

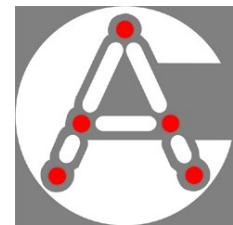
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# BARIATRIC BED 120765 SLB RD

CHIAPPA ARREDAMENTI S.r.l.

Via Monte Rosa 15,  
20014 Nerviano (MI) ITALY  
[www.chiappaarredamenti.com](http://www.chiappaarredamenti.com)

## Instructions for Use



BARIATRIC BED 120765 SLB RD

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## **Warnings, Cautions and Notes**



### **WARNING**

Indicates possible hazards in procedures or conditions which, if not correctly followed, could result in death, injury or other serious adverse reactions.



### **Caution**

Indicates possible hazards in procedures or conditions which, if not correctly followed, could result in equipment damage or failure.



Explains or amplifies a procedure or condition.



Indicates an optional item or feature.

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## **WARNING**

**Keep these instructions in a safe place; you may need to refer to them later on.**

**Read and understand these instructions before operating the bed.**

**Carers must be trained in the proper use of this product, its functions and controls, and any accessories.**

**These instructions are mandatory for the safe and effective use of this product, including the safety of patients and carers.**

**Unauthorised modifications or repairs to this product may affect its safety and will invalidate any warranty.**

**CHIAPPA ARREDAMENTI S.r.l. accepts no liability for any incident, accident or reduction in performance that may occur as a result of such repairs or modifications.**

**To avoid the risk of electric shock, this product must only be connected to an electricity supply with a protective earth.**

**Do not smoke or use naked flames near this equipment and do not expose it to extremes of temperature.**

**Do not use electrically powered beds in the presence of flammable gases such as anaesthetic agents e.g. in operating theatres.**

**The bed is intended for indoor use only and should not be used outside a normal hospital environment.**

**Do not use accessories that have not been designed or approved for use with the bed.**

**The user should carry out a risk assessment before using the bed with equipment from other suppliers or manufacturers.**

**Always apply the brakes when the bed is stationary.**

**To reduce the risk of injury due to falls, lower the bed to minimum height when the patient is unattended.**

**Patients should not be left in the Trendelenburg position when unattended.**

**To reduce the risk of overbalancing, do not allow the patient to get on or off the bed when the mattress platform is in a tilted (head down or foot down) position.**

*Continued on next page*



## **WARNING**

**Where risk assessment indicates that a patient is at high risk of entrapment owing to their medical condition or other circumstances, and where there is no medical benefit from their being left in a contoured position, place the mattress platform in the flat position and disable the controls (Function lockout) when the patient is unattended.**

**When the bed is operated, make sure that obstacles such as bedside furniture do not restrict its movement.**

**When moving or operating the bed, take care that any attached accessories (e.g. lifting pole) do not strike doors, ceilings, etc.**

**Hold the head board or foot board when pushing or pulling the bed; do not hold the side rails or any attached accessories.**

**Before operating the bed, make sure the patient is positioned correctly to avoid entrapment or imbalance.**

**Take care not to squeeze or trap trailing cables from the handset/ACP and other equipment between moving parts of the bed.**

**Take care not to allow clothing or bed linen to become snagged on moving parts of the bed.**

**Do not place the bed on an incline greater than 7° as this may, in extreme circumstances, cause the bed to overbalance.**

**This product complies with the requirements of applicable standards for electromagnetic compatibility (EMC).**

**However, medical electrical equipment requires special precautions regarding EMC and should be installed and used in accordance with the EMC information in the product service manual.**

**Medical electrical equipment can be affected by portable and mobile radio frequency communications equipment e.g. cellular telephones.**

## **1. Introduction**

---

These instructions contain information for the installation, use and maintenance of the CHIAPPA ARREDAMENTI Bariatric Bed 120765 SLB RD. This bed has multiple functions to provide the optimum nursing position for both patient and carer.

### **Standard features**

- Extendable mattress platform sections
- Electrical adjustment of bed height, backrest section, thigh/calf section.
- Auto-Chair facility
- Electrical adjustment of head down tilt (Trendelenburg) and foot down tilt (reverse Trendelenburg)
- Drop split side rails, adjustable height, detachable
- Extendable and removable head board / Fixed width and removable foot board
- Mattress support surface with removable radio translucent panels
- Adjustable length mattress platform
- Electric CPR function
- Lithium battery backup
- Bedstripper (linen shelf)
- Under bed light
- Full width brake bar at foot side (steering / swivelling / braked)
- Patient Handset with backlight and Attendant Control Panel (ACP) with function locks
- I.V. pole sockets and oxygen bottle sockets at head end
- Corner roller buffers
- 150mm dual wheel castors (one steering and conductive, three swivelling)
- ANTIMICROBIAL White Epoxy Powder Coated

### **Optional features**

Optional features are specified by the customer at the time of ordering.



*Refer to "Accessories" in Chapter 6 for accessory model numbers.*

★ Electrically operated retracting backrest	★ Lifting pole with integrated I.V. hooks
★ DIN accessory rails set (two pieces)	★ I.V. pole fixed height
★ Egress handle	★ Urine bag holder
★ Built-in Scale	★ Oxygen bottle holder

## Specification label



# Caution

**Before using the bed, ensure that the “Power In” rating on the specification label is compatible with the local electricity supply.**

The model number of the bed

**REF**

120765 SLB RD

and serial number of the bed

**SN**

XXXXXX

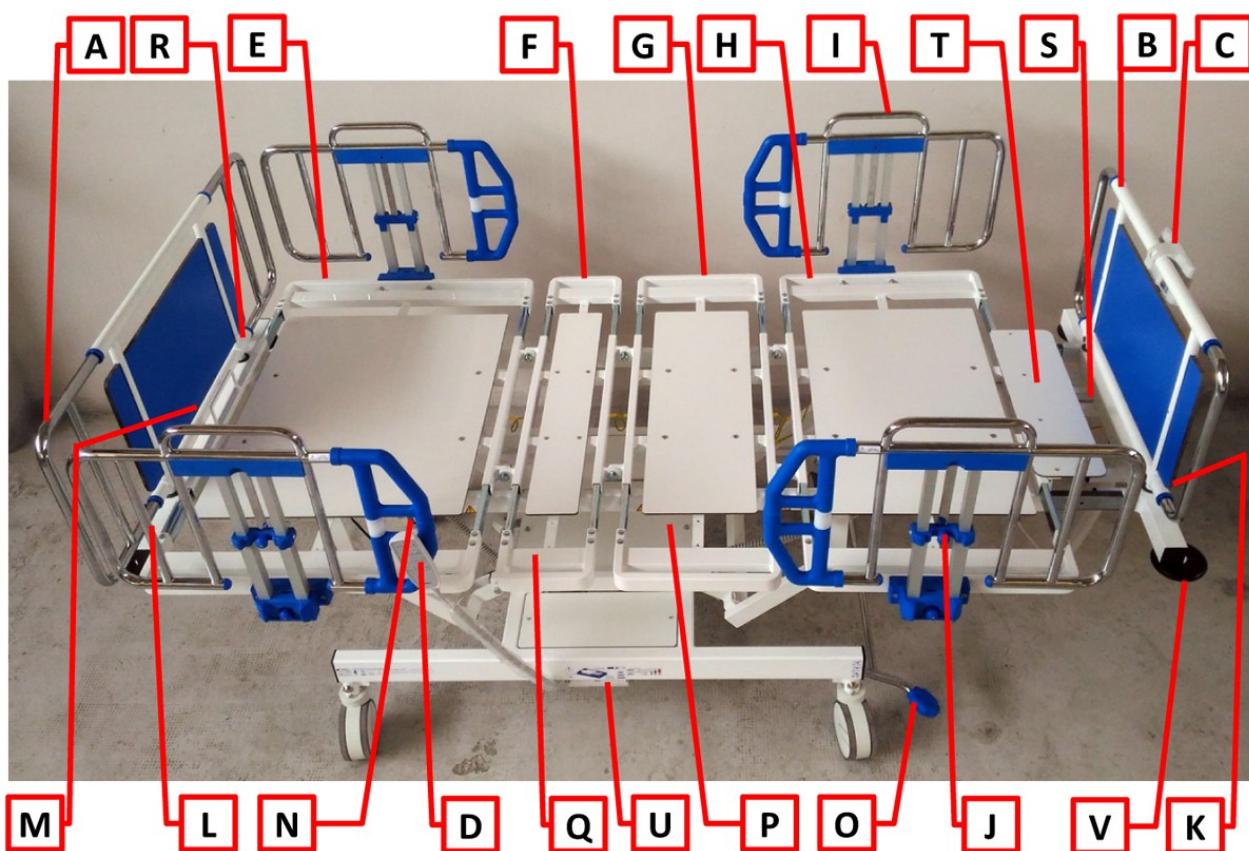
can be found on the specification label, located on the bed trolley frame, left side.



*Refer to the SN serial number to identify the bed for assistance purpose.*

## Product overview

- |                                  |  |
|----------------------------------|--|
| A. Extendable Head board         | L. I.V. pole socket/Oxygen bottle holder socket  |
| B. Fixed Width Foot board        | M. Lifting pole socket                           |
| C. Attendant Control Panel (ACP) | N. Conductive and Steering Castor (front right)  |
| D. Patient Handset               | O. Brake/Swivelling/Steering pedal               |
| E. Expandable Backrest section   | P. Electric set (control box, battery)           |
| F. Expandable Seat section       | Q. Expandable sections operating knob            |
| G. Expandable Thigh section      | R. Extendable head board operating knob          |
| H. Expandable Calf section       | S. Adjustable length mattress platform           |
| I. Side rails (detachable)       | T. Mattress retainer/mattress extension platform |
| J. Side rail operating knobs     | U. Underbed light                                |
| K. Bedstripper (linen shelf)     | V. Corner Roller buffer                          |



## **2. Clinical Applications**



### **WARNING**

**To ensure the patient can use the bed safely, their age, size and condition should be assessed by a clinically qualified person.**

**The use of head down tilt (Trendelenburg) or foot down tilt (reverse Trendelenburg) may be contraindicated for certain medical conditions. The tilt facility should only be used under the guidance of a clinically qualified person after assessment of the patient's condition.**

#### **Intended use**

The bed is suitable for use in Application Environments 1, 2 and 3 as defined in EN 60601-52:2010.

##### **Application Environment 1**

Intensive/critical care provided in a hospital where 24-hour medical supervision and constant monitoring is required, e.g. ITU, ICU and CCU.

##### **Application Environment 2**

Acute care provided in a hospital or other medical facility where medical supervision and monitoring is required, e.g. general medical and surgical wards.

