patient's reach and is used to block the functions of the free push-button.

3. Bilateral pedals (optional cod. 82700077)
Bilateral pedals for the height adjustment of the mesh. Placed on both sides of the bed to facilitate different positions , and intervene on the hands - free patient. Equipped with safety protection to prevent involuntary operation.

4. Control panel (optional cod. 82700066);
Control panel for operator use with the possibility of inhibiting the controls of each single bed movement. All functions can be activated via the buttons of consent to the action maintained movement. There are also emergency hotkeys and comfort positions.

5. Base
Perimeter tubular structure in welded and epoxy painted steel, covered by an ABS casing.

6. Frame net
Longitudinal metal structure on which the different sections rest.

7-8. Headboard and footboard
Headboard and footboard are the end part of the bed. They are shaped to allow an easy grip in the movement of the bed and a pleasant aesthetic appearance. They are available in various configurations.

9. Back section
Part of the support that supports the patient's head and back.

10. Basin section
Central part of the shelf supporting the basin. It's not a big deal.

11. Upper section of the legs
Mesh part that allows the lifting of the upper section of the legs.

12. Lower section of the legs
Mesh part that allows the lifting of the lower section of the legs by means of an electric actuator or 6-position "Rastomat" snap mechanism.

13. Brake
Pedal that allows you to lock or unlock the wheels and set the steering lock.

14. Wheels
Connected to the base, they allow the movement of the bed.

15. Tailgate release handle
In case there are technopolymer half banks, it allows the lowering and the raising of the same.

16. Quick release lever back section (CPR)
Lever that allows the quick release of the backrest section in case of emergency.

17.Bumpers (optional)
Wheels in plastic material that absorb any impact when moving the bed.

3.4 Technical characteristics

3.4.1 Dimensional data

ELECTRIC VARIABLE HEIGHT BED		727T0045 – 727T0045C
Sections	-	4
Floor size	mm	2000 x 880
Height	mm	380 ÷ 780
Encumbrance	mm	2260 x 1010 (960)
Back section	mm	700
Fixed section	mm	108
Upper section of the legs (pelvis)	mm	310
Lower leg section (footboard)	mm	730
Backrest adjustment	deg	0 ÷ 71
Back section translation - basin	mm	103 - 53
Upper leg section adjustment	deg	0 ÷ 30
Trendelenburg	deg	0 ÷ -15°
Reverse trendelenburg	deg	0 ÷ 15°
Bottom section of the frame	deg	0 ÷ 30
Safe workload	kg	270
Patient weight	kg	230
Standard wheel diameter	mm	150
Suggested dimensions mattress	mm	2000 x 850 x 180 h
Weight	kg	130

3.4.2 Electrical data

ELECTRIC VARIABLE HEIGHT BED		727T0045 – 727T0045C
Supply voltage	V	100-240V-50Hz
Network frequency	Hz	50
Operating voltage	Vcc	24
Max current absorbed	To	1.5
Sound power level emitted under load	dB	<60
Class of electrical protection	-	I
Applied part	-	Type B
Degree of electrical protection	-	IP66
Intermittent operation	min/hour	10% or 2 minutes of operation followed by 18 minutes of pause
Battery capacity	Ah	1,2
Battery charging time	h	10-12
Reference standards		CEIUNI EN 60601-2-52

4. PUSH BUTTON

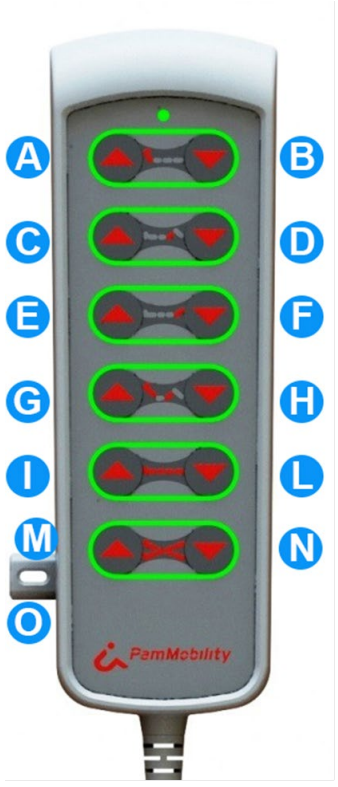
4.1 Free button panel

The bed supports a free push-button with 12 buttons and 6 functions.

ATTENTION! Before performing any handling, please refer to the section on the manoeuvre to be carried out.

The movements that can be made by means of a push-button are as follows:

- Raise the back; **To**
- Lower the backrest;**B**
- Raise the upper section of the **shankseC;**
- Lower the upper leg section;**D**
- Raise the lower section of the legs;**E**
- Lower lower leg section;**F**
- Simultaneous raising of the back section and the upper section of the legs **G**
- Simultaneous lowering of the back section and the upper section of the legs **H**
- Raise the bed; **I**
- Lower the bed;**L**
- Reverse trendelenburg; **M**
- Trendelenburg; **N**
- Led lighting on power on;
- Key for locking and unlocking the Trendelenburg. **Or**



4.1.1 UNFORESEEN

4.2 Inhibitor controls

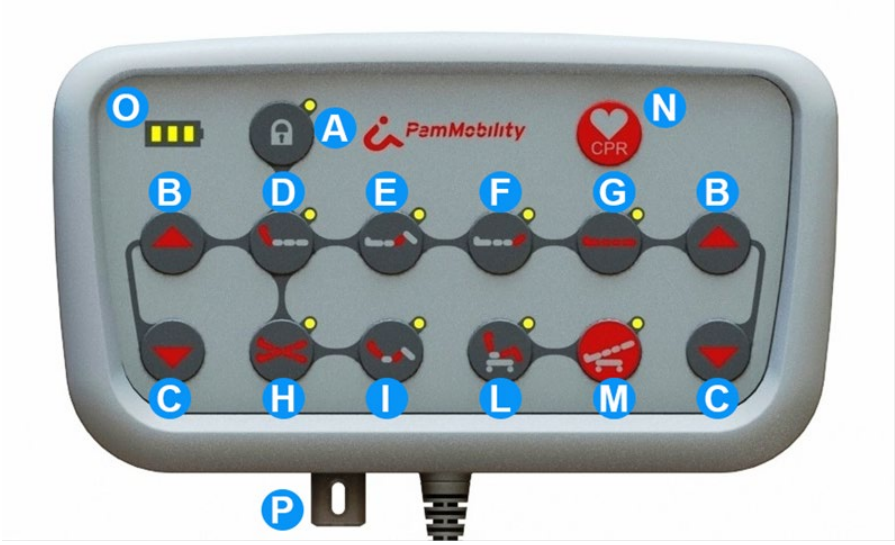
The electric beds can support a Control Box inhibition console, which allows operators to inhibit the functions of the free control panel.

Inhibition commands

To disable console commands, proceed as follows:
Press Tastoe A in **with the** padlock symbol closed and holding down the A key also press the movement key that you want to inhibitree for example:
to exclude the movement of the backrest you will have to press the button A+ **the button** Dil green led on the edge button turns off

Inhibition commands

To unlock commands from console proceed as follows
Press the A button **in** with the lock symbol closed and holding the Open button **also** the movement key you want to unlock for example:
to exclude the movement of the backrest you will have to press the button A+ **the button** Dil green led on the edge button is lit



4.3 Bilateral pedals (optional cod. 82700077)

The electric beds can support a bilateral pedal board, which allows operators to raise and lower the bed.

ATTENTION! Before performing any handling, please refer to the section on the manoeuvre to be carried out.

The two-sided pedal movements are as follows:

- Raise the bed;
- Put the bed down.

4.4 Control panel

The beds can have a control system that allows the operator to control, activate and inhibit the functions of the free control panel.
There are also emergency hotkeys for CPR, comfort position, Trendelenburg. and patient descent position

*ATTENTION! Make sure the magnetic key **P is** inserted. Before performing any handling, please refer to the section on the manoeuvre to be carried out.*

Description:

- Lock inhibition/ unlocking movements **A**
- Control of movement **B**
- Control of movement C descent
- movement of the upper section of the backrest **D**
- movement of the upper leg section; **And**
- movement of the lower leg section (if present) **F**
- up/down movement of bed **G**
- Handling of Trendelenburg/ controtrendelenburg; **H**
- simultaneous movement of the back and upper section of the legs; **I**
- Button for comfort position (armchair); **L**
- CPR button total reset; **N**
- Button for emergency Trendelenburg position M
- Magnetic control console inhibition key. **P**
- Indicator led battery status/ presence network 230V

4.5 Control panels for kit 4 foldable sides (NOT PROVIDED)

UNFORESEEN

4.5.1 Inhibition of commands from the control panel

UNFORESEEN

5. INSTALLATION

The handling activities described in this chapter shall only be carried out by qualified personnel specially trained to carry out loading operations in complete safety, unloading and handling of packages by means of lifting tools such as cranes or forklifts. Local staff should be aware of the accident prevention rules.

