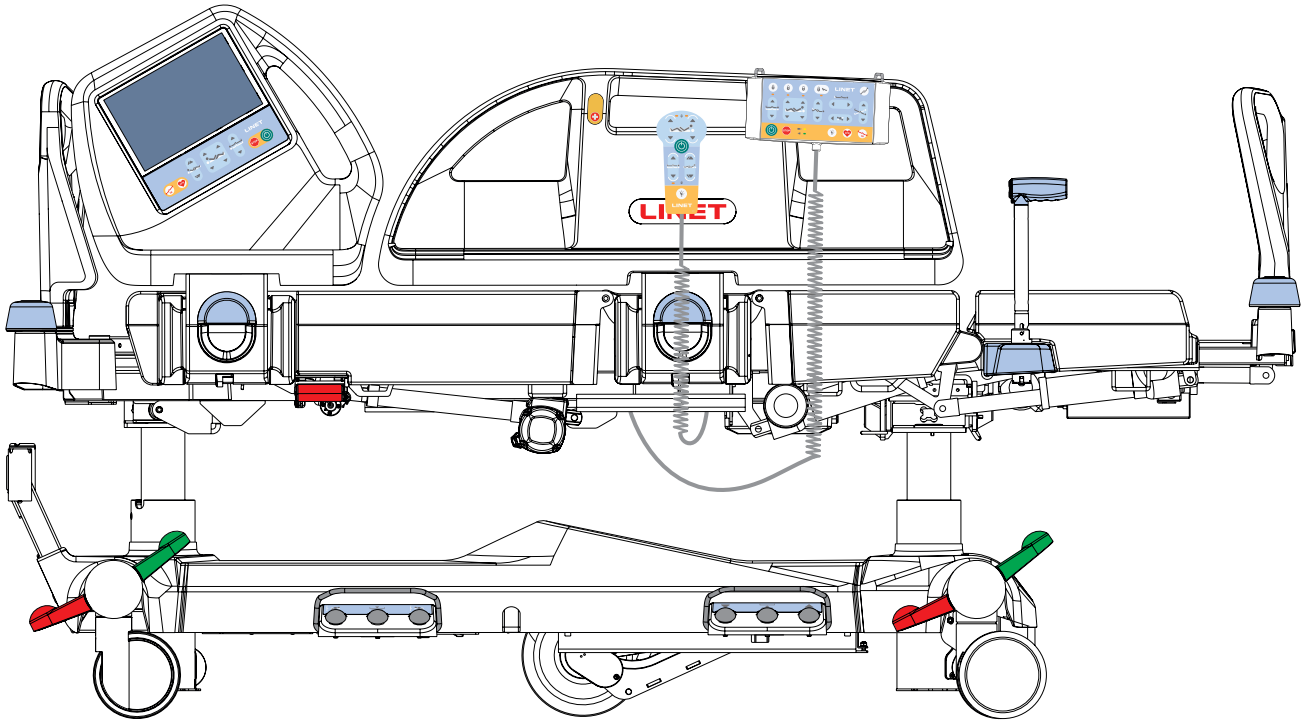
LINET

Instructions for Use and Technical Description



Multicare X

Positionable Bed for Intensive Care

version with scales

CE

0123

D9U001MCX-0101

Version: 03

Publication Date: 2021-12

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Multicare X
Positionable bed for intensive care
version with scales

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Related links: www.linet.com

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Table of Contents

1 Symbols and Definitions 5
1.1 Warning Notices 5
1.1.1 Types of Warning Notices 5
1.1.2 Structure of Warning Notices 5
1.2 Instructions 5
1.3 Lists 5
1.4 Symbols on the Package 6
1.5 Symbols and Labels on the Bed 7
1.6 Serial Label with UDI 13
1.6.1 Serial Label for Multicare X with scales 13
1.7 Acoustic signalisation 14
1.8 Visual signalisation 14
1.8.1 Mains Power LED (Attendant Control Panel) 14
1.8.2 Connection to mains power Indicator (Multiboard X) 15
1.8.3 Accumulator indicator (Attendant Control Panel) 15
1.8.4 Accumulator Charge Status Indicator (Multiboard X) 15
1.8.5 Lock LED (Attendant Control Panel) 16
1.9 Definitions 16
1.10 Abbreviations 17
2 Safety Instructions 18
3 Intended use 21
3.1 User population 21
3.2 Contraindications 21
3.3 Operator 21
4 Product Description 22
5 Technical Specification 23
5.1 Identification of Applied Parts (Type B) 23
5.2 Scales (only version with scales) 23
5.3 Mechanical Specifications (Multicare X) 23
5.4 Environment conditions (Multicare X) 24
5.5 Electrical Specifications (Multicare X) 24
5.6 Electromagnetic Compatibility 25
5.6.1 Manufacturer instructions - electromagnetic emissions 25
5.6.2 Manufacturer instructions - electromagnetic susceptibility 26
5.7 Available Connectors 27
6 Use and Storage Conditions 28
7 Scope of Delivery and Bed Variants 29
7.1 Delivery 29
7.2 Scope of Delivery 29
7.3 Multicare X Variants 29
8 Putting into Service 30
8.1 Accumulator Activation 31
8.2 Foot Board 32
8.3 Head Board 33
8.4 Mattress Support Platform 33
8.5 Potential Equalisation 34
8.6 Before Use 35
8.7 Transport 35
8.7.1 Bed Transport Mode 35
8.8 Firmware 36
9 Power Cord 36
10 Accumulator 37
10.1 Replacing the accumulator 38
10.2 Removing the Bed from Service 38
11 Manipulation 39
11.1 Siderails 39
11.2 Castor Control 40
11.3 CPR Backrest Release 41
12 Control Elements 42
12.1 Multiboard X 43
12.1.1 Home Screen (LCD touchscreen) 44
12.1.2 Statuses (Multiboard X - LCD touchscreen) 51
12.1.3 Fault Codes (OptiCare X integrated mattress) 59
12.1.4 Settings Screens 60
12.1.5 NEW PATIENT FUNCTION 63
12.1.6 Positioning Screen (LCD touchscreen) 66
12.1.7 Lock Screen (LCD touchscreen) 70
12.2 Attendant Control Panel 71
12.2.1 Bed and Keyboards Illumination 73
12.3 Handset (optional) 74
12.4 Patient Control Panels 75
12.5 Bed Height Foot Control (optional) 76
12.6 Lateral Tilt Foot Control (standard) 76
13 Bed Positioning 77
13.1 Backrest 77
13.2 Thighrest 78
13.3 Calfrest 80
13.4 Bed Height 81
13.5 Autocontour 82
13.6 Emergency Trendelenburg Position 84
13.7 Antitrendelenburg and Trendelenburg Tilt 85
13.8 Examination Position 86
13.9 Bed Extension 87
13.10 CPR Position 88
13.11 Cardiac Chair Position 89
13.12 Lateral Tilt 90
13.13 Vascular Position 92
13.14 Mobilisation Position 93
13.15 Low Flat Position 94
13.16 Ergoframe 94
14 Scales Control 95
14.1 Preparation 95
14.2 Taring 95
14.3 Displaying 97
14.4 Hold Mode 97
14.5 Bed Overload 99
14.6 Bed Underload 100
14.7 Weighing in tilt 101
14.8 Factory Zero Setting 101
14.9 History of Weight Values 101
14.10 NEW PATIENT FUNCTION 102
15 Bed Exit Alarm Monitoring (only version with scales) 102
15.1 Preparation 102
15.2 Activation 103
15.3 Bed Exit Alarm Monitoring Screen 104
15.4 Monitored Zone 104
15.5 PAUSE 105
15.6 BED EXIT ALARM 106
15.7 Deactivation 107
15.8 Fault Status (disconnected from the mains) 107
16 Automatic Lateral Therapy (ALT) 108
16.1 Initial ALT Screen 109
16.2 Description of ALT Screen 110
16.3 Bed collisions with the environment 111
16.4 Adjustment of angles and periods 111
16.5 TEST of the Automatic Lateral Therapy 113
16.6 Activated Automatic Lateral Therapy 114
16.7 PAUSED Automatic Lateral Therapy 115
16.8 Return to the bed position before PAUSE 116
16.9 History of ALT Cycles 117
17 Equipment 119
17.1 Accessory Rail with plastic hooks 119
17.2 Brake Signal 120
17.3 i-Brake® 120
17.4 Retractable Fifth Castor 120
17.5 LINIS SafetyPort 120
17.6 Undercarriage 121
17.7 i-Drive Power 122
17.7.1 i-Drive Power System - Basic Description 122
17.7.2 Safety instruction for i-Drive Power 122

17.7.3 Specifications of Use 122
17.7.4 Manipulation 123
17.7.5 i-Drive Power Activation/Deactivation 124
17.7.6 Powered Drive 125
17.7.7 Braking 126
17.7.8 Free Drive 126
17.7.9 Accumulator 126
17.7.10 Fault Signalization 127
17.7.11 Light Indicators 127
17.7.12 Technical Specifications 127
17.7.13 Electrical specification 128
17.7.14 i-Drive Power Maintenance 128
17.8 Mobi-Lift® 129
17.8.1 Using the Support Handles 129
17.9 X-Ray Lung Examination 130
17.10 Nurse Call 131
17.11 USB Connector 133
17.12 m-Panel 134
17.12.1 Signalisation (Bed picture) 135
17.12.2 Bed Exit Alarm Signal 135
17.13 Adaptor for Traction Frames 136
17.14 Safestop 136
18 Mattress 137
18.1 Fixation of a mattress on the mattress support platform 137
18.2 Passive Mattress 138
18.3 Active Mattress (not integrated) 138
18.4 Integrated Mattress 139
18.4.1 Integrated Mattress Screen (OptiCare X) 140
19 Accessories 141
19.1 Lifting Pole 143
19.2 Triangular Holder for Lifting Pole 144
19.3 Infusion Holders for Lifting Pole 144
19.4 Infusion Stand 145
19.5 Infusion Bottle Basket for Infusion Stand 146
19.6 Adaptor for Infusion Stand 146
19.7 Mobile Infusion Stand 147
19.8 Writing Shelf 147
19.9 Monitor Shelf 148
19.10 Utility Shelf 149
19.11 Oxygen Bottle Holders 150
19.11.1 Vertical Oxygen Bottle Holders 151
19.11.2 Horizontal Oxygen Bottle Holder 151
19.12 Ventilation Circuit Holder 152
19.13 Urinary Bag Holders 153
19.13.1 Urinary Bag Basket 153
19.14 Handset Holder 154
19.15 Positioning Cushion 154
19.16 Traction Frame M 155
19.17 Traction Frame Kinetec T41 155
19.18 Protectors 156
19.19 Stabilising ALT Pads 158
19.20 Advanced Stabilising ALT Pads 159
19.21 Foldable IV & Drive (Infusion Stands/Pushing Handles) 160
20 Cleaning/Disinfection 163
20.1 Cleaning (Multicare X) 164
20.1.1 Daily Cleaning 164
20.1.2 Cleaning before Changing Patients 164
20.1.3 Complete Cleaning and Disinfection 165
21 Troubleshooting 166
22 Maintenance 167
22.1 Regular maintenance 167
22.2 Spare Parts 167
22.3 Safety Technical Checks 167
23 Disposal 168
23.1 Environment Protection 168
23.2 Disposal 168
23.2.1 Within Europe 168
23.2.2 Outside Europe 168
24 Warranty 169
25 Standards and Regulations 169
25.1 Multicare X 169
25.2 Manufacturer 169

1 Symbols and Definitions

1.1 Warning Notices

1.1.1 Types of Warning Notices

Warning notices are differentiated by the type of danger using the following signal words:

► **CAUTION** warns about the risk of material damage.
► **WARNING** warns about the risk of physical injury.
► **DANGER** warns about the risk of fatal injury.

1.1.2 Structure of Warning Notices



SIGNAL WORDS!
Type and source of danger!
► Measures to avoid the danger.

1.2 Instructions

Structure of instructions:

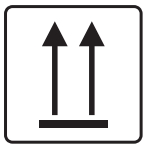
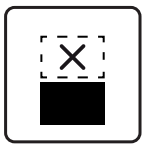
► Perform this step.
Results, if necessary.

1.3 Lists

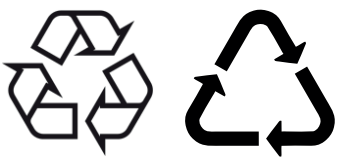
Structure of bulleted lists:

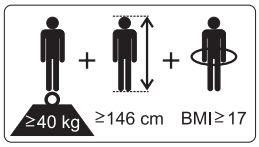
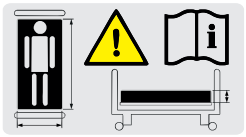
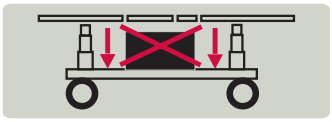
- List level 1
  - List level 2
    - List level 3

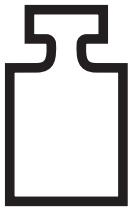
1.4 Symbols on the Package

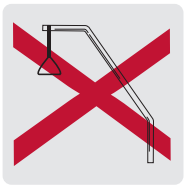
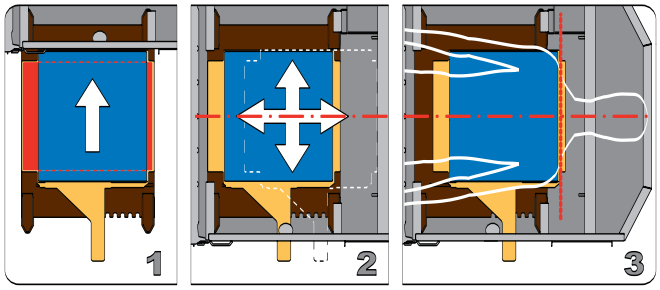
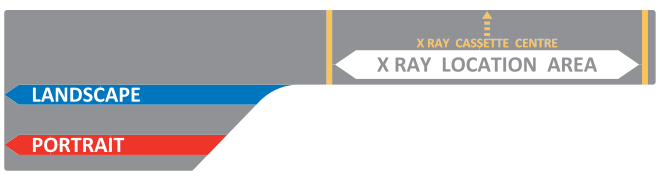
	FRAGILE, HANDLE WITH CARE
	THIS WAY UP
	KEEP DRY (PROTECT FROM HUMIDITY)
	PAPER RECYCLING SYMBOL
	DO NOT STACK DURING STORAGE
	DO NOT USE HAND TRUCK HERE
	OVERSEAS PACKAGE: STACKING LIMIT BY NUMBER (3 PACKAGES FOR TRANS-PORT)
	OVERSEAS PACKAGE: STACKING LIMIT BY NUMBER (5 PACKAGES FOR STORAGE)

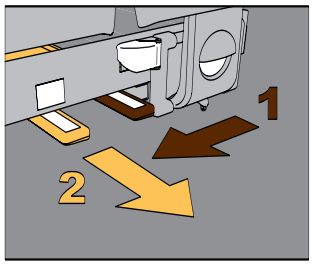
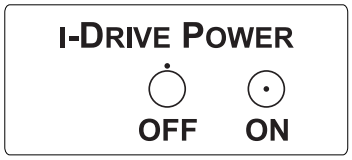
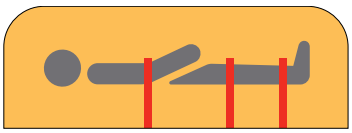
1.5 Symbols and Labels on the Bed

	READ INSTRUCTIONS FOR USE
	GO BUTTON (PRESS TO ACTIVATE CONTROL ELEMENT)
	STOP BUTTON (PRESS TO INTERRUPT BED POSITIONING)
	MANUFACTURER
	MANUFACTURING DATE
	REFERENCE NUMBER (PRODUCT TYPE DEPENDING ON CONFIGURATION)
	SERIAL NUMBER
	FOR INDOOR USE ONLY
	UNIQUE DEVICE IDENTIFICATION (FOR MEDICAL DEVICES)
	WEEE SYMBOL (RECYCLE AS ELECTRONIC WASTE, DO NOT PUT INTO THE HOUSEHOLD WASTE)
	RECYCLING SYMBOL

	SAFE WORKING LOAD
	PHYSICAL DESCRIPTION OF AN ADULT (DESIGNATION OF MEDICAL BED FOR ADULTS)
	USE MATTRESS RECOMMENDED BY MANUFACTURER
	DO NOT PUT ANY OBJECTS ON UNDERCARRIAGE
	CALFREST LOAD LIMIT
	WARNING AGAINST CRUSHING OR TRAPPING OF HANDS
	JACK FOR ATTACHMENT OF CONDUCTOR FOR POTENTIAL EQUALISATION
	CPR LEVER
	GENERAL WARNING SIGN
	GENERAL WARNING SIGN
	TYPE **B** APPLIED PARTS
	THERMAL PROTECTION FOR TRANSFORMER

	MAXIMUM PATIENT WEIGHT
	WEIGHT OF BED
	SAFETY ISOLATING TRANSFORMER (GENERAL)
CE 0123	**CE** MARK FOR Multicare X
	DO NOT POLLUTE THE ENVIRONMENT
	DO NOT OPEN
	BATCH NUMBER (ACCESSORIES)
	MAXIMUM MASS OF MOBILE HOSPITAL BED (MAXIMUM MASS OF EMPTY BED + SAFE WORKING LOAD)
	ON (i-Drive Power)
	OFF (i-Drive Power)

	THIS COMPONENT CONTAINS LITHIUM - DO NOT PUT INTO THE HOUSEHOLD WASTE (If Multicare X is equipped with Integration Module, it contains lithium battery.)
	MEDICAL DEVICE (compatible with Medical Device Regulation)
	INSTRUCTIONS RELATED TO THE USE OF THE i-DRIVE POWER SYSTEM
	EARTH GROUND
	DO NOT INSERT LIFTING POLE HERE!
	CENTRE OF MATTRESS SUPPORT PLATFORM (SYMBOL IS LOCATED ON THE INNER SIDE OF HEAD BOARD, FOOT BOARD AND BOTH FOOT SIDERAILS)
	INSTRUCTIONS FOR INSERTION AND MANIPULATION WITH X-RAY CASSETTE HOLDER
	LABEL ON THE X-RAY CASSETTE HOLDER

	LABEL ON THE BED HEIGHT FOOT CONTROL
	LABEL ON THE LATERAL TILT FOOT CONTROL
	INSTRUCTIONS FOR REMOVAL OF THE X-RAY CASSETTE HOLDER
	i-DRIVE POWER MAINS SWITH
	PLACE FOR BELT (SEGUFIX)
	SAFE WORKING LOAD OF THE ADAPTOR FOR TRACTION FRAMES
	NURSE CALL LABEL ON THE INNER SIDE OF HEAD SIDE-RAIL
	WARNING, READ INSTRUCTIONS FOR USE (COLUMN UNIT)

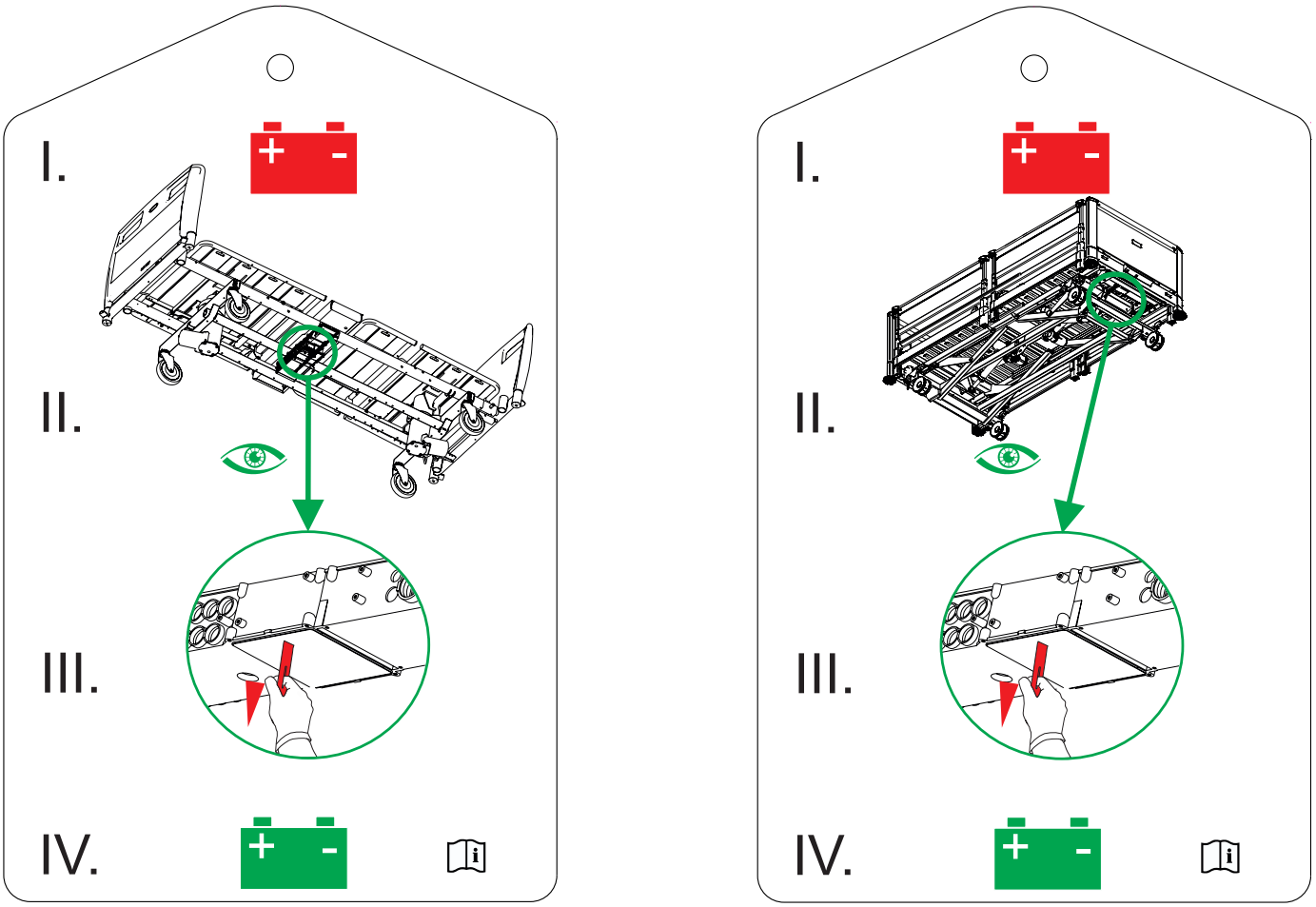


Fig. Instructions for Accumulator Activation

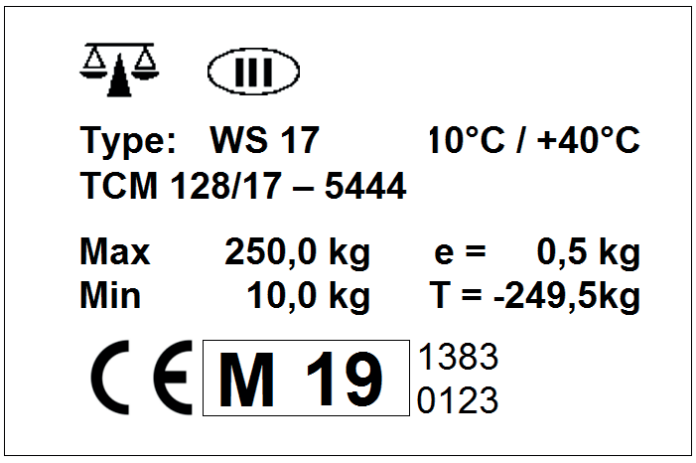


Fig. Scales label (WS17)

Scales Abbreviations	
Max	maximum capacity of the weighing instrument
Min	minimum capacity of the weighing instrument
e	verification scale interval
T	tare value

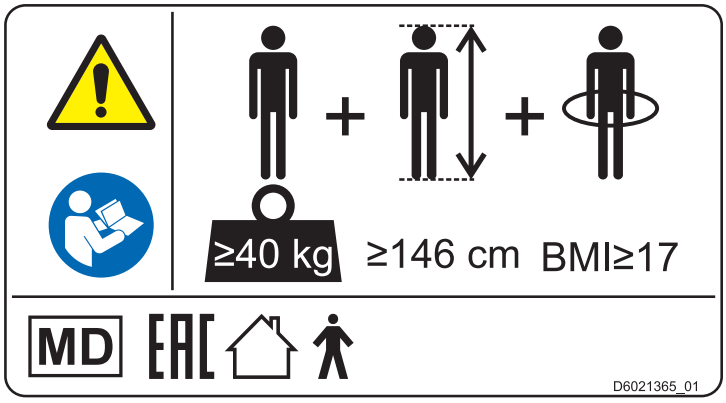


Fig. Informational Label with Specification of Adult Patient

1.6 Serial Label with UDI

1.6.1 Serial Label for Multicare X with scales

Serial label of the Multicare X is placed on the left head end side of the mattress support platform frame. The serial label contains information about Address of Manufacturer, Manufacturing Date (Year-Month-Day), Product Reference Number, Product Serial Number, Global Trade Item Number (GTIN), Unique Device Identification (UDI), symbols, weight specifications and electrical specifications.

1.7 Acoustic signalisation

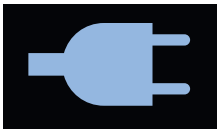
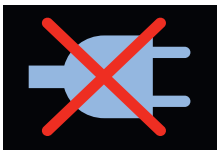
SOUND	MEANING
CONTINUOUS SOUND	overheating
	accumulator overcurrent
	scales overload (only version with scales)
	actuator overload
BEEP + CONTINUOUS SOUND	Siderail Signal (lateral tilt + head siderail or foot siderail down)
REPEATED BEEP: 0,6s sound / 2,6s silence	STOP error (all STOP buttons are disabled)
MELODY: 3 beeps, pause, 2 beeps, longer pause, 3 beeps, pause, 2 beeps	Bed Exit Alarm (only version with scales)
BEEP lasting 0,3s	confirmation
	stopping or locked function
	lateral tilt 15° achieved
	transition from tilt (lateral tilt, Trendelenburg, Antitrendelenburg) to horizontal position
4 TIMES REPEATED BEEP lasting 0,3s	disconnected from the mains
	positioning powered by the accumulator
BEEP lasting 0,5s	start of service mode or end of service mode
	keyboard error (positioning blocked)
BEEP lasting 3s	system error
BEEP lasting 5s	SCU disconnected (only if integrated mattress is used)
	scale module disconnected (only version with scales)
REPEATED BEEP during 3 minutes: 1,1s sound / 1,1s silence	Brake Signal (only version with Brake Signal)

1.8 Visual signalisation

1.8.1 Mains Power LED (Attendant Control Panel)

MAINS POWER LED 	MEANING
lit	connected to the mains
flashing: 0,6s lit / 0,6s not lit	keyboard error (flashing inverted to Lock LED)
	error (first fault)
flashing: 0,1s lit / 0,1s not lit	service mode
not lit	disconnected from the mains power
	transformer switching error

1.8.2 Connection to mains power Indicator (Multiboard X)

Connection to mains power	Indication
Bed is connected to the mains power	
Bed is disconnected from the mains power (flashing icon)	

1.8.3 Accumulator indicator (Attendant Control Panel)

ACCUMULATOR INDICATOR  	MEANING
lit	accumulator disconnected or faulty
flashing: 1,6s lit / 0,2s not lit	accumulator deeply discharged
flashing: 0,1s lit / 0,1s not lit	accumulator discharged
flashing: 0,2s lit / 1,6s not lit	accumulator is charging
not lit	accumulator charged

1.8.4 Accumulator Charge Status Indicator (Multiboard X)

Acummulator Charge Status	Indication
Charging	
Charged Accumulator (bed is connected to the mains)	
Faulty Accumulator or Accumulator Disconnected	
Discharged Accumulator (blue outline, bed is disconnected from the mains)	
Critically Discharged Accumulator (red outline, bed is disconnected from the mains)	
Bed is powered by the Accumulator	

1.8.5 Lock LED (Attendant Control Panel)

VISUAL SIGNALISATION / LOCK LED	lit	flashing: 0,6s lit / 0,6s not lit			not lit
Thighrest, Calfrest and Bed Extension Lock LED	locked	lock error	keyboard error	motion blocked	unlocked
Backrest Lock LED	locked	lock error	keyboard error	motion blocked	unlocked
Bed Height, Lateral Tilt, Trendelenburg and Antitrendelenburg Tilt Lock LED	locked	lock error	keyboard error	motion blocked	unlocked
Foot Control Lock LED	locked	lock error	keyboard error	motion blocked	unlocked

1.9 Definitions

Basic Bed Configuration	The pricelist model configuration, not including a mattress.
Bed Weight	The value depends on the product configuration, accessories or customer adjustments.
Clearance of Undercarriage	The height from the floor to the lowest point of the undercarriage between the castors, for the manipulation of accessories under a braked bed in the standard position.
Duty Cycle	Cycle of operation of the motor: time of activity/time of rest.
Ergoframe	Ergoframe is the kinematic system of Mattress support platform Adjustment whose effect is the elimination of pressure on the patient´s abdomen and pelvic area and frictional forces on the patient‘s back and legs.
Maximum Patient Weight	Maximum Patient Weight depends on the application environment according to IEC 60601-2-52. For application environment 1 (intensive/critical care) and 2 (acute care) reduce Safe working Load by 65 kg. For application environment 3 (long-term care) and 5 (ambulatory care) reduce Safe working Load by 35 kg.
Safe Working Load	The highest allowable load on the bed. The Safe Working Load is the sum of: – the patient – the mattress – the accessories of the medical bed (only if they are supported by the support system of the medical bed) and – the load supported by those accessories (excluding patient weight).
Siderail Height	The height of the upper crossbar or the edges of the siderails (not the highest point of the siderail controls) from the patient surface.
Standard Bed Position	- The height of the patient surface with regard to the floor is 400 mm. - The mattress support platform, including the individual parts, has to be in a horizontal position (0°). - The siderails are always locked in the upper position. - The basic position of the integrated extension.
Adult	Patient having a physical size equal to or more than 146 cm, a mass equal to or more than 40 kg and a body mass index (BMI) equal to or more than 17 (according to IEC 60601-2-52).
Maximum Mass of Mobile Hospital Bed	Sum of Maximum Empty Bed Mass and Safe Working Load.