##### **Application Environment 3**

Long term care in a medical area where medical supervision is required and monitoring is provided if necessary, e.g. nursing homes and geriatric facilities.

#### **Indications**

The bed is appropriate for high dependency patients who pose a movement and handling risk and/or whose clinical condition requires that they are positioned with minimal physical handling.  
Patients with a moderate amount of independence can, at the carer's discretion, use the controls to adjust their own position.  
The mattress platform can be positioned to assist with treatment of a patient as required within the clinical settings defined in Application Environments 1, 2 and 3.

## Contra-indications



The safe working load of the bed is 500kg (1102lb).



The maximum recommended patient weight is 450kg (992lb).

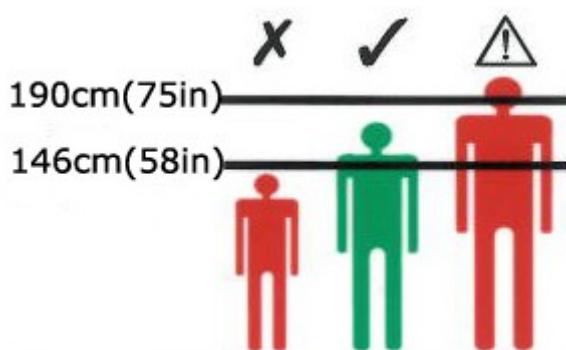
The safe working load is calculated as follows  
(in accordance with EN 60601-2-52:2010):

Maximum patient weight 450kg  
Mattress 12kg  
Accessories (including attached loads) 38kg  
TOTAL 500kg



## WARNING

If the combined weight of the mattress and accessories exceeds 50kg, the maximum patient weight must be reduced accordingly.



The recommended patient height is between 146cm and 190cm.

At the discretion of the carer, patients taller than 190cm may be accommodated by extending the bed – refer to “Bed length adjustment” in Chapter 4.

Ensure that the patient’s height does not exceed the “In-bed length” shown in Chapter 7.

### 3. Installation

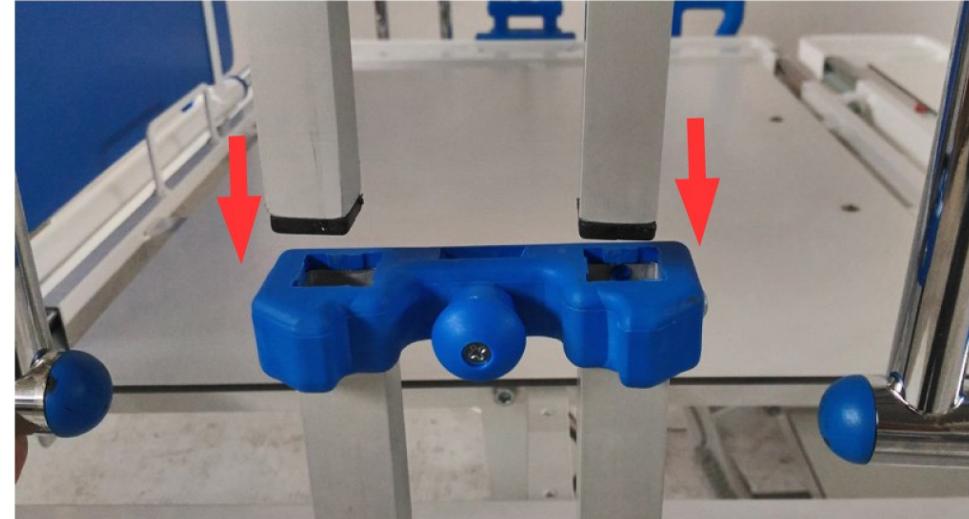
#### To install head and foot boards (n.2)

Insert the head board and the foot board in their sockets.

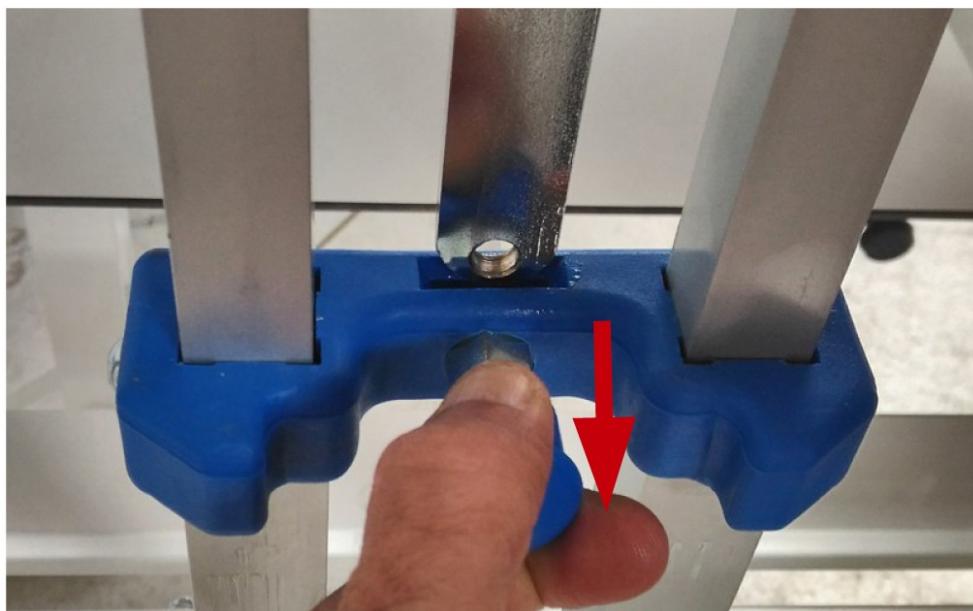


Slide the external rail mounts into the bed frame nylon mounting points:

#### To install and remove the side rails (n.4)



pull the upper operating knob and slide the central chrome plated rail mount too, until the operating knob makes an audible “click”.



To **remove** the side rail, pull the upper operating knob and holding the top side rail handle, pull out the side rail.

## **Electric connection**

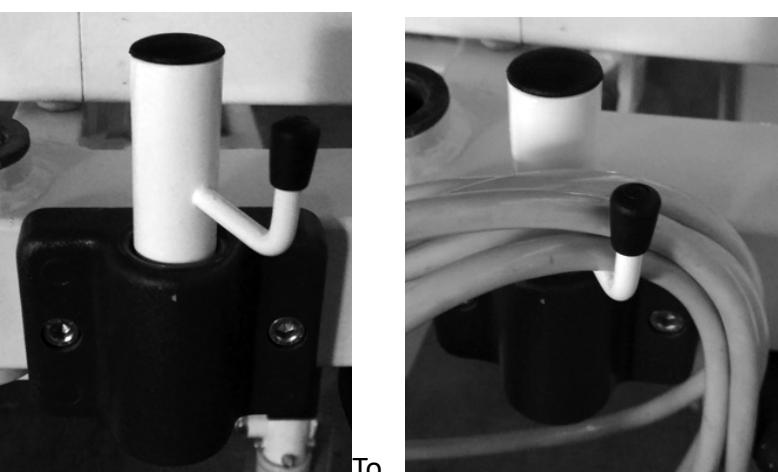


A label on each side rail indicates they are detachable.

Connect the mains plug to a suitable socket outlet. Make sure the mains plug is easily accessible so it can be disconnected quickly in an emergency.

When the bed is connected to the electricity supply, a GREEN indicator will light on the control box. (The electric set is located underneath the mattress platform, covered with a plastic laminated panel, unscrew the panel to reach the set if needed.)



	<p>A solid YELLOW indicator will light on the Attendant Control Panel (right picture) and on the control box (left picture), if the emergency battery is on charge.</p> 
<b>Cable storage</b>	<p>When not in use or before moving the bed, take the power supply cord, coil it up and place it in the hook located in the black socket at head side.</p> 
	<p>isolate the bed from the electricity supply, disconnect the mains plug from the socket outlet.</p>
<b>Potential equalisation terminal</b>	<p>A potential equalisation terminal is located at the head end of the bed. When other electrical equipment is within reach of the patient or carer, potential differences between the equipment can be minimised by connecting together their potential equalisation terminals.</p> 



## WARNING

If the power cord or mains plug is damaged, the complete assembly must be replaced by authorised service personnel.

Do not remove the fitted plug, or use a rewireable plug or adapter.

Make sure the power supply cord is not stretched, kinked or crushed.

Do not allow the power supply cord to trail on the floor where it may cause a trip hazard.

Make sure the power supply cord does not become entangled with moving parts of the bed.



## Caution

Before the first use, or if the bed has been unused for more than three months, connect the bed to the electricity supply for at least 24 hours to allow the backup battery to recharge fully.

Failure to do this may reduce the life of the battery.

The bed should be positioned with the roller buffers at least 8cm from the rear wall to prevent the head board striking the wall when the bed is in head down tilt (Trendelenburg).



Recommended positioning from rear wall at least 8cm from the corner roller buffer

## Mattress



# WARNING

**Always use a mattress of the correct size and type. Incompatible mattresses can create hazards.**

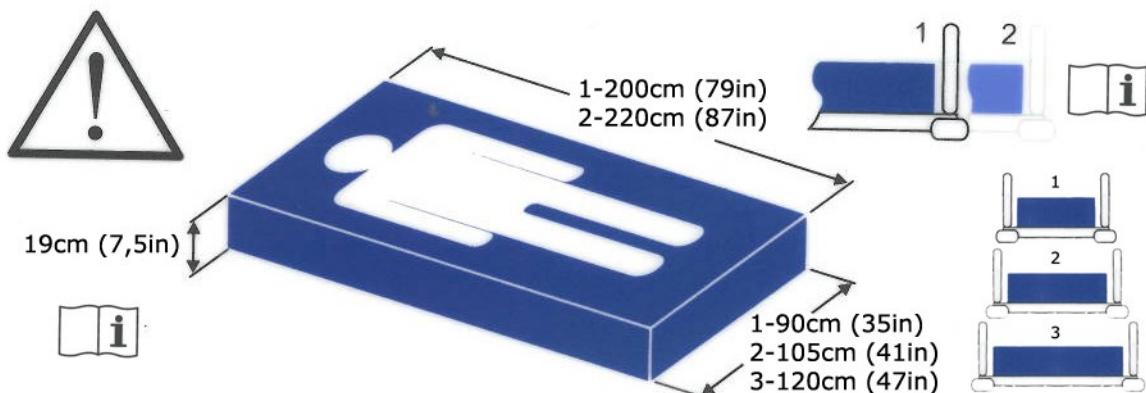
**Entrapment hazards may exist when using a very soft mattress, even if it is the correct size.**

**The maximum recommended mattress thickness for use with side rails is 19cm.**

**Read the instructions for use supplied with the mattress.**

**Where the maximum patient weight specified for the mattress is different to that specified for the bed, the lower value applies.**

**Mattress size label** A label on the frame indicates the correct mattress size:



*The numbers 1,2 on the label indicate different mattress platform widths and 1,2,3 different mattress platform lengths; refer to "Bed length adjustment" in Chapter 4.*

<b>Mattress and side rails</b>	<p>When choosing bed and mattress combinations, it is important to consider the use of side rails based on clinical assessment of each individual patient and in line with local policy.</p> <p>When assessing the suitability of a mattress for use with side rails, the following factors should be considered:</p> <ul style="list-style-type: none"> <li>• The bed is designed to provide an acceptable side rail height when used with a foam mattress up to 19cm thick.</li> <li>• Specialist powered air / foam replacement mattresses will typically envelop the patient when loaded and can generally be deeper than a foam mattress without compromising safety. Other makes of specialist mattress replacement must be assessed individually prior to use to verify sufficient clearance is maintained.</li> <li>• Mattress overlays are not recommended for use with this bed.</li> <li>• To ensure compliance with EN 60601-2-52:2010, an approved mattress should be used. Compliance with this standard when using other mattresses must be validated by the user.</li> <li>• For more information on suitable mattresses and mattress replacements, contact your local approved distributor.</li> </ul>
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## 4. Operation



### WARNING

**Operate the brake pedals with your feet while wearing suitable shoes.  
Do not operate the pedals with your hands.**

#### Brakes and Steering



STEER: all four castors can rotate, but the steering castor (see below) is locked so that it cannot swivel. This helps to keep the bed on a straight line.