ATTENTION! Ensure that the vehicles and logistic facilities used comply with the permitted use and in perfect condition; keep away from suspended loads, make sure that ropes and lifting straps are in perfect condition and properly inserted in the appropriate hooks.

5.1 Transport and delivery

Transport may be by the following means of transport: road, rail, sea, air.
The weight of the article is deductible from the technical characteristics and packaging. The handling of the single article must be carried out using suitable means for handling such as the self-propelled forklift or the manual forklift.
Occupational safety precautions remain valid.
The device is delivered mounted wrapped with a shockproof bubble wrap film.

ATTENTION! Upon receipt of the device, check with the conveyor that the material is intact, has not been damaged during transport or has not been opened voluntarily to remove parts inside. Check that the delivery corresponds to the specifications of the order and verify with the shipping documents that the delivery is complete.

If the packaging is damaged internally, open the carrier's presence and check that the bed has not been damaged.
Note any damage on the shipping documents and immediately inform Pam Mobility s.r.l.
If the packages are not abnormal, check externally the bed within 24 hours of delivery.
In case of visible damage due to transport, inform the carrier and the insurer immediately, as well as Pam Mobility s.r.l.

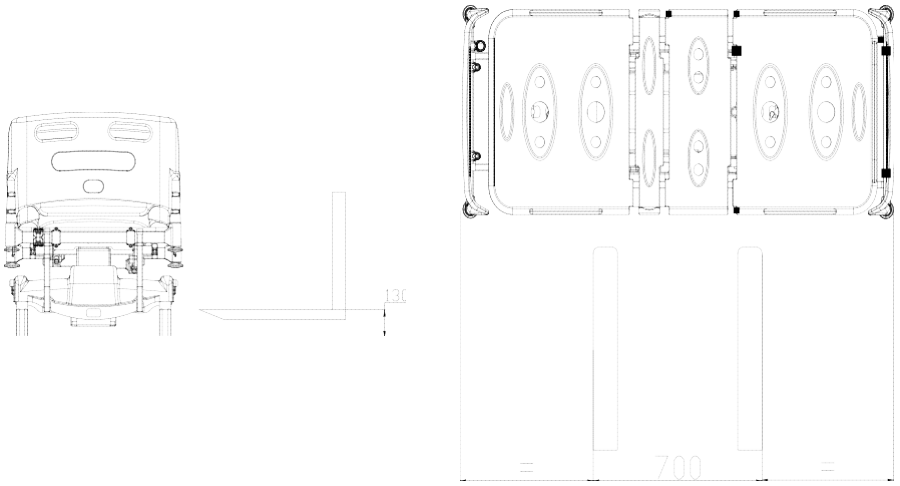
5.2 Lifting

WARNING! Lifting and handling operations must be carried out by specialized personnel and trained in this type of manoeuvres.

ATTENTION! During the lifting, slowly tighten the belts and verify that no components not prepared to bear the weight of the group are affected

In order to ensure safe handling of the bed, strictly follow the following instructions:
Make sure that the lifting means are adequate to the weight of the bed.
Use only flat lifting bands.
Place the lifting bands near the trolley frame and not the net frame. If forklifts are used, place the bed on top of a suitable platform by locking the four wheels.
Raise the bed from the ground as little as possible.

ATTENTION! During the operation, check that no part of the bed is crushed against the lifting device.



5.3 Storage

In case of prolonged storage, leave the bed sheltered from rain and wind and in a dry place.
Especially well protect electrical parts and all parts very sensitive to humidity and low temperatures.
The storage of the bed can be done in dry premises with the temperature between -10 ºF and +50 ºF; and relative humidity 20% 90% without condensation.

5.4 Installation

The installation takes place under the direction and responsibility of a qualified technician of Pam Mobility s.r.l.

WARNING: it is absolutely forbidden to mount and install the bed without the support of a qualified technician of Pam Mobility s.r.l.. Similarly it is absolutely forbidden to disassemble the bed for a subsequent reinstallation without the support of a qualified technician of Pam Mobility s.r.l.

- Check that there is a power outlet near the installation area.
- Check that the installation surface is sufficient considering the additional space required for mounting.
- Make sure that the space left next to the bed is sufficient for a person to pass through.
- Make sure that the specific capacity of the floor is sufficient to bear the weight of the bed.

5.4.1 Preparation of the installation area

The place of installation must: have a rigid floor, horizontal, flat.

5.5 Verification of the allocation

The packaging shall contain:
- electric bed (ordered version);
- additional accessories ordered;
- the instruction manual for use.

5.6 Assembly

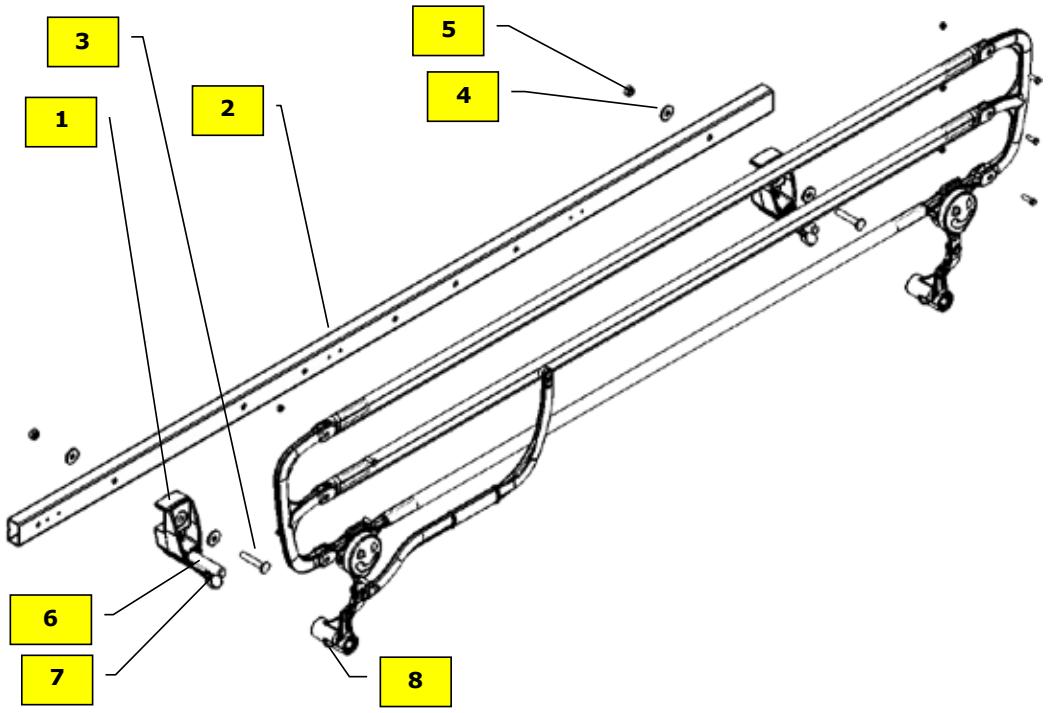
ATTENTION! The assembly area must be clean and clear; must be at least 4x3 m to allow for assembly operations.

The place of assembly must have the following
characteristics: flat floor, not yielding;
lighting 400 LUX;
have an electrical power distribution socket suitable for the characteristics of the article (see identification plate) made in compliance with IEC standards.

5.7 To mount the sides (cod. 7300007A)

WARNING! Incompatible banks can create risks.

To mount the sides with compass proceed as follows:
mount the clamp (1) on the traverse (2) of the bed frame fixing it with screws (3), washers (4) and self-locking nuts (5) included;
Insert the tailgate into the pins of the clamps (6), until the release lever (7) does not block the lower part of the articulation arms (8);



repeat for the other side.