1.10 Abbreviations

AC (~)	Alternating Current
ALT	Automatic Lateral Therapy
CE	European Conformity
CPR	Cardiopulmonary Resuscitation
dB	Sound Intensity Unit
DC (⎓)	Direct Current
CUC	Configuration number
EMC	Electromagnetic Compatibility
FET	Field-effect transistor
HF	High Frequency
HPL	High Pressure Laminate
ICU	Intensive Care Unit
INT.	Duty Cycle
IP	Ingress Protection
IV	Intravenous
LCD	Liquid Crystal Display
LED	Light Emitting Diodes
ME	Medical Electrical (Equipment)
ON	Activation
OFF	Deactivation
ppm	Parts per million, millionth (1000 ppm = 0,1%)
REF	Reference Number (product type depending on configuration)
SCU	System Control Unit (integrated mattress)
SN	Serial Number
SWL	Safe Working Load
UDI	Unique Device Identification (for medical devices)
USB	Universal Serial Bus
WEEE	Waste Electrical and Electronic Equipment

2 Safety Instructions



WARNING!
Multicare X bed should be left in its lowest position when the patient is unattended in order to reduce risk of injury due to falls!



WARNING!
Siderails of Multicare X should be located in the „up“ position to reduce the risk of the patient accidentally slipping or rolling off the mattress!



WARNING!
Incompatible siderails and mattresses can cause an entrapment hazard!



WARNING!
Inappropriate handling of the power supply cord, e. g. by kinking, shearing or other mechanical damages is hazardous!



WARNING!
When routing cables from other equipment in the Multicare X bed avoid squeezing those between parts of the Multicare X bed!



WARNING!
Multicare X bed should not be used with bed hoists and bed lifts!



WARNING!
The bed is intended for adults.
► Follow the chapter **Intended use**.



WARNING!
Incompatible mattresses can create hazards.



WARNING!
To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.



WARNING!
No modification of this equipment is allowed.



WARNING!
Do not modify this equipment without authorization of the manufacturer.



WARNING!
If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.



WARNING!
An additional multiple socket-outlet or extension cord shall not be connected to the medical electrical system.



WARNING!
During specific investigations or treatments the significant risks of reciprocal interference posed by ME equipment may occur.



WARNING!
Staff expert assessment is needed to consider all individual cases of contraindications!



WARNING!
Certain bed positions are not suitable for specific diagnosis/medical conditions. Fowler position is not suitable for spinal cord injuries! Trendelenburg position is not suitable for patients with higher intracranial pressure!



WARNING!
Length adjustment of the bed must be proportional to the height of patient!
Risk of trapping or squeezing because of patient´s body constitution disproportionate to the size of mattress support platform!



WARNING!
Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established!



WARNING!
Only authorised and trained person using the tool is allowed to change fuses and power supplies!



WARNING!
This medical device is not intended for oxygen enriched environment!



WARNING!
This medical device is not intended for use with flammable substances!



WARNING!
This medical device is not portable medical electrical equipment!



WARNING!
Make sure the duty cycle (2 min ON/18 min OFF) is not exceeded during bed positioning!



WARNING!
Patient is allowed to use selected control elements only if hospital personnel had assessed that the patient´s physical and psychological state is in accordance with use of them and only if the hospital personnel had trained the patient in accordance with the instructions for use!



WARNING!
Hospital personnel is allowed to use the weighing system (scales) for weighing patients only if they had been trained according to the instructions for use!



WARNING!
No part of the Multicare X ME equipment shall be serviced or maintained while in use with a patient!



WARNING!
Patient is allowed to use selected control elements of the ME equipment unless servicing and maintenance of the ME equipment is performed!

Additional Instructions for Correct Use:

► Follow the instructions carefully.
► Use the bed exclusively if it is in perfect working order.
► If necessary, check the bed functions daily or at each shift change.
► Ensure any user has read and understood the instructions for use completely before operating the product.
► Use the bed exclusively with the correct mains supply.
► Ensure that the bed is operated exclusively by qualified personnel who have been trained according to the instructions for use.
► Ensure that the patient (health permitting) has been informed about the operation of the bed and all applicable safety instructions.
► Move the bed exclusively on even, hard-surfaced floors.
► Contact service department of the manufacturer immediately to let it replace any damaged parts by the original spare parts.
► Ensure the bed is operated by qualified personnel trained in using the bed in accordance with the instructions for use by manufacturer or by person approved by the manufacturer, eventually by authorized representative or by person approved by the authorized representative.
► Ensure that maintenance and installation are performed exclusively by qualified personnel who have been trained by the manufacturer.
► During peak loads or unavoidable excess loads (CPR), adjust Mattress support platform to the lowest position.
► Ensure that only one adult patient lies on the bed at any time.
► To avoid injury or crushing, take extra caution when operating any moving parts of the bed.
► When using lifting poles or infusion stands, ensure that nothing will be damaged when you move or adjust the bed.
► Brake the castors when the bed is occupied.
► Keep the Mattress support platform in the lowest position at any time when the healthcare personnel are not treating the patient in order to prevent the patient from falling or injuries.
► Ensure that siderails are operated exclusively by healthcare personnel.
► Never use the bed in areas where there is a hazard of explosion.
► Enable or disable functions on Patient Control Panels using the Attendant Control Panel as appropriate for the patient's physical and mental state. Verify that the function is actually disabled.
► Never handle the mains plug with wet hands.
► Disconnect the product from the mains exclusively by pulling the mains plug.
► When pulling the mains plug, always hold the plug, not the cable.
► Position the mains cable so that there are no loops or kinks in the cable; protect the cable from mechanical wear and tear.
► Improper handling of mains cable can cause an electric shock hazard, other serious injuries or damage to the mattress replacement system.
► Ensure that the stipulated duty cycle of motor is not exceeded.
► To change fuses or cables contact servise organisation authorized by manufacturer.
► To prevent failures, use exclusively the manufacturer's original accessories and mattresses.
► Ensure that the stipulated safe working load is not exceeded.
► If the patient‘s condition could lead to an entrapment, leave the mattress support platform in the flat position whilst unattended.
► Adjust bed height when transporting the bed in order to facilitate overcoming possible obstacles.
► Do not exceed maximum load of 80 kg (176.37 lbs) for mattress support platform extension.
► Do not exceed the maximum patient weight limit (see Mechanical Specifications).
► Do not hang anything on any cable.
► Never use the mattress replacement system near radiators or other heat sources.
► Select a suitable location for the placement of bed accessories and other objects to prevent involuntary activation of buttons or controls which may result in the adjustment of bed positioning.
► Do not use the bed when its parts have been removed (e.g. parts of mattress support platform) unless these parts are designed to be removed.
► Never place any accessories or handset on the siderails where keyboards are located.
► After each emergency situation always check if any of the controllers (controllers in siderails, handset or ACP) is not involuntarily pressed by the bed accessories or by the mattress.
► The weighing system must be calibrated at regular intervals and in accordance with the metrological regulations of the relevant country. All testing and certification must be carried out by qualified personnel. The healthcare provider is responsible for ensuring the required testing frequency and testing procedure of the weighing system is carried out.
► To avoid unintended activation of moving parts during any use of the bed always check that none of the control elements of the bed is pressed by persons, mattress or other objects.
► When adjusting the ALT (Automatic Lateral Therapy), ensure that the process does not pose any risk of the patient falling or getting injured, or of any lines or tracheal tubes getting pulled out.

3 Intended use

The intended use is the hospitalization of the patient in the intensive and acute care units, which includes above all the following aspects:

► Adjustment of the specific positions needed for the preventive reasons, routine nursing, treatments, mobilization, physiotherapy, examinations, sleeping, and relaxation. These positions are further specified and described in the clinical evaluation of this device, together with their potential clinical outcomes and benefits.

► Providing the safe environment for the patient during all relevant procedures. The particular requirements on patient safety are the subject of the clinical evaluation, including evaluation of the risk/benefit ratio. The relevant safety issues are the part of the risk management file.

► Patient in-bed indoor transport out of the patient room.

► Providing the suitable working conditions for the caregivers to perform the routine and specific tasks during the patient hospitalization.

► Indicative measurement of the patient weight, used as supportive feature without direct diagnostic effect. It helps staff to assess the general patient status and apply the nutrition and medicaments (valid for the version of the beds with in-bed scales).

3.1 User population

► Adult patients (weight >= 40 kg, height >= 146 cm, BMI >= 17) in the intensive and acute care units (Application Environment 1 and 2 as in IEC 60601-2-52)

► Caregivers (nurses, doctors, technical personnel, transport personnel, cleaning personnel)

3.2 Contraindications

► The medical device is not intended for the pediatric patients use.

► Certain positions are not suitable for specific diagnoses/medical conditions (e.g. spinal cord injuries vs. Fowler position, higher ICP patients vs. Trendelenburg). Staff expert assessment / nursing consideration is needed in all individual case of contraindication.

3.3 Operator

► Caregiver

► Patient (based on individual patient status assessment by caregiver the patient can utilize dedicated device functions)

4 Product Description

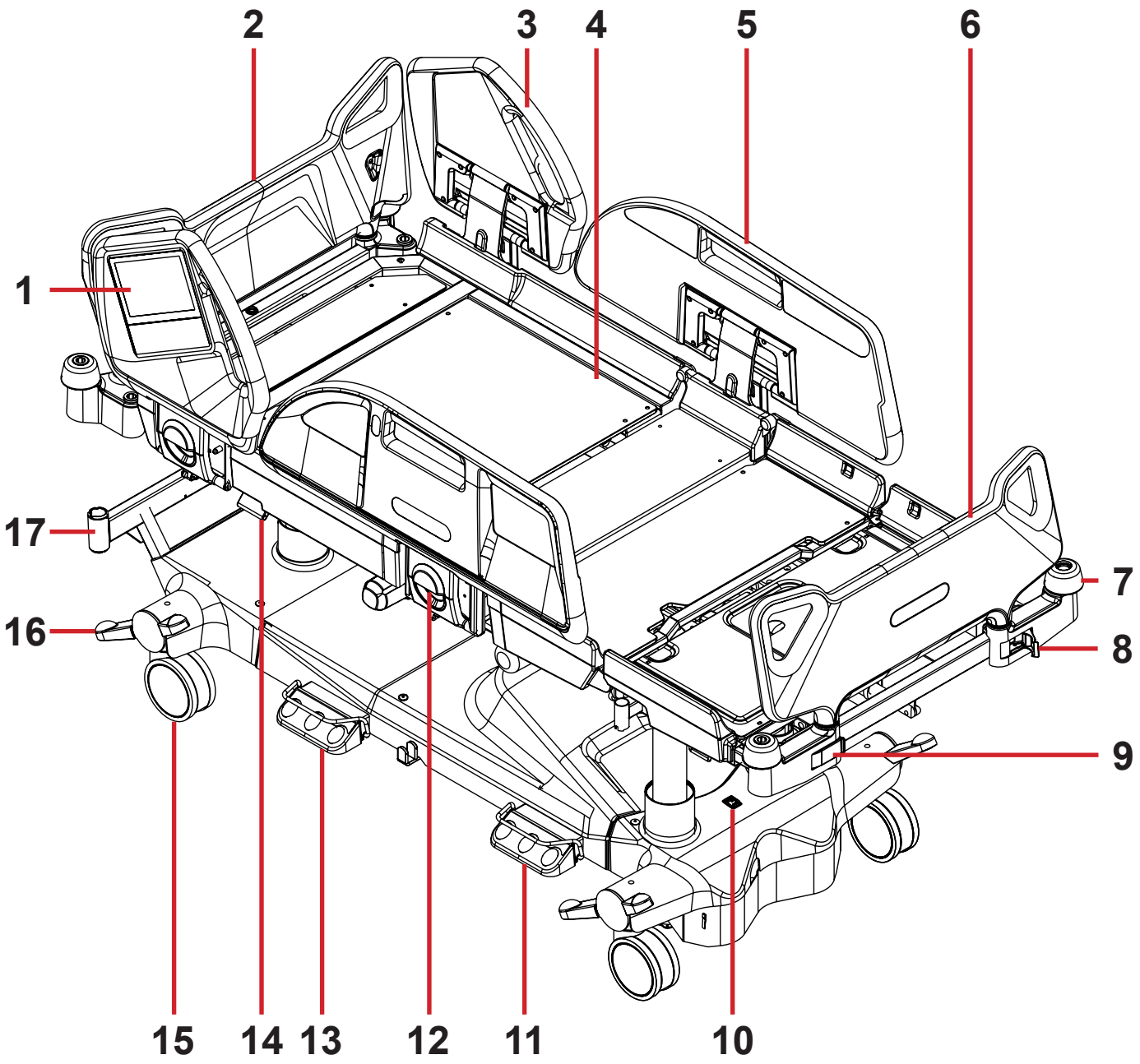


Fig. Bed Overview (Multicare X)

1. **Multiboard X**
2. **Removable Head Board**
3. **Head Siderail**
4. **Four-part Mattress support platform with Ergoframe® System**
5. **Foot Siderail with Patient Control Panels**
6. **Removable Foot Board (lockable)**
7. **Corner Bumper**
8. **Foot Board Safety Lock (unlocked)**
9. **Foot Board Safety Lock (locked)**
10. **i-Drive Power mains switch**
11. **Bed Height Foot Control**
12. **Siderail Release Lever**
13. **Lateral Tilt Foot Control**
14. **CPR Lever – Backrest Release**
15. **Castor**
16. **Castor Control Lever**
17. **Accessory Adaptor**

5 Technical Specification

All technical data are rated data and are subject to construction and manufacturing tolerances.

WARNING!
If Multicare X bed is used with OptiCare X integrated mattress system respect values of mechanical and electrical specifications which can harm none of them!

5.1 Identification of Applied Parts (Type B)

All part of the bed (and accessories) the patient can reach are type B Applied Parts.

- Mattress support platform frame, Covers and all Movable Parts
- Head Board and Foot Board
- Siderails
- Mobi-Lift Handles
- Handset

5.2 Scales (only version with scales)

Accuracy of displayed weight values:
- 0,5 kg (1,1 lbs)
- Scales Class III

5.3 Mechanical Specifications (Multicare X)

Parameter	Value
External Dimensions in Standard Bed Position (length x width)	215 cm x 105 cm
Maximum Length of Backrest	87,5 cm
Maximum Length of Seat Section	26,5 cm
Maximum Length of Thighrest	36 cm
Maximum Length of Calfrest	38,5 cm
Safety Siderail Height above Mattress support platform	45 cm (maximum)
Dimensions of Head Siderail (length x height)	53,5 cm x 56,5 cm
Dimensions of Foot Siderail (length x height)	100,7 cm x 46 cm
Bed Extension (minimum — maximum)	0 cm — 22 cm
Maximum Dimensions of Mattress (length x width)	214 cm x 87,5 cm
Maximum Mattress Height	23 cm
Clearance in Standard Position	15 cm
Castor diameter	15 cm
Minimum — Maximum Mattress support platform Height above floor (without Mattress)	44 cm — 82 cm
Ergoframe (Backrest/Thighrest)	6 cm / 6 cm
Maximum Backrest Angle	70°
Maximum Thighrest Angle	30°
Maximum Calfrest Angle	38°
Angle between Calfrest and Thighrest	112°
Maximum Lateral Tilt Angle	+30°/-30°
Trendelenburg Angle	13°
Antitrendelenburg Angle	16°
Average Bed Weight (without mattress)	224 kg
Bed Safe Working Load (SWL): - Patient - Mattress (OptiCare X) - Accessories - Load on the Accessories	250 kg 185 kg 15 kg 13,12 kg 28,6 kg

Parameter	Value
Lifting Pole Safe Working Load	75 kg
Maximum Mass of Mobile Hospital Bed (Empty Bed Maximum Mass + Safe Working Load)	525 kg
Maximum Patient Weight for Application Environment 1, 2 in accordance with IEC 60601-2-52	185 kg
Sound Pressure Level	50 dBA
Application Environment in accordance with IEC 60601-2-52	1, 2

5.4 Environment conditions (Multicare X)

Use Conditions	
Ambient Temperature	10°C — 40°C
Relative Humidity	30% — 75 %
Atmospheric Pressure	795 hPa — 1060 hPa

Storage and Transport Conditions	
Ambient Temperature	-20°C — 50°C
Relative Humidity	20% — 90 %
Atmospheric Pressure	795 hPa — 1060 hPa

5.5 Electrical Specifications (Multicare X)

Parameter	Value
Input Voltage, Frequency	230 V AC, 50/60 Hz 127 V AC, 50/60 Hz 120 V AC, 50/60 Hz 110 V AC, 50/60 Hz 100 V AC, 50/60 Hz 110 - 127 V AC, 60 Hz / 220 V AC, 50/60 Hz
Maximum Power Input	450 VAC
Ingress Protection (EN 60529)	IPX4
Protection Class	Class I
Electrical Motor Duty Cycle	2 minutes ON /18 minutes OFF
Accumulator	Pb AKU 2 x 12 V / 1,2 Ah / Fuse 15A
Control Unit Fuse Version 230 V Version 127 V Version 120 V Version 110 V Version 100 V	 2 x T2.0A L 250 V 2 x T4.0A L 250 V 2 x T4.0A L 250 V 2 x T4.0A L 250 V 2 x T4.0A L 250 V

NOTE Upon request, LINET ® can deliver hospital beds with electrical specifications that comply with regional standards (custom voltage, different mains plugs).

5.6 Electromagnetic Compatibility

Bed is intended for hospitals except for near active HF surgical equipment and the RF shielded room of a medical system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Bed has defined no essential performance.



WARNING!
Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

List of used cables:
- ► **Mains cable**, maximum length 6 m
- ► **Attendant Control Panel**, maximum length 3m
- ► **Handset,** maximum length 3m



WARNING!
Use of the accessories, converters and other cables, than specified and provided by manufacturer of this bed could lead to increase of electromagnetic emission or lower the electromagnetic immunity of this bed and lead to improper operation.



WARNING!
Mobile RF communication device (including end use devices like antenna cables and external antenna) should not be used closer than 30 cm (12 inches) from any part of this bed Multicare X, including cables specified by manufacturer. Otherwise this could lead to deterioration of functionality of this bed.



WARNING!
Do not overload the bed (SWL), respect the duty cycle (INT.) and consider chapter 22 Maintenance in order to maintain the basic safety with regard to electromagnetic disturbances for the expected service life.

5.6.1 Manufacturer instructions - electromagnetic emissions

Emission Test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class A
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies

NOTE The EMISSIONS characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.

5.6.2 Manufacturer instructions - electromagnetic susceptibility

Immunity Tests	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV for contact discharge ± 15 kV for air discharge
Radiated RF IEC 61000-4-3 Proximity fields from RF wireless communications equipment IEC 61000-4-3	3 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz See Table 1
Fast electrical transients / burst IEC 61000-4-4	±2 kV for power line repetition frequency 100 kHz
Surge IEC 61000-4-5	± 1 kV Line-to-line ± 2 kV Line-to-ground
Conducted RF IEC 61000-4-6	3 V (0,15 MHz – 80 MHz) 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m
Voltage dips, short interruptions on power supply input lines IEC 61000-4-11	0 % UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0 % UT; 1 cycle and 70 % UT; 25/30 cycle Single phase: at 0° 0 % UT; 250/300 cycle

Table 1 - IMMUNITY to RF wireless communications equipment

Test frequency (MHz)	Band (MHz)	Service	Modulation	Immunity Test Level V/m
385	380 - 390	TETRA 400	Pulse modulation 18 Hz	27
450	430 - 470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	28*
710 745 780	704 - 787	LTE band 13, 17	Pulse modulation 217 Hz	9
810 870 930	800 - 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE band 5	Pulse modulation 18 Hz	28
1 720 1 845 1 970	1 700 - 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	28
2 450	2 400 - 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE band 7	Pulse modulation 217 Hz	28
5 240 5 500 5 785	5 100 - 5 800	WLAN 802.11 a/n	Pulse modulation 217 Hz	9

***NOTE** Use of GMRS 460 and FRS 460 wireless communication equipment in very close proximity to the bed might lead to temporary loss of charging function of internal backup battery of medical bed.

NOTE There are applied no deviations to requirements of IEC 60601-1-2 ed. 4

NOTE There are no known other measures for keeping the basic safety based on EMC phenomena.

NOTE Beds equipped with integration module meet standard for IEEE 802.11 b/g/n (2400,0 MHz – 2483,5 MHz, modulation DSSS (IEEE 802.11 b), OFDM (IEEE 802.11 g/n) 20MHz bandwidth, EIRP = 0,34 W).

5.7 Available Connectors

WARNING!
Use the connectors only according to their intended use and with the respect to special restrictions in order to avoid possible damage of the bed.

Available Connector	Intended Use	Restrictions
1) Mains power plug (head end)	Main AC power supply of the bed.	Connect only to wall receptacle compatible with the provided plug type!
2) LAN socket (head end)	Optional connection to hospital data network (via Ethernet).	Connect only to hospital network devices complying with IEC 60950-1 or IEC 60601-1. Connect only to IEEE 802.3 compatible wall socket via UTP or STP cable with RJ-45 connectors! Maximum input voltage 3 V AC or 48 V DC, max. input current 350 mA. Bed does not receive/accept any data from hospital network. Bed can send status data in format HL7, the presence of this LAN socket does not automatically mean this function is available in this bed or is active. This socket does not require PoE (Power over Ethernet) supply.
3) Nurse Call connector (head end)	Optional connection to analogue Nurse Call signaling hospital network.	Connect only the UL 1069 compatible nurse call signaling system via 37 pin D sub connector. Maximum input voltage 28 V, maximum input current 0,5 A standby, 1A short term!
4) USB connectors (2 pieces, in head siderails)	USB charger for patient‘s personal mobile devices (i.e. mobile phones, tablets).	Maximum available power output 5 V DC / max. 2 A, use only for charging!
5) Plug&Play for Attendant Control Panel (left bed side)	Special connection for optional wired ACP for bed control (intended for nurse).	Connect only the LINET Attendant Control Panel compatible with Multicare X!
6) Plug&Play for Handset (right bed side)	Special connection for optional wired handset for bed control (intended for patient).	Connect only the LINET Handset!

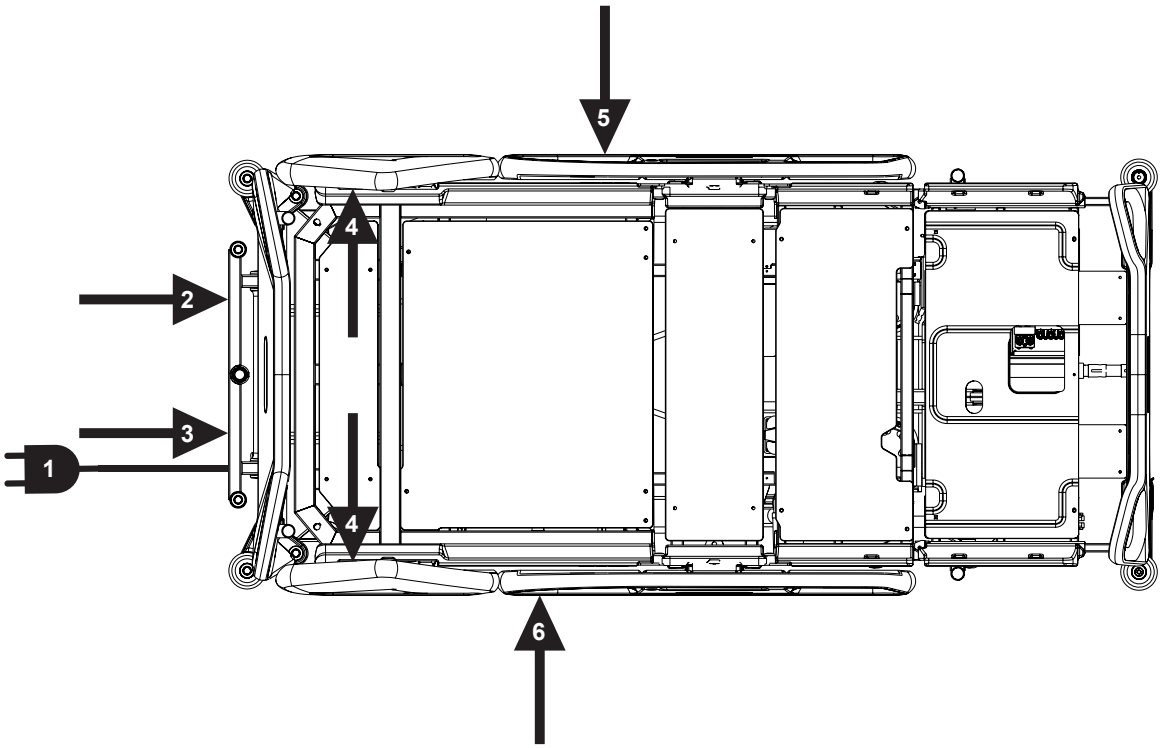


Fig. Positions of Available Connectors

NOTE See also chapters „8.6 Before Use“ on the page 35, „17.10 Nurse Call“ on the page 131 and „17.11 USB Connector“ on the page 133.

6 Use and Storage Conditions



DANGER!
Danger to life due to electric shock!
To ensure the bed's class I protection against electric shocks:
► Ground the mains.
► Use exclusively Hospital Grade or Hospital Only receptacles for grounding.

Multicare X and OptiCare X are designed for use in rooms for medical purposes. Electrical installations must therefore meet local norms laying down the necessary conditions for electrical installations.
► Disconnect the bed from the mains in exceptional cases (i.e. lightnings, earthquake).

Multicare X and OptiCare X are not suitable for indoor environments containing flammable gases (except oxygen cylinders). Respect values of the parameters connected with environment conditions in the chapter Technical Specification during use and storage of the product.

7 Scope of Delivery and Bed Variants

7.1 Delivery

► Upon receipt, check that the shipment is complete as specified on the delivery note.
► Notify the carrier and supplier of any deficiencies or damages immediately as well as in writing or make a note on the delivery note.