FREE: all four castors are free to rotate and swivel.



BRAKE: brakes are applied on all four castors.

#### Using the steering castor

Position the bed so that all the castors line up in the direction of travel. Raise the pedals to lock the steering castor and move the bed by pushing it from the opposite end.



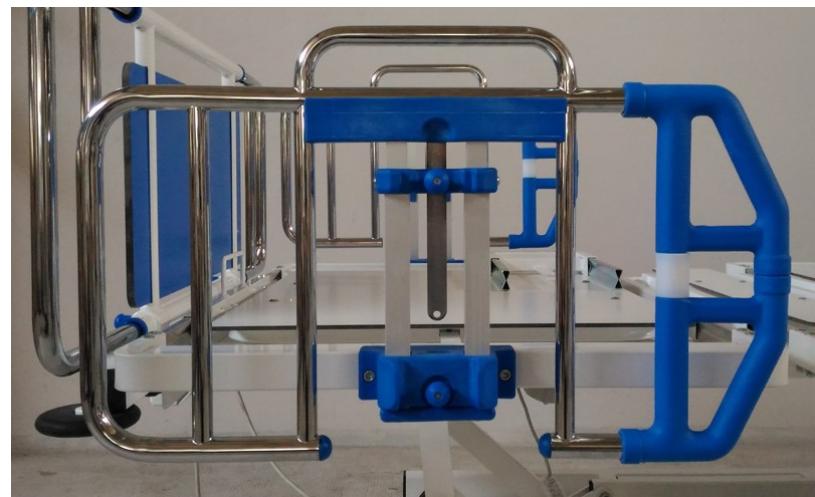
*The steering castor is at right head side.  
The steering castor is conductive too.*

**Side rails**

The bed is fitted with drop split side rails, adjustable height and detachable. They can be adjusted on three different height levels:



First level (all down – mattress level)



Second level (mid)



Third level (all up)



## WARNING

The clinically qualified person responsible should consider the age, size and condition of the patient before allowing the use of side rails.

Side rails are not intended to restrain patients who make a deliberate attempt to exit the bed.

The bed must only be used with the side rails supplied. Do not use another manufacturer's side rails.

Ensure that the mattress is suitable for use with side rails - refer to Chapter 3 for guidance.

### Operation



*Side rails are detachable.*

#### To lower the side rail

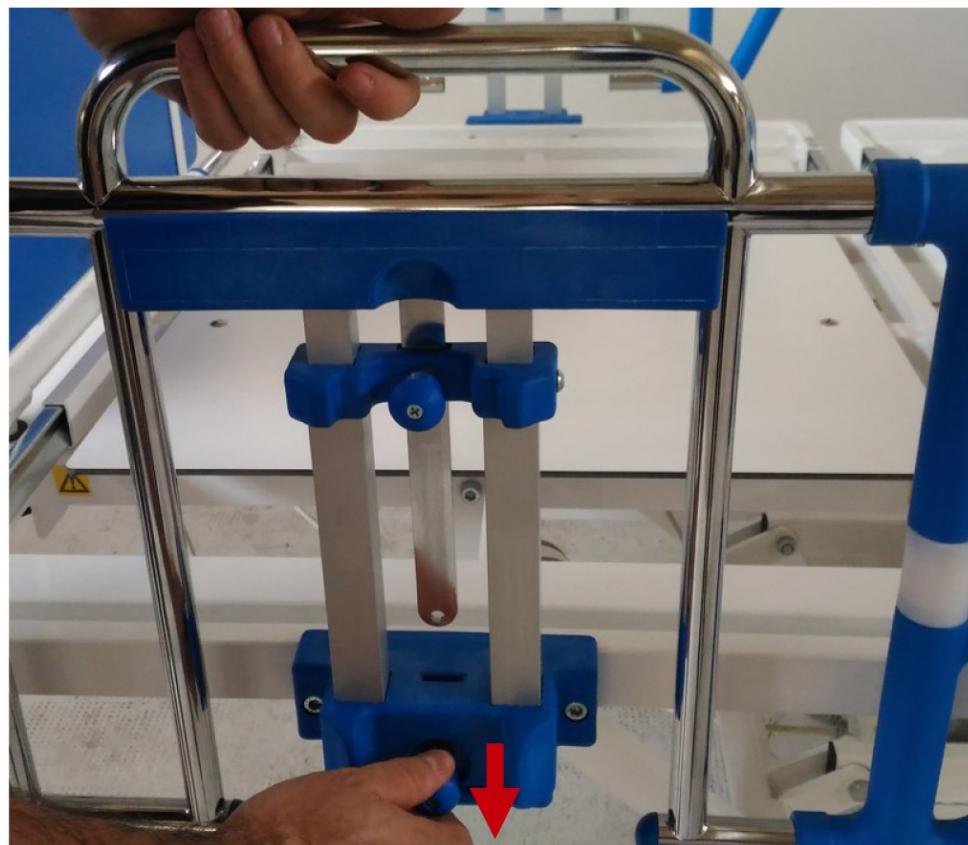
Hold the top side rail handle (third level) and pull the UPPER blue operating knob:



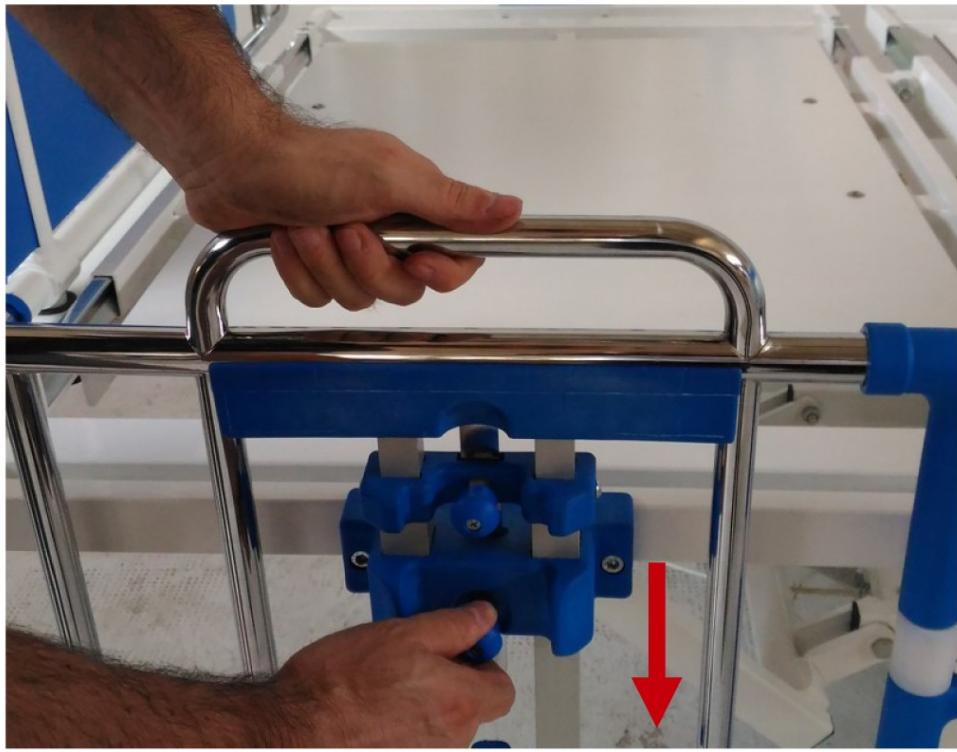
push down the side rail which will slide at the second level (mid) of height:



then pull the LOWER blue operating knob and push down the side rail at the first level (all down – mattress level):

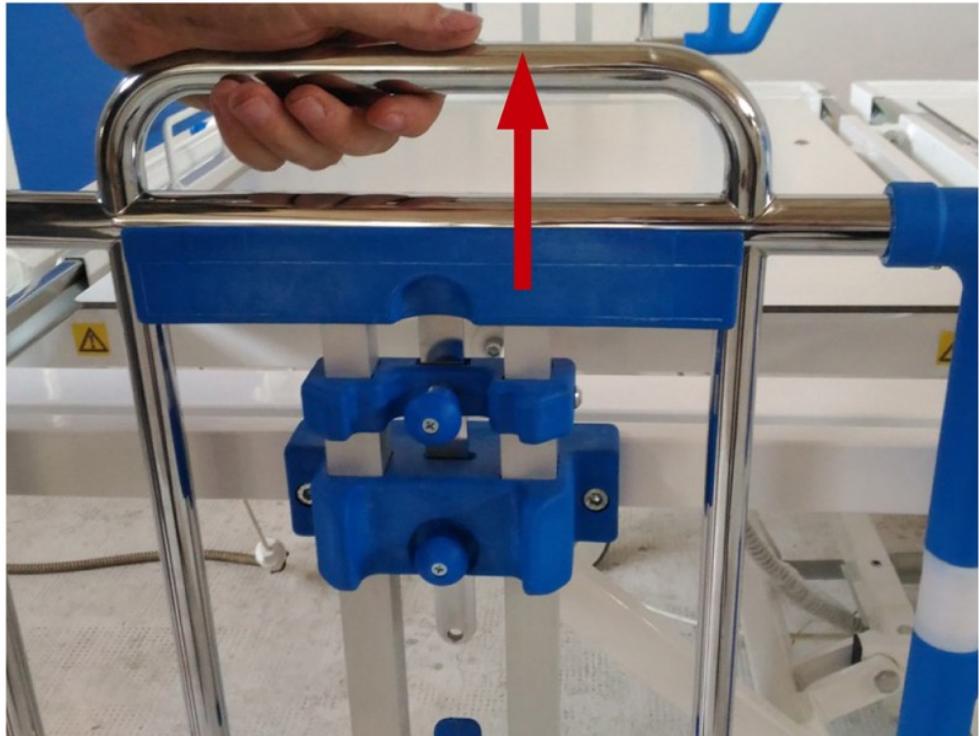


so that the side rail folds down below the mattress platform:

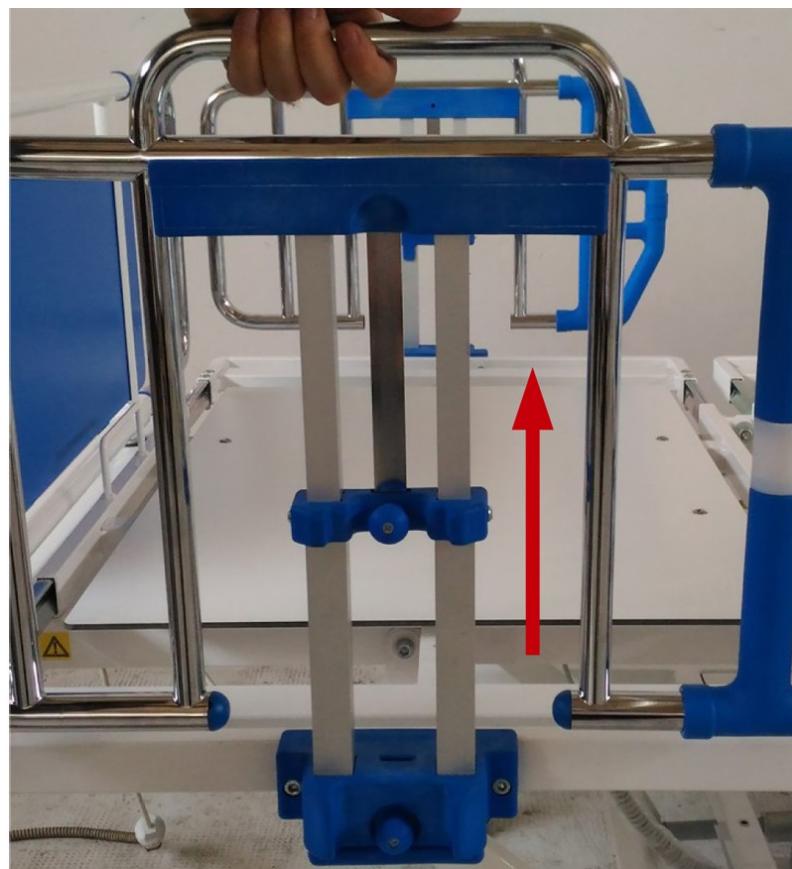
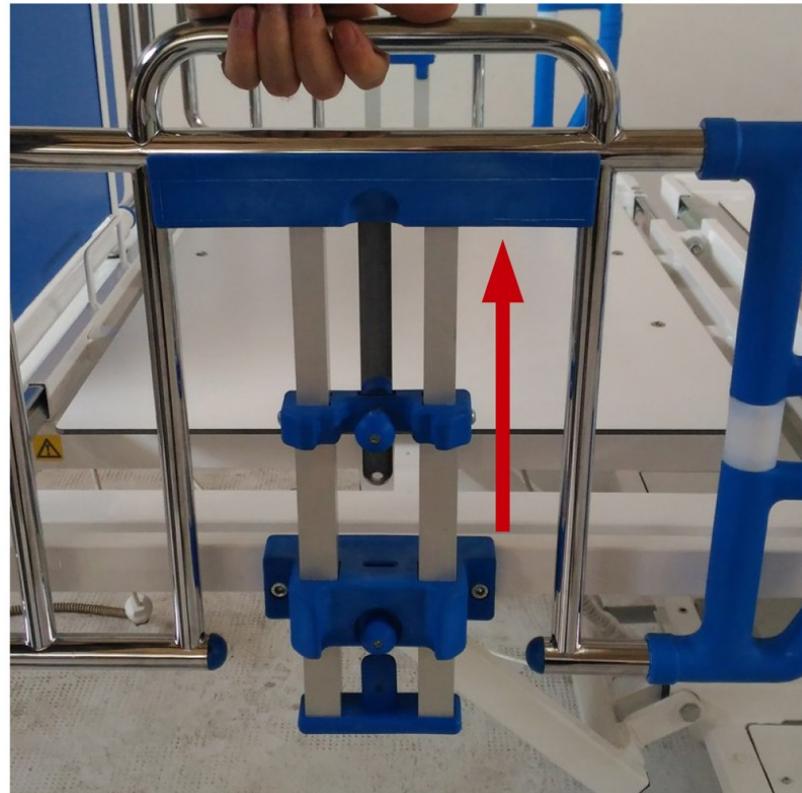


**To raise  
the side rail**

Grab the top side rail handle and pull it up:



until the UPPER and LOWER operating knobs are locked to the top raised position (third level) with an audible “click”.



When the side rail is raised at its maximum top height (third level), then you can adjust it at the second level of height (see how to *lower the side rail* at page 20) or leave it at the third level (maximum top height).



*Side rails are designed to avoid potential finger entrapment: if the side rail drops down without any control, the 25mm gap between the nylon mouldings, where the aluminium vertical rails slide, assures safety.*



*Side rails are designed and supplied with two internal ergonomic nylon handles to facilitate the patient safety grab.*



## **WARNING**

**Make sure the operating knob is securely engaged when the side rail is raised. Do not leave the side rail in the raised position if the operating knob did not make an audible “click”.**

### **Extendable head board / fixed width foot board**

### **Operation EXTENSION**

Head board is extendable. This is needed whenever the mattress platform sections are extended.

The gap between the head board and the safety side rail must be less than 6 cm (EN60601-2-52).

The head and foot boards can be easily lifted off and removed from the bed for access to the patient.

To extend the head board, grab the chrome plated extension tube at right/left side, pull the blue operating knob, pull out the chrome plated extension tube (while releasing the blue operating knob) until it locks with an audible “click”.



## **SHORTEN**

To shorten the head board, pull the blue operating knob, grab the chrome plated extension tube at right/left side and push them inside until the lower tube locks with an audible “click”.



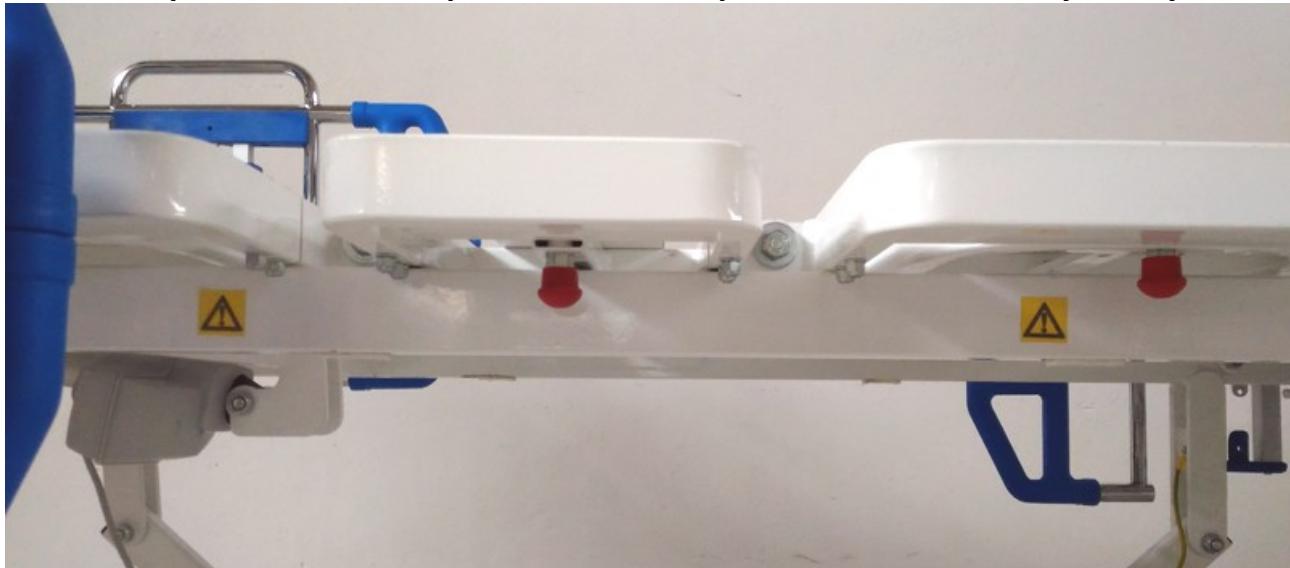
## **REMOVAL**

To remove the head/foot board grab the upper frame and lift the board up.  
To put them back in place grab the upper frame and place the two tapered inserts inside their sockets (see page 12).



*Head/Foot boards are detachable.*

**Mattress platform sections potential contact points are identified by this symbol.**



**Keep hands and fingers away from these areas!!!**

<b>Extendable mattress platform sections</b>	<p>The bariatric bed is supplied with extendable mattress platform sections, from 90cm to 105cm and to 120cm.</p>  <p><b>90cm</b></p>  <p><b>105cm</b></p>  <p><b>120cm</b></p>
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The four sections (backrest, seat, thigh and calf) at 90 cm allow the bed to be driven easily through corridors and doors.

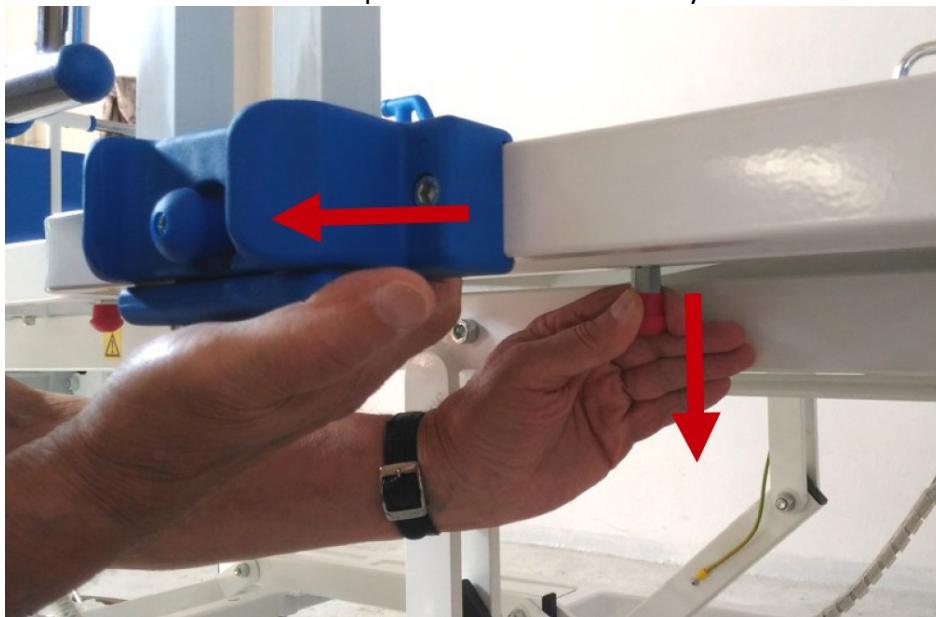
When an obese patient is accommodated into the bed, the sections must be extended at 120cm.