Please note: The correct way to mount the lift is with the lift handle facing the foot side.

WARNING: it is absolutely forbidden to mount and install the lift without the support of a qualified technician of Pam Mobility s.r.l.. Similarly it is absolutely forbidden to disassemble the bank for a subsequent reinstallation without the support of a qualified technician of Pam Mobility S.r.l..

5.8 Electrical connection

WARNING! Electric beds may not be used in a potentially explosive or flammable atmosphere (hyperbaric chamber type).

ATTENTION! Danger of Electrocution. Cables must be positioned so that they are not crushed, trapped, stretched, trampled, bent, wet or obstructed by moving parts.

WARNING! The power cord should not interfere with the operator.

WARNING! Verify that the voltage and the network frequency correspond to the one to which the article has been prepared (see identification plate).

- prepare a SCHUKO socket;
- connect the plug to the power supply;
- Wait 6/8 hours to charge the buffer battery.

5.9 Functional test

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

Before using the article:

- perform the "periodic check" provided for in the maintenance chapter;
- if the check is successful the article is ready to be put on regular service, otherwise contact Pam Mobility Customer Service immediately.

6. OPERATION AND USE

6.1 Warnings

Electric beds can not be used in potentially explosive or flammable atmosphere (hyperbaric chamber type).

Before moving the bed, make sure that the power cord is disconnected and attached to the bed.

Sanitize The reader according to the modalities described in the QUICK chapter.

It is the responsibility of the attending staff to authorize the patient to use the functions of the bed.

The electric part is designed for a continuous use of 2 minutes with an interval of 18 minutes between one use and the other as shown in the identification plate on the control unit. Using the bed without respecting these constraints does not pose any danger for either the patient or the operator but can damage the device.

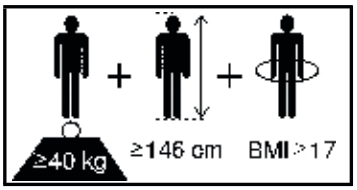
Inform the patient whenever bed adjustments are made.

Always lift the safety rails of the bed when there is a patient above. During the stop always lock the bed by applying the brakes.

When the PATIENT's condition (such as disorientation due to medication or particular clinical conditions) can lead to ENTRAPMENT OF THE PATIENT with THE SIDES/SHOULDERS, The MATTRESS SUPPORT PLATFORM must be left in a safe position with horizontal bed base and lowered when the patient is left alone (except when requested to be provided to medical staff for special or special circumstances).

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

Beds should only be used with patients who meet the following parameters: weight greater than or equal to 40 Kg, height greater than or equal to 146 cm and body mass index greater than or equal to 17 (see label below).



6.2 Secure position

The bed is in a safe position when the bed base is in a horizontal position in the lowest position with the sides raised, the controls by push-buttons disabled, the extension bed (if available) closed and the brake inserted.

6.3 Emergency positions

The bed can reach two emergency positions, depending on the type of emergency the patient is in:

1. The bed is in emergency position when the bed base is horizontally in the lowest position (total reset), with the sides lowered.
2. The bed is in the emergency position when all the sections of the bed are zeroed and the bed base moves to the Trendelenburg position with the sides lowered.

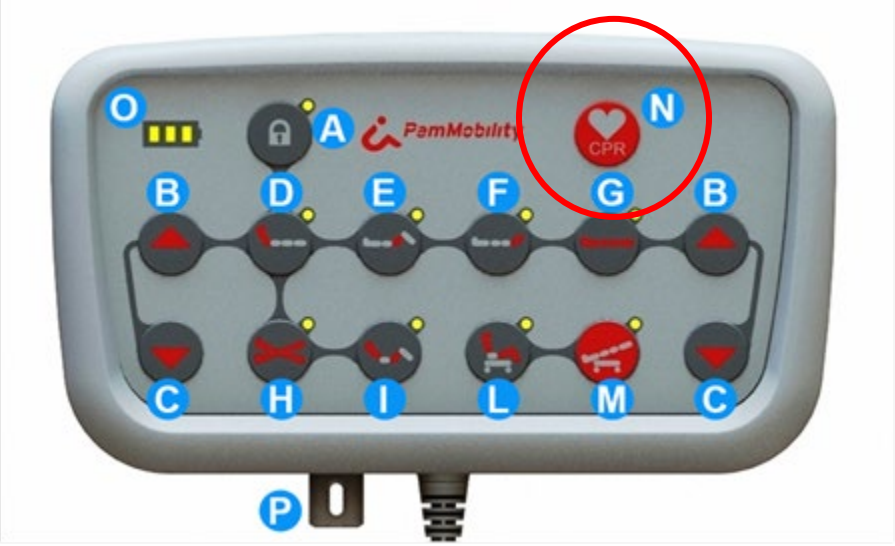
To bring the bed to the EMERGENCY POSITION 1 proceed as follows:

- press the button of the button to reset the bed sections;
- press the button to lower the bed;
- lower the sides (see reference paragraph).

FROM A CONTROL PANEL

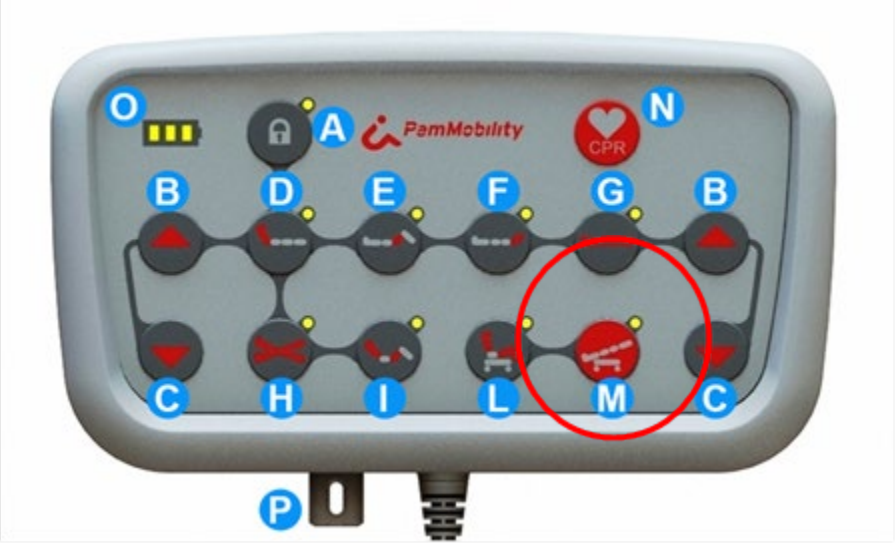
- press the button of the push-button **N (** cpr) until the desired position is reached: the control clears the network plane and leads to minimum height;
- lower the sides (see reference paragraph).

-



To bring the bed to the EMERGENCY POSITION 2 proceed as follows:
press the button of the button to reset the bed
sections;
press the button of the push-button to bring the
Treendelenburg into position;
lower the sides (see reference paragraph).

FROM A CONTROL PANEL
press the button of the M button **until** the position is reached: the control clears the network plane and leads to the Trendelenburg position. lower the sides (see reference paragraph).



6.4 To move the bed

WARNING! Before moving The patient is informed.

WARNING! Make sure before moving the bed that the power cord is disconnected from the mains socket and that it is properly secured so as not to hinder movement.

WARNING! The handling must take place only on rigid flat surfaces and with raised sides. Always lock the bed at the end of handling.

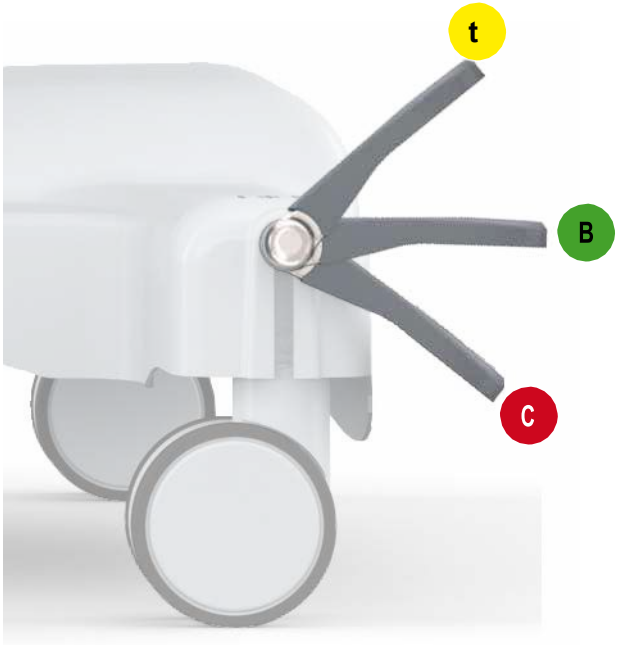
To move the bed proceed as follows:

- ensure that the sides are raised;
- remove the power plug and wrap the cable;
- release the brakes;
- Push or pull the handle by grabbing the headboard or footboard;
- at the end of the journey lock the bed.
- Make sure the control console has the P magnetic key **inserted**

6.5 Lock and unlock The bed

The bed is equipped with four rotating wheels braking one with directional lock.