7.2 Scope of Delivery

- Multicare X medical bed
- Instructions for use

7.3 Multicare X Variants

Variable bed features:

s = standard
o = optional

- Integrated Mattress
  - bed with OptiCare X integrated mattress (complete set with System Control Unit) (o)
  - OptiCare X ready bed without mattress and without System Control Unit (o)
  - OptiCare X ready bed without mattress and with System Control Unit (o)
  - bed without OptiCare X integrated mattress (s)
- Scales
  - without scales (without Bed Exit Alarm Monitoring) (o)
  - with scales (with Bed Exit Alarm Monitoring) (s)
- Automatic Lateral Therapy (ALT)
  - without ALT (o)
  - with ALT (s)
- Undercarriage
  - 3-part undercarriage cover (o)
  - 1-part undercarriage cover (s)
  - Adaptor for Traction Frame (o)
- Castors
  - Tente Integral 150 mm (5.9 in.) single castors (s)
  - Tente Integral 150 mm (5.9 in.) double castors (o)
  - Tente Integral 150 mm (5.9 in.) single castors + 5th castor (o)
  - Tente Integral 150 mm (5.9 in.) double castors + 5th castor (o)
  - Tente Integral 150 mm (5.9 in.) single castors + Retractable 5th castor (o)
  - Tente Integral 150 mm (5.9 in.) double castors + Retractable 5th castor (o)
  - Tente Integral 150 mm (5.9 in.) single castors + i-Drive Power® (o)
  - Tente Integral 150 mm (5.9 in.) double castors + i-Drive Power® (o)
- Control Elements
  - Multiboard X in both head siderails (s)
  - Attendant Control Panel (s)
  - Handset with illuminated buttons and adapter for simple connection Plug and Play (o)
  - Foot Control for Lateral Tilt (s)
  - Foot Control for Height Adjustment (o)
  - Patient Control Panels integrated in foot siderails (s)
  - Patient Control Panels integrated in head siderails (o)
- 1 pair of Mobi-Lift® handles (o)
- i-Brake® (o)
- x-ray cassette holder (0)
- EMR ready bed (o)
- Nurse call (o)
- Safestop (o)
- m-Panel (o)
- USB (o)
- LINIS SafetyPort
  - without LINIS SafetyPort (s)
  - basic hardware preparation for LINIS SafetyPort (CE06: without Integration Module) (o)
  - complete hardware preparation for LINIS SafetyPort (CE31: with Integration Module) (o)

8 Putting into Service



WARNING!
Risk of injury when working on the bed!
► Ensure that the bed is disconnected from the mains connection prior to putting into service, putting out of service and maintenance.
► Ensure that the castors are locked prior to putting into service, putting out of service and maintenance.



CAUTION!
Material damage due to incorrect putting into service!
► Ensure that putting into service is performed exclusively by manufacturer´s customer service or trained hospital personnel.



CAUTION!
Material damage due to temperature difference!
► If there is a considerable temperature difference between the bed and the place of operation (after transport/storage), leave bed unconnected for 24 hours for the difference to balance itself.

NOTE For safe, easy handling, LINET ® recommends having two technicians put the bed into service.

Set up the bed as follows:
► Unpack the bed.
► Check the delivery (see Scope of Delivery and Bed Variants).
► Remove isolating foil from the mains control box (see Accumulator Activation).
► Install equipment and accessories.
► In case of delivery with dismantled head board and foot board, mount the head board and foot board (see Head Board and Foot Board).
► Set up the bed exclusively on a suitable floor surface (see Transport).
► Ensure that the mains cable is not in collision with something and it is not stretched when adjusting the bed.
► Check that the plug is inserted correctly.
► Do not leave any extension cords or power strips loose on the floor.
► Ensure that all of the required mechanical and electrical prevention mechanisms are available on site.
► There is no mains switch on the bed, i.e. the mains cable is the only means to isolate the bed from the mains. Ensure that the mains cable is always accessible.
► Have the separable plug of the mains cable changed and maintained exclusively by qualified and trained service technicians authorised by the manufacturer.

8.1 Accumulator Activation

Control Section Placement

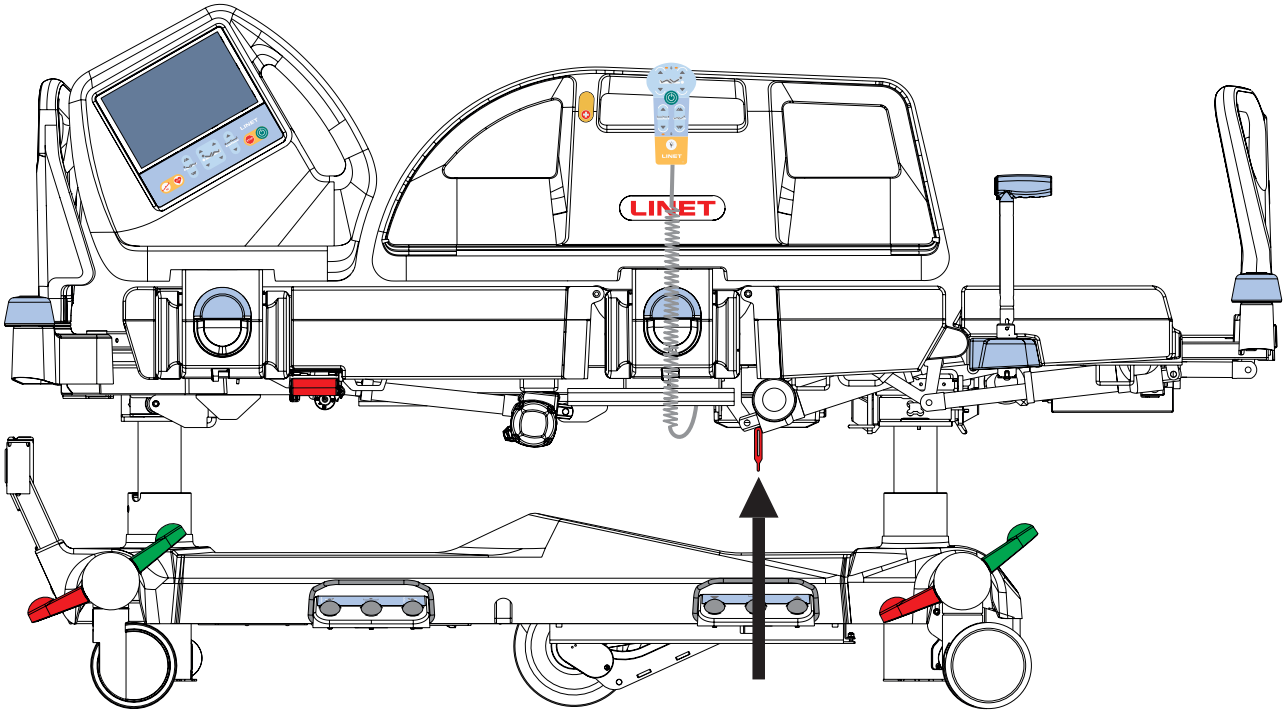


Fig. Isolating Foil Placement

Removing the Isolating Foil

To remove isolating foil:

► Remove isolating foil from mains control box by pulling strap.
► Check if isolating foil is complete and undamaged as shown in figure Detail of Isolating Foil.
► If isolating foil is damaged, contact the manufacturer's service department immediately.

NOTE Isolating Foil is sharp-edged. Remove it carefully not to cut yourself.

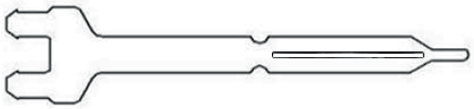


Fig. Detail of Isolating Foil

8.2 Foot Board

Dismount the foot board as follows:

► Unlock both foot board locks.
► Pull foot board from sleeve fittings.
► Lock foot board locks.

Install the foot board as follows:

► Unlock foot board locks.
► Slide foot board into sleeve fittings.
► Lock foot board locks.

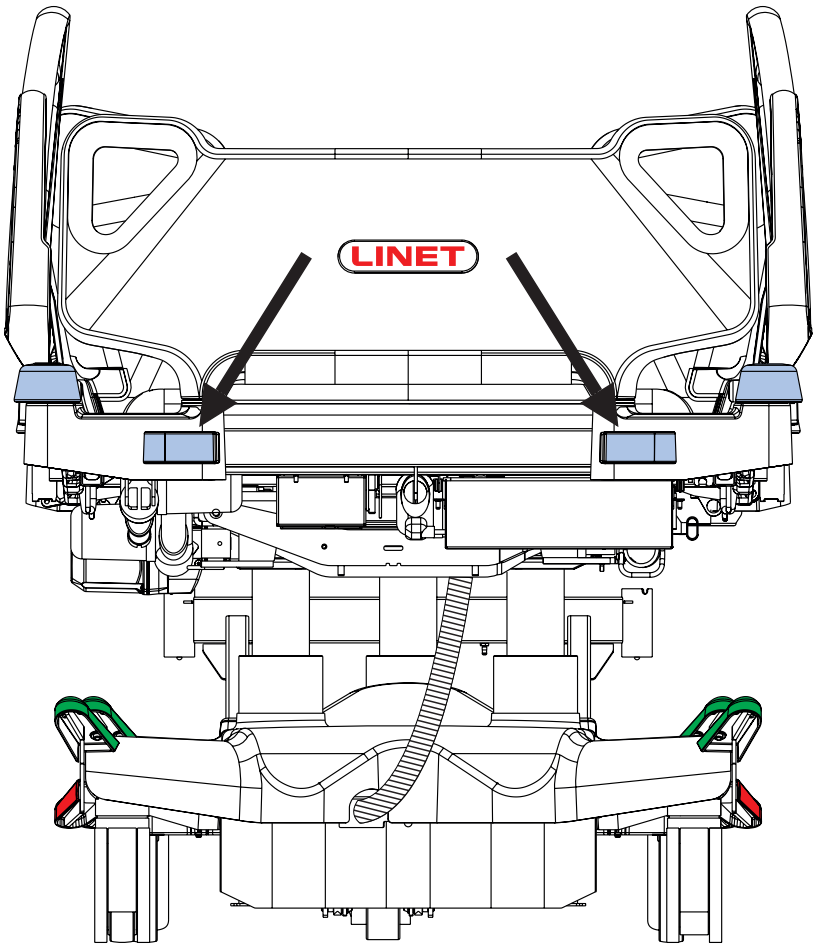


Fig. Foot Board Locks

8.3 Head Board

Dismount the head board as follows:
► Pull head board from sleeve fittings.
► Place the head board in a safe position outside the bed.

Install the head board as follows:
► Slide head board into sleeve fittings.

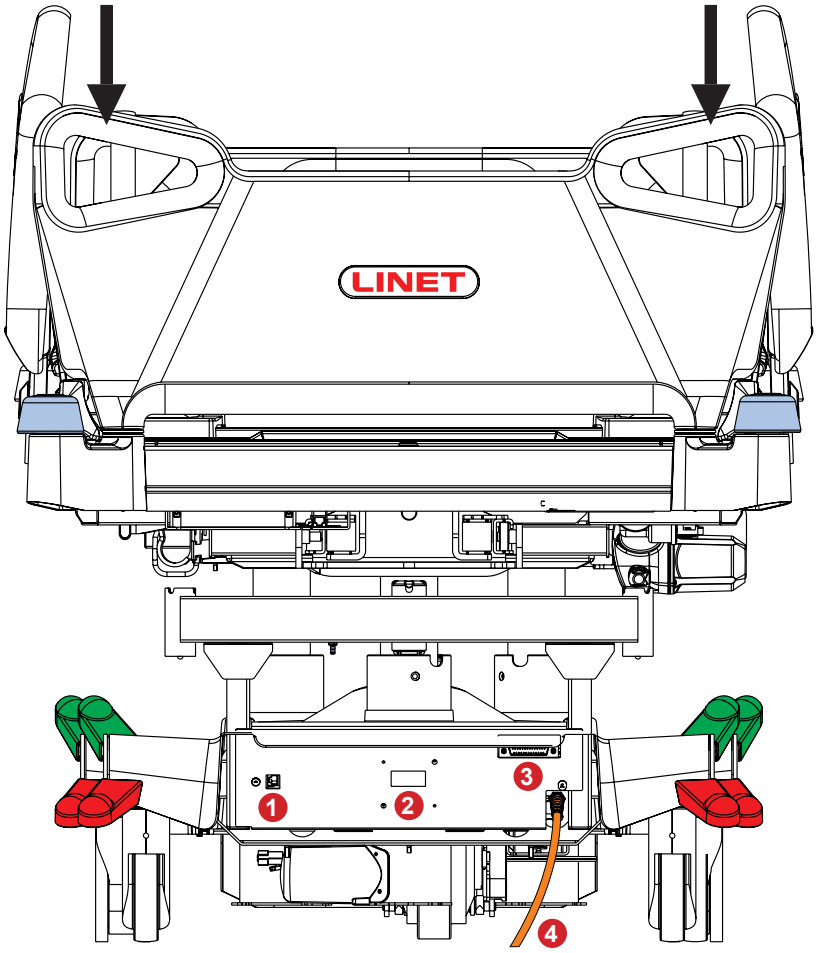


Fig. Head Board

1. LAN connector (to connect the medical bed to a LAN data network)
2. Localisation receiver (receiving a signal from SafetyMonitor Tag Localisation transmitter)
3. Nurse Call connector (to connect the medical bed to the Nurse Call hospital system)
4. Mains Power Cable

8.4 Mattress Support Platform

Multicare X bed has 4-part Mattress support platform consisting of Backrest, Seat section, Thighrest and Calfrest.

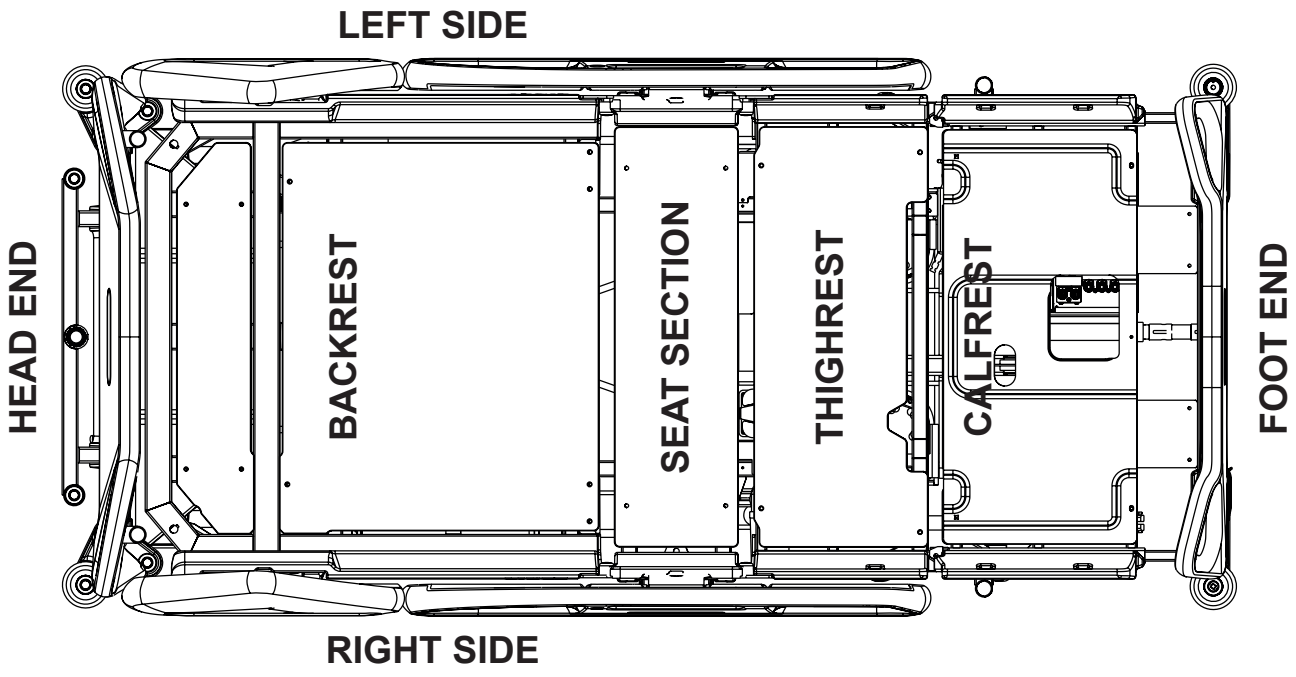


Fig. 4-part Mattress support platform

8.5 Potential Equalisation

The bed is equipped with a standard protective connector. This connector is used for potential equalisation between the bed and any intravascular or intracardiac device connected to the patient to protect the patient from static electric hocks.

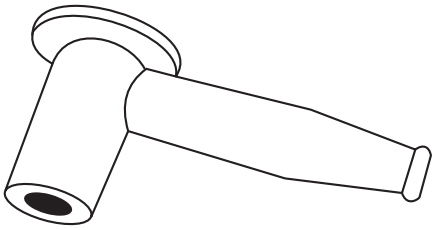


Fig. Potential equalisation connector - female

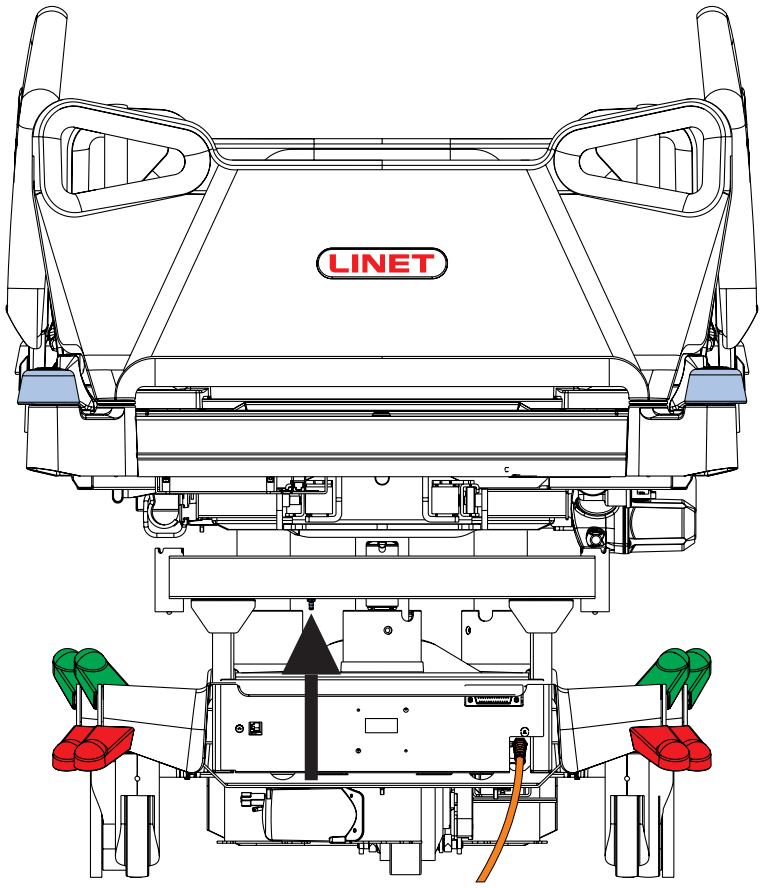


Fig. Potential equalisation - male

Use equalisation connector if:

- the patient is connected to any intravascular or intracardiac device.

Before connecting the patient to an intravascular/intracardiac device:

► Connect the ground wire of the device to the potential equalisation connector on the bed on which the patient in question is lying.
► Use a standard hospital connector (female).
► Make sure that the connectors match.
► Make sure that there is no possibility for inadvertent disconnection.

Before moving the bed:

► Disconnect the patient from the intravascular or intracardiac device.
► Disconnect the potential equalisation connector.

8.6 Before Use

Prepare the bed for use as follows:
► Connect the bed to the mains.
► Charge the accumulator.
► Raise and tilt the mattress support platform to the highest position.
► Lower and tilt the mattress support platform to the lowest position.
► Check that the castors as well as main brake work correctly.
► Check that the bed extension works correctly.
► Check that it is possible to remove the head board and foot board.
► Check all of the functions on the control elements.
► Check that the siderails function properly.
► Dispose of all packaging (see Disposal).

8.7 Transport

For a safe transport, observe the following:
► Ensure that no cables are run over when moving a bed.
► Ensure that the mains cable is attached with a hook (at the head end of the bed).
► Ensure that the castors are unlocked before moving the bed during the loading/unloading process (see Castor Control).
► Adjust bed height to at least 20 cm below maximum height.
► Push bed by handles on head board or foot board.
► Move the bed exclusively on suitable floor surfaces.
► Ensure the bed is braked when it is not transported.
► For longer distances, ensure that the castor steering function (main control) is activated.
► Ensure that the brakes are released while moving the bed.

Suitable surfaces:
■ Tile
■ Hard linoleum
■ Poured flooring

Unsuitable surfaces:
■ Too soft, unsealed or defective flooring
■ Soft wooden flooring
■ Soft and porous stone floors
■ Carpeted floors with underlay
■ Soft linoleum

8.7.1 Bed Transport Mode

To avoid damaging the bed and the environment during transport or storage:
► Activate Bed Transport Mode on the Attendant Control Panel.

To activate Bed Transport Mode:
► Disconnect the bed from the mains.
► Disconnect the ground wire.
► Activate the keypad by pressing the button  on the Attendant Control Panel.

► Press the Thighrest Up button + Thighrest Down button + Trendelenburg Tilt button at the same time and hold them for three seconds.
The Bed Transport Mode is activated.

To deactivate Bed Transport Mode:
► Connect Power Cable to the mains.

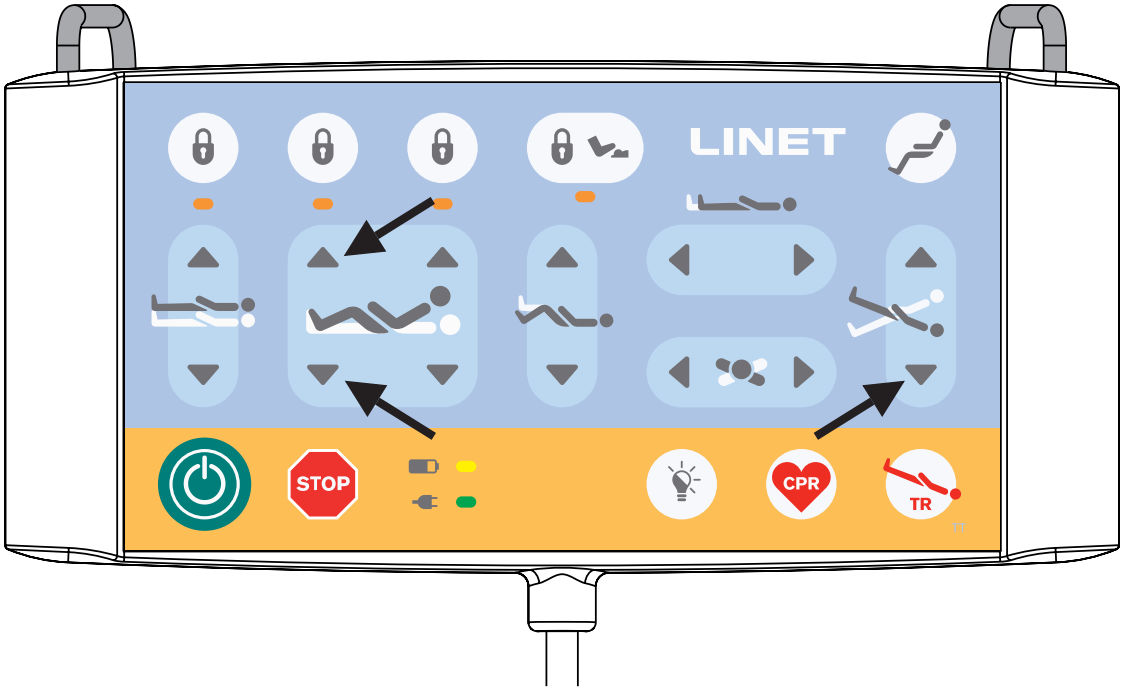


Fig. Bed Transport Mode (Attendant Control Panel)

8.8 Firmware

The bed includes firmware that can be updated only by an authorised service technician.
This firmware is protected against unauthorised access by mechanical housing (tool is needed to access), by seal (components with processor are sealed), by exclusive compatibility with an authorised software tool and by check of compatibility of the new firmware with the bed.

9 Power Cord

Attachment plug is means of connecting and disconnecting bed from the mains.
Mains power cord must be attached with a hook at the head end of the bed during transport.

CAUTION!
Disconnecting bed from the mains does not stop motions of the bed!
► Stop the bed before disconnection bed from the mains.

Where the integrity of the external protective conductor in the installation or its arrangement is in doubt
► operate the bed from internal accumulator only.

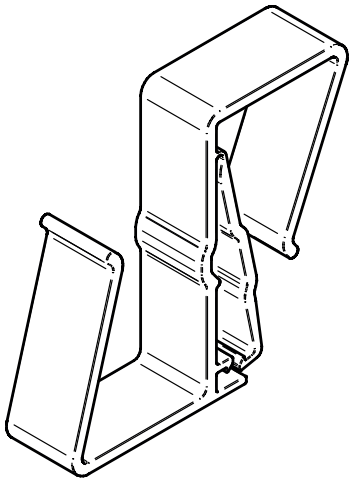


Fig. Hook for hanging power cord

10 Accumulator



WARNING!
When the bed is not connected to the mains and accumulator is not sufficiently charged all electrical functions of the bed are blocked! After some long period without charging the battery, the battery will be deeply discharged and loose its full functionality!

Purpose

The accumulator serves as a backup during power failures or for emergency bed positioning.

- ► Use only accumulator approved by the manufacturer.
- ► Check the functionality of the accumulator at least once a month and have the accumulator changed if necessary.

The manufacturer will assume no responsibility for any damage to the bed or the accumulator caused by:
- ■ non-observance of the manufacturer's instructions in the instructions for use.
- ■ using accumulator not approved by the manufacturer.

Warranty

The manufacturer provides a **6-month** warranty for the full function of the accumulator.

Accumulator lifetime could be up to 5 years if operated under optimum conditions.
Accumulator capacity can be significantly reduced if:
- ► too high ambient temperature
- ► many accumulator charge/discharge cycles
- ► recurrence of deep discharge
- ► bed is often powered only by the accumulator

Charging

The accumulator supplied with the bed is delivered insufficiently charged.
Charging of the accumulator before use of the bed takes approximately 4 hours.
Charging of the accumulator runs automatically when the power cable is connected to the mains.

To charge the accumulator:
- ► Connect the bed to the mains.

Storage

For declared lifetime period of leaded accumulators is recommended during storage:
- ► To prevent accumulator from deep discharging and to keep accumulator at least partly charged by regular recharging.
- ► To store accumulator on the dry places with temperature from 10°C to 40°C.
- ► To prevent accumulators from being in the sunshine.

Signalisation

The indicator on Multiboard X touchscreen and LED on Attendant Control Panel indicate the accumulator charge status.

10.1 Replacing the accumulator

CAUTION!
Damage to the bed due to incorrect accumulator replacement!
► Have the accumulator replaced exclusively by qualified personnel.
► Exclusively use the accumulator approved by the manufacturer.

CAUTION!
Material damage due to overheating!
If the accumulator is faulty, degassing may occur. In rare cases this might cause deformations of the accumulator case, control panel housing or cable.
► Stop using the bed immediately (see Removing the Bed from Service).
► Inform the manufacturer's service department.

CAUTION!
Risk of reducing accumulator durability due to incorrect use!
► Use bed on accumulator only in crisis situations (e.g.: power blackout, patient complications during transport, etc.)
► After reconnecting bed to the mains charge accumulator to full capacity (see chart Accumulator charge status).
► Have the accumulator replaced exclusively by a qualified service organisation of the manufacturer.

Faulty accumulator

The accumulator is regarded as faulty if at least one of the following conditions applies:

► Accumulator charging constantly
► Low voltage on accumulator
► Low charging current of accumulator

This status is indicated by the accumulator status indicator being constantly lit. These statuses are summarised and written to black box in the control unit.

To cancel this status:
► Press button 

.

Discharged accumulator

This status is indicated by the accumulator status indicator flashing quickly.
This status will be cancelled automatically when the bed switches to sleep mode (bed is disconnected from the mains, no button is pressed).

To cancel this status:
► Press button 

.

10.2 Removing the Bed from Service

Remove the bed from use as follows:
► Disconnect the bed from the mains.
► Disconnect the ground wire.
► Deactivate the accumulator.
► Remove accessories.

To prevent damage during storage:
► Pack or cover the bed and accessories.
► Ensure that storage conditions are the same as the operating conditions.

11 Manipulation

WARNING!
Risk of injury when adjusting the bed!
► Ensure that there are no body parts between the mattress support platform elements and the mattress support platform frame when adjusting the bed.
► Ensure that there are no body parts below the mattress support platform frame before adjusting the bed.

11.1 Siderails

The split siderails are components of the bed in contact with patient. A pneumatic spring supports the operation of the split siderails. The nursing personnel are responsible for the siderails being raised up while the patient is in bed.

WARNING!
Risk of injury, damaging or unintentional movement of the bed due to incorrect placement of accessories or Handset!
► Never place any accessories or Handset on the siderails in the area where keyboards are located.
► Never place Handset on the edge of siderail.
The correct placement of Handset is shown at following pictures.

WARNING!
Risk of injury due to incorrectly latched siderail!
► Ensure that siderail is secured in the upper or lower position.

WARNING!
Risk of injury due to incorrect position of siderails!
► Ensure that siderails are folded up while the patient is in bed.