## Operation

### EXTENSION

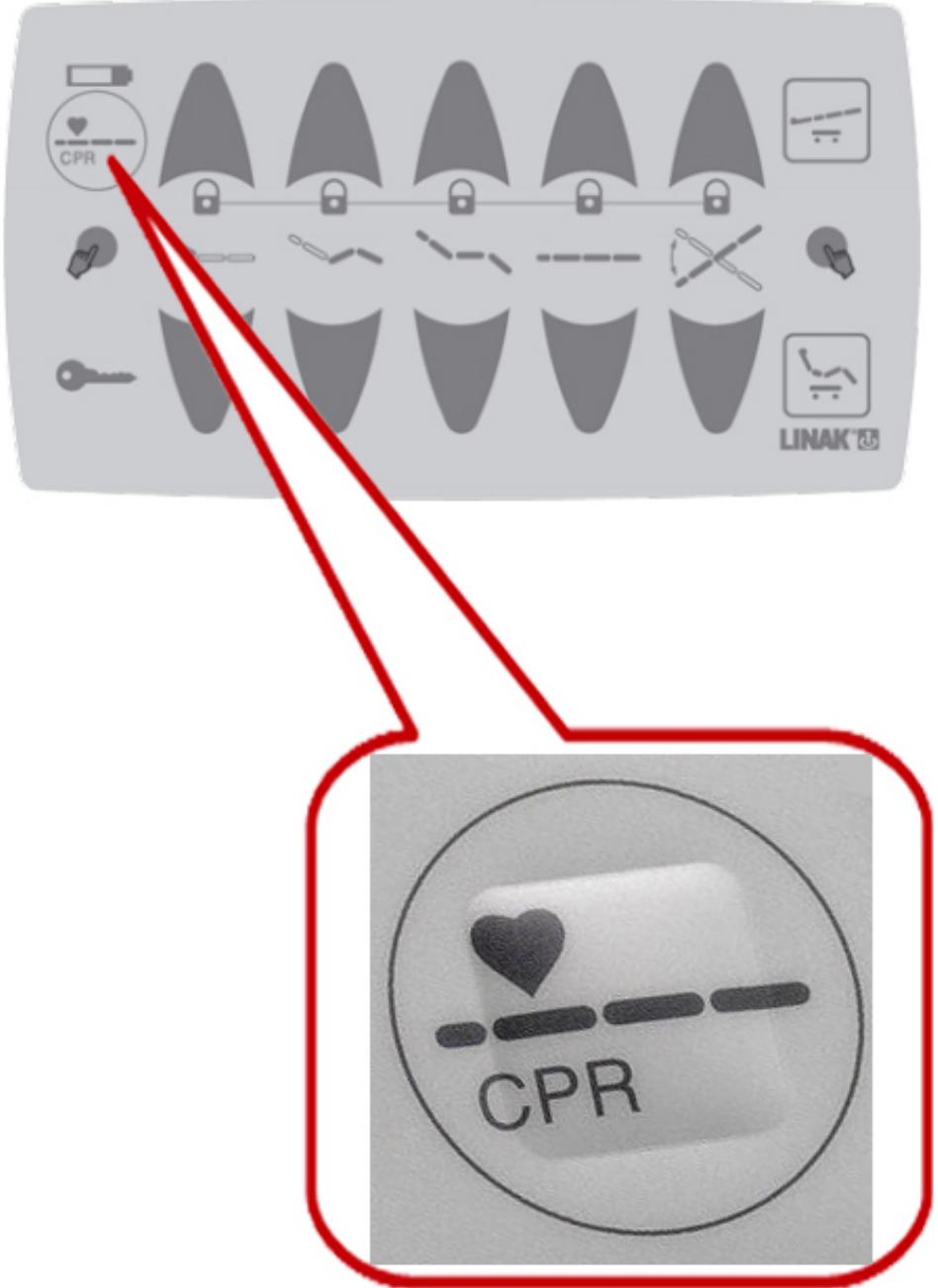
To extend the eight sections, grab with one hand the middle of a section frame, pull with the other hand the corresponding RED operating knob underneath that section and pull out the section with your hand:



pull out the extension frame, release the RED operating knob until it locks with an audible “click”. The first extension is at 105cm and the second extension is at 120cm.

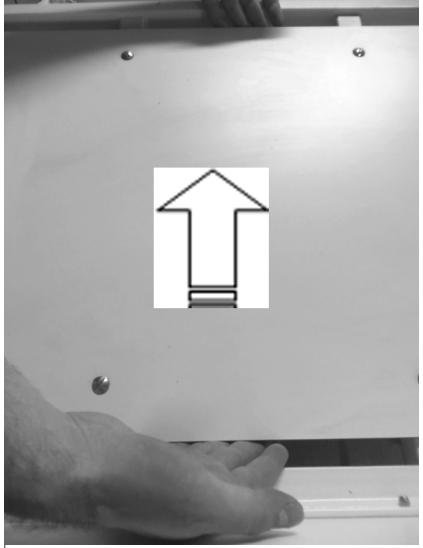
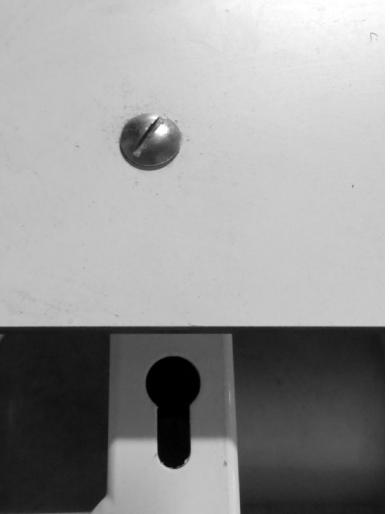
### SHORTEN

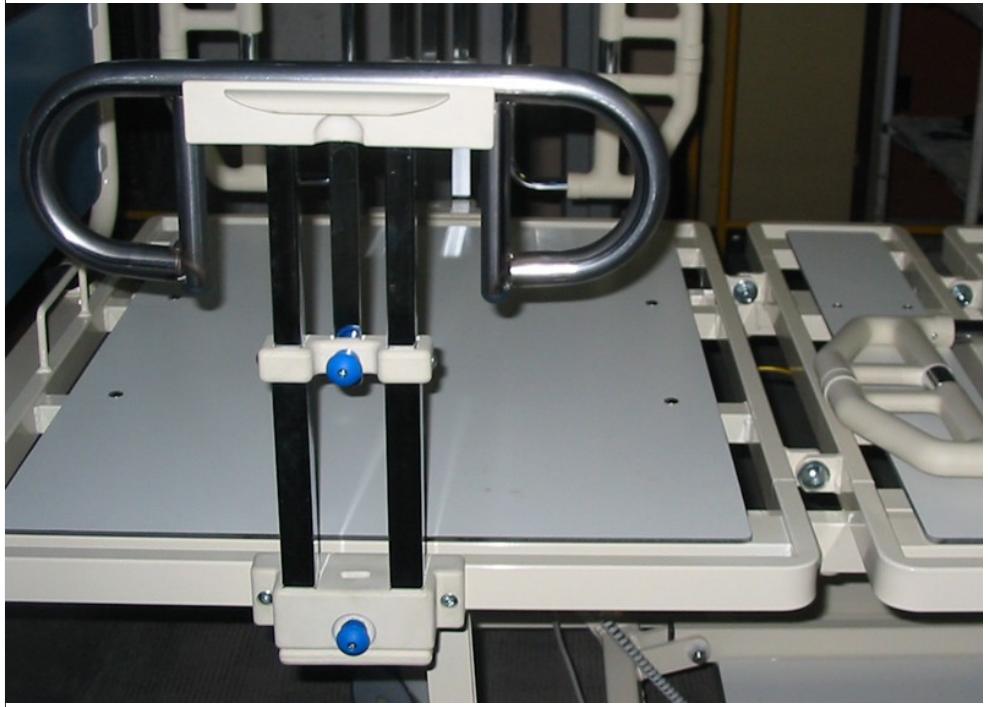
To shorten the sections, just reverse the procedure: grab each section frame, pull the RED operating knob underneath that section, push the extension frame, release the RED operating knob until it locks with an audible “click”.

<b>CPR backrest release</b>	<p>Electric CPR control is located on the ACP (Attendant Control Panel). If the patient suffers a cardiac arrest, press the CPR button to lower the backrest and all other platform sections, plus levelling and lowering the bed. This enables cardio-pulmonary resuscitation to be carried out.</p>
	



*From its top height with maximum profile and tilt, electric CPR is taking maximum 23 seconds to lower the backrest, thigh and calf sections and make the bed flat.*

<b>Mattress support panels removal</b>  <b>Operation</b>	<p>Mattress supports panels are removable for deep cleaning and maintenance.</p> <p>Push towards head side of the bed the plastic laminate panel to release it, it will slide for 1 cm and then remove it.</p>  
--	--

<b>Egress handle ★</b>	<p>This accessory can be used in place of the standard side rail, to make the egress of the patient from the bed easier and more comfortable.</p> <p>Its adjustment operation is the same of standard side rail at page 20.</p> 
------------------------	--

<b>Electrically operated retracting backrest ★</b>	Standard backrest supplied raises at 50°, while this option let the backrest raise at 64° and slide 12 cm backward to avoid abdominal crush.
<b>Bed length adjustment</b>	The length of the bed is adjustable to an extended position (+ 20 cm), to accommodate very tall patients.