The command positions are:
Position A: Three wheels are free, and one directional on the head side. Position B: the wheels are free and swivel
Position C: The wheels are locked.
Place the pedal with one foot to achieve the desired function.



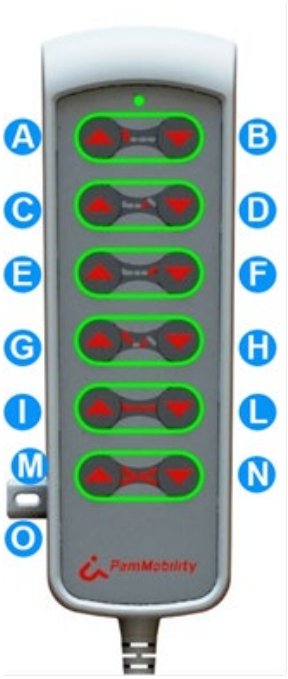
6.6 Alarm on wheels for unbraked bed (accessory 82700043)

The brake alarm is an alarm device for electric beds. The device alerts the operator by means of an audible alarm if the brakes are not inserted.

6.7 Courtesy light device (accessory 82700086 or included in the panel kit sides 82700087)

LED night courtesy light placed under the bed frame; on/ off button on the operator control panel.
To activate the service light proceed as follows:

FROM A FREE CONTROL PANEL
press the A **+ B** button on the push-button simultaneously.



6.8 Raising and lowering the bed

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

The height adjustment of the bed is achieved by two electric actuators controlled by a free control panel, a control panel, a pedal board, internal and external control panels for sides.

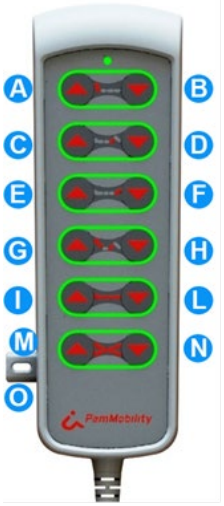
To adjust the height of the bed it is necessary that the dedicated command is enabled (see dedicated paragraphs in the chapter "PUSH BUTTONS").

WARNING! Do not place hands or objects between the base and the moving part. Do not manually intervene on moving parts and follow the instructions.

To adjust the height of the bed proceed as follows:

FROM A FREE CONTROL PANEL

- press the I button to raise the bed;
- Press the L button to lower the bed.



FROM A CONTROL PANEL

press the B (up arrow) key to raise the bed; Press the C (down arrow) G key to lower the bed.

6.9 Raising and lowering the section backrest

WARNING! Always notify the patient before adjusting the back of the bed.

The adjustment of the back section of the bed is obtained by means of an electric actuator controlled by free control panel, control panel and internal and external control panels for sides.

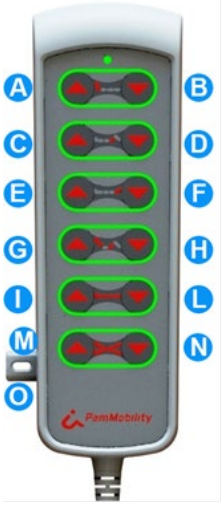
To adjust the back section it is necessary that the dedicated command is enabled (see dedicated paragraphs in the chapter "PUSH BUTTONS").

WARNING! Do not interpose the hands or objects between the backrest and the frame of the bed base. Do not manually intervene on moving parts and follow the instructions.

To adjust the backrest section proceed as follows: FROM

FREE CONTROL PANEL

- press the A button to raise the backrest section;
- press the B button to lower the backrest section



FROM A CONTROL PANEL

press the button B (up arrow) D to raise the back section; Press the button C(up arrow)" D to lower the backrest section.

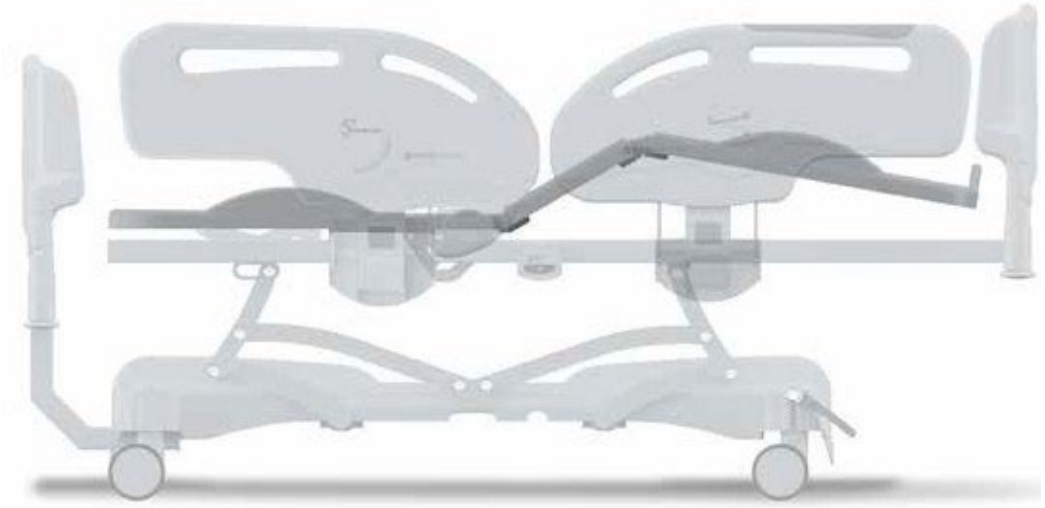
7.9 Raise and lower the upper section of the legs

WARNING! Always notify the patient before adjusting the upper leg section.

The regulation of the upper section of the legs of the bed is obtained through an electric actuator controlled by free control panel, control panel and internal and external control panels for sides.

To adjust the upper section of the legs it is necessary that the dedicated command is enabled (see dedicated paragraphs in the chapter "PUSH BUTTONS").

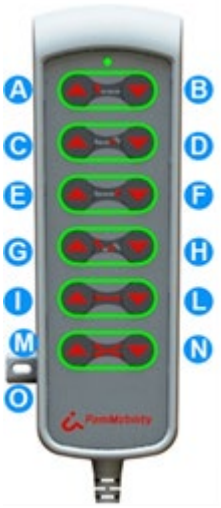
WARNING! Do not interpose the hands or objects between the upper section of the legs and the frame of the bed base. Do not manually intervene on moving parts and follow the instructions.



To adjust the upper section of the legs proceed as follows:

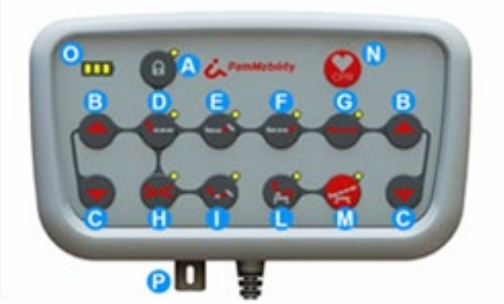
FROM A FREE CONTROL PANEL

- press the C button **to** raise the upper section of the legs;
- press D button **to** lower the upper leg section



FROM A CONTROL PANEL

press the button **B (** up arrow)**[E** to raise the upper **section of the legs;** Press the button C(**up** arrow)[E to lower the upper section of the legs.



7.10 Simultaneously raise and lower the backrest section and upper leg section (Autocontour)

WARNING! Inform the patient before adjusting the sectionsRequire.