SIDERAIL DESCRIPTION

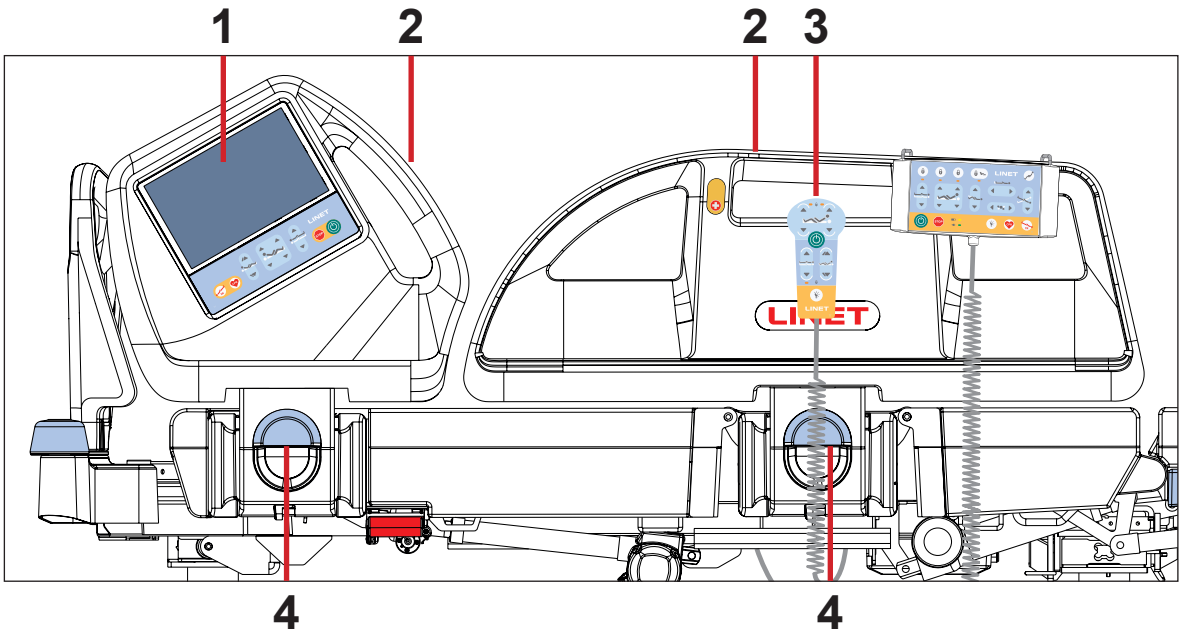


Fig. Siderails

1. Multiboard X with LCD touchscreen
2. Siderail Handle
3. Correct Placement of Handset
4. Siderail Release Handle

MANIPULATION

To raise siderails up:
► Grab siderail by Siderail Handle (**2**).
► Pull siderail up until it latches. You will hear audible „click“.

To release siderails down:
► Grab siderail by Siderail Handle (**2**).
► Unlock siderail by pulling Siderail Release Handle (**4**) to yourself.
► Fold down siderail slowly.

11.2 Castor Control

CAUTION!
Material damage due to incorrect transport and involuntary movement!
- ► Prior to transport, ensure that the bed is disconnected from the mains.
- ► Ensure that the castors are braked prior to assembly, disassembly and maintenance.
- ► Ensure that the castors are braked when the bed is occupied.
- ► Hang the mains cable on the transport hook on the bed during transport.
- ► Have the bed transported exclusively by nursing personnel and by at least 2 persons.

CAUTION!
Respect minimal clearance underneath the bed!
- ► Observe the path for any obstacles and avoid collisions and possible damages of any bed´s part on the undercarriage.
- ► Do not use bed lifts and hoists for lifting the bed.

The bed is equipped with central castor´s control and brake system.
The control levers are located in the four corners of the undercarriage.

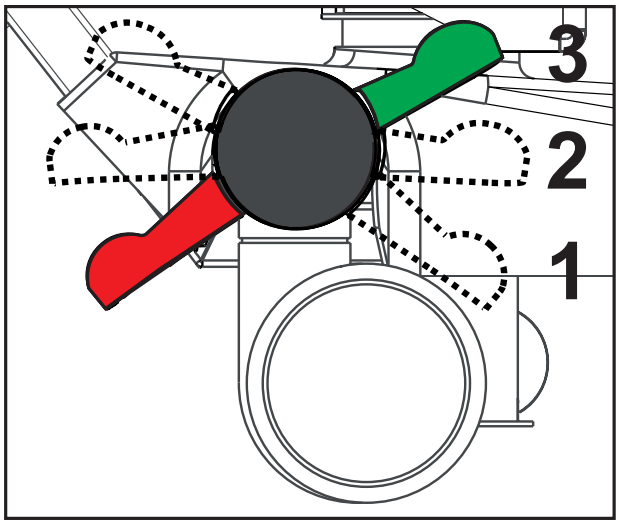


Fig. Positions of Castor Control Lever

Castor control lever positions:

1. Forward Movement - Steering (GREEN PEDAL DOWN)

An arrested front castor determines the direction of movement. If the bed is equipped with a fifth castor, this castor determines the direction of movement.

2. Unrestricted Movement

All four castors are unlocked.

3. Braked (RED PEDAL DOWN)

All four castors are braked.

11.3 CPR Backrest Release

WARNING!
Risk of injury due to lowering the backrest too quickly!
- ► Ensure that the siderails are in the low position.
- ► Ensure that there are no body parts between any movable parts of the bed.
- ► Push the Backrest down using the mattress guard handle only.

The bed allows quick, mechanical lowering of the backrest for emergency procedures (CPR).

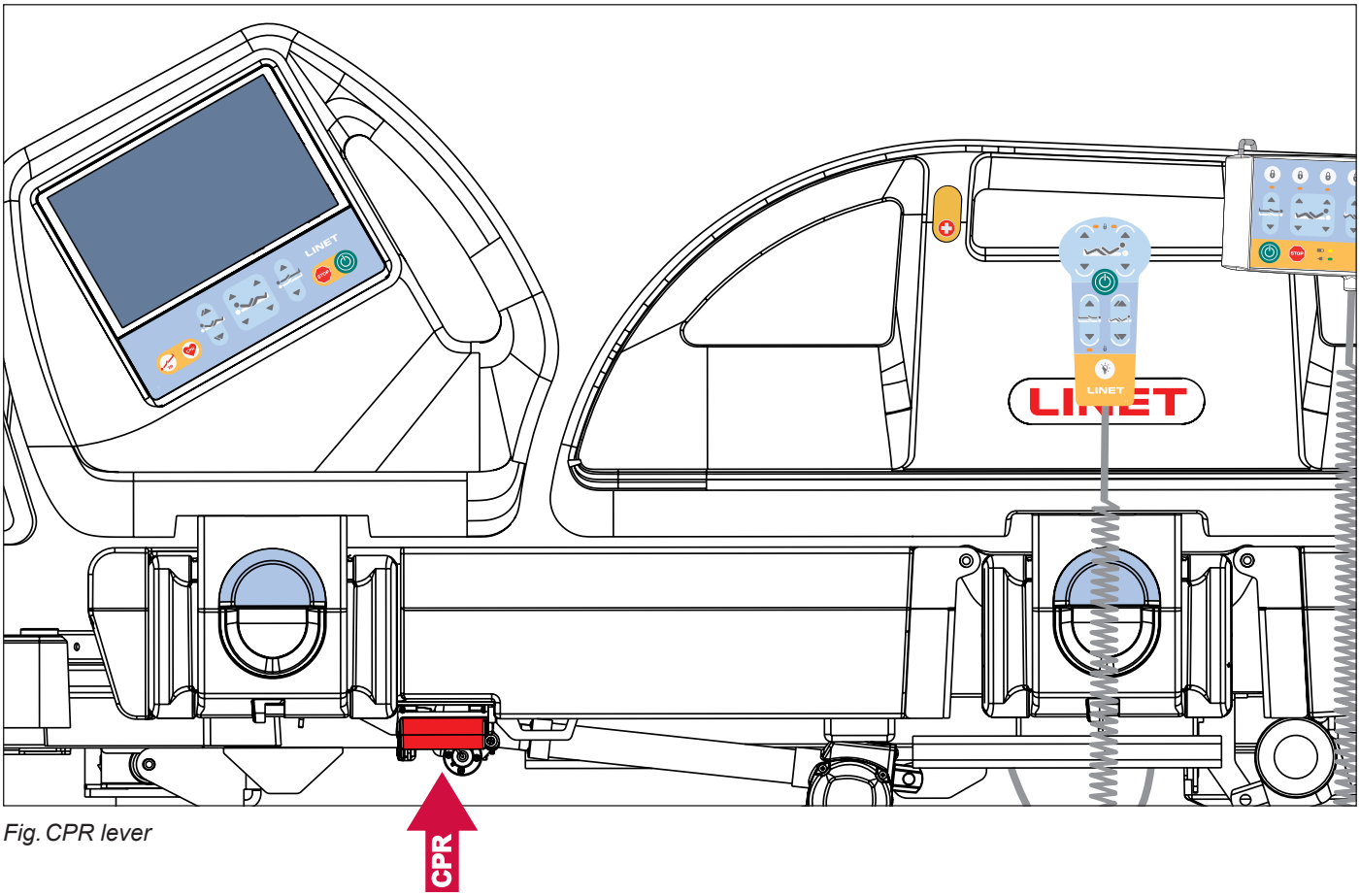


Fig. CPR lever

Set the position as follows:
- ► Pull and hold release handle.
- ► Push Backrest down.

12 Control Elements

The bed is operated by different control elements.

Control elements depending on the model:

- Multiboard X with LCD touchscreen in both head siderails
- Attendant Control Panel
- Handset with illuminated buttons and with adapter for easy connection (Plug and Play)
- Patient Control Panels integrated in both foot siderails (illuminated)
- Lateral Tilt Foot Control
- Bed Height Foot Control

Disabling individual functions on the Attendant Control Panel will affect all control elements.

If the bed does not react to individual position settings:

► Check whether the function is disabled on the Attendant Control Panel.

POSITIONING	Multiboard X	Attendant Control Panel	Handset	Patient Control Panels (foot siderail)	Bed Height Foot Control	Lateral Tilt Foot Control
Backrest	✔	✔	✔	✔		
Thighrest	✔	✔	✔	✔		
Calfrest	✔	✔				
Bed Height	✔	✔	✔		✔	
Autocontour	✔		✔	✔		
Examination Position					✔	
Emergency Trendelenburg Position	✔	✔				
Longitudinal Tilt (Antitrendelenburg Tilt and Trendelenburg Tilt)	✔	✔				
Bed Extension	✔	✔				
CPR Position	✔	✔				
Cardiac Chair Position	✔	✔				
Mobilization Position	✔					
Lateral Tilt	✔	✔				✔
Vascular Position	✔					
Low Flat Position						✔

12.1 Multiboard X

The Multiboard X is the main control element for the caregivers. It consists of LCD touchscreen and keyboard and it is integrated in the outside of both head siderails.

► Ensure that exclusively trained nursing staff operates the Multiboard X.

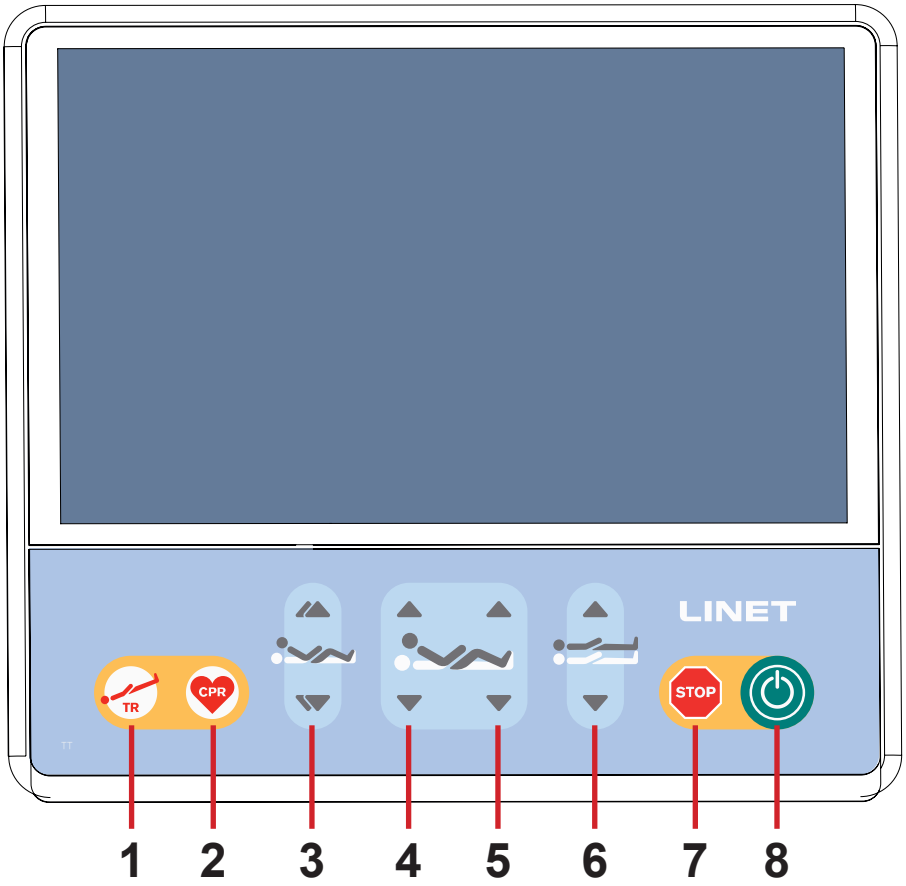


Fig. Multiboard X (LCD touchscreen and keyboard)

1. Emergency Trendelenburg Position Button
2. CPR (Resuscitation) Position Button
3. Autocontour Adjustment Buttons (simultaneous movement of the Backrest and Thighrest)
4. Backrest Adjustment Buttons
5. Thighrest Adjustment Buttons
6. Bed Height Adjustment Buttons
7. Central STOP Button (press to interrupt bed positioning)
8. GO Button (press to activate control elements)

Positioning buttons 3, 4, 5 and 6 are explained in chapter „13 Bed Positioning“ on the page 77.

GO BUTTON

The button  activates the keyboard of all Control Elements, except for Lateral Tilt Foot Control.

Pressing button  will keep the keyboard active for 3 minutes.

Pressing a button will keep the keyboard active for another 3 minutes.

During this time the following is possible:

► Adjusting individual Mattress support platform elements by pressing the corresponding positioning buttons.
► Disabling individual functions with the lock buttons.

NOTE: To activate CPR function (button ) the button  is not needed.

STOP BUTTON

Pressing button  immediately stops all electronic bed movements.

12.1.1 Home Screen (LCD touchscreen)

The LCD touchscreen is a part of the Multiboard X integrated in the head siderail. Depending on the current function, the LCD touchscreen shows different screens. Each selected screen displays a status bar in the top and a menu bar in the bottom.



Fig. Home Screen - LCD touchscreen

1. Positioning Screen Tile (press to enter Positioning Screen)
2. Home Screen Icon (press to enter Home Screen if another screen is selected)
3. Settings Screen Icon (press to enter Settings Menu of the selected screen)
4. Help Screen Icon (press to display bubbles with helpful descriptions on the selected screen)
5. Scales Screen Tile (press to enter Scales Screen)
6. Accumulator Charge Status Indicator
7. Connection to mains power Indicator
8. Time and Date Indicator
9. Intergrated Mattress Screen Tile (press to enter Integrated Mattress Screen)
10. ALT Screen Tile (press to enter Automatic Lateral Therapy Screen)
11. Next Page Icon (press to enter next page of the Home Screen if available)
12. Bed Exit Alarm Monitoring Screen Tile (press to enter Bed Exit Alarm Monitoring Screen)
13. Previous Page Icon (press to enter previous page of the Home Screen if available)
14. Lock Screen Tile

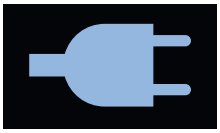
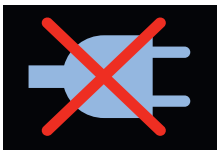
ACCUMULATOR CHARGE STATUS

WARNING!
Disabled functions due to critically discharged accumulator!
► Connect bed immediately to the mains.

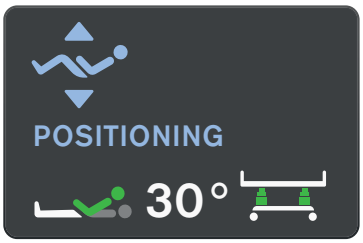
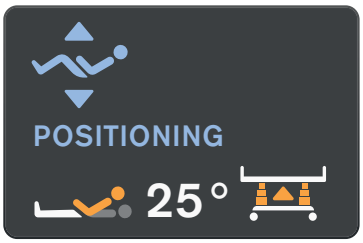
Accumulator Charge Status is indicated by the icon in the upper right corner of each screen on LCD touchscreen.

Acummulator Charge Status	Indication
Charging	
Charged Accumulator (bed is connected to the mains)	
Faulty Accumulator or Accumulator Disconnected	
Discharged Accumulator (blue outline, bed is disconnected from the mains)	
Critically Discharged Accumulator (red outline, bed is disconnected from the mains)	
Bed is powered by the Accumulator	

CONNECTION TO MAINS POWER

Connection to mains power	Indication
Bed is connected to the mains power	
Bed is disconnected from the mains power (flashing icon)	

TILES ON THE HOME SCREEN

Tile	Meaning
	BACKREST ANGLE IS IN 30° (GREEN UPPER PART OF FIGURE = BACKREST ANGLE IN MORE THAN 30° OR EQUAL TO 30°) BED IS IN THE MINIMUM HEIGHT (GREEN COLUMNS ON BED PICTURE = BED IS IN THE MINIMUM HEIGHT)
	BACKREST ANGLE IS IN LESS THAN 30° (ORANGE UPPER PART OF FIGURE = BACKREST ANGLE IN LESS THAN 30°) BED IS NOT IN THE MINIMUM HEIGHT (ORANGE COLUMNS ON BED PICTURE = BED IS NOT IN THE MINIMUM HEIGHT)
	NO FUNCTION IS LOCKED
	AT LEAST ONE FUNCTION IS LOCKED
	DISPLAYED WEIGHT VALUE THAT IS NOT MANUALLY HIDDEN IN DISCREET MODE (THE WEIGHT VALUE IS ALSO VISIBLE ON THE PLACE OF PRIMARY DISPLAY ON THE SCALES SCREEN)
	WEIGHT VALUE IS MANUALLY HIDDEN IN DISCREET MODE (THE WEIGHT VALUE IS VISIBLE ONLY ON THE PLACE OF PRIMARY DISPLAY ON THE SCALES SCREEN)

Tile	Meaning
	BED IS OVERLOADED
	BED IS UNDERLOADED
	BED EXIT ALARM MONITORING IS ACTIVATED (ON) AND INNER ZONE MONITORING IS SELECTED
	BED EXIT ALARM MONITORING IS ACTIVATED (ON) AND OUTER ZONE MONITORING IS SELECTED
	BED EXIT ALARM MONITORING IS DEACTIVATED (OFF)
	BED EXIT ALARM MONITORING IS PAUSED (COUNTDOWN INDICATES MINITES REMAINING TO THE END OF PAUSE PERIOD)

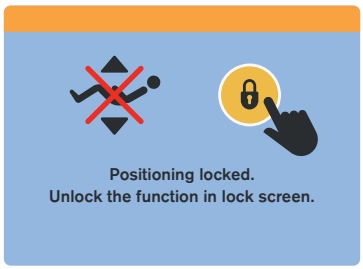
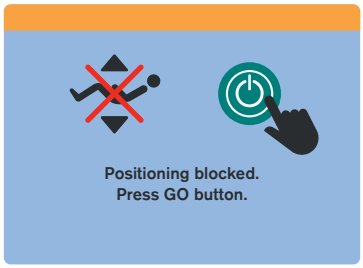
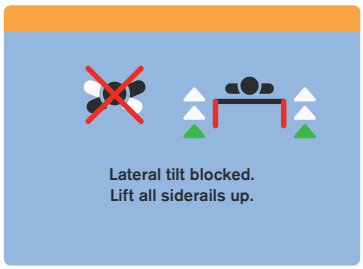
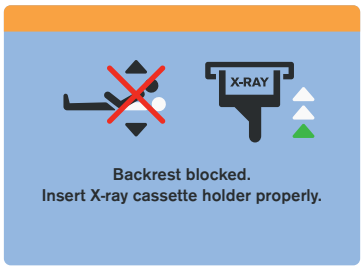
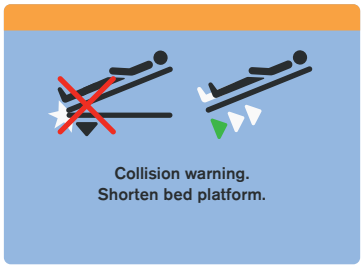
Tile	Meaning
	TRIGGERED BED EXIT ALARM (PATIENT IS NOT IN REQUIRED POSITION ON THE BED DURING ACTIVATED BED EXIT ALARM MONITORING)
	BED EXIT ALARM MONITORING IS TURNED OFF BECAUSE OF THE BED DISCONNECTED FROM THE MAINS POWER
	AUTOMATIC LATERAL THERAPY IS NOT ACTIVATED
	AUTOMATIC LATERAL THERAPY IS ACTIVATED (ON)
	AUTOMATIC LATERAL THERAPY IS PAUSED
	INTEGRATED MATTRESS IS DEFLATED (CPR MODE IS ACTIVATED)

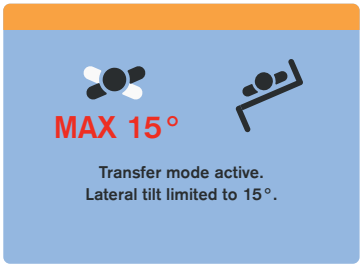
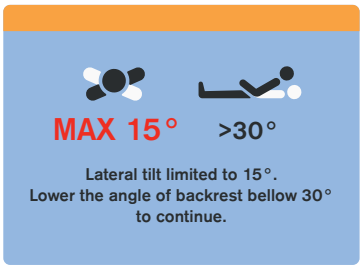
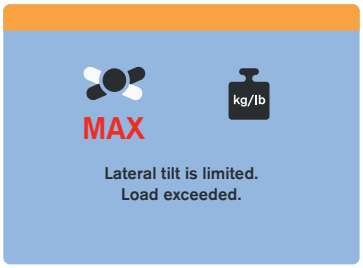
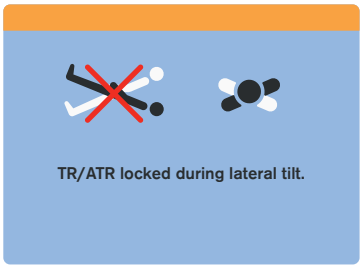
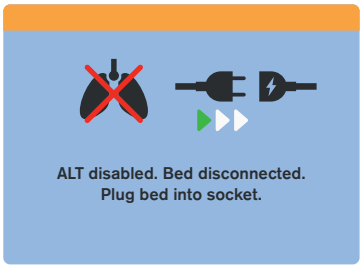
Tile	Meaning
	INTEGRATED MATTRESS IS DISCONNECTED (AT LEAST ONE AIR HOSE IS DISCONNECTED FROM SCU)
	INTEGRATED MATRESS ERROR, CORRESPONDING POP-UP WINDOW IS DISPLAYED ON THE INTEGRATED MATTRESS SCREEN (CONTACT SERVICE DEPARTMENT OF THE MANUFACTURER)
	INTEGRATED MATTRESS CONTROL IS DISABLED (INTEGRATED MATTRESS IS DISCONNECTED FROM THE MAINS POWER)
	INTEGRATED MATTRESS ERROR THAT CAN BE REMOVED BY OPERATOR (FOLLOW THE CORRESPONDING POP-UP WINDOW ON THE INTEGRATED MATTRESS SCREEN)
	INTEGRATED MATTRESS RUNS IN OPTIMIZE MODE
	INTEGRATED MATTRESS RUNS IN COMFORT MODE (COUNTDOWN INDICATES MINUTES REMAINING UNTIL THE END OF MANUAL PRESSURE SETTING)

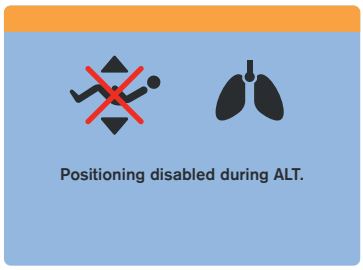
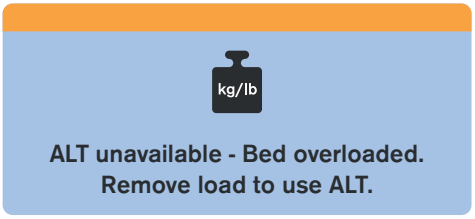
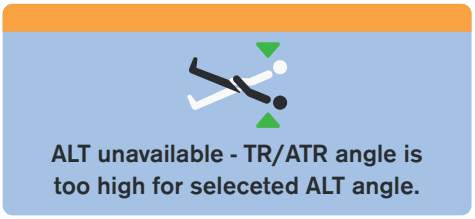
Tile	Meaning
	INTEGRATED MATTRESS RUNS IN PRONE MODE (TIME INDICATES HOW LONG PATIENT LIES PRONE)
	INTEGRATED MATTRESS RUNS IN MAX MODE (COUNTDOWN INDICATES MINUTES REMAINING UNTIL THE END OF MAX MODE)

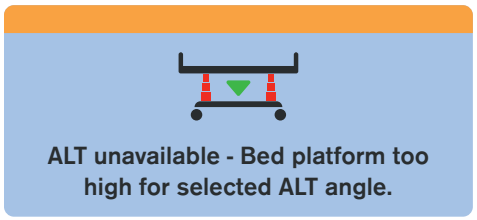
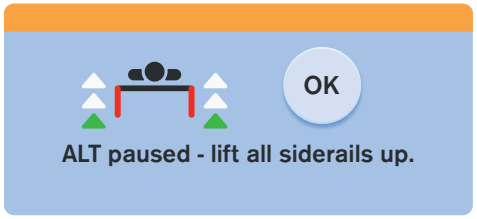
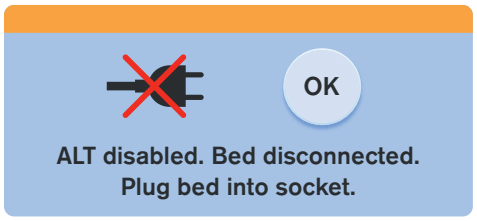
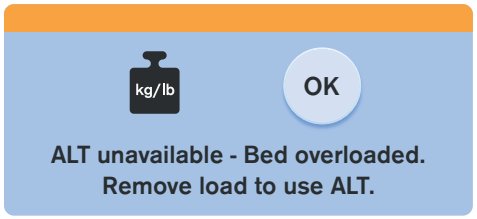
12.1.2 Statuses (Multiboard X - LCD touchscreen)

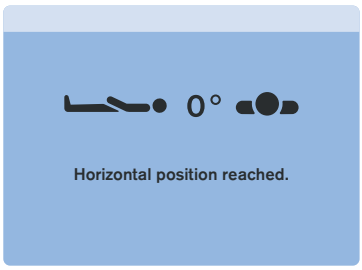
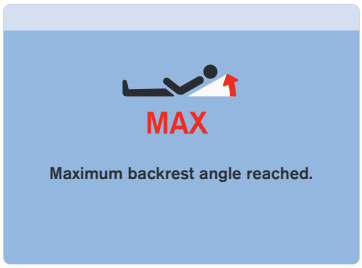
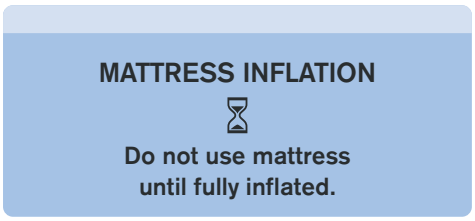
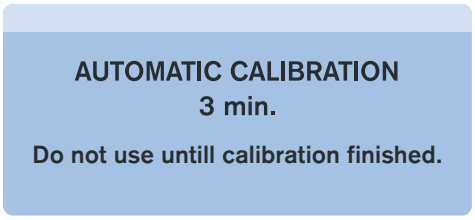
There are 3 types of pop-up windows according to the coloured stripe in the upper part of pop-up window.
Red colour indicates warning with required action. Orange colour indicates caution with recommended action. Grey colour indicates only notification.