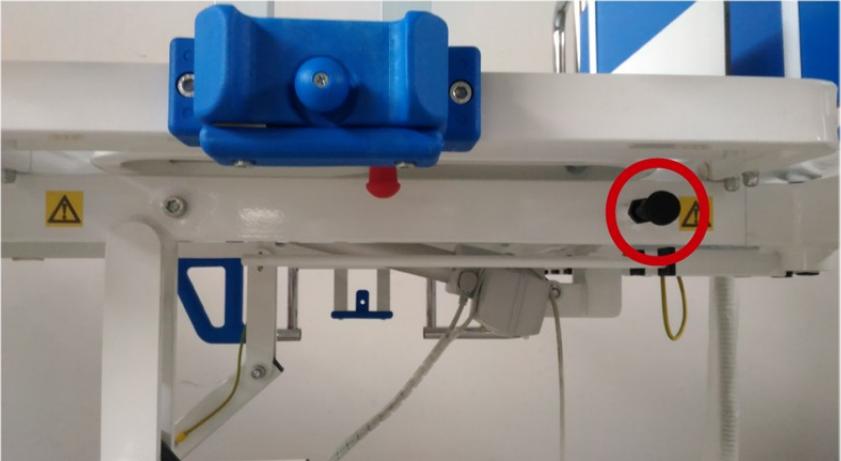


## WARNING

**Install a suitable foam mattress extension (squab) at the foot end when the bed is extended.**

**Always adjust the bed frame and mattress platform to the same length and make sure both are latched securely in position.**

**Level the mattress platform before adjusting the bed length.**

<b>Operation</b>	<p>Locate the left and right black knobs (showed below in the red circle) at foot end of the bed, underneath the mattress platform:</p>  <p>Pull the knobs, rotate them of 90° and release them:</p> <div style="display: flex; justify-content: space-around;">   </div> <p><b>Pull the knob and rotate it 90°</b></p> <p>now the foot extension is free.</p>
------------------	---

Pull the foot extension frame out and then rotate the knobs back until the pin of the knob is locked: the foot extension now is securely fastened.



Pull out the mattress retainer panel at foot end (item "T" at page 10), turn it over and position it flat with the metal insert in its socket.



To restore the foot extension (shorten the bed): firstly put mattress retainer panel back into its original position (Pull out the mattress holder panel from the flat position, turn it over and position it vertical with the plastic laminate insert in its socket, facing the metal insert inward the bed), then pull the knobs, rotate them of 90° and release them: now the foot extension is free, push it back to its original closed position, rotate the knobs back until the pin of the knob is locked (see page 31): now the foot extension is securely fastened.

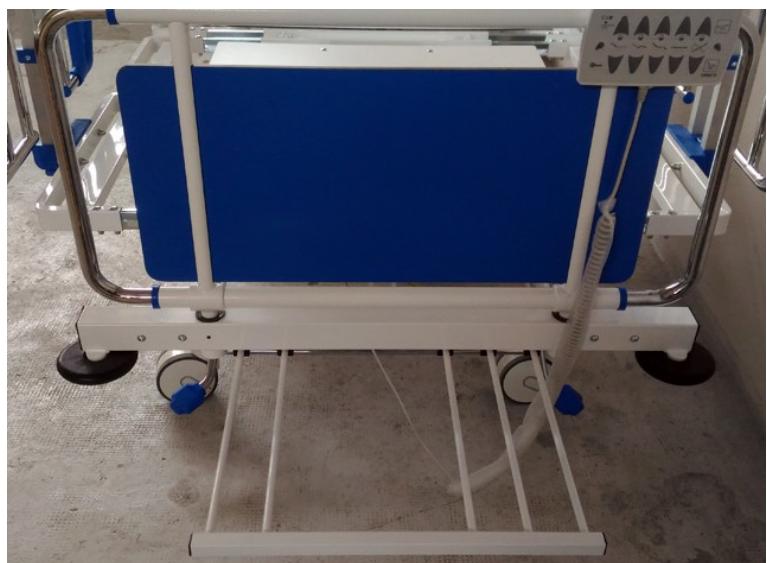


### **Bedstripper (linen shelf)**

The bedstripper is used for supporting clean linen when the bed sheets are being changed.

Pull out the bedstripper from its closed position below the foot board.

After use, push the bedstripper back to its closed position.



## Lifting pole ★

Lifting pole helps the patient to pull him/herself up and change position of the body on the mattress platform, or to help him/herself get off the bed.



*Lifting pole is supplied with two IV hooks on top.  
IV hooks on top safe working load is 5kg each.*



## Caution

**The safe working load of handle and belt is 150 kg.**

### Lifting pole

#### socket

### Operation

Lifting pole socket is located at head end, behind the extendable head board.



Place the lifting pole in its socket until the plastic orange cover of the double tubes is inside the socket.

## I.V. pole fixed height ★

I.V. pole with two hooks.



I.V. hooks safe working load is 5kg each hook.

## I.V. pole fixed height sockets

### Operation

I.V. pole fixed height sockets are located at head end, behind the head board.



Place the I.V. pole in one of the two sockets until the tube is completely inside the socket.



*The two black nylon sockets placed at head end, behind the head board, can be used for I.V. pole fixed height and/or for oxygen bottle holder.*

## Oxygen bottle holder ★

Oxygen bottle holder is designed to accommodate AD, CD, DD, PD, RD, ZD, D cylinders (according to *Medical Gas Cylinder Data Chart*). Oxygen bottle holder dimension is 370×140mm.



Use the black hand-wheel to lock the tank.  
Safe working load is 10kg.

<b>Oxygen bottle holder sockets</b>  <b>Operation</b>	<p>Oxygen bottle holder sockets are located at head end, behind the head board.</p> <p>Place the oxygen bottle holder in one of the two sockets until the metal insert is completely inside the socket.</p> 
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<b>DIN accessory rails ★</b>	<p>The bed may also be fitted with DIN accessory rails, right and left on the second section of the bed. Safe working load is 5kg.</p> 
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<b>Urine bag holder ★</b>	<p>Urine bag holder is made of stainless steel and can be placed directly on the second section frame (fixed one) of the bed.</p>  <p>Safe working load is 5kg.</p>
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## WARNING

Whenever the sections of the mattress platform are extended, the head board must be extended too accordingly.  
[SEE Extendable head board in chapter 4]



## WARNING

Whenever the sections of the mattress platform are closed at 90cm and the sections are adjusted with handset or ACP, pay attention at the potential finger entrapment with the lower frame in any movement.

### Adjusting the mattress platform

The bed is provided with two control handsets: a patient handset with basic controls only and a more comprehensive attendant control panel with locks (ACP) for use by the carer. The functions on both handsets are described separately over the next few pages.

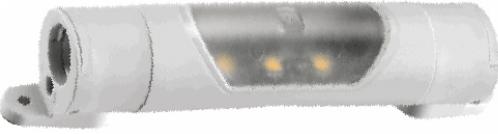
### Operation

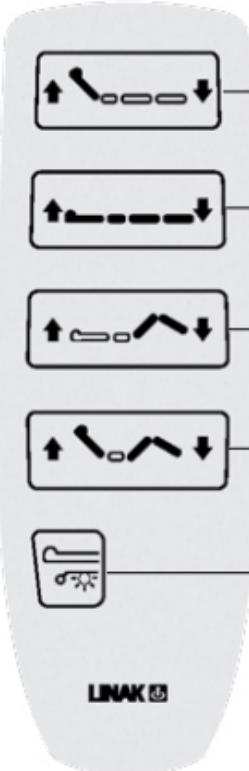
To adjust the mattress platform: press and hold the appropriate button until the required position is achieved. Movement will continue until the button is released or the limit of travel is reached.



## WARNING

If the patient handset or ACP is dropped onto a hard surface, check that all the buttons work correctly afterwards.

<b>Under-bed light (night-light)</b>	The bed is supplied with under bed light on the left side, underneath the trolley frame. See next paragraph for operation.  
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<b>Patient Handset</b>	The patient handset can be positioned on either side of the bed.
	 <p><b>Backrest</b></p> <p><b>Mattress Platform Height</b></p> <p><b>Thigh Section</b></p> <p><b>Auto-Contour</b></p> <p><b>Under Bed Light</b></p> <p><b>LINAK</b></p>
<b>Operation</b>	<p><b>BACKREST:</b> these buttons raise and lower the backrest. The backrest reaches an angle approximately 50° above the horizontal. (62° if supplied with electrically operated retracting backrest).</p> <p><b>MATTRESS PLATFORM HEIGHT:</b> these buttons raise and lower the mattress platform. Highest position: 39cm (43cm if supplied with integrated scale). Lowest position: 75cm (79cm if supplied with integrated scale).</p> <p><b>THIGH SECTION:</b> These buttons raise and lower the thigh section. When the thigh section is raised from the flat position (32°), the calf section will be in the Fowler position (7° angled downwards).</p>

**AUTO-COUTOUR:**

The Auto-Contour up button simultaneously raises the backrest and thigh sections to provide upright patient profiling; the raised thigh section prevents the patient sliding down the bed.

The Auto-Contour down button returns the mattress platform to a flat position.

**UNDER-BED LIGHT:**

this button switches ON the under bed light, located at left side under the trolley frame.

To switch the light OFF, just push the button again.



*The patient handset is supplied with blue background lighting for easy usage in dark surroundings*

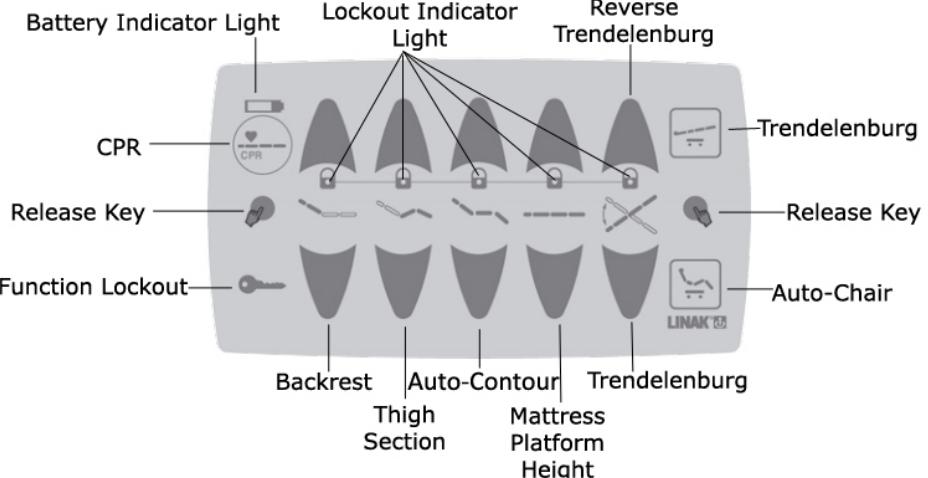


*The Under-Bed Light is not working whenever the emergency battery is running out of charge.*

**WARNING**

**Store the handset on the side rail using the clip on the back; this will help to prevent accidental operation of the controls.**