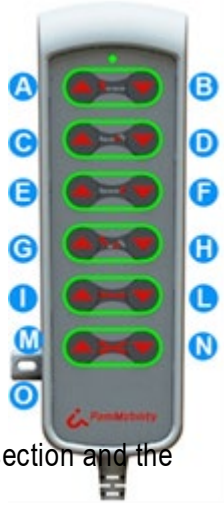
The simultaneous adjustment of the back section and the upper section of the legs of the bed is obtained by means of two electric actuators controlled by free control panel, by control panel and by internal and external control panels for sides.

To adjust the autocontour position it is necessary that the dedicated command is enabled (see dedicated paragraphs in the chapter "PUSH BUTTONS").

WARNING! Do not interpose the hands or objects between the sections and the frame of the network plane. Do not manually intervene on moving parts and follow the instructions.

To adjust the auto position proceed as follows:

- press the G button **to** raise the section simultaneously backrest and the upper section of the legs;
- press the H button **to** lower the section simultaneously backrest and the upper section of the legs.



FROM A CONTROL PANEL

press the button **B (** up arrow**)[I** to simultaneously raise the backrest section and the upper section of the legs;

Press the **C (** up arrow**)key** to lower the back section and upper leg section simultaneously.

.

7.11 Trendelenburg and reverse trendelenburg

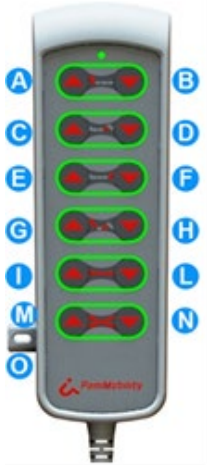
7.11.1 Trendelenburg

WARNING! Before making any adjustments, please inform the patient.

The Trendelenburg position adjustment is achieved by means of an electric actuator controlled by a free control panel, a control box, a control panel and external control panels for the sides.

To adjust the position of Trendelenburg, the dedicated command must be enabled (see dedicated paragraphs in the chapter "PUSH BUTTONS").

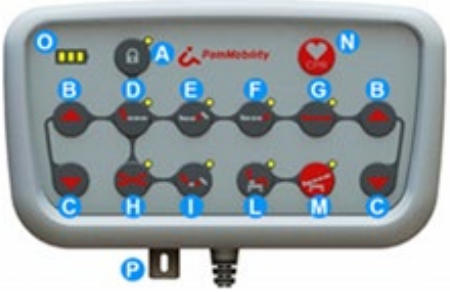
To adjust the position of Trendelenburg proceed as follows:



FROM A FREE CONTROL PANEL
press the M button **until** the desired position is reached

*WARNING: Make sure the magnetic key **O is** present and well-adjusted.*

FROM A CONTROL PANEL
Press the **B (** up arrow) **H** key until the desired position is reached.



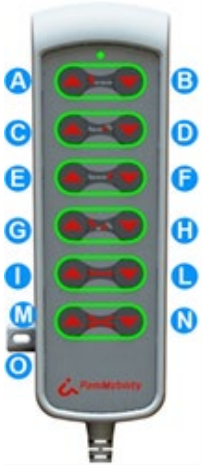
7.11.2 Reverse trendelenburg

WARNING! Before making any adjustments, please inform the patient.

The adjustment of the position of controtrendelenburg is obtained through an electric actuator controlled by free control panel, Control Box, control panel and external control panels for sides.

To regulate the position of the control panel, it is necessary for the dedicated command to be enabled (see dedicated paragraphs in the chapter "CONTROL PANEL").

To adjust the position of controtrendelenburg proceed as follows:



FROM A FREE CONTROL PANEL
press the N button **until** the desired position is reached

*WARNING: Make sure the magnetic key **O is** present and well-inserted*

FROM A CONTROL PANEL
press the **C (** up arrow) **H** key until the desired position is reached.

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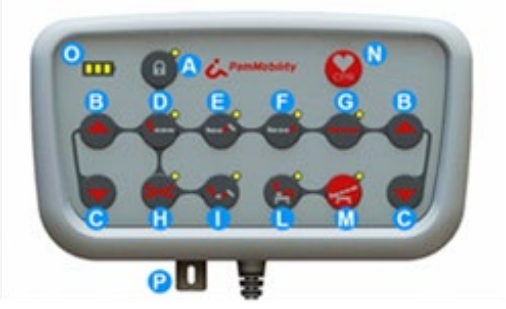


7.12 Comfort position (chair)

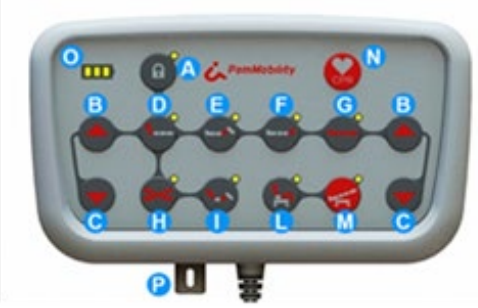
WARNING! Always notify the patient before adjusting the bed sections.

The comfort position (or chair) is obtained by the combined handling of the backrest section, the upper section of the legs and the inclination of countertrendelenburg. It is obtained by means of three electric actuators controlled by a control panel and internal and external control panels for sides.

WARNING! Do not insert the hands or objects between the moving sections and the frame of the network plane. Do not manually intervene on moving parts and follow the instructions.

To adjust the comfort position proceed as follows:

FROM A CONTROL PANEL
press the L button **until** the desired position is reached;
to reset the position press the total reset button or individually lower each section by referring to its previous paragraphs.



7.13 CPR total zero setting of positions

The automatic total zeroing of the positions allows to intervene in a timely manner in emergency operations, and is obtained through electric actuators controlled by control panel and external control panels for sides and for the exclusive use of the operator.

WARNING! Do not insert the hands or objects between the moving sections and the frame of the network plane. Do not manually intervene on moving parts and follow the instructions.

To reset the total positions automatically, proceed as follows: FROM

CONTROL PANEL
press the N button **until** the desired position is reached: the control clears the network plane and brings it to a minimum height.

7.14 Trendelenburg of emergency

The Trendelenburg position adjustment with all sections lowered is achieved by an electric actuator controlled by a control panel and external control panels for sides and for the exclusive use of the operator.

ATTENTION! The emergency switch can be activated ONLY if the override switch is in the "unlock all controls" position.

To adjust the position of emergency Trendelenburg proceed as follows: FROM CONTROL PANEL

Press the M button **until** the desired position is reached: The control clears the network plane and moves to the Trendelenburg position.

7.15 Emergency release device back CPR

The CPR backrest release device allows the backrest to be lowered quickly in case of emergency and can be activated by means of a bilateral lever positioned under the bed base.

To lower the backrest proceed as follows:

- unlock the backrest by grabbing it with one hand and acting on the CPR release handle by pulling it upwards;
- lower the backrest accompanying the descent.

7.16 Security position at night

The bed is equipped with a "safety night" position, which is a function that automatically brings the bed to the minimum height of 380 mm from the floor.
This position is obtained by means of an electric actuator controlled by a magnetic key control panel, a control panel and external control panels for the exclusive use of the operator.

ATTENTION! The safe position is activated SOLO if the override selector is in the "unlock all commands" position.

To bring the bed to the scheduled position of "safety night" proceed as follows:

FROM A FREE CONTROL PANEL
It is not possible to reach the minimum safety height at night with the free control panel.

FROM A CONTROL PANEL
press the **C + G** button: The bed will be lowered to the minimum standard height.
Re-press the C **+ G** button again until you reach the safe night position.

7.17 Raise and lower the lower leg section

WARNING! Before adjusting the lower part of the patient's blood pressure, check the patient.

The lower section of the legs can be adjusted by two "Rastomat" 6-position trigger mechanisms or by an electric actuator (optional).

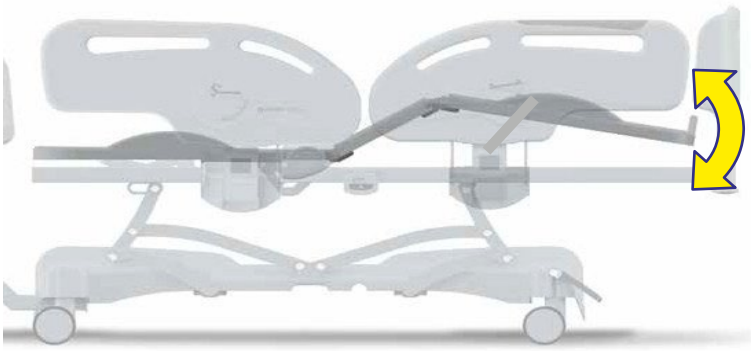
WARNING! Do not insert hands or objects between the lower section of the legs and the bed base or the sides.