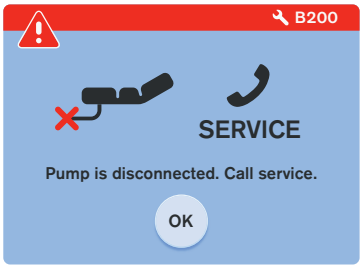
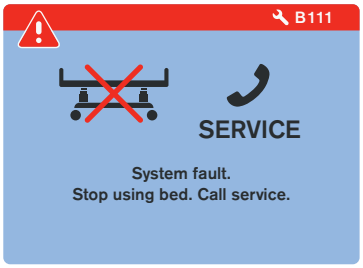
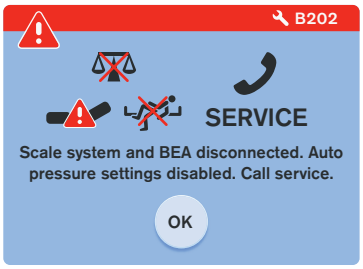
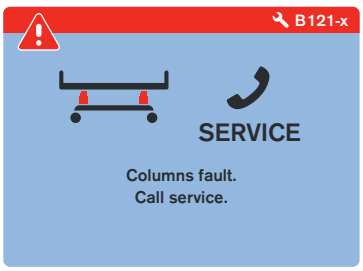
Status (Pop-up window)	Meaning	How to change the status
	Function locked.	Unlock function if needed. Enter the Lock Screen to unlock the selected function.
	GO Button not activated. Use of the control elements is disabled.	Press GO Button to activate control elements if needed.
	Lateral Tilt disabled when siderail folded down or a column unit is disconnected.	Raise siderail up to allow Lateral Tilting to continue.
	Incorrectly inserted X-Ray Cassette Holder. Backrest Adjustment is disabled.	Insert X-Ray Cassette Holder correctly!
	Risk of collision. Positioning blocked to avoid collision of the bed with floor or collision of the bed with bed equipments.	To continue in positioning, adjust bed extension to shorten mattress support platform.

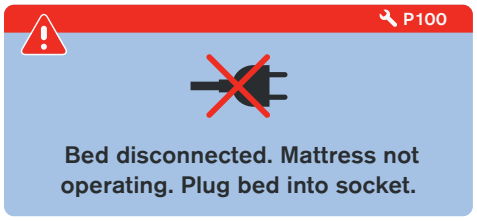
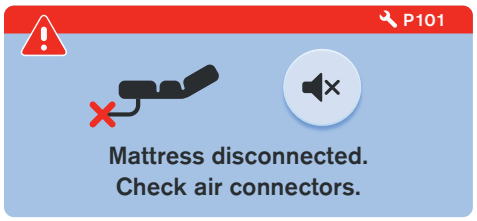
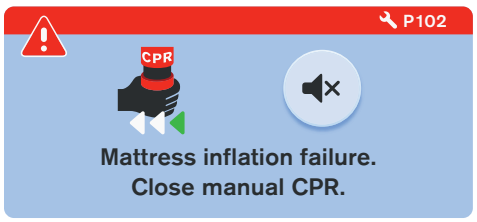
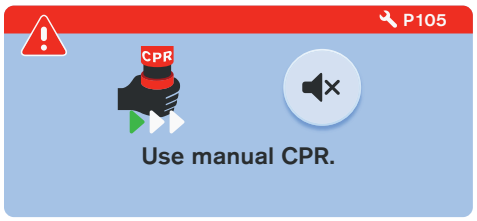
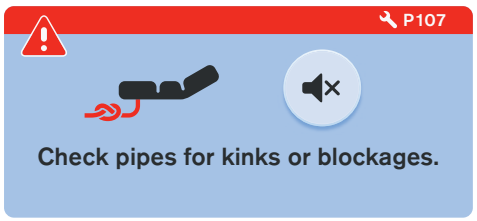
Status (Pop-up window)	Meaning	How to change the status
	Lateral Tilt with siderail folded down is limited to 15°. Transfer Mode is activated.	Use Lateral Tilt with siderail folded down to facilitate patient transfer.
	Lateral Tilt that can be adjusted by pedals of Lateral Tilt Foot Control is limited to 15°.	Use LCD touchscreen on Multiboard X or Attendant Control Panel to continue in lateral tilting above 15°.
	Lateral Tilt is limited to 15° because Backrest Angle is in more than 30°.	Lower the Beckrest to less than 30° to continue in lateral tilting above 15°.
	Lateral Tilt is limited to 15° because the bed is loaded with more than 150 kg.	Remove load to continue in lateral tilting above 15°.
	Longitudinal tilt adjustment (Trendelenburg tilt and Antitrendelenburg tilt) is disabled during the set lateral tilt of the bed.	Decrease the lateral tilt angle to continue in longitudinal tilt adjustment.
	Automatic Lateral Therapy is disabled because the bed is disconnected from the mains power.	Connect bed to the mains power to enable the Automatic Lateral Therapy.

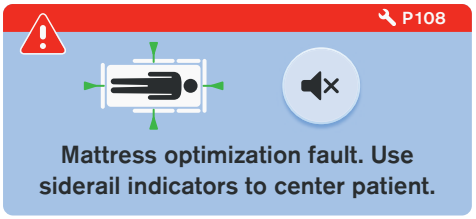
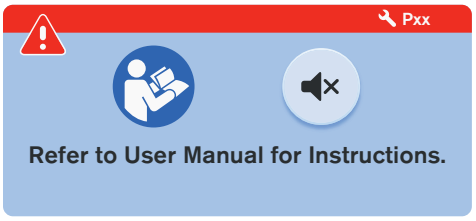
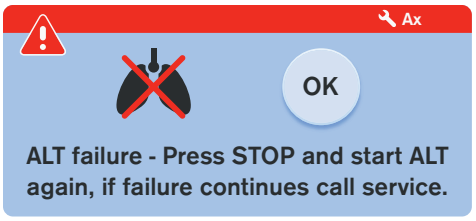
Status (Pop-up window)	Meaning	How to change the status
	Positioning is disabled during activated Automatic Lateral Therapy.	Deactivate the running Automatic Lateral Therapy if bed positioning is needed.
	Lowering of the mattress support platform is stopped because of a detected obstacle on the undercarriage cover.	Remove the obstacle from the undercarriage cover to continue in lowering the mattress support platform.
	Automatic Lateral Therapy cannot be activated because of overloaded bed.	Remove load to enable activation of the Automatic Lateral Therapy.
	Automatic Lateral Therapy cannot be activated because of the Backrest in more than 30°.	Lower the Backrest Angle to enable activation of the Automatic Lateral Therapy.
	Automatic Lateral Therapy cannot be activated because of too high Trendelenburg Angle or Antitrendelenburg Angle.	Lower the Trendelenburg Angle or Antitrendelenburg Angle to enable activation of the Automatic Lateral Therapy.
	Automatic Lateral Therapy cannot be activated because of too low position of the mattress support platform.	Adjust a higher position of the mattress support platform to enable activation of the Automatic Lateral Therapy.

Status (Pop-up window)	Meaning	How to change the status
	Automatic Lateral Therapy cannot be activated because of too high position of the mattress support platform.	Adjust a lower position of the mattress support platform to enable activation of the Automatic Lateral Therapy.
	OPTIMIZE Mode of the OptiCare X integrated mattress cannot be activated because of longitudinal tilt or lateral tilt of the Multicare X bed.	Change lateral tilt adjustment or longitudinal tilt adjustment towards the bed horizontal position to enable activation of the OPTIMIZE Mode.
	Automatic Lateral Therapy is PAUSED because of a siderail folded down.	Raise all siderails up to enable activation of the Automatic Lateral Therapy.
	Automatic Lateral Therapy has been stopped and it cannot be activated now because the bed is disconnected from the mains power.	Connect the bed to the mains power to enable activation of the Automatic Lateral Therapy, then press OK.
	Automatic Lateral Therapy has been stopped and it cannot be activated because the bed is overloaded.	Remove load to enable activation of the Automatic Lateral Therapy, then press OK.
	It is not possible to increase the lateral tilt angle or longitudinal tilt angle (Trendelenburg Angle or Antitrendelenburg Angle) because of the tilt adjustment limits of the bed.	Change lateral tilt adjustment or longitudinal tilt adjustment towards the bed horizontal position to enable the increasing of the lateral tilt angle or longitudinal tilt angle.

Status (Pop-up window)	Meaning	How to change the status
	Bed reached horizontal position.	Position bed if needed.
	Confirmation window of a time change or of an overwriting the scales history.	Press TICK for confirmation or CROSS for cancel.
	Maximum Backrest Angle was reached on the bed equipped with Hercules.	Change the Backrest Angle adjustment if needed.
	Notification of the running inflation process of the OptiCare X mattress after switching from CPR Mode to OPTIMIZE Mode.	Wait until the mattress is inflated.
	Notification of the running automatic process that should not be disturbed.	Wait until the Automatic Calibration is finished.

Status (Pop-up window)	Meaning	How to change the status
	Bed is overloaded by more than 250 kg. Safe Working Load is exceeded by more than 10 kg.	Remove load!
	OptiCare X System Control Unit (SCU) is disconnected.	Contact service department approved by manufacturer!
	Automatic CPR deflation is not available. OptiCare X System Control Unit could be disconnected.	Use manual CPR valve on a mattress side to deflate the Opti-Care X mattress!
	System fault of the Multicare X bed!	Stop using the Multicare X bed and contact service department approved by manufacturer!
	Scales system is disconnected and its functions are disabled! Bed Exit Alarm Monitoring and automatic pressure settings of the OptiCare X mattress are disabled!	Contact service department approved by manufacturer!
	Column unit fault!	Contact service department approved by manufacturer!

Status (Pop-up window)	Meaning	How to change the status
	OptiCare X integrated mattress does not work because of the bed disconnected from the mains power.	Connect the bed to the mains power to enable functions of the OptiCare X integrated mattress!
	At least one air hose is disconnected from the OptiCare X SCU.	Press MUTE Icon to mute acoustic alert sounding from SCU. Connect all the air hoses to the OptiCare X SCU.
	Integrated Mattress inflation failed!	Press MUTE Icon to mute acoustic alert sounding from SCU. Close manual CPR valve or check air connections to SCU to enable mattress inflation! If problem is still present, transfer patient to another surface!
	Integrated Mattress deflation failed! Automatic deflation is not available!	Press MUTE Icon to mute acoustic alert sounding from SCU. Open manual CPR valve to enable mattress deflation! If problem is still present, transfer patient to another surface!
	Mattress Identification failed! Connected mattress is not compatible with OptiCare X SCU!	Press MUTE Icon to mute acoustic alert sounding from SCU. Only connect the compatible mattress to the OptiCare X SCU! Check hoses in mattress near connection and re-connect the OptiCare X integrated mattress!
	Mattress Identification failed due to a clogged or kinked air hose!	Press MUTE Icon to mute acoustic alert sounding from SCU. Ensure the air hoses are not kinked and remove found kinks and blockages! Check hoses in mattress near connection and re-connect the OptiCare X integrated mattress!

Status (Pop-up window)	Meaning	How to change the status
	Optimization process has been stopped because patient is not properly placed on the OptiCare X integrated mattress.	Press MUTE Icon to mute acoustic alert sounding from SCU. Position the patient to the centre of the mattress support platform according to the indicators on the foot siderails, head board and foot board.
	Integrated Mattress Fault requiring an information from the instructions for use and intervention of a service technician! See „12.1.3 Fault Codes (OptiCare X integrated mattress)“ on the page 59.	Press MUTE Icon to mute acoustic alert sounding from SCU. Follow the instructions for the corresponding fault code displayed in the upper right corner of the pop-up window (**Pxx**) and contact service department approved by manufacturer and report the identification fault code!
	Automatic Lateral Therapy is interrupted due to the fault!	Press STOP and then press PLAY to start Automatic Lateral Therapy again. If this fault remains, contact service department approved by manufacturer and report identification code of the fault displayed in the upper right corner of the pop-up window (**Ax**)!

FAULT RESET

To reset the displayed fault:

► Press MUTE Icon on the corresponding pop-up window.

RESET Icon appears on the pop-up window instead of the MUTE Icon.

► Press RESET Icon.

The fault is reset.

If the fault cause was removed, the fault is eliminated.

If the fault cause was not removed, the fault will return with the corresponding pop-up window.

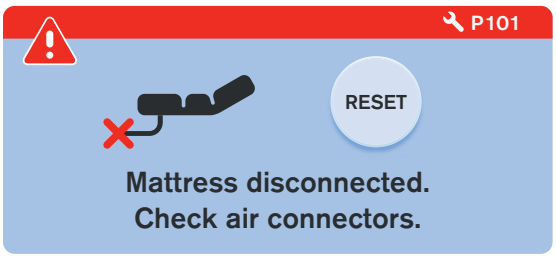


Fig. RESET Icon on the pop-up window P101

12.1.3 Fault Codes (OptiCare X integrated mattress)

Fault Code	Type of the Fault	Immediate Action of Operator	Corrective Action of Operator
P2	Major Inflate Fault (air leak)	Check both manual CPR valves for closing. OR Check air connections to SCU. If problem is still present, transfer patient to another surface.	If problem is still present, contact service department approved by manufacturer!
P3	Deflate Fault	Wait three minutes until fault self-clear. OR Check that air pipes between mattress and SCU are not kinked. If problem is still present, transfer patient to another surface.	If problem is still present, contact service department approved by manufacturer!
P4	Pressure Sensor Fault	Transfer patient to another surface.	Contact service department approved by manufacturer!
P5	Overpressure Fault	Transfer patient to another surface.	Contact service department approved by manufacturer!
P6	BOD Valve Fault	If the mattress is still supporting the patient, they should not move the patient to another surface if fault self-clears until 60 minutes. OR Transfer patient to another surface.	Contact service department approved by manufacturer!
P7	Blower Fault	No MCM function, assess the effect on patient.	Contact service department approved by manufacturer!
P8	Clogged Blower Filter	No MCM function, assess the effect on patient.	Contact service department approved by manufacturer!
P9	Communication Fault	Transfer patient to another surface.	Contact service department approved by manufacturer!
P12	Optimization Out of Range	Patient may be too heavy for the mattress or in a position that could prevent the BOD from closing. Check patient weight, patient's position and other medical device that is being used (e.g. traction, positioning aids etc.). OR Transfer patient to another surface.	Contact service department approved by manufacturer!
P14	Overcurrent of Solenoid	Transfer patient to another surface.	Contact service department approved by manufacturer!
P92	System Control Unit Overheating	Transfer patient to another surface.	Contact service department approved by manufacturer!
P94	Pressure Calibration Fault	Transfer patient to another surface.	Contact service department approved by manufacturer!
P98	Solenoid Fail	Transfer patient to another surface.	Contact service department approved by manufacturer!
P100	Find the corresponding graphic pop-up in the chapter „12.1.2 Statuses (Multiboard X - LCD touchscreen)“ on the page 51 and follow the instructions related to it.		
P101			
P102			
P105			
P106			
P107			
P108			

12.1.4 Settings Screens

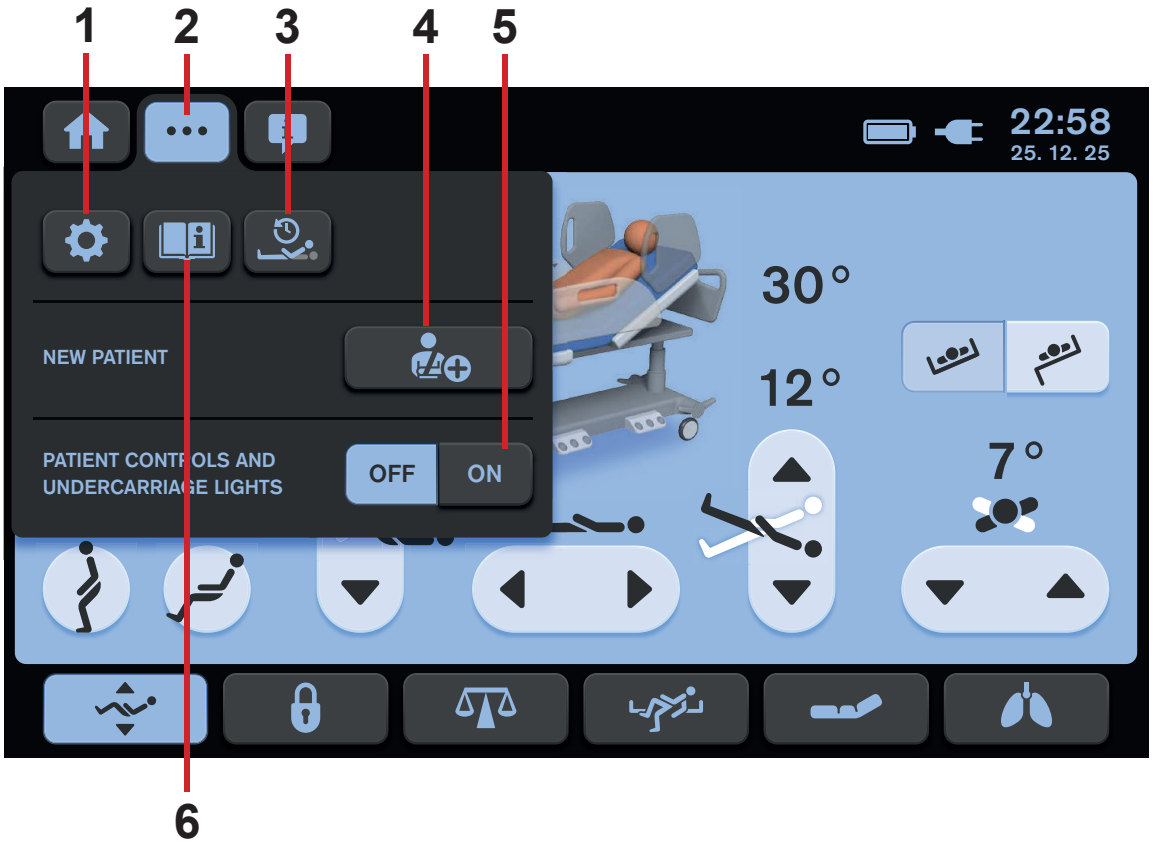


Fig. Settings Menu

1. Settings Icon (to enter Settings Screen)
2. Settings Screen Icon (to enter Settings Menu of the selected screen)
3. History Screen Icon (depending on the selected screen in the background)
4. NEW PATIENT Icon (to activate NEW PATIENT function)
5. Illumination Control Icons (Patient Control Panels keyboards, Handset keyboard and Bed Illumination)
6. Help Icon (press to enter Help Screen of the selected screen)

To enter Settings Menu:

► Press Settings Screen Icon (**three dots**).

3 SETTING SCREENS

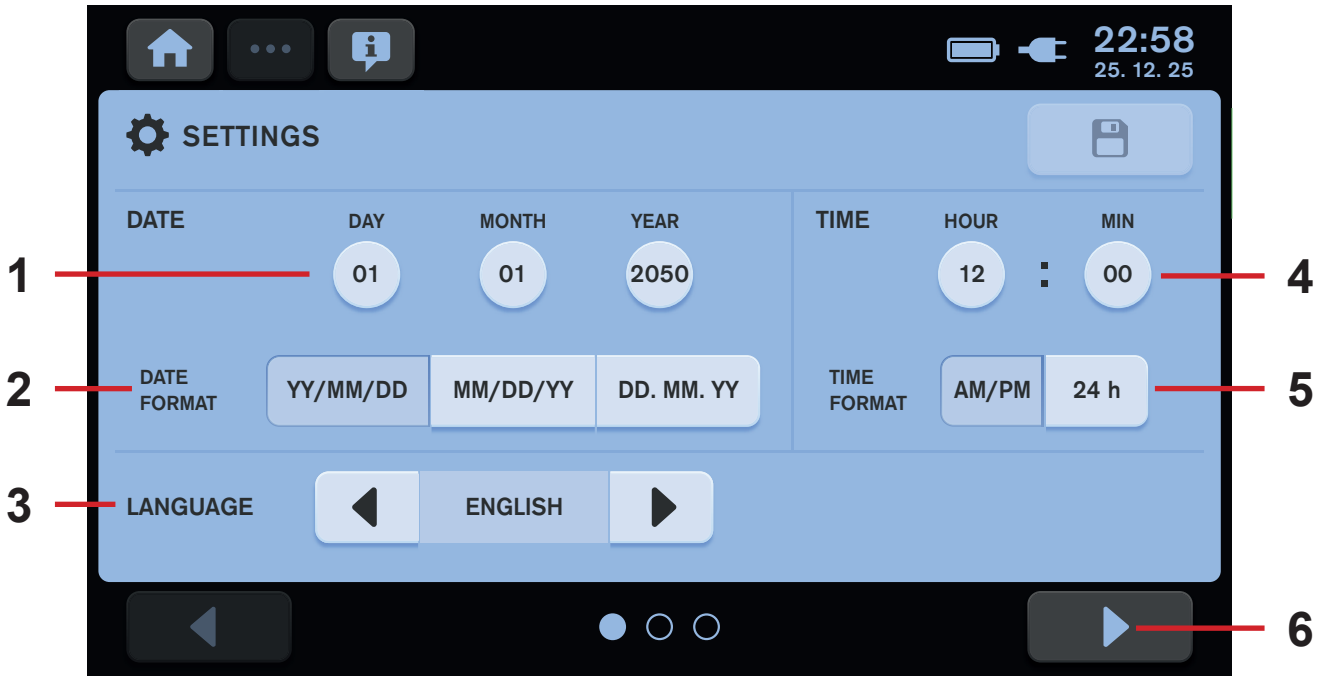


Fig. Settings Screen 1

1. DATE Settings Icons (day/month/year)
2. DATE FORMAT Settings Icons (year/month/day or month/day/year or day. month. year)
3. LANGUAGE Settings Icons
4. TIME Settings Icons (hours : minutes)
5. TIME FORMAT Settings Icons (am/pm format or 24 fours format)
6. Next Settings Screen Icon (3 screens)

To enter Settings Screen:
► Press Settings Screen Icon (**three dots**).
► Select Settings Icon (**gear**).

To change settings:
► Press corresponding icons.

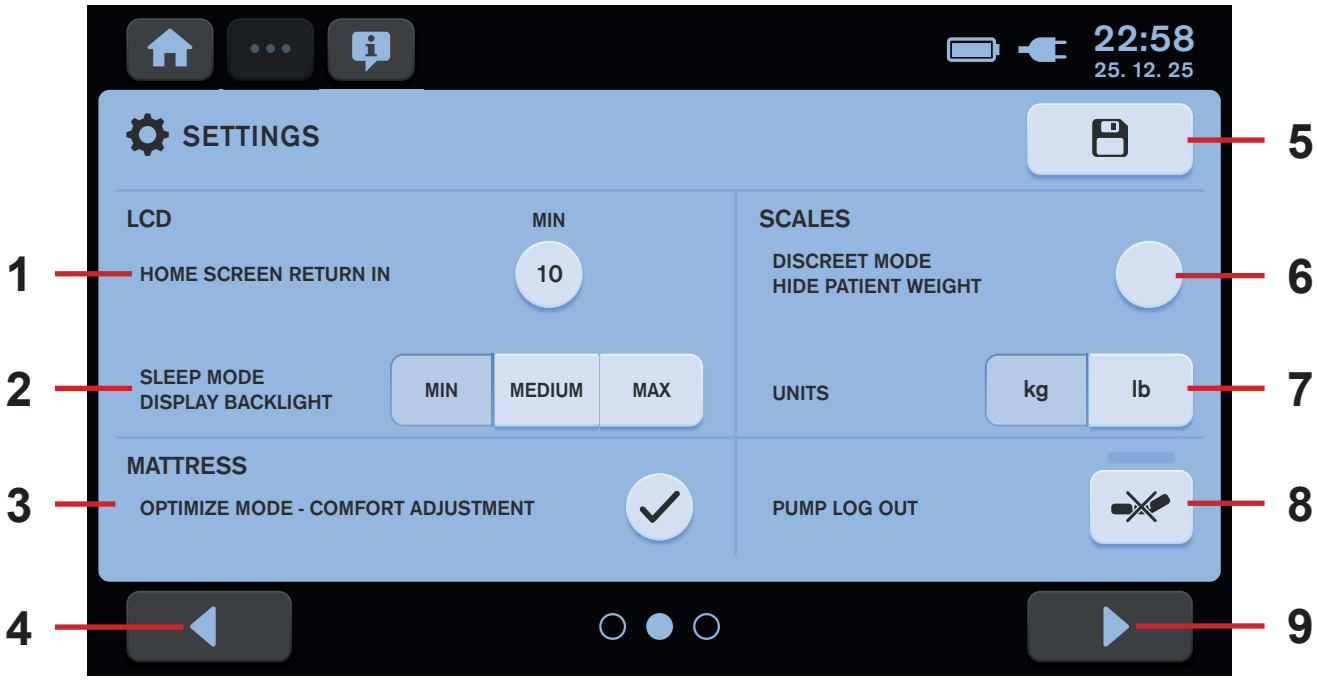


Fig. Settings Screen 2

1. Home Screen Return Settings Icon (countdown in minutes before the automatic return from the selected screen to the Home Screen)
2. Display Backlight Settings Icons (three modes of intensity: MIN or MEDIUM or MAX)
3. COMFORT Adjustment in OPTIMIZE Mode Settings Icon (tick - enabled, cross - disabled)
4. Previous Settings Screen Icon (3 screens)
5. SAVE Settings Icon
6. Scales DISCREET Mode (to hide weight value on the Home Screen)
7. Weight Unit Settings Icons (values in kg or values in lb)
8. OptiCare X System Control Unit LOG OUT Icon
9. Next Settings Screen Icon (3 screens)

To enter next Settings Screen:
► Press Next Settings Screen Icon (**9**).

To enter previous Settings Screen:
► Press Previous Settings Screen Icon (**4**).

To change settings:
► Press corresponding icon.

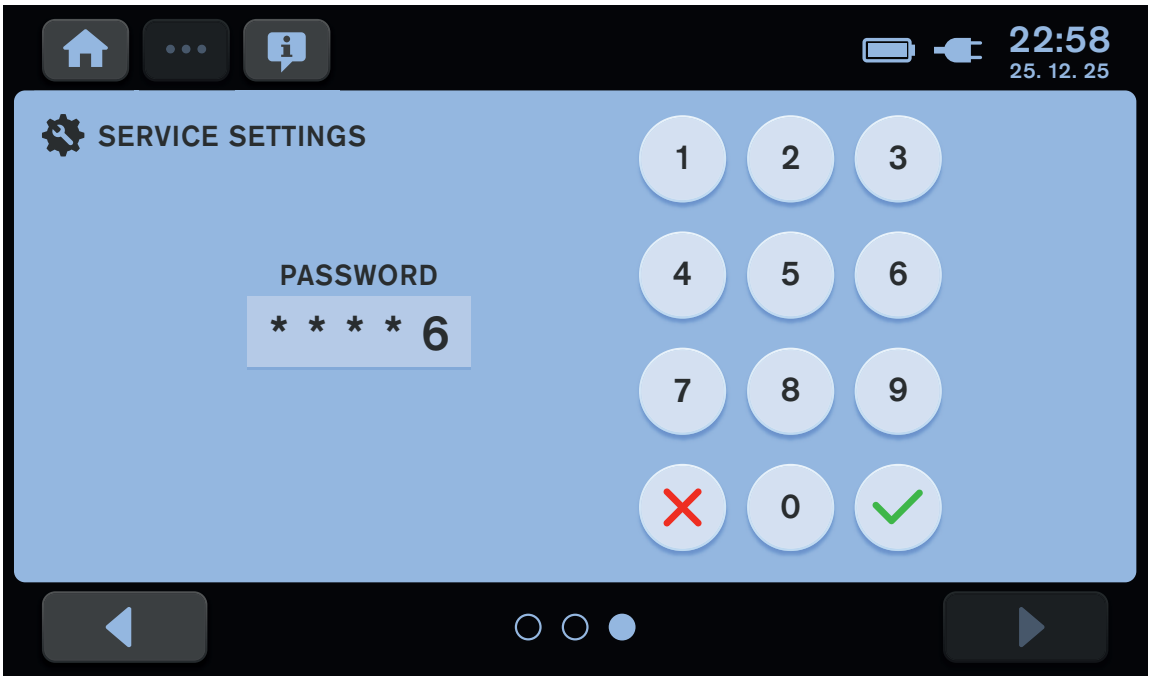


Fig. Settings Screen 3 (insert password to enter Service Settings)

12.1.5 NEW PATIENT FUNCTION



It is recommended to use New Patient function when replacing patients and no patient lies on the Multicare X bed.