**The patient should be shown how to use the handset by the carer.**

<p><b>Attendant Control Panel (ACP)</b></p> <p><b>Operation</b></p>	<p>The ACP is located at the foot end of the bed.</p>  <p>The diagram illustrates the layout of the Attendant Control Panel (ACP). It features a central vertical column of six buttons, each with a grey arrow pointing upwards. To the left of this column is a 'Function Lockout' key. Above the top button is a 'CPR' button with a heart icon. At the very top are two indicator lights: 'Battery Indicator Light' on the left and 'Lockout Indicator Light' on the right, which has three smaller arrows pointing to the top three buttons. To the right of the panel are four additional buttons labeled 'Trendelenburg' (with a diagonal line icon), 'Release Key' (with a key icon), 'Auto-Chair' (with a chair icon), and 'LINAK'. Below the central column of buttons are five labels: 'Backrest', 'Thigh Section', 'Auto-Contour', 'Mattress Platform Height', and 'Trendelenburg' (repeated).</p>
	<p><b>RELEASE KEY:</b> Simultaneously press and hold the Release Key button (left or right button) and one of the function button needed among Backrest, Thigh Section, Auto-Contour, Mattress Platform Height, Trendelenburg and Reverse Trendelenburg. <u>(CPR, Trendelenburg and Auto-Chair push button work without the Release Key. Just press them directly).</u></p> <p><b>BACKREST:</b> these buttons raise and lower the backrest (lower button to raise, upper button to lower). The backrest reaches an angle approximately 50° above the horizontal. (62° if supplied with electrically operated retracting backrest).</p> <p><b>THIGH SECTION:</b> These buttons raise and lower the thigh section (lower button to raise, upper button to lower). When the thigh section is raised from the flat position (32°), the calf section will be in the Fowler position (7° angled downwards).</p> <p><b>AUTO-CONTOUR:</b> The Auto-Contour up button simultaneously raises the backrest and thigh sections to provide upright patient profiling (lower button to raise, upper button to lower); the raised thigh section prevents the patient sliding down the bed. The Auto-Contour down button returns the mattress platform to a flat position.</p> <p><b>MATTRESS PLATFORM HEIGHT:</b> these buttons raise and lower the mattress platform (lower button to raise, upper button to lower). Highest position: 39cm (43cm if supplied with integrated scale). Lowest position: 75cm (79cm if supplied with integrated scale).</p>

## **FUNCTION LOCKOUT**

### **TRENDELENBURG:**

This button lowers the head end of the mattress platform (maximum 12°).

### **REVERSE TRENDELENBURG:**

This button lowers the foot end of the mattress platform (maximum 12°).

### **AUTO-CHAIR (cardiac-chair):**

The Auto-Chair button simultaneously raises the backrest (62°) and thigh sections (22°), then lower the foot end of the mattress platform into a chair position.

### **CPR:**

If the patient suffers a cardiac arrest, press and hold the CPR button.

This will flatten the mattress platform (and lower it if necessary) to enable cardio-pulmonary resuscitation to be carried out.

The CPR button overrides the function lockout settings.

### **BATTERY INDICATOR LIGHT:**

If the ACP battery indicator lights SOLID YELLOW, the battery is charging.

If the ACP battery indicator doesn't light, the battery is fully charged.

### **FUNCTION LOCKOUT & LOCKOUT INDICATOR LIGHT**

Function lockout can be used to prevent operation of the controls, e.g. when inadvertent movement of the mattress platform could injure the patient.

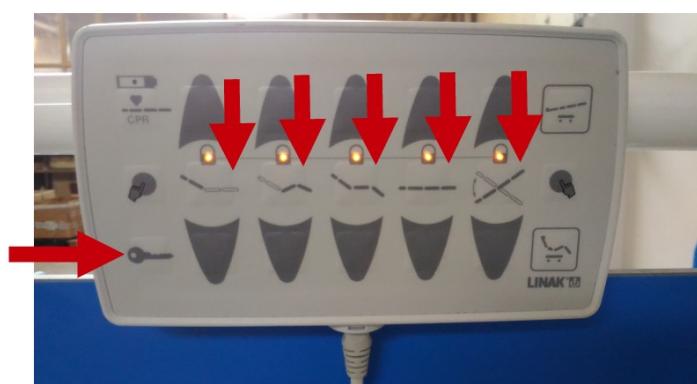
The indicator above each function shows its status: ON (YELLOW light)= function locked; OFF (no light)= function unlocked.

To selectively lock (prevent) functions: simultaneously press the Function Lock button "KEY" (RED arrow below on the left) and the corresponding function(s) to be locked (as indicated by the red arrows). The "lock" indicator(s) above the function button(s) will light.

When function(s) is(are) locked, push buttons CPR, AUTO-CHAIR and TRENDELENBURG functions will work for Emergencies.

To unlock (allow) previously locked functions:

simultaneously press the Function Lock button "KEY" (RED arrow below on the left) and the corresponding function(s) to be unlocked (as indicated by the red arrows). The "lock" indicator above the function button(s) will turn off.





## WARNING

**Store the ACP on chrome plated tube of the foot board using the clip on the back; this will help to prevent accidental operation of the controls and to keep the ACP out of the reach of the patient.**

### Backup battery

The backup battery allows operation of the bed for short periods when it is disconnected from the electricity supply or in emergency situations when the electricity supply is not available.

### Operation

The battery's charge level is indicated as follows:



LED	Indication of operation
Solid yellow	Charging
No LED light	Fully charged
Error during charging	Flashing yellow

Buzzer functionality:

the buzzer will make a warning when a button on the ACP or Patient Handset is pressed and the battery capacity is low.

Recharging the backup battery (Charging time: Approx. 10 hours).

To recharge the battery, connect the bed to the electricity supply. Allow at least ten hours to recharge the battery when it is completely discharged.

While the battery is recharging, the ACP battery indicator lights SOLID YELLOW. The indicator will go out when the battery is fully charged.



## WARNING

**Emergency battery DUTY CYCLE: 5%  
1 minute continuous use followed by 19 minutes not in use.**



## Caution

To ensure the battery is kept fully charged and prevent damage to the battery, the bed should be connected to the electricity supply at all times during normal use.

The battery is intended for occasional and emergency short term use. Its life will be reduced if it is used to power the bed for long periods.

### Duty Cycle Lockout



## Caution

#### Duty cycle lockout

Continuous operation of the controls for more than 2 minutes at full load and an internal temperature of the control box more than 40°C, may exceed the duty cycle of the bed's electrical system, causing the control box to stop functioning until cooled down.

## 7. Product Care



### WARNING

**Disconnect the bed from the electricity supply before starting any cleaning or maintenance activity.**

**The bed will still operate on battery power if the function has not been locked on the ACP.**

#### Decontamination



### WARNING

**Do not allow the mains plug or power supply cord to get wet.**



*Remove the side rails from the bed to allow better decontamination on beds.*



*The bed should be cleaned and disinfected weekly, and before a new patient uses the bed.*

<b>Cleaning operation</b>	<p>Remove the mattress and any accessories from the bed. The head/foot boards and mattress platform sheets should be removed from the bed for cleaning. Wearing suitable protective clothing, clean all surfaces with a disposable cloth moistened in hand hot water and a neutral detergent. Start by cleaning the upper sections of the bed and work along all horizontal surfaces. Work methodically towards the lower sections of the bed and clean the wheels last. Take extra care to clean areas that may trap dust or dirt. Wipe over with a new disposable cloth moistened with clean water, and dry with disposable paper towels. Allow the cleaned parts to dry before replacing the mattress.</p>
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<b>Disinfection operation</b>	After cleaning the bed as described above, wipe all surfaces with sodium dichloroisocyanurate (NaDCC) at a concentration of 1,000 parts per million (0.1%) of available chlorine. In the case of pooling body fluids, e.g. blood, the concentration of NaDCC should be increased to 10,000 parts per million (1%) of available chlorine.
<b>Use of other disinfectants</b>	CHIAPPA ARREDAMENTI S.r.l. recommends sodium dichloroisocyanurate (NaDCC) as a disinfectant because it is effective, stable and has a fairly neutral pH. Many other disinfectants are used in healthcare facilities, and it is not possible for CHIAPPA ARREDAMENTI S.r.l. to test each one to determine whether it may affect the appearance or performance of the bed. If facility protocols require the use of a disinfectant other than NaDCC (e.g. diluted bleach or hydrogen peroxide), it should be used with care and in accordance with the manufacturer's instructions.



## Caution

**Do not use abrasive compounds or pads, or phenol-based disinfectants.**

**Do not use jet stream cleaning or wash tunnels.**

**Do not remove grease from the actuator pistons.**

<b>Preventive maintenance</b>	This product is subject to wear and tear during use. To ensure that it continues to perform within its original specification, preventive maintenance procedures should be carried out at the intervals shown.
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## WARNING

**This list indicates the minimum recommended level of preventive maintenance.**

**More frequent inspections should be carried out when the product is subjected to heavy use or aggressive environments, or where required by local regulations.**

**Failure to carry out these checks, or continuing to use the product if a fault is found, may compromise the safety of both the patient and carer.**

**Preventive maintenance can help to prevent accidents.**

Actions to be done by carer	Daily	Weekly
Check operation of side rails	✓	
Check patient handset and cable		✓
Check ACP and cable		✓
Visually check castors		✓
Visually check power supply cord and mains plug		✓
Check the mattress for damage and fluid ingress		✓
Examine the lifting pole, strap and handle ★	✓	
Check for correct fitting of the locking pin on removable side rails and extendable head/foot boards.		✓



## WARNING

The procedures below must be carried out by suitably trained and qualified personnel.

Failure to do so may result in injury or an unsafe product.