7.17.1 Adjust the lower section of the legs with rack mechanism

WARNING! Do not release the lower section of the legs if you are not sure of the perfect locking by the locking mechanism.

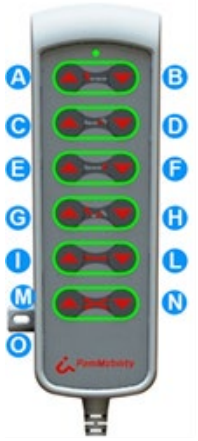
To raise the lower section of the legs proceed as follows:
hold and raise the lower section of the legs to the desired position, verifying the perfect locking. The rack offers the possibility to adjust the lower section of the legs up to 6 different positions.

To lower the lower section of the legs proceed as follows:
raise the lower section of the legs completely so as to unlock the rack mechanism, then gently lower again until the complete support on the frame of the mesh.



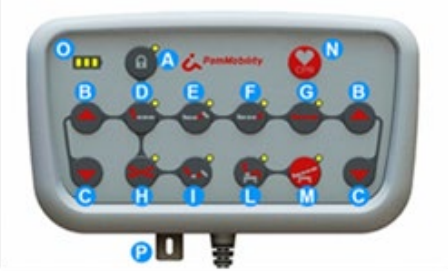
7.17.2 Adjust the lower section of the legs electrically (optional) Movement of the footboard implemented by electric actuator.

To adjust the upper section of the legs proceed as follows:



FROM A FREE CONTROL PANEL
press the button to raise the lower section of the legs; press the button to lower the lower section of the legs.

FROM A CONTROL PANEL
press the **B** (up **arrow) +** F button to raise the lower leg section;
Press the **C (** down **arrow) + Fper button** to lower the lower section of the legs.



7.19 Integrated bed extension (optional cod. 82700038)

WARNING! The patient should not have to wait for the duration of this regulation.

Built-in bed extension to the bed frame. It allows the extension of the bed top of 18cm . Made with a steel profiled frame and protected by a cover in technopolymer.

To stretch the bed proceed as follows:
make sure the bed is locked (see par."Lock and unlock the bed");
release the extension by unscrewing the knobs (18), placed on both sides of the bed, and pull the section outwards until the end of the stroke (Fig. 2);
Turn the knobs (18) to lock the section.

Fig. 1

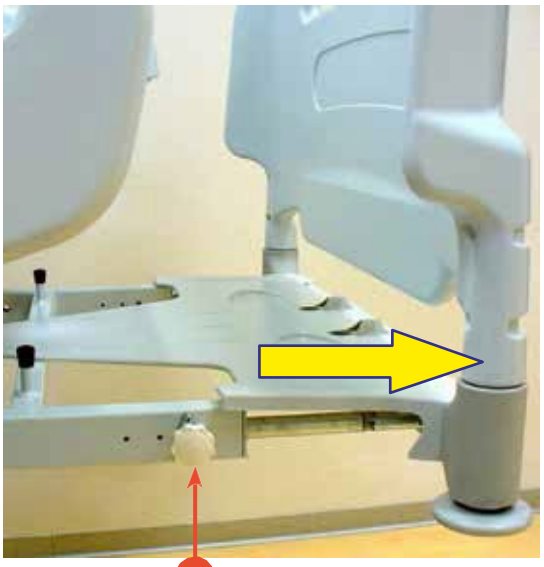


Fig. 2

Note: The knobs need not be unscrewed completely until they are removed from the frame in order for the extension. Just unscrew them just enough to allow the section to scroll.

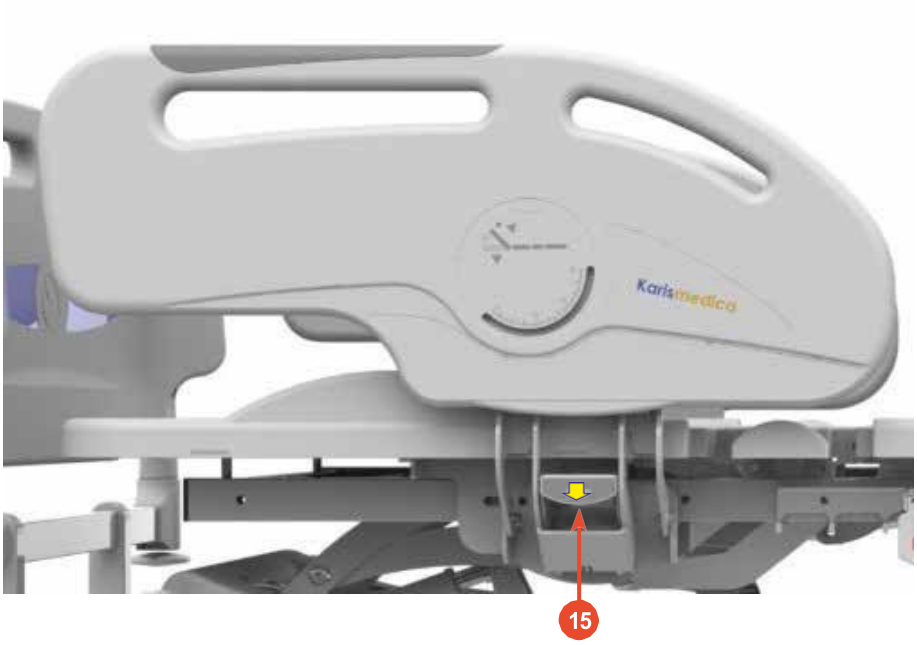
To return the bed to normal length proceed as follows: make sure that the bed is locked (see par."Lock and unlock the bed"); release the extension by unscrewing the knobs (18), placed on both sides of the bed, and push the section inwards until the end of the stroke (Fig. 1);
Screw back the knobs (18) to lock the section.

7.20 Handling 4 bed areas 727T0045

WARNING! Always notify the patient before making any adjustments.

To lower the sides proceed as follows:
grab the bank with one hand and with the other lower the lever in the direction indicated by the arrow (15);
lower the bank by turning it downwards.

To lift the sides proceed as follows:
Hold the bank and raise it by rotating it upwards: the locking device supports it in the raised position.



7.21 Handling of bed hinges cod.727T0045C

WARNING! Always notify the patient before making any adjustments

AVVERTENZA! Prima di effettuare la manovra avvisare sempre il paziente.

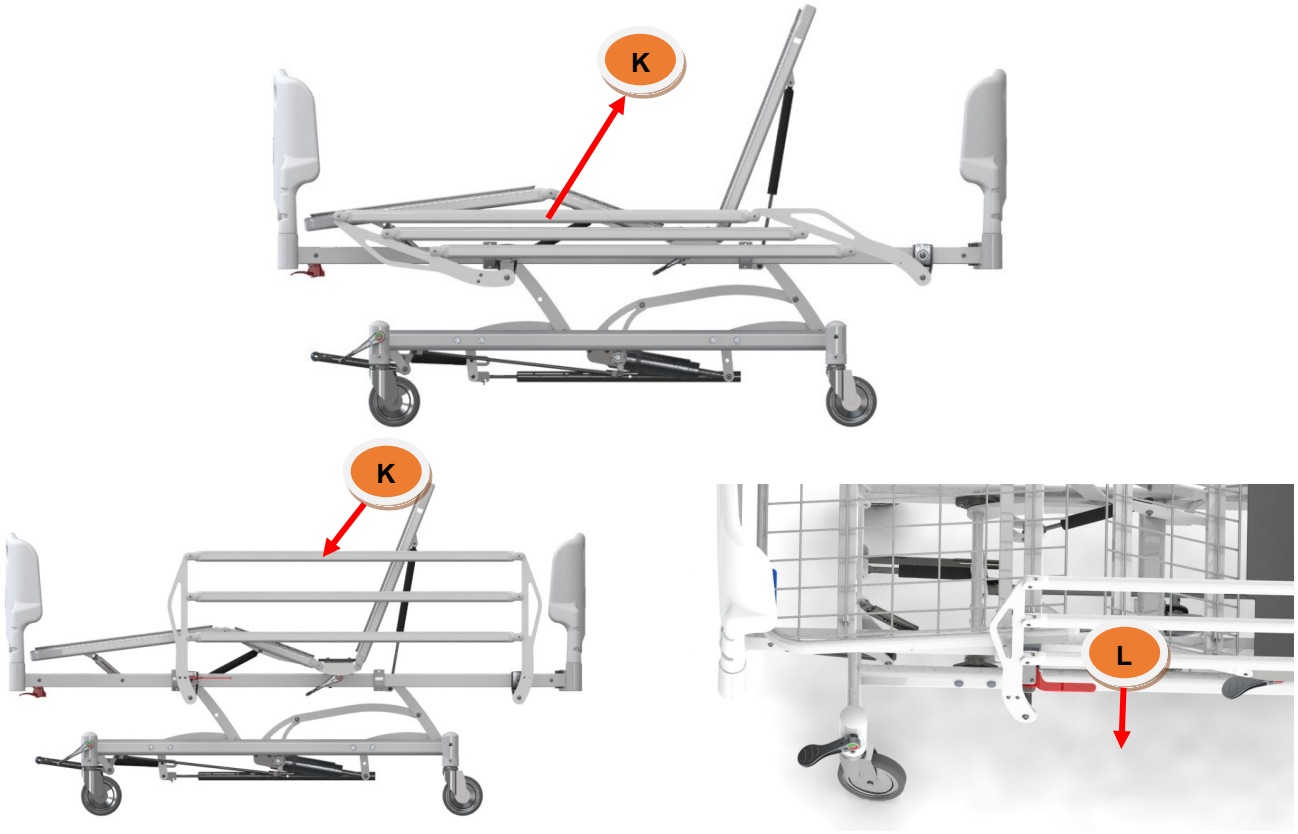
ATTENZIONE! Prima di effettuare qualsiasi manovra assicurarsi che il freno sia inserito.