The New Patient function has following effects on the Multicare X bed with OptiCare X integrated mattress:

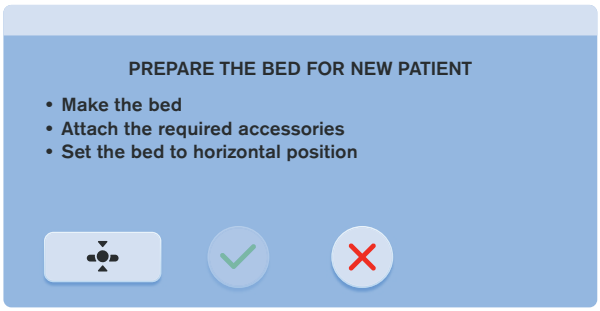
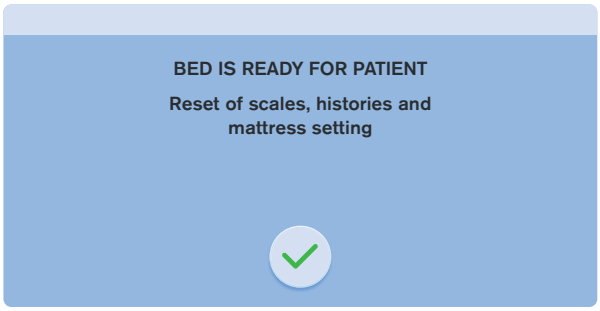
- Scales Taring (only if the scales are stabilised)
- Deletion of the Scales history
- Deletion of the ALT history
- Deletion of the Backrest History
- Setting of the MOBILE Mode with pressure level 3 (only for OptiCare X)
- Deletion of the Pressure Comfort Setting (only for OptiCare X)
- Setting of the MCM with HIGH intensity level (only for OptiCare X)

To activate New Patient function:

- ► Wait until the scales are stabilized.
- ► Press and hold NEW PATIENT Icon.
- ► Follow NEW PATIENT Guide.

Beep indicates confirmation of the activated New Patient function.
Scales have been tared, histories deleted and it is recommended to place new patient on the bed.

NEW PATIENT GUIDE

Order of the NEW PATIENT Guide steps	Signalisation & Settings
1) **Ensure the following conditions are met:** ► Patient is not in bed. ► Scales are stabilized. **To start the preparation of the bed for new patient:** ► Press **Tick** Icon. **To cancel the NEW PATIENT function:** ► Press **Cross** Icon.	
2) **To continue preparing the bed for new patient:** ► Make the bed. ► Add the required accessories to the bed. ► Adjust the bed to horizontal position by pressing the icon  . It is not possible to advance to the next step without the bed in horizontal position! ► Press **Tick** Icon.	
3) **Do not touch the bed and wait for the end of the processing!**	
4) **To finish the preparation of the bed for new patient:** ► Press **Tick** Icon. The bed is prepared for new patient's admission.	

Cancelling the NEW PATIENT function	Signalisation & Settings
To cancel the NEW PATIENT function: ► Press **Cross** Icon on the corresponding NEW PATIENT Guide window. **See the window displayed in the case of the interrupted NEW PATIENT function on the right side.**	

12.1.6 Positioning Screen (LCD touchscreen)

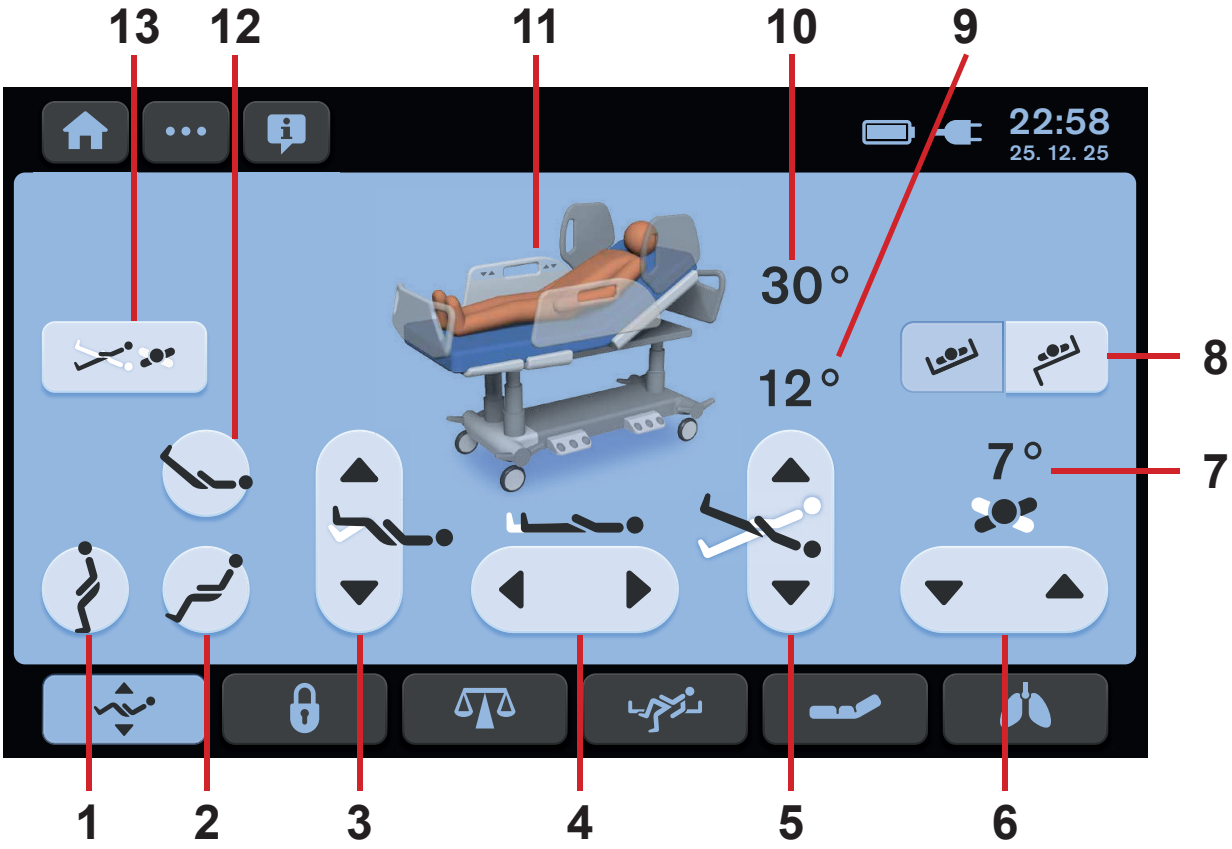


Fig. Positioning Screen - LCD touchscreen

1. Mobilization Position Icon
2. Cardiac Chair Position Icon
3. Calfrest Adjustment Icons (UP/DOWN)
4. Bed Extension Icons (LONGER/SHORTER)
5. Longitudinal Tilt Icons (UP/DOWN)
6. Lateral Tilt Icons (UP/DOWN)
7. Lateral Tilt Angle Indicator
8. Transport Mode Icons (ON/OFF)
9. Trendelenburg/Antitrendelenburg Tilt Angle Indicator
10. Backrest Angle Indicator
11. Bed Status Picture
12. Vascular Position Icon
13. Combined Positioning Screen Icon

Positioning icons **1, 2**, **3**, **4**, **5**, **6** and **12** are explained in chapter „13 Bed Positioning“ on the page 77.

TRANSFER MODE

Transfer Mode enables Lateral Tilt with a siderail in down position for 3 minutes.

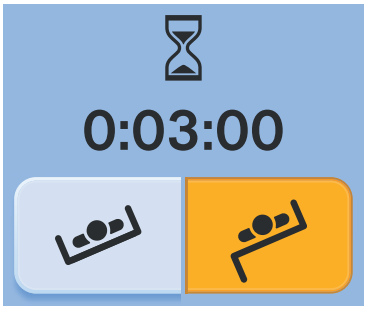


Fig. Activated Transfer Mode

COMBINED TILT POSITIONING

Combined Positioning Screen enables less limited simultaneous positioning of the Lateral Tilt and of the Longitudinal Tilt (Trendelenburg Tilt and Antitrendelenburg Tilt).
A corresponding pop-up window indicates the reached tilt adjustment limits of the bed.

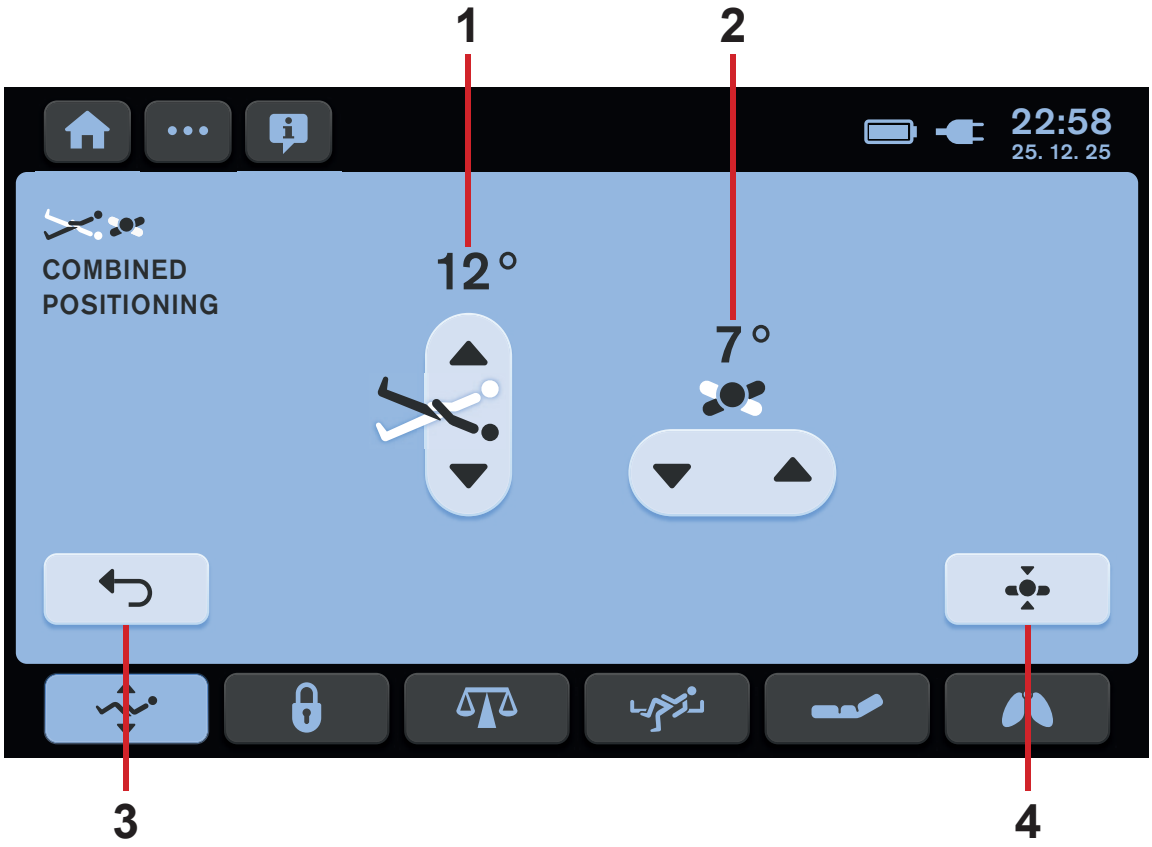


Fig. Combined Positioning Screen

1. Longitudinal Tilt Icons (UP/DOWN) with Trendelenburg/Antitrendelenburg Tilt Angle Indicator
2. Lateral Tilt Icons (UP/DOWN) with Lateral Tilt Angle Indicator
3. EXIT Icon (to return to the Positioning Screen)
4. Horizontal Position Icon (to adjust the mattress support platform to the horizontal position)

Positioning icons **1** and **2** are explained in chapter „13 Bed Positioning“ on the page 77.

HISTORY OF BACKREST POSITIONS

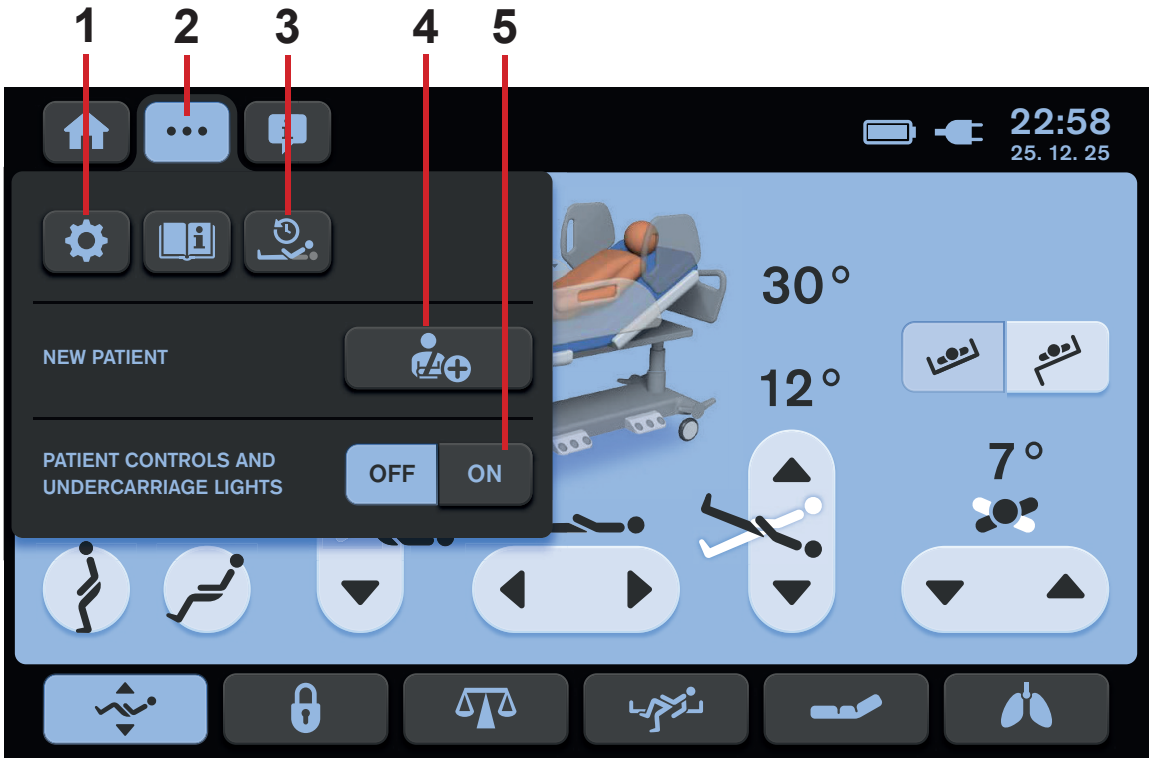


Fig. Settings Menu of the Positioning Screen

1. Settings Icon (to enter Settings Screen)
2. Settings Screen Icon (to enter Settings Menu of the selected screen)
3. Backrest History Screen Icon (to enter Backrest History Screen)
4. NEW PATIENT Icon
5. Illumination Control Icons (Patient Control Panels keyboards, Handset keyboard and Bed Illumination)

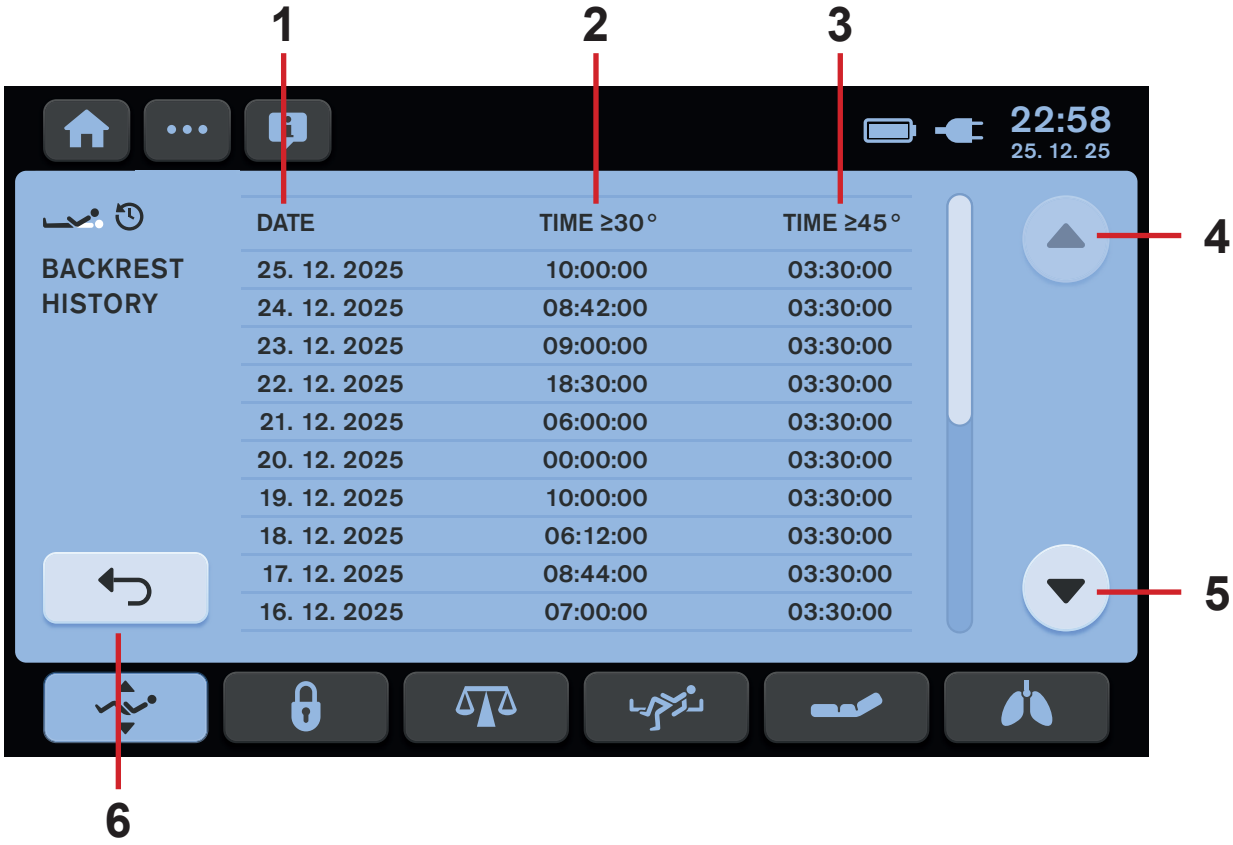


Fig. Backrest History Screen

1. Column with recorded dates
2. Column with recorded periods during which Backrest was in the angle equal to or greater than 30° up to 44°
3. Column with recorded periods during which Backrest was in the angle equal to or greater than 45°
4. Previous Lines Icon
5. Next Lines Icon
6. Return to the Positioning Screen Icon

12.1.7 Lock Screen (LCD touchscreen)

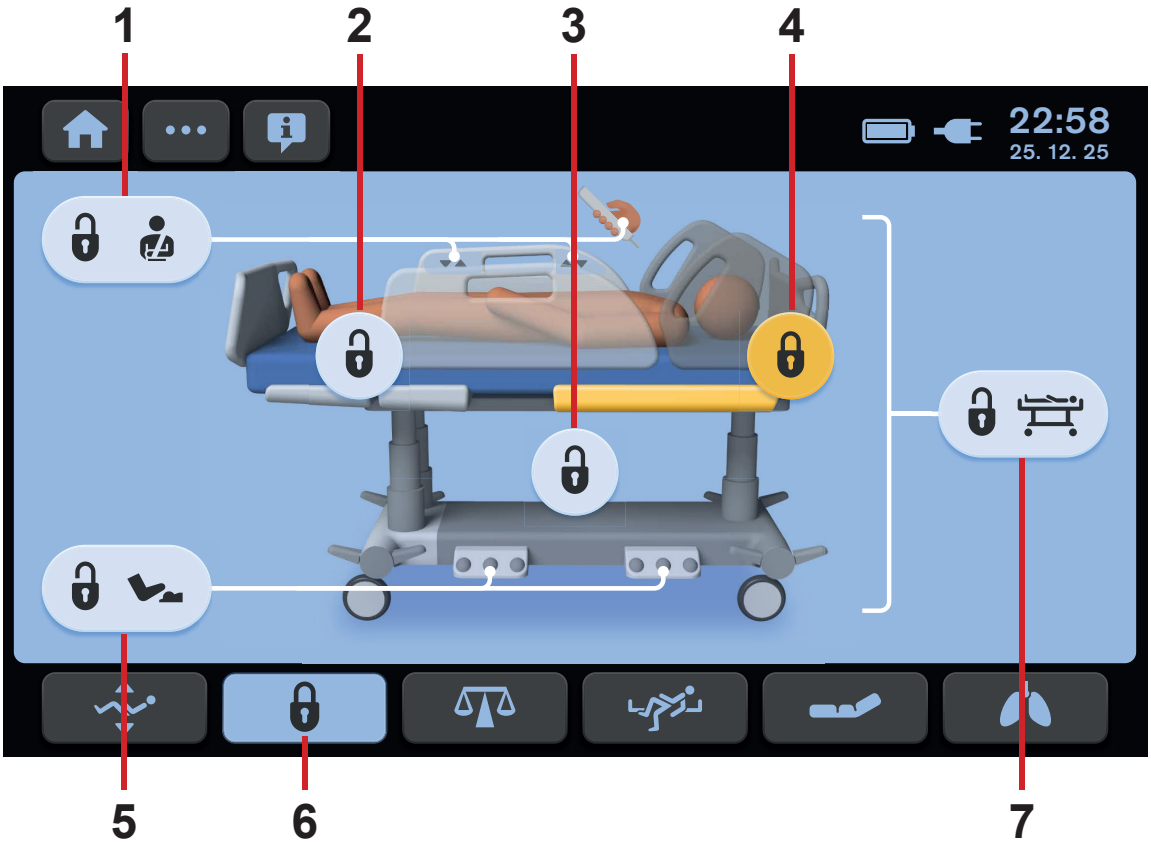


Fig. Lock Screen - LCD touchscreen

1. Patient Control Elements Lock Icon (Patient Control Panels in foot siderails, Handset, Mobi-Lift)
2. Thighrest and Calfrest Lock Icon
3. Height and Tilt Lock Icon (Bed Height, Trendelenburg Tilt, Antitrendelenburg Tilt, Lateral Tilt)
4. Backrest Lock Icon
5. Foot Control Lock Icon (Bed Height Foot Control, Lateral Tilt Foot Control)
6. Lock Screen Icon (blue background - activated, dark background - not activated)
7. Central Lock Icon (all Lock Icons are pressed/yellow if this icon is pressed)

Locking individual functions:
► Activate touchscreen by pressing GO button.
► Press icon or icons of functions to lock.
Selected functions are locked.
Icons of locked functions are highlighted in **yellow**.

Locking all functions:
► Activate touchscreen by pressing GO button.
► Press icon **7**.
All functions are locked.

NOTE It is not possible to lock Emergency Trendelenburg Position and CPR Position.

12.2 Attendant Control Panel

The Attendant Control Panel is a standard Control Element. The Attendant Control Panel can be hung on the foot board or on side-rails if required. It is possible to hold the Attendant Control Panel in the hand while operating.

► Ensure that exclusively trained nursing staff operates the Attendant Control Panel.

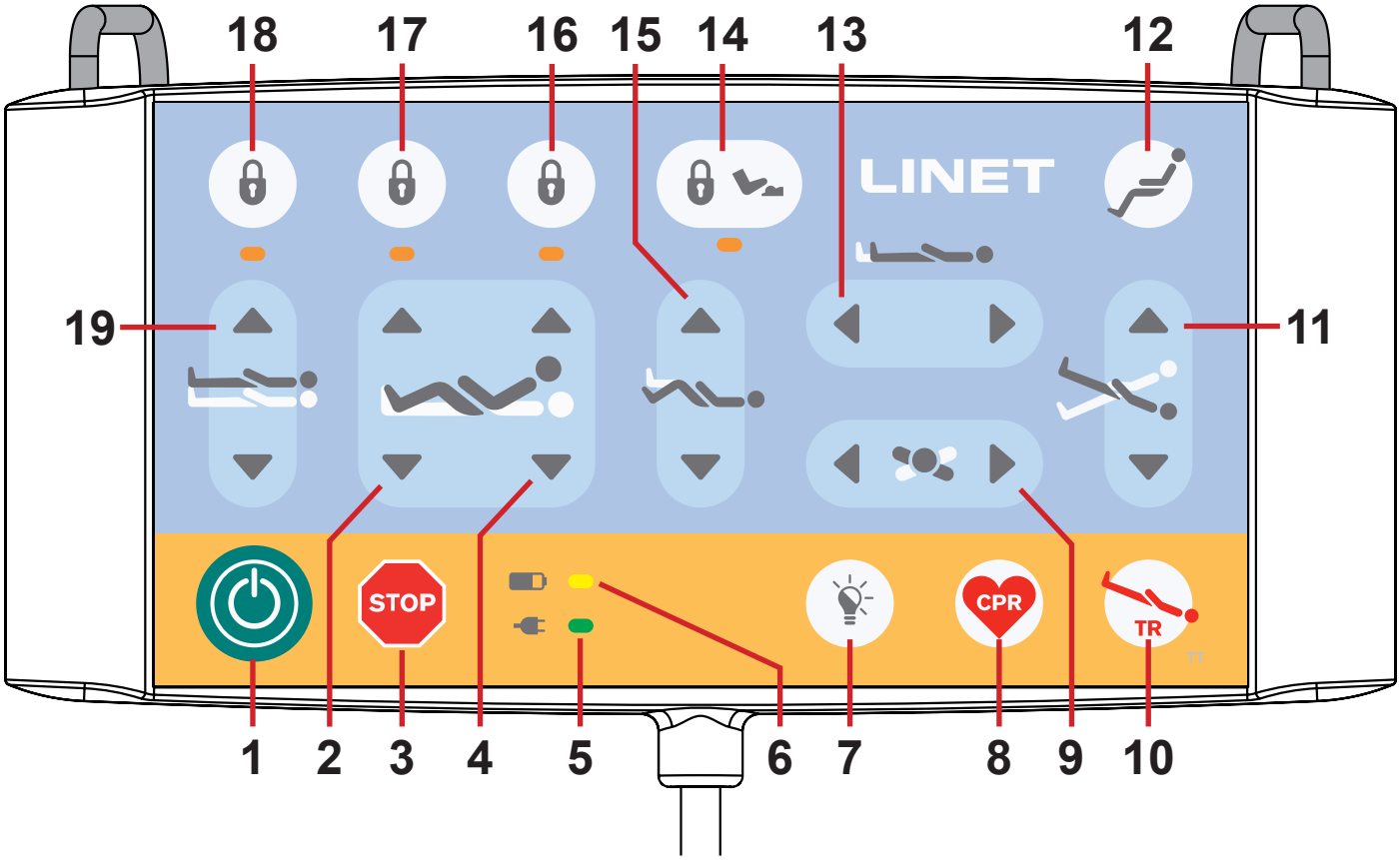


Fig. Attendant Control Panel

1. **GO Button**
2. **Thighrest Adjustment Buttons**
3. **Central STOP Button**
4. **Backrest Adjustment Buttons**
5. **Mains Power LED**
6. **Accumulator Charge Status LED**
7. **Illumination Control Button**
8. **CPR Position Button**
9. **Lateral Tilt Buttons**
10. **Emergency Trendelenburg Position Button**
11. **Longitudinal Tilt Buttons**
12. **Cardiac Chair Position Button**
13. **Bed Extension Adjustment Buttons**
14. **Foot Control Lock Button and LED**
15. **Calfrest Adjustment Buttons**
16. **Backrest Lock Button and LED**
17. **Thighrest, Calfrest and Bed Extension Adjustment Lock Button and LED**
18. **Bed Height, Lateral Tilt, Trendelenburg Tilt and Antitrendelenburg Tilt Lock Button and LED**
19. **Bed Height Adjustment Buttons**

GO BUTTON

The button  activates the keyboard of all control elements for 3 minutes, except for Lateral Tilt Foot Control.

During this time the following is possible:
► Adjusting individual mattress support platform elements by pressing the corresponding function buttons.
► Disabling individual functions with the lock buttons.

Each time a function button is pressed, the keyboard will remain active for another 3 minutes.

STOP BUTTON

Pressing button 

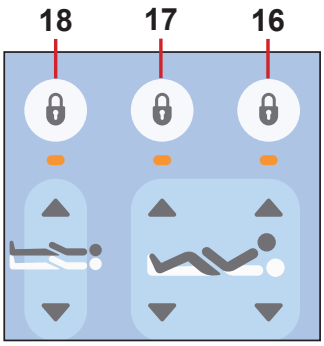
immediately stops all electronic bed movements.

FUNCTION BUTTONS

The function buttons **2**, **4**, **8**, **9**, **10**, **11**, **12**, **13**, **15** and **19** are described in chapter „13 Bed Positioning“ on the page 77.

NOTE Pressing two function buttons at the same time will be recognized as an error by the controller. The controller will interrupt immediately all bed movements and display shows alert.

LOCK

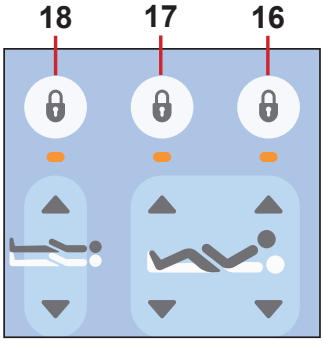


To lock Backrest Adjustment:
► Press button **16**.
Corresponding LED on Attendant Control Panel is lit.
Backrest Adjustment is disabled using any Control Element.