Actions to be done by qualified personnel	Yearly
Carry out a full test of all electrical bed positioning functions (backrest, height, tilt, etc.)	✓
Check that the bedstripper / linen shelf remains in its closed position when maximum foot down tilt is applied.	✓
Check that the bed operates correctly using the backup battery as described in the next section <b>Battery test</b> .	✓
Check operation of castors, paying special attention to braking and steering functions	✓
Check that the bed extension locks securely	✓
Examine the power supply cord and mains plug – if damaged, replace the complete assembly; do not use a rewirable plug	✓
Examine all accessible flexible cables for damage and deterioration	✓
Check all accessible nuts, bolts and other fasteners are present and correctly tightened	✓
Check any accessories fitted to the bed, paying particular attention to fasteners and moving parts	✓

<b>Battery test</b>	<p>Check the condition of the backup battery by carrying out the following test.</p> <ol style="list-style-type: none"> <li>1. Disconnect the bed from the electricity supply.</li> <li>2. Raise the mattress platform to maximum height</li> <li>3. Raise the backrest and thigh sections as far as they will go.</li> <li>4. Press and hold the CPR button and lower the mattress platform to minimum height.</li> <li>5. Apply maximum head down tilt (Trendelenburg).</li> <li>6. Return the mattress platform to the level position.</li> <li>7. Apply maximum foot down tilt (reverse Trendelenburg).</li> </ol> <p>If this test is not completed successfully, connect the bed to the electricity supply for at least eight hours to recharge the battery then perform the test again. If the bed fails a second time, contact CHIAPPA ARREDAMENTI S.r.l..</p> <p><b><u>To maintain best performance see:</u></b></p> <ul style="list-style-type: none"> <li>- chapter 7. Technical data / Electrical &amp; Safety data / backup battery.</li> <li>- chapter 7. Technical data / Transportation and storage / Caution.</li> </ul>
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<b>Troubleshooting</b>	If the equipment fails to operate correctly, the table below suggests some simple checks and corrective actions. If these steps fail to resolve the problem, contact CHIAPPA ARREDAMENTI S.r.l. or an approved service agent (Distributor).
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Symptom	Possible cause	Action
Buzzer sound	Bed is operating from the backup battery and backup battery has low charge.	Check the power supply cord is plugged in and the electricity supply is OK.
One or more bed functions inoperative	Function(s) locked on ACP	Unlock function(s) on ACP
Bed is difficult to manoeuvre around corners.	Brake pedals in "steer" position.	Place brake pedals in the "free" position.
Control box is not working after it worked for more than 2 minutes continuously.	Duty cycle of electrical system exceeded.	Refer to section Duty cycle lockout in Chapter 4.
ACP and Patient Handset are flashing. Any button pressed will emit a sound and no function is allowed.	A cable has been disconnected from the control box and reconnected to the control box and the system needs a reset.	To reset: simultaneously press the two HEIGHT push buttons on the Patient Handset, until the sound is OFF.

<b>Product Lifetime</b>	The lifetime of this equipment is typically ten (10) years. "Lifetime" is defined as the period during which the product will maintain the specified performance and safety, provided it has been maintained and operated in conditions of normal use in accordance with the requirements in these instructions.
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## **6. Accessories**

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Recommended accessories range are shown in the table below.

<b>Accessory</b>	<b>Product Code</b>
Lifting pole with integrated IV hooks	500933
I.V. pole fixed height	500699
Oxygen bottle holder	200376
Urine bag holder	500960
Electrically operated retracting backrest (AVAILABLE ONLY WHEN ORDERED WITH THE BED)	500937
Built-in scale (AVAILABLE ONLY WHEN ORDERED WITH THE BED)	500650
Egress handle	500939
Additional conductive dual castor 150mm	500525
I.V. pole additional socket at foot end	500698
DIN accessory rails set (2 pieces)	500946

## 7. Technical data

General data	
Safe working load	500kg
Maximum patient weight	450kg
Product weight	200kg approx.
Audible noise	50dB approx.
Operating conditions	
Temperature	5°C to 40°C
Relative humidity	20% to 90% at 30°C, non-condensing
Atmospheric pressure	700hPa to 1060hPa
Electrical & Safety data	
Power supply	Universal, SMPS 200W effect output (Switch Mode Power Supply) 100-240 VAC, 50/60 Hz, -15%/+10%, Max 3,9A
Duty cycle	10% (2 min. ON, 18 min. OFF)
Safety Standards	Medical equipment classified in accordance with: IEC 60601-1:2005 IEC 60601-2-52:2010
Other Safety standards	EC DIRECTIVES 93/42 EEC – MEDICAL DEVICES CLASS I and further modifications 2007/47/EC
Electric shock protection	Class I
EMC	Complies with EN 60601-1-2:2002 and 2007
Potential equalisation terminal	Complies with EN 60601-1:2001 and 2006
Liquid ingress protection	IPX4 (Electric set is IPX6)
Backup battery	Lithium Ion technology: Nickel Manganese Cobalt Oxide (NMC). Output voltage: 25.9 V DC Max. discharge current: 10 A Charging Current: 300 mA/controlled by BA21 Battery capacity: 2.25 Ah/58.28 Wh Duty cycle: 5%, 1 minute continuous use followed by 19 minutes not in use. Charging: with integrated charger in battery. Charging time: approx. 10 hours. Operating temperature: +5°C to +30°C. Relative humidity: 20% to 90%, but non-condensing acc. to temperature Atmospheric pressure: 700 to 1060 hPa

<b>Dimensions</b>	<i>Subject to normal manufacturing variations</i>
<b>Overall length</b>	
<i>Position 1 (Short)</i>	230cm
<i>Position 2 (Extended)</i>	246cm
<b>In-bed length</b>	
<i>Position 1 (Short)</i>	200cm
<i>Position 2 (Extended)</i>	220cm
<b>Overall width</b>	
<i>Position 1 (Short)</i>	106cm
<i>Position 2 (Extended)</i>	136cm
<b>In-bed width</b>	
<i>Position 1 (Short)</i>	90cm
<i>Position 2 (Medium)</i>	105cm
<i>Position 3 (Extended)</i>	120cm
<b>Height of mattress platform (centre of seat section to floor)</b>	
<b>STANDARD</b>	39cm to 75cm
<i>with INTEGRATED SCALE</i>	43cm to 79cm
<b>Head down tilt angle</b>	12°
<b>Foot down tilt angle</b>	12°
<b>Mattress size (refer to Chapter 3 for details)</b>	
<i>Position 1 (Short)</i>	200cm x 90cm, 12.5 to 19cm thick
<i>Position 2 (Medium)</i>	200cm x 105cm, 12.5 to 19cm thick
<i>Position 3 (Extended)</i>	200cm x 120cm, 12.5 to 19cm thick
<b>Mattress platform angles</b>	<p> <math>a = 50^\circ</math> max.  <math>b = 32^\circ</math> max.  <math>c = 7^\circ</math> max.  <math>d = 98^\circ</math> min.     </p>



## Caution

If the bed is stored for a long time, it should be connected to the electricity supply for 24 hours (at least every six months from bed manufacturing date) to recharge the backup battery, otherwise the battery may become unserviceable.

### Environmental protection

Incorrect disposal of this equipment and its component parts, particularly actuators, batteries and other electrical devices, may produce substances that are hazardous to the environment. To minimise these hazards, contact CHIAPPA ARREDAMENTI S.r.l. or the Local Distributor for information on correct disposal.

### Transportation and storage

Handle with care. Do not drop. Avoid shock or violent impact.

This equipment should be stored in a clean, dry and well-ventilated area which meets the following conditions:

Operation temperature	+5°C to +40°C
Stock temperature	-10°C to 50°C
Relative humidity	20% to 90% at 30°C, non-condensing
Atmospheric pressure	700hPa to 1060hPa

### Symbols

	Safe Working Load
	Maximum patient weight
	Alternating current (a.c.)

	Caution
	Refer to instructions for use
	Type B applied part. Applied parts are considered to be: Upper frame section, Bed controls, Side Rails, Head and Foot Boards
	Manufacturer / date of manufacture

	Complies with the European Medical Device Directive 93/42/EEC
	Waste Electrical and Electronic Equipment (WEEE) - do not dispose of this product in general household or commercial waste
	Serial number
	Model number
	Potential equalisation terminal
	Protective earth (ground)
	Recommended mattress size
	Recommended patient height

## **8. Warranty and Service**

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Warranty has a validity of 2 years (24 months) from the date of delivery of the product and covers the defects arising within 2 years from delivery.

CHIAPPA ARREDAMENTI S.r.l. ensures the replacement of defective original parts, only if used under normal conditions and maintained following the details written in this IFU and for this reason, at the sole discretion of its technicians.

What is not covered by this Warranty:

- Damaged parts for normal wear and tear or misuse / bad or poor maintenance of the product.
- Parts damaged by assembly or use that do not comply with the requirements and indications of this IFU.

It is understood that the Warranty will automatically lapse if any changes to the Product have been made without the written consent of CHIAPPA ARREDAMENTI S.r.l. or non-original components and / or non-original accessories have been mounted on the bed.

CHIAPPA ARREDAMENTI S.r.l. also declines any responsibility for Civil Liability arising from improper use of the bed and / or not complying with the operating and maintenance rules of this IFU.

All costs for any damage suffered during transport will be charged to the recipient, as well as the supply of spare parts and the possible putting into service of the parts.

We recommend that you check immediately after purchase that the product is visually in good condition and read this IFU carefully before using it.

For each request for spare parts, the code of the bed (RF) and its Serial Number (SN) must be specified.

For service, maintenance and any questions regarding this product, please contact CHIAPPA ARREDAMENTI S.r.l. ([web@chiappaarredamenti.com](mailto:web@chiappaarredamenti.com)) or your local authorized distributor.

## **9. Electromagnetic Compatibility (EMC)**

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### **Caution**

**The use of non-approved accessories may result in increased emissions or reduced immunity of the equipment. A list of approved accessories is included in the product instructions for use. See chapter 6 – Accessories. When this equipment is used adjacent to other electronic devices, the user should observe the equipment to verify normal operation.**

#### **EMC Test report**

##### **Conducted emission in the frequency range 150kHz-30MHz**

The graphs 1, 2, 3, 4 indicates that the equipment considered in working cycle meets the EN 60601-1-2 requirement.

##### **Radiated emission in the frequency range 30MHz-1000MHz**

The graphs 5, 6, 7, 8 indicate that the equipment consider in working cycle meet the EN 60601-1-2 requirement.

##### **Harmonic measurement**

The result indicate that the equipment consider in working cycle meet the EN 60601-1-2 requirement.

##### **Flicker measurement**

The result indicate that the equipment consider in working cycle meet the EN 60601-1-2 requirement.

##### **Fast transients BURST**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

##### **Electro-static discharge immunity test**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

##### **RF conducted immunity test**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

### **RF radiated immunity test**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

### **Surge immunity test**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

### **Power frequency magnetic field**

The result indicate that the equipment consider in working cycle meets the EN 60601-1-2 requirements.

### **Dips and voltage interruption immunity test**

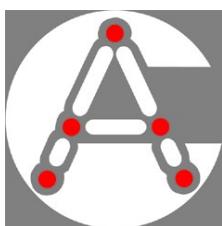
The result indicate that the equipment consider in working cycle meets the IEC EN 61000-6-2 requirements.



*The full version of the EMC Test is available under request.*

*Please send an email request to: [web@chiappaarredamenti.com](mailto:web@chiappaarredamenti.com)*

Our long Tradition, Competence, Reliability and Quality ensure our Customer Satisfaction & Care and CHIAPPA ARREDAMENTI continuity of future Presence and Service.



## CHIAPPA ARREDAMENTI S.r.l.

Via Monte Rosa, 15  
20014 Nerviano (MI) – ITALY  
T: 0039-0331-587504  
E: [web@chiappaarredamenti.com](mailto:web@chiappaarredamenti.com)  
W: [www.chiappaarredamenti.com](http://www.chiappaarredamenti.com)



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