Il letto è dotato di sponde utili a contenere il paziente riducendo il rischio di cadute accidentali. Le sponde sono facilmente abbattibili in modo da consentire un agevole ingresso/uscita dal letto.

Per *sollevare* le sponde procedere come segue:

- Assicurarsi che il letto sia frenato (vedi pag.15 del presente manuale).
- Afferrare il tubo superiore della sponda **K** e sollevarlo nella direzione indicata dalla freccia.
- Una volta raggiunta l'altezza massima un meccanismo automatico provvederà a bloccarla in posizione.

AVVERTENZA! Non inserire le mani o oggetti tra il piano rete e le sponde.

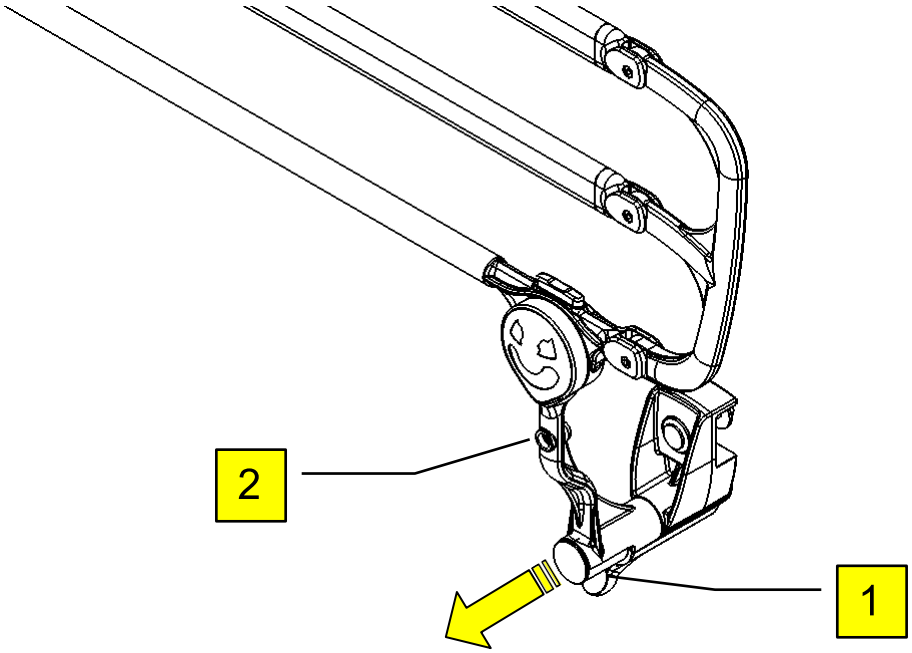


Per *abbassare* le sponde procedere come segue:

- Assicurarsi che il letto sia frenato (vedi pag.15 del presente manuale).
- Afferrare il tubo superiore della sponda **K**.
- Con l'altra mano tirare la maniglia di sblocco **L** nella direzione indicata dalla freccia.
- Accompagnare la discesa della sponda

7.22 Disassemble the sides (cod. 7300007A)

To disassemble the sides with compass proceed as follows:
press the release lever (1) both front and back, downwards;
Pull the tailgate pivot arms outwards (2) until the clamp pins have left the seat;



repeat for the other bank; place the sides in a safe place.

WARNING! Incompatible banks can create risks.

WARNING: it is absolutely forbidden to mount and install the lift without the support of a qualified technician of Pam Mobility s.r.l.. Similarly it is absolutely forbidden to disassemble the bank for a subsequent reinstallation without the support of a qualified technician of Pam Mobility S.r.l..

7.23 Equipotential connection

The electric beds are equipped with equipotential connecting clamp placed on the side of the bed head; the clamp is necessary for the equalization of the electrical potentials of all the metal parts without protection.

WARNING! DANGER OF ELECTRICAL DEVIATIONS. It is necessaryto usefully equipotential connection cauldron if the patient is connected to intravascular or intracardiac equipment. The cable must be connected to the equipotential connecting clamp located on the bed; then it is necessary to connect the latter to an appropriate equipotential terminal.

7.24 Pull-out network plan

Network top in technopolymer easily removable for thorough disinfection and cleaning.

7. OPTIONAL

Cod.82700002 – ROD LIFTS PATIENT WITH TRAPEZE
Patient lifting rod made of chromed steel tube.
Adjustable strap and molded trapeze.

Cod. 82700025 - HEIGHT ADJUSTABLE DRIP ROD 4 HOOKS
IV rod adjustable in height to 4 hooks.

Cod. 82700016 - HEIGHT ADJUSTABLE DRIP ROD 4 STAINLESS STEEL HOOKS
Height adjustable IV rod with 4 stainless steel hooks.

8. SANITATION

8.1 Sanitizing products

ATTENTION! Sanitizing agents are corrosive.

The best sanitizing agents are the most commonly used in industry. Follow the instructions provided by the manufacturer for the specific application during use. If possible, ask the manufacturer for guarantees on the degree of corrosivity of the solutions used.
Any change to these features may damage the item.
It's very important to follow the specifics of concentration, temperature and reaction time. Any change to these features may damage the device. During sanitization steps only use:

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

Do not use sulfuric acids or mineral acids such as HCl, H_2SO_4, HNO_3 and H_2SO_3.

8.2 Sanificazione con prodotti contenenti alogeni

WARNING: Do not use halogen-containing products during closed circuit sterilization, the bed may be damaged.

If used incorrectly these products can corrode steel especially if the pH is low. Perform accurate checks before using these solutions.
If the device is to be sanitised using halogen (e.g. chlorine) sanitising products, the following requirements shall be followed:

- the pH must be above 10;
- the temperature must not exceed 40 °C;
- the solution must not stay in contact with the bed for more than 20 min.;
- a concentration of up to 50 ppm of active chlorine shall be used;
- after sanitizing perform a generous rinse with water.

8.3 Sanitizing intervals

The sanitization intervals are defined by the user, according to the needs, taking into account the indications in this manual and those in the sanitizing products used.

8.4 Automatic sanitization

The automatic sanitization (autoclave) is defined by the customer, according to the needs, taking into account the indications in this manual and those reported by the sanitizing products used.

8.5 Manual sanitization

The manual sanitization will be defined by the customer, according to the needs, taking into account the indications in this manual, and those reported by the sanitizing products used.

ATTENTION! Always check the safety data sheets of the materials used for sanitization. In case of contact/ inhalation and/ or ingestion, follow the prescriptions indicated in the prescribed sheets.