To lock Thighrest, Calfrest and Bed Extension Adjustment:
► Press button **17**.
Corresponding LED on Attendant Control Panel is lit.
Thighrest, Calfrest and Bed Extension Adjustment are disabled using any Control Element.

To lock Bed Height, Lateral Tilt, Trendelenburg Tilt and Antitrendelenburg Tilt Adjustment:
► Press button **18**.
Corresponding LED on Attendant Control Panel is lit.
Bed Height, Lateral Tilt, Trendelenburg Tilt and Antitrendelenburg Tilt Adjustment are disabled using any Control Element.

UNLOCK



To unlock Backrest Adjustment:
► Press button **16**.
Corresponding LED on Attendant Control Panel is not lit.
Backrest Adjustment is enabled again.

To unlock Thighrest, Calfrest and Bed Extension Adjustment:
► Press button **17**.
Corresponding LED on Attendant Control Panel is not lit.
Thighrest, Calfrest and Bed Extension Adjustment are enabled again.

To unlock Bed Height, Lateral Tilt, Trendelenburg Tilt and Antitrendelenburg Tilt Adjustment:
► Press button **18**.
Corresponding LED on Attendant Control Panel is not lit.
Bed Height, Lateral Tilt, Trendelenburg Tilt and Antitrendelenburg Tilt Adjustment are enabled again.

MAINS POWER LED 

Status	Meaning
lit LED	connected to the mains
unlit LED	disconnected from the mains
flashing LED	system error

12.2.1 Bed and Keyboards Illumination

Bed and Keyboards Illumination helps the nursing staff as well as the patient to orientate. The illumination is turned off when the bed is powered by accumulator.

The Multicare X bed is equipped with three-phase illumination:

1. Full intensity of illumination
2. Lowered intensity of illumination
3. Illumination is turned off

The lowered intensity of illumination is set up after the bed is connected to the mains.

After pressing the GO button:
► The Patient Control Panels and Handset keyboards and Bed Illumination will light up at full intensity.

After elapsing the GO period:
► The illumination intensity of Patient Control Panels and Handset keyboards will be lowered.

7 minutes after GO period has elapsed:
► The intensity of Bed Illumination will be lowered.

In the event any button is pressed on the Attendant Control Panel, Handset or Patient Control Panels outside of GO period:
► The Bed Illumination will light up at full intensity for 10 minutes and after that the illumination will be lowered.
► Simultaneously, the Patient Control Panels and Handset keyboards will light up at full intensity for 7 seconds. Then the illumination will be lowered.

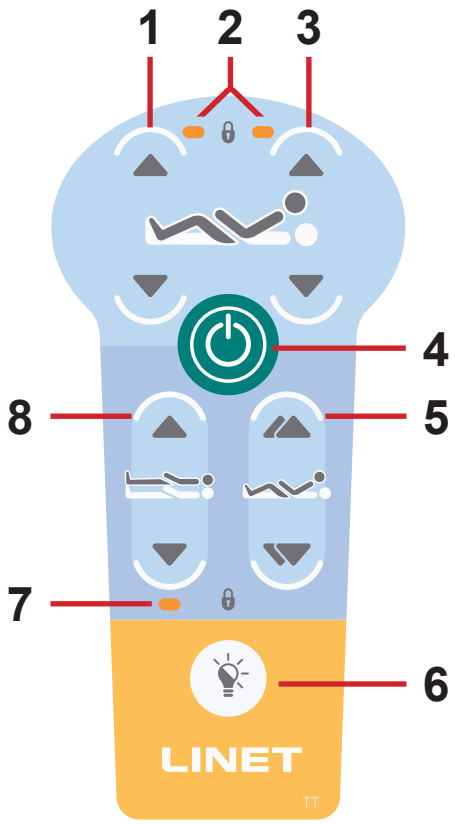
After activating the bed via any Foot Control:
► The full intensity of Bed Illumination will be activated for 9 minutes and 40 seconds.

In case of pressing any Foot Control once outside the period of activation:
► All the Patient Control Panels and Handset keyboards will light up at full intensity for 7 seconds and then the illumination will be lowered.
► The full intensity of Bed Illumination will be activated for 10 minutes and then the illumination will be lowered.

Turning off all illumination:
► Press **Illumination Control Button** (**7**) on the Attendant Control Panel and all illumination on the bed (Patient Control Panels and Handset keyboards and Bed Illumination) will be turned off. This function is not blocked by the preceding activation by the GO button.

12.3 Handset (optional)

The handset is available with illuminated keyboard.
The illumination is activated for 7s if any button was pressed and the illumination is activated for 3 minutes if GO Button was pressed.



1. **Thighrest Adjustment Buttons**
2. **Thighrest/Backrest Lock LED**
3. **Backrest Adjustment Buttons**
4. **GO Button**
5. **Autocontour Adjustment Buttons**
6. **Flashlight Button**
7. **Height Lock LED**
8. **Bed Height Adjustment Buttons**

Fig. Handset

GO BUTTON

The button activates the keyboard of all Control Elements, except for Lateral Tilt Foot Control.

Pressing button will keep the keyboard active for 3 minutes.

Pressing a button will keep the keyboard active for another 3 minutes.

FUNCTION BUTTONS

The function buttons **1**, **3**, **5** and **8** are described in chapter „13 Bed Positioning“ on the page 77.

To switch on the flashlight:

► Press flashlight button .

NOTE Depending on the patient’s condition, the nursing staff decides whether the patient is allowed to adjust the bed’s position.

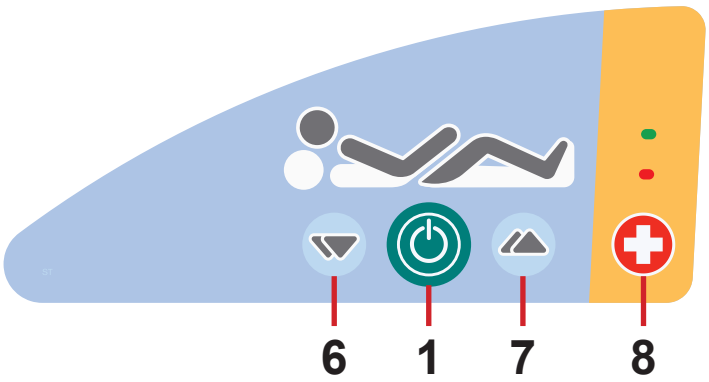
If required, prevent the patient from adjusting the bed as follows:

► Disable functions.

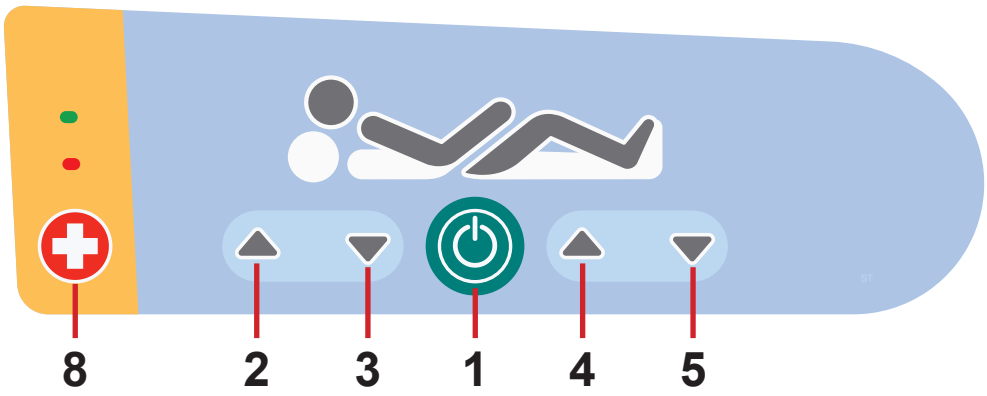
NOTE An adapter for the handset is available. The adapter enables quick installation and removal (e.g. replacing a defective handset, using the handset for another bed).

12.4 Patient Control Panels

The Patient Control Panels integrated in the foot siderails allow the patient to adjust the positions of the Backrest, Thighrest and Autocontour.



1. GO Button (activation of the control panel)
2. Backrest Adjustment Button – UP
3. Backrest Adjustment Button – DOWN
4. Thighrest Adjustment Button – UP
5. Thighrest Adjustment Button – DOWN
6. Autocontour Adjustment Button – (simultaneous movement of the Backrest and Thighrest) – DOWN
7. Autocontour Adjustment Button (simultaneous movement of the Backrest and Thighrest) – UP
8. Nurse Call Button



GO BUTTON

The button  activates the keyboard of all Control Elements, except for Lateral Tilt Foot Control.

Pressing button  will keep the keyboard active for 3 minutes.

Pressing a button will keep the keyboard active for another 3 minutes.

FUNCTION BUTTONS

The function buttons **2**, **3**, **4**, **5, 6** and **7** are described in chapter „13 Bed Positioning“ on the page 77.

NOTE Keyboards are illuminated. The illumination is activated for 7s if any button was pressed and the illumination is activated for 3 minutes if GO Button was pressed.

NOTE Functions on the Patient Control Panels in the foot siderails are disabled when the foot siderail is in lower position.

12.5 Bed Height Foot Control (optional)

The foot control is optional and allows setting the bed height with one's feet.
The use of Bed Height Foot Control is described in the chapter „13 Bed Positioning“ on the page 77.

Press the selected pedal twice in 3 seconds:
► Bed Height Foot Control is activated for 30s after this procedure.

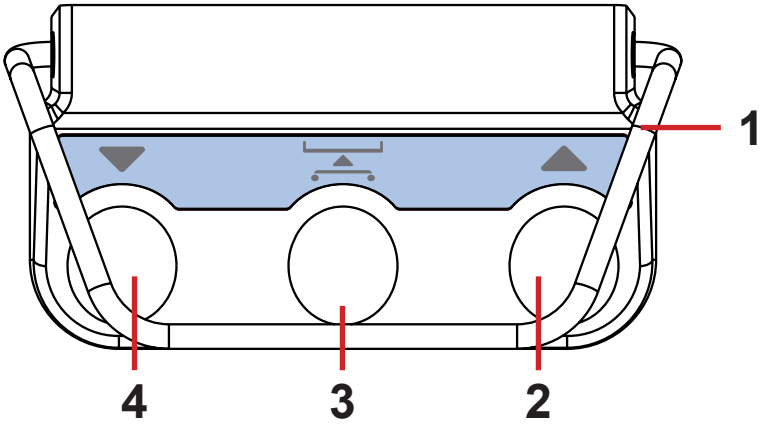


Fig. Bed Height Foot Control

1. Protection Frame against Unwanted Activation
2. Raise Mattress support platform Pedal
3. Examination Position Pedal
4. Lower Mattress support platform Pedal

12.6 Lateral Tilt Foot Control (standard)

The foot control allows setting the Lateral Tilt of the bed with one's feet.
The use of Lateral Tilt Foot Control is described in the chapter „13 Bed Positioning“ on the page 77.

Press the selected pedal twice in 3 seconds:
► Lateral Tilt Foot Control is activated for 30s after this procedure.

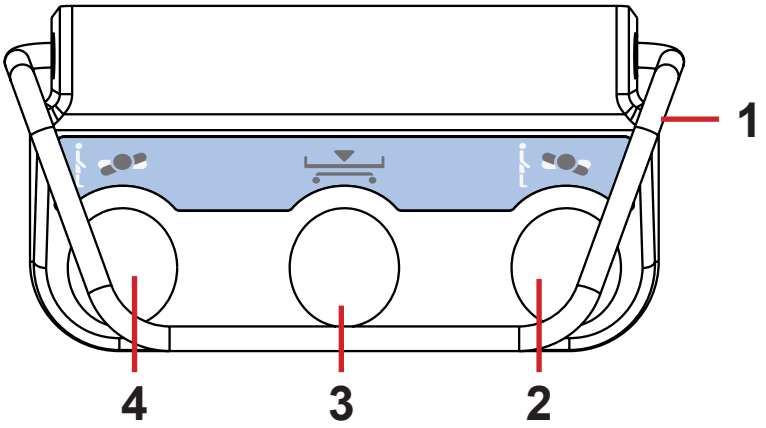
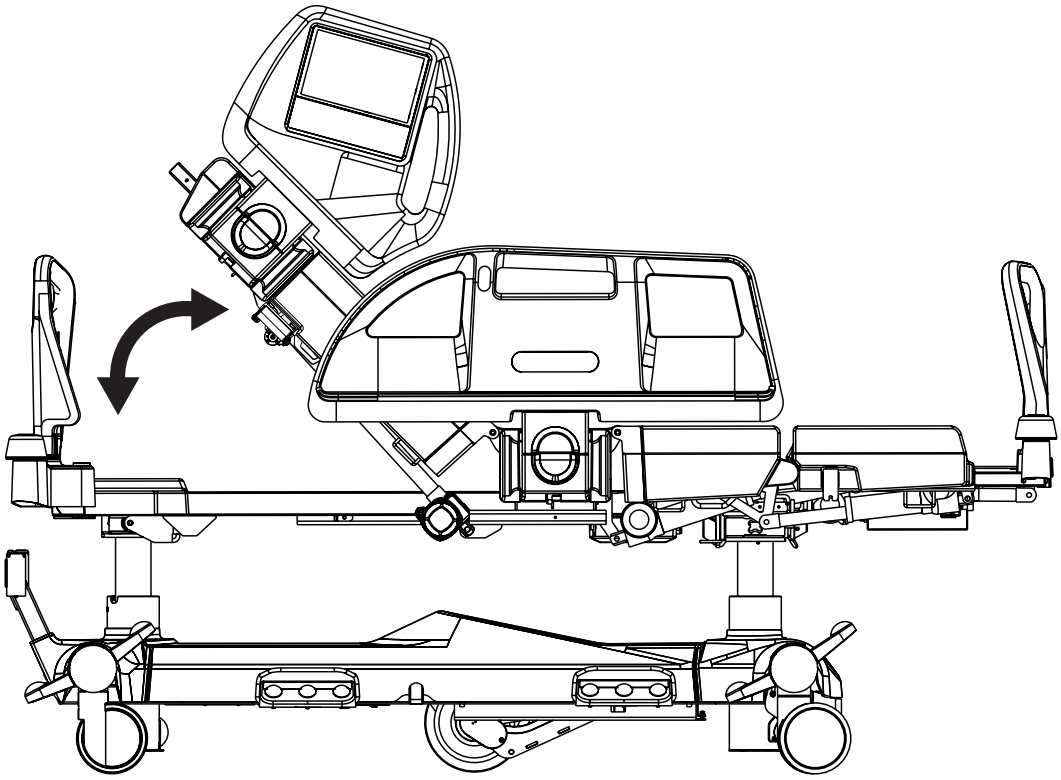


Fig. Lateral Tilt Foot Control

1. Protection Frame against Unwanted Activation
2. Tilt Right Pedal
3. Low Flat Position Pedal
4. Tilt Left Pedal

13 Bed Positioning

13.1 Backrest



To position Backrest use:

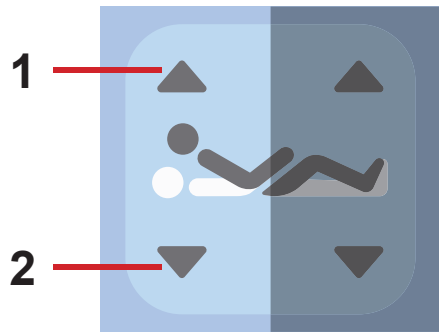
► Multiboard X
► Attendant Control Panel
► Handset
► Patient Control Panel (in foot siderail)



Fig. Backrest Angle on Multiboard X Display

Multiboard X Positioning Screen shows Backrest Angle.

During continuous positioning Backrest stops automatically in 30 and 45 degrees (the beep will appear). To continue in positioning press corresponding button once more.



1. Backrest Up

2. Backrest Down

Fig. Backrest Adjustment Buttons (Multiboard X)

Multiboard X:

► Press button  .

► Press selected Backrest Adjustment Button until intended position is reached.

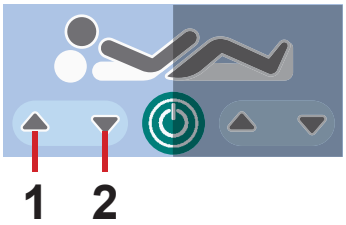


Fig. Backrest Adjustment Buttons (Patient Control Panel)

Patient Control Panel (in foot siderail):

► Press button .

► Press selected Backrest Adjustment Button until intended position is reached.

1. Backrest Up

2. Backrest Down

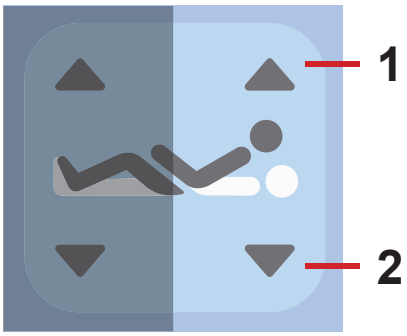


Fig. Backrest Adjustment Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press selected Backrest Adjustment Button until intended position is reached.

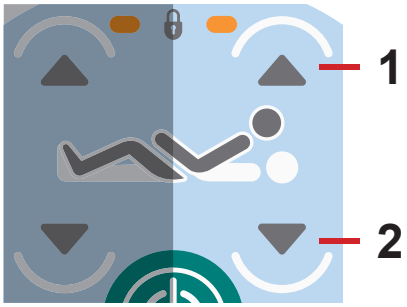


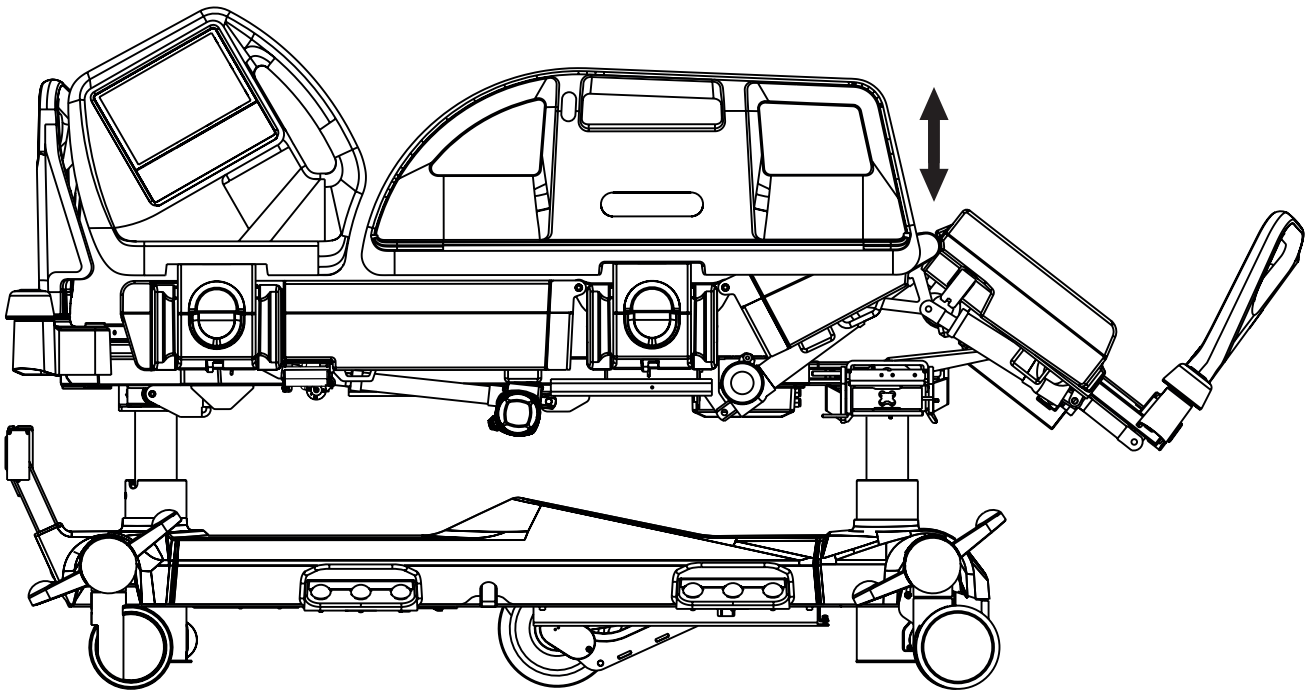
Fig. Backrest Adjustment Buttons (Handset)

Handset:

► Press button .

► Press selected Backrest Adjustment Button until intended position is reached.

13.2 Thighrest



To position Thighrest use:

► Multiboard X
► Attendant Control Panel
► Handset
► Patient Control Panel (in foot siderail)

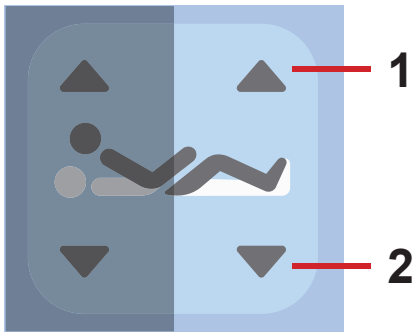


Fig. Thighrest Adjustment Buttons (Multiboard X)

Multiboard X:

► Press button .

► Press selected Thighrest Adjustment Button until intended position is reached.

1. Thighrest Up

2. Thighrest Down

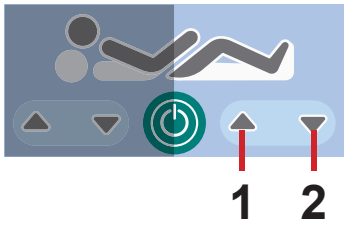


Fig. Thighrest Adjustment Buttons (Patient Control Panel)

Patient Control Panel (in foot siderail):

► Press button .

► Press selected Thighrest Adjustment Button until intended position is reached.

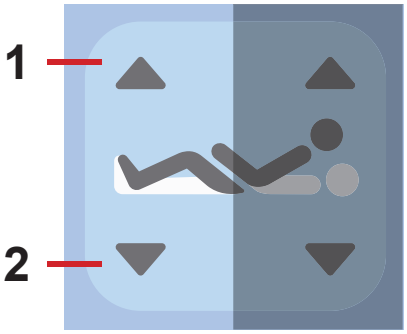


Fig. Thighrest Adjustment Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press selected Thighrest Adjustment Button until intended position is reached.

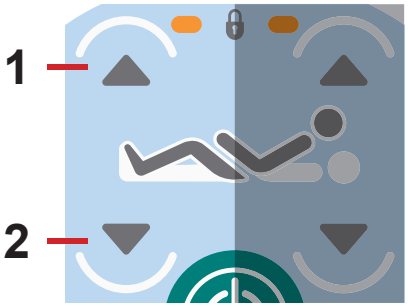


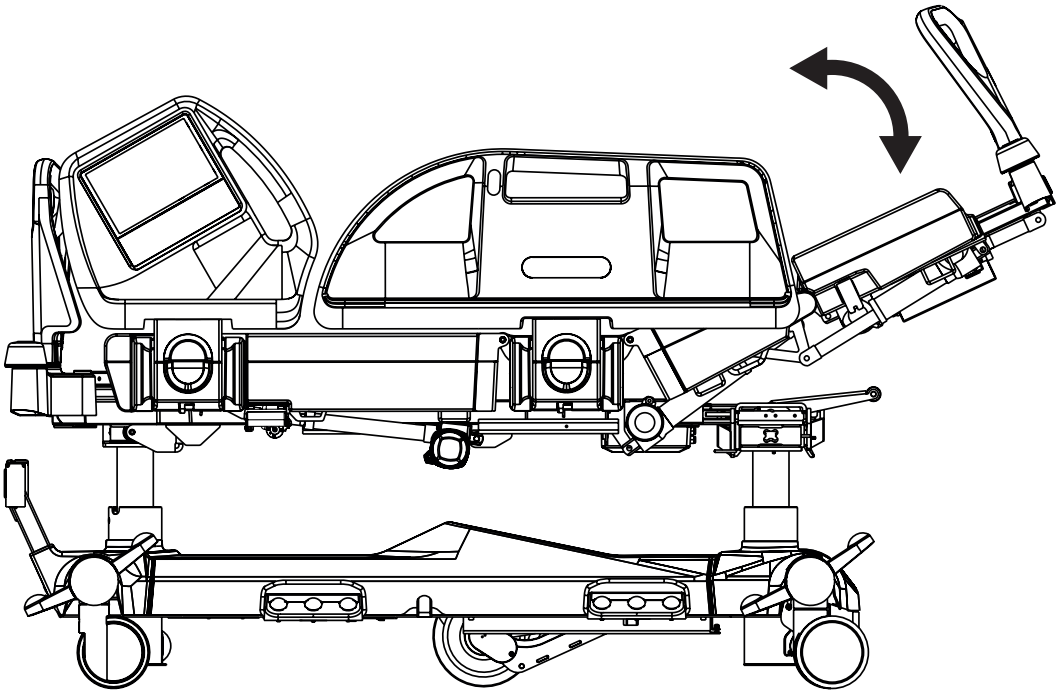
Fig. Thighrest Adjustment Buttons (Handset)

Handset:

► Press button .

► Press selected Thighrest Adjustment Button until intended position is reached.

13.3 Calfrest



To position Calfrest position Thighrest firstly.

To position Calfrest use:

► Multiboard X
► Attendant Control Panel

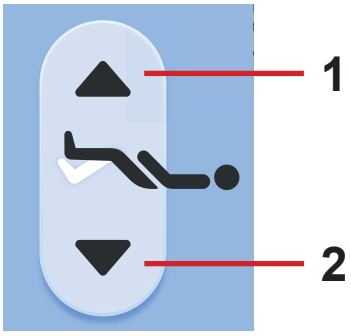


Fig. Calfrest Adjustment Buttons (Multiboard X)

1. Calfrest Up

2. Calfrest Down

Multiboard X:

► Press button  .

► Press selected Calfrest Adjustment Button until intended position is reached.

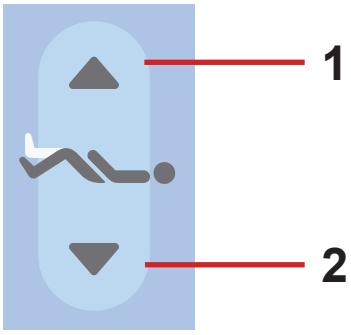


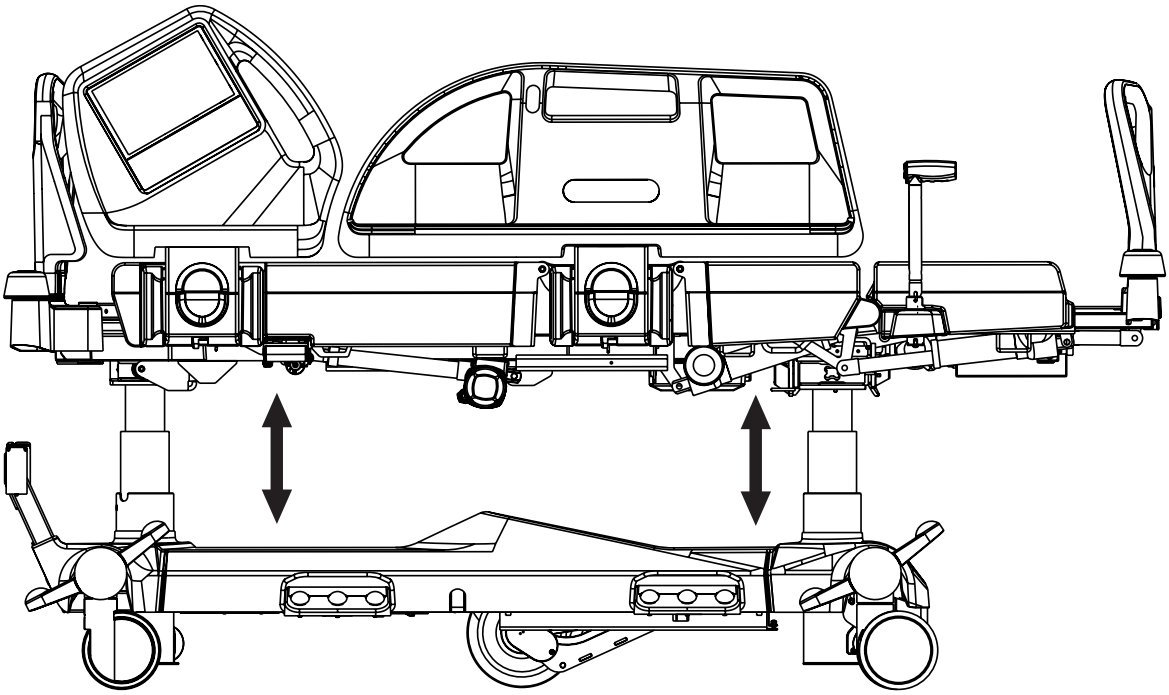
Fig. Calfrest Adjustment Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button  .

► Press selected Calfrest Adjustment Button until intended position is reached.