9. MAINTENANCE

9.1 Periodic verification

User personnel shall inspect the article at least once a year; the inspection shall include a visual search for any damage that could compromise the integrity and proper functioning of the article. Which:

- integrity of power cables and plugs;
- correct connection of the power cord;
- tightening screws;
- correct insertion and fixing of any accessories;
- wheel cleaning and general product.

ATTENTION! If damage is detected, put the product immediately out of service until it has been repaired or replaced.

ATTENTION! Cleaning and maintenance must be carried out with the bed disconnected from the power supply.

WARNING! Technical personnel should check the efficiency of the bacteria at least 3times a year.

To check the efficiency of the batteries proceed as follows:

- disconnect the power plug from the power outlet;
- perform at least two handling cycles for each of the adjustments made on the bed.

9.2 Technical assistance

Requests for assistance from the customer service department must be sent by fax or e-mail to the following address:

Pam Mobility s.r.l.
Via Verdi 39 - 42043 Gattatico (RE) -
Italy Tel 0522 473859 - Fax 0522
1548244
E-mail:
info@pammobility.comhttp:
www.pammobility.com

Specifying:

- Product code, serial number, production code, year of installation;
- defects found;
- exact address of the place where the bed is installed.

ATTENTION: all assistance interventions must be carried out by Pam Mobility personnel. Assistance by unauthorized persons may impair the operation of the bed and may cause damage to property or persons. Pam Mobility s.r.l. assumes no liability for damage to property or persons resulting from assistance provided by unauthorized personnel.

9.3 Provision

In the case of a long-term provision of the product, it is necessary:

- place it dry and sheltered from the sun;
- protect it from dust by covering it with a nylon sheet;
- grease the parts that could oxidize or damage in case of drying.

9.4 Demolition and disposal

The materials of the bed consist essentially of:
- painted or galvanized ferritic steel;
- plastic material in abs;
- elastomers;

Disassemble the bed separating the individual pieces according to the material with which they are made, it is mandatory to dispose of the different materials in accordance with the regulations of the country in which the bed must be removed.
Regarding the disposal of consumer products, behave as follows.

Products for the sanitization

- The products used for sanitation must not be discharged into urban canalizations.
- Inquire about the provisions in force on disposal arrangements at the local authorities.

Batteries

- The battery of the engine control unit must be regularly replaced by an electrician. Used batteries must not be disposed of with common waste, but must be delivered to the appropriate disposal centers.

9.5 BATTERY

It is equipped with a battery for operation in case it is not possible to connect to the power supply.

The charging time is about 10-12 hours with completely discharged battery.

It is advisable to make sure that the batteries do not drain completely, but recharge them frequently in order to achieve a longer service life.

Batteries must be replaced, depending on use, at least after 3 years.

To optimise the life of the batteries, the control units must be connected to the network as much as possible. Batteries must be recharged at least every 3 months. Otherwise they are damaged and self-discharge.

When the bed is powered only by the extra battery you can perform 20 complete movements.
When the battery reaches 50% of its charge each movement emits an audible alarm.

An operation test is recommended at least once a year.
Batteries shall only be replaced by models having the mechanical and electrical characteristics of the following types:
- KOBE 1.2-6 (6V, 1.2 Ah)
- YUASA 1.2-6 (6V,1.2 Ah)
- PBQ 1.2-12 (12V, 1.2ah)
- KOBE1.2-12 (12V,1.2ah)

Make sure the ventilation hole is intact. The ventilation hole allows the exit of the battery gases but does not allow the penetration of water.

WARNING: The battery has no capacity to ensure the operation of the bed for long periods but only serves as a buffer in case of temporary power failure. Connect the bed to the mains as soon as possible.

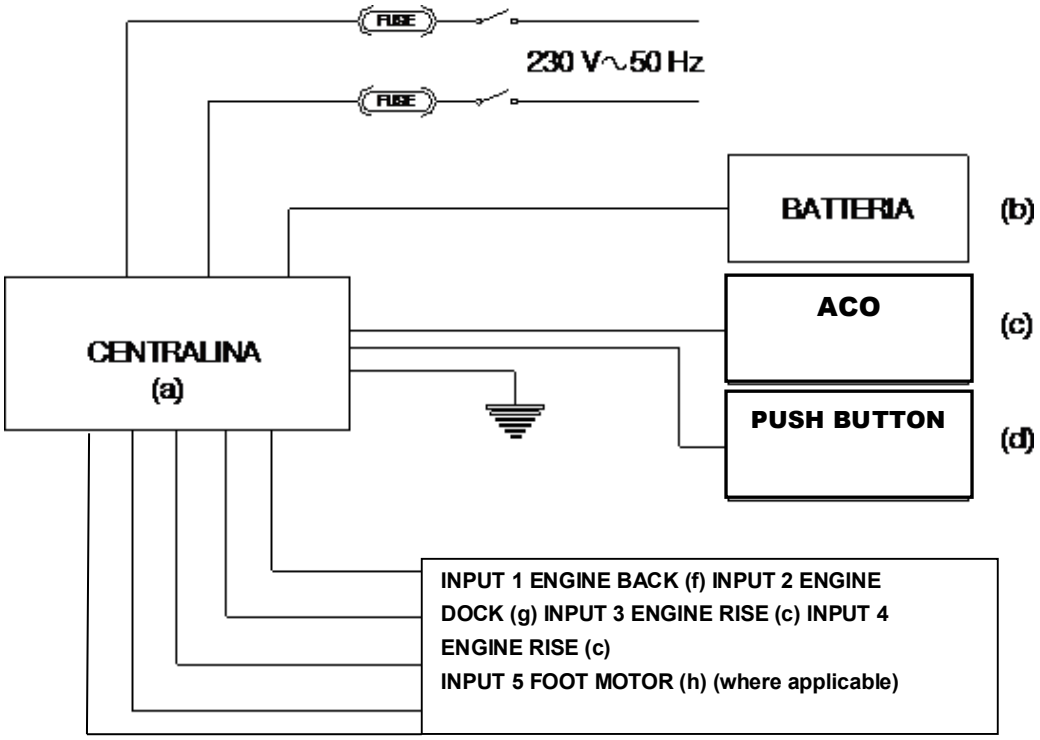
9.6 Troubleshooting

DEFECT	POSSIBLE CAUSE	INTERVENTION
The power supply device does not turn on	Not connected to the power line.	Connect to the power line.
	Power cord is defective.	If interchangeable cable replace with new. If fixed cable ship to service center.
	It's a faulty control unit.	Send the control unit to repair.
The power supply device turns on but the actuator does not work. You can hear relays from the control unit.	The actuator plug is not well inserted into the ECU socket.	Insert the actuator pin well into the control unit.
	The actuator is faulty.	Replace the actuator unit.
	It's a faulty control unit.	Replace the control unit
The power supply device turns on but the actuator does not work. There is no relay noise coming from the control unit.	It's a faulty control unit.	Send the control unit to repair.
	It's a faulty keypad.	Send the keypad to repair.
The battery of the control unit is completely discharged and you do not hear the relays	Battery completely discharged.	Recharge the battery pack.
	Defective battery.	Replace the battery pack.
A control unit output allows only one direction of advance to the actuator connected.	It's a faulty keypad.	Send the keypad to repair.
	It's a faulty control unit.	Send the control unit to repair.
The actuator does not carry the maximum expected load.	Damaged safety clutch (if LA 38)	Send the actuator to repair.
	The actuator is damaged.	
Noise from the actuator but no movement.	The actuator is damaged.	Send the actuator to repair.
The motor turns but the quick release is noisy or not working.	The clutch release arm has a rotation of less than 75.	Adjust the control cable.
The actuator moves only inwards and not outwards.	The safety nut has been activated	Send the actuator to repair.

10. GUARANTEE

For the duration of the warranty period, the manufacturer undertakes to eliminate any defects and/or defects in the bed provided that it has been used correctly in accordance with the instructions in the user and maintenance manual.
The replacement of parts with other parts that do not comply with the Pam Mobility s.r.l. specifications, if commercial, or not provided by Pam Mobility s.r.l. if designed, make the warranty expire, as well as the improper use of the bed.

11. WIRING DIAGRAM



POS.	DESCRIPTION
to	Control unit TC21
b	Buffer battery TBB2-4398-001-0
c	ACO TNP6-4398-001
d	Push-button panel TH12
and	Trolley lift actuator TA23
f	Actuator back TA1
g	Basin actuator TA31
h	Foot actuator (where applicable) TA31

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