13.4 Bed Height



To position Bed Height use:

- ► Multiboard X
- ► Attendant Control Panel
- ► Handset
- ► Bed Height Foot Control
- ► Mobi-Lift

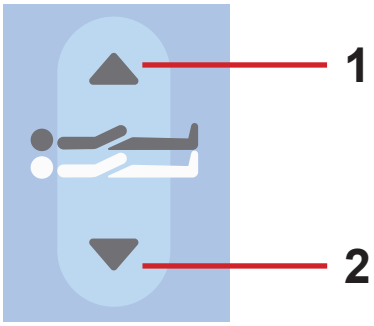


Fig. Bed Height Adjustment Buttons (Multiboard X)

1. Mattress Support Platform Up

2. Matress Support Platform Down

Multiboard X:

► Press button .

► Press selected Bed Height Adjustment Button until intended position is reached.

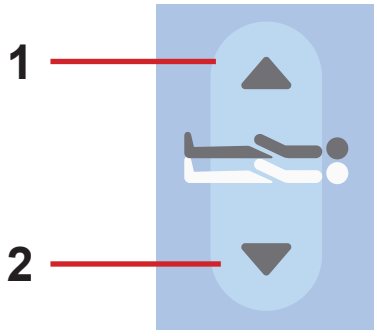


Fig. Bed Height Adjustment Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press selected Bed Height Adjustment Button until intended position is reached.

1. Mattress Support Platform Up

2. Matress Support Platform Down

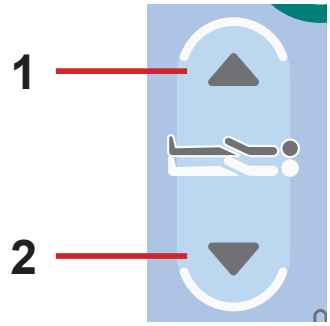


Fig. Bed Height Adjustment Buttons (Handset)

Handset:

► Press button  .

► Press selected Bed Height Adjustment Button until intended position is reached.



Fig. Bed Height Pedals (Bed Height Foot Control)

Bed Height Foot Control:

► Press the selected Bed Height Pedal and release it.
► Press and hold selected Bed Height Pedal once more until intended position is reached.

NOTE: Bed Height Foot Control is activated for 30s after this procedure. Selected Pedal must be pressed twice in 3 seconds.

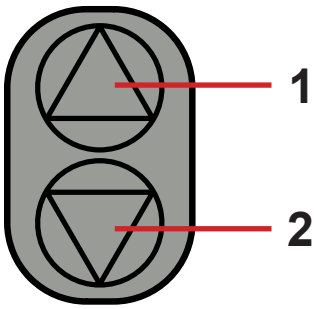


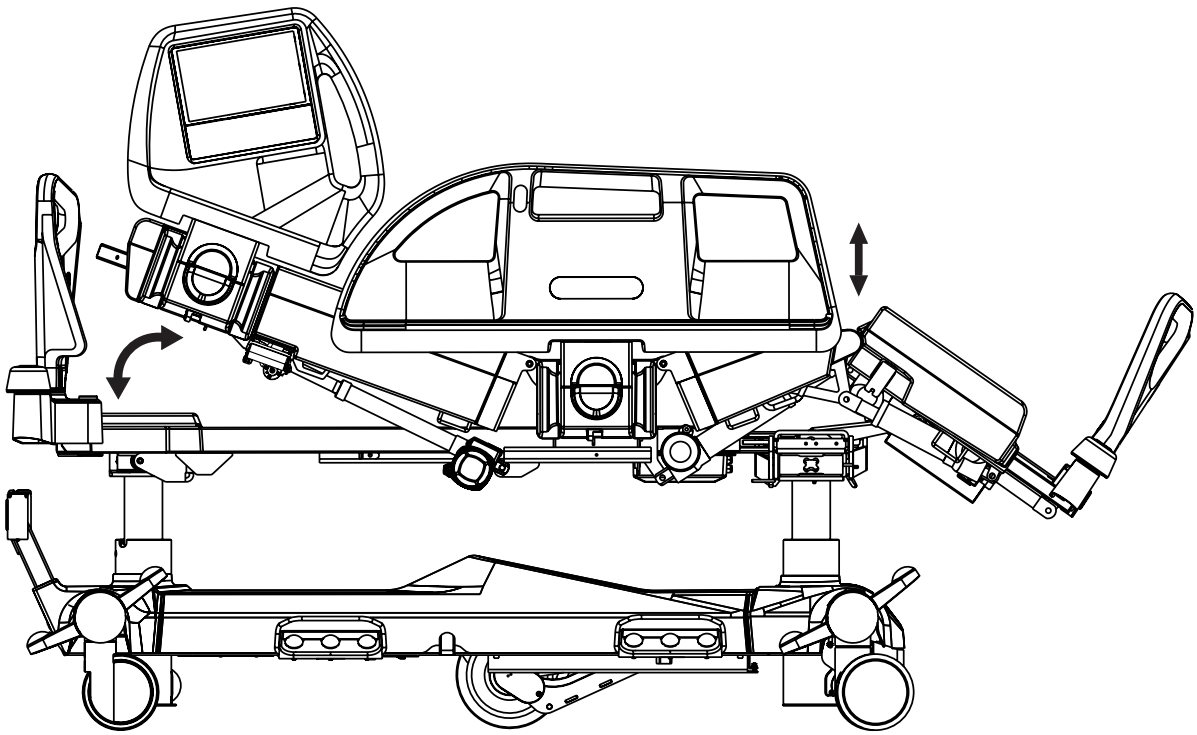
Fig. Mobi-Lift Bed Height Buttons

Mobi-Lift:

► Press button  .

► Press selected Mobi-Lift Bed Height Button until intended position is reached.

13.5 Autocontour



To position Autocontour use:

► Multiboard X
► Handset
► Patient Control Panel (in foot siderail)

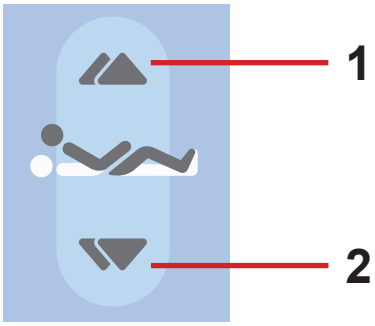


Fig. Autocontour Adjustment Buttons (Multiboard X)

1. Autocontour Up

2. Autocontour Down

Multiboard X:

► Press button  .

► Press selected Autocontour Adjustment Button until intended position is reached.

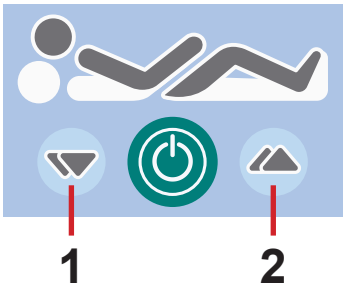


Fig. Autocontour Adjustment Buttons (Patient Control Panel)

Patient Control Panel (in foot siderail):

► Press button  .

► Press selected Autocontour Adjustment Button until intended position is reached.

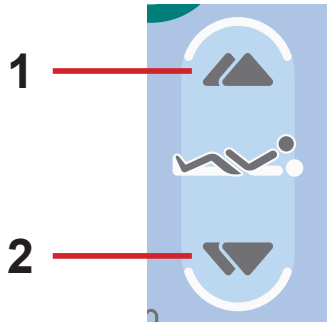


Fig. Autocontour Adjustment Buttons (Handset)

Handset:

► Press button  .

► Press selected part of Autocontour Adjustment Button until intended position is reached.

13.6 Emergency Trendelenburg Position

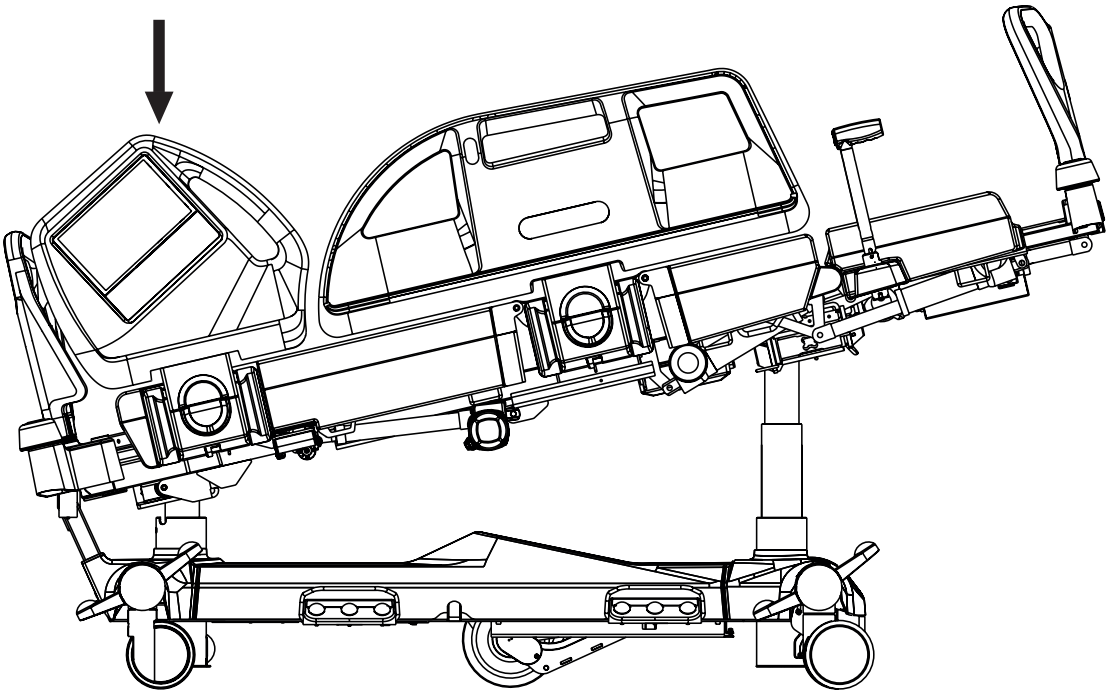


Fig. Trendelenburg Position

Trendelenburg position provides anti-shock conditions for the patient. During Trendelenburg Position Mattress support platform is straightened in the tilt.

To position Emergency Trendelenburg Position use:

► Multiboard X
► Attendant Control Panel

WARNING!
Risk of injury due to improper use of Trendelenburg Position!
► Hospital staff is responsible for assessing if the physical and psychological state of the patient is in accordance with use of the Trendelenburg Position.
► Hospital staff is responsible for assessing whether used bedclothes increase the risk of patient´s sliding from the bed!



Fig. Trendelenburg Position Button (Multiboard X)

Multiboard X:

► Press button .

► Press Trendelenburg Position Button until intended position is reached.



Fig. Emergency Trendelenburg Position Button (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press Trendelenburg Position Button until intended position is reached.

13.7 Antitrendelenburg and Trendelenburg Tilt

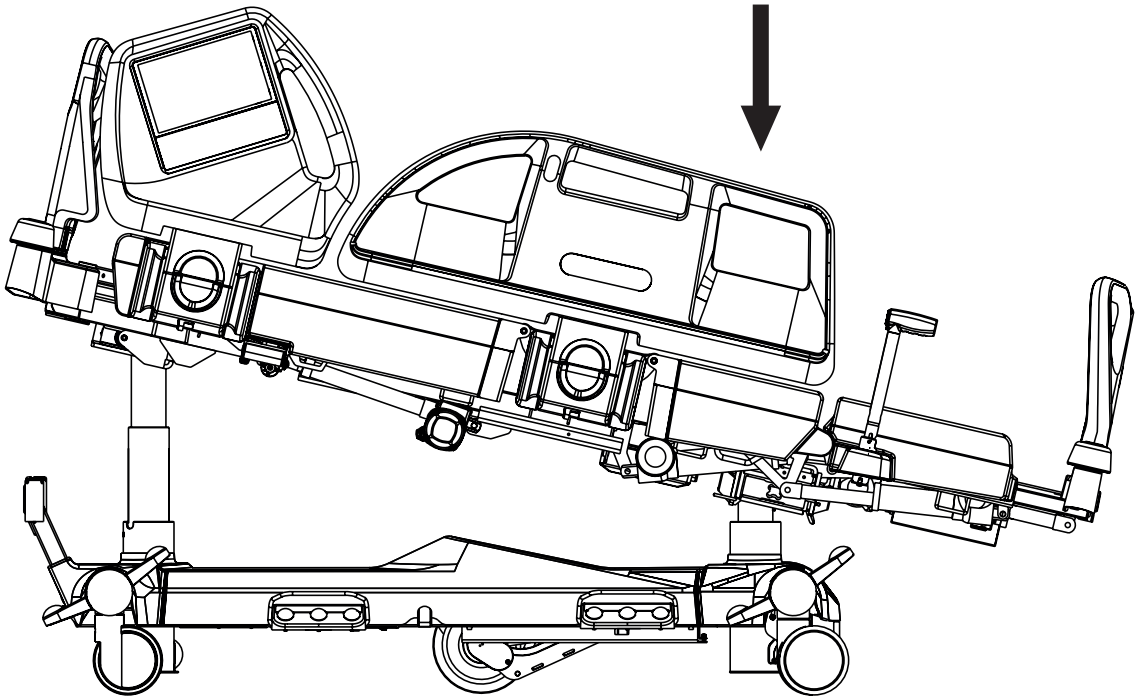


Fig. Antitrendelenburg Tilt

To position Trendelenburg or Antitrendelenburg Tilt use:

► Multiboard X
► Attendant Control Panel

Multiboard X touchscreen shows Longitudinal Tilt Angle.



Fig. Longitudinal Tilt Angle on Multiboard X Display

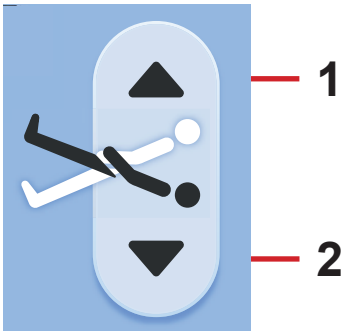


Fig. Longitudinal Tilt Buttons (Multiboard X)

Multiboard X:

► Press button  .

► Press selected Longitudinal Tilt Button until intended position is reached.

1. Antitrendelenburg Tilt

2. Trendelenburg Tilt

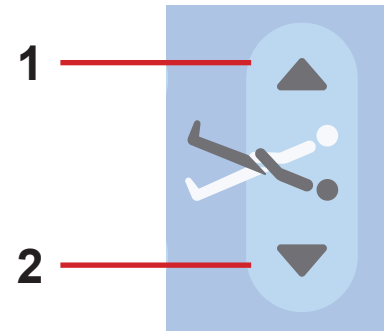


Fig. Longitudinal Tilt Buttons (Attendant Control Panel)

Attendant Control Panel:

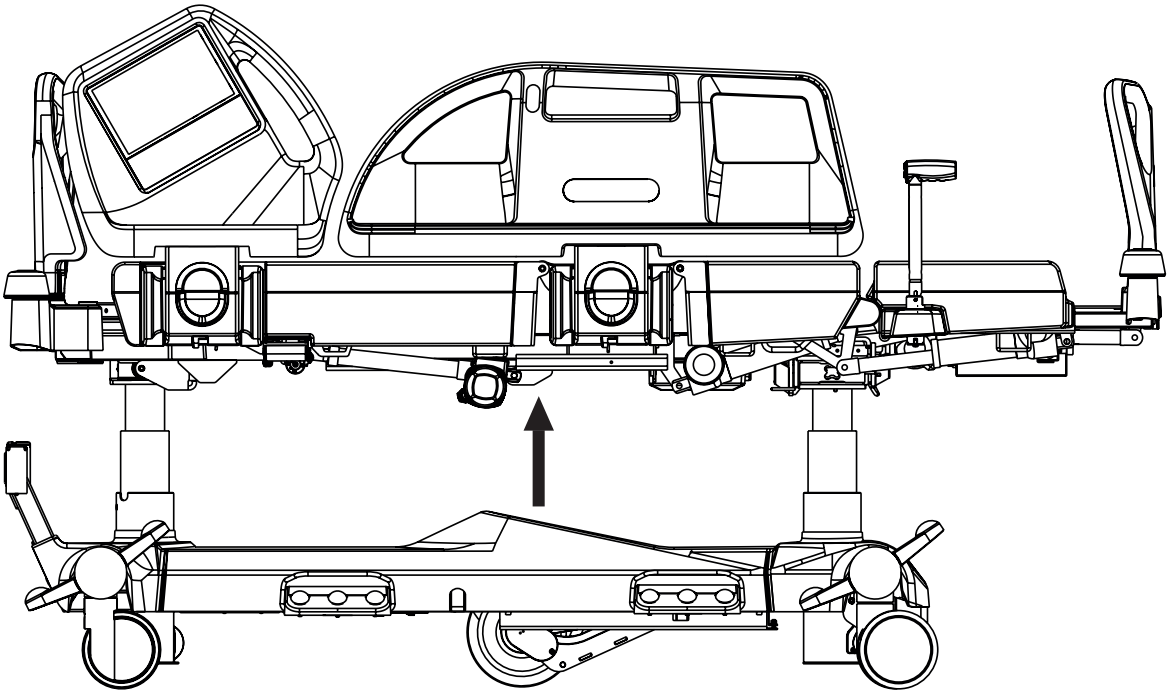
► Press button .

► Press selected Longitudinal Tilt Button until intended position is reached.

1. Antitrendelenburg Tilt

2. Trendelenburg Tilt

13.8 Examination Position



To position Examination Position use:

► Bed Height Foot Control

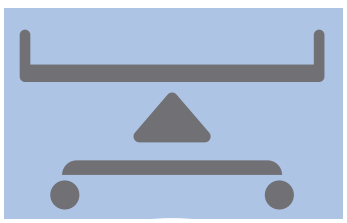


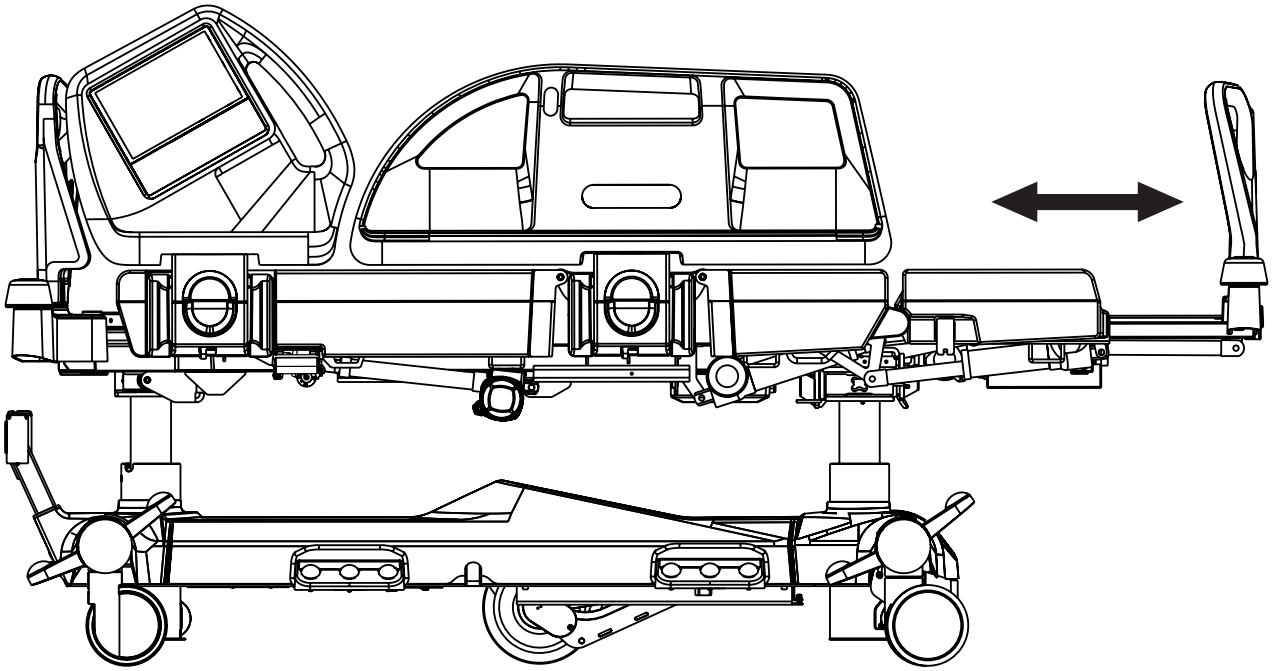
Fig. Examination Position Pedal (Bed Height Foot Control)

Bed Height Foot Control:

► Press Examination Position Pedal and release it.
► Press and hold Examination Position Pedal once more until intended position is reached.

NOTE: Bed Height Foot Control is activated for 30s after this procedure. Selected Pedal must be pressed twice in 3 seconds.

13.9 Bed Extension



To position Bed Extension use:

► Multiboard X
► Attendant Control Panel

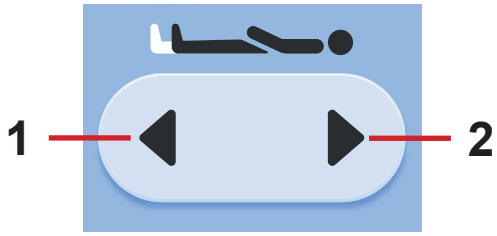


Fig. Bed Extension Adjustment Buttons (Multiboard X)

Multiboard X:

► Press button .

► Press selected Bed Extension Adjustment Button until intended position is reached.

1. Longer Mattress Support Platform
2. Shorter Mattress Support Platform

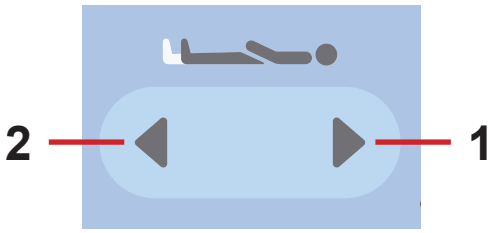


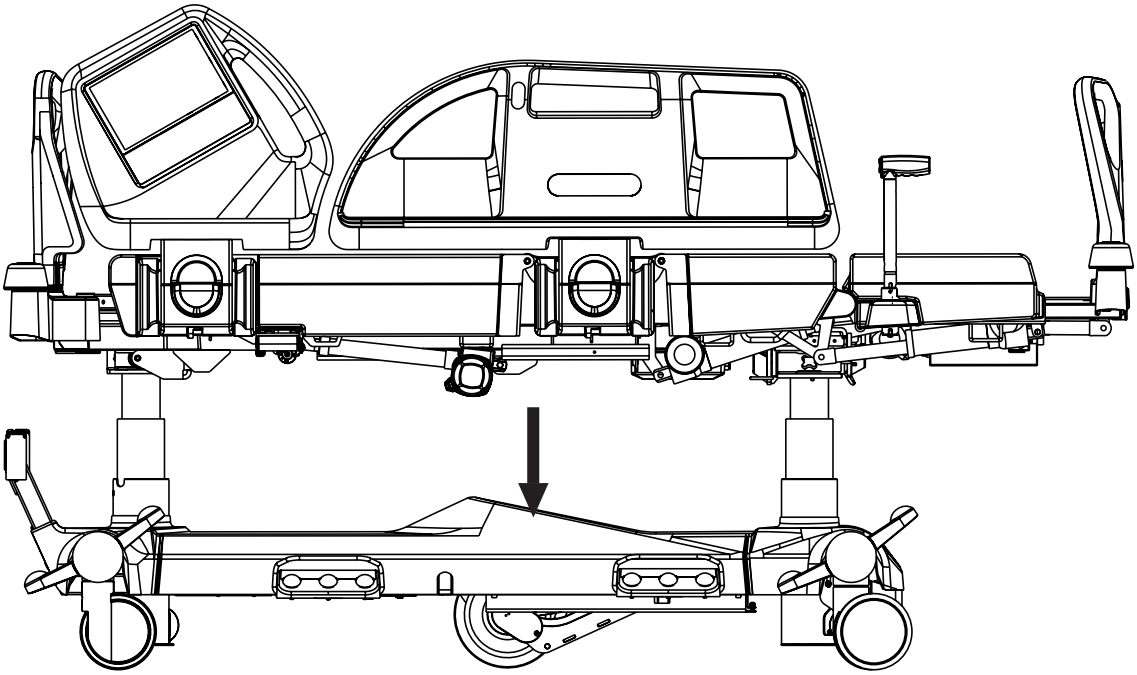
Fig. Bed Extension Adjustment Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press selected Bed Extension Adjustment Button until intended position is reached.

13.10 CPR Position



In CPR Position bed reaches flat Mattress support platform.
If the bed is equipped with OptiCare X mattress, pressing CPR Button will also deflate the mattress.

To position CPR Position use:

► Multiboard X
► Attendant Control Panel



Fig. CPR Button (Multiboard X)

Multiboard X:

► Press CPR Position Button until intended position is reached.

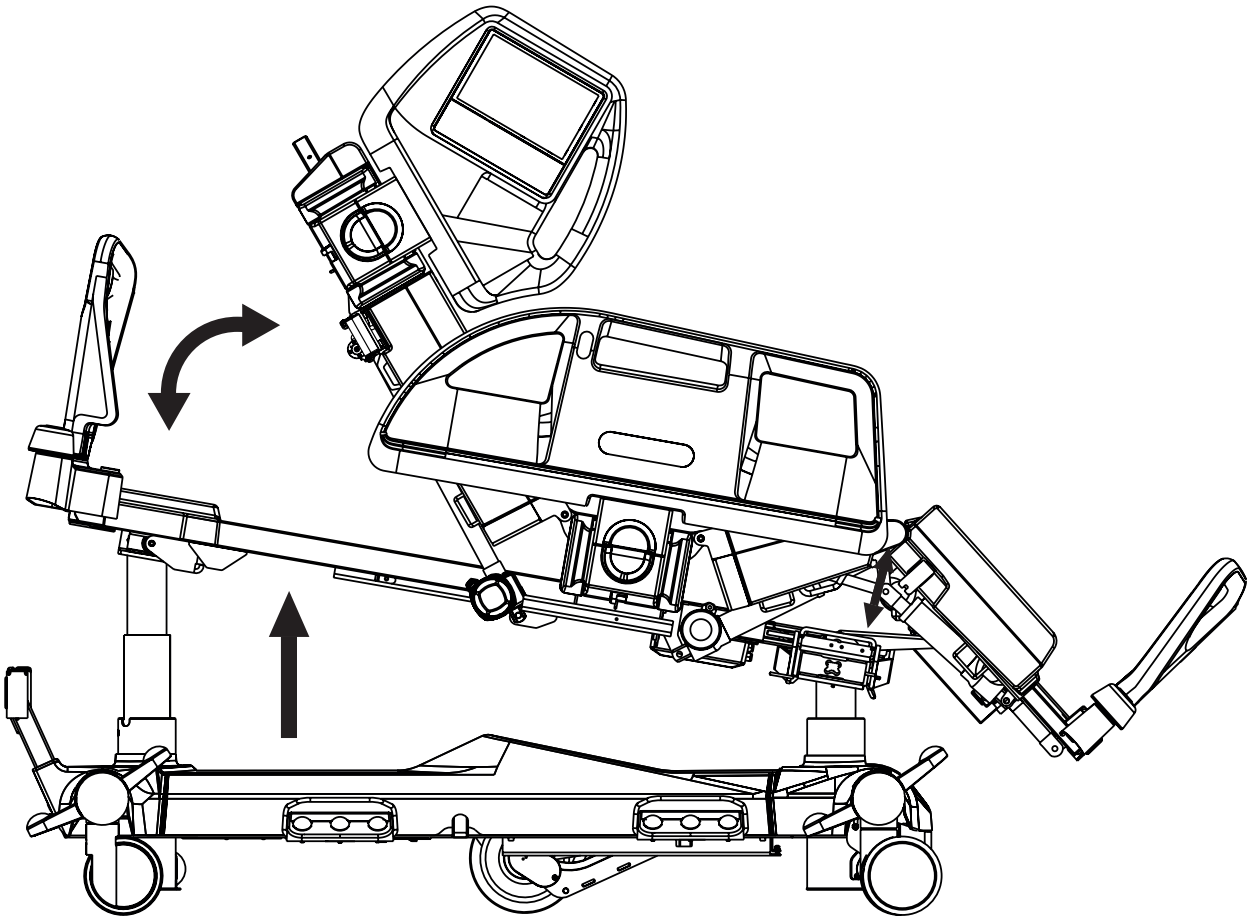


Fig. CPR Button (Attendant Control Panel)

Attendant Control Panel:

► Press CPR Position Button until intended position is reached.

13.11 Cardiac Chair Position



To position Cardiac Chair Position use:

► Multiboard X
► Attendant Control Panel



Fig. Cardiac Chair Position Button (Multiboard X)

Multiboard X:

► Press button  .

► Press Cardiac Chair Position Button until intended position is reached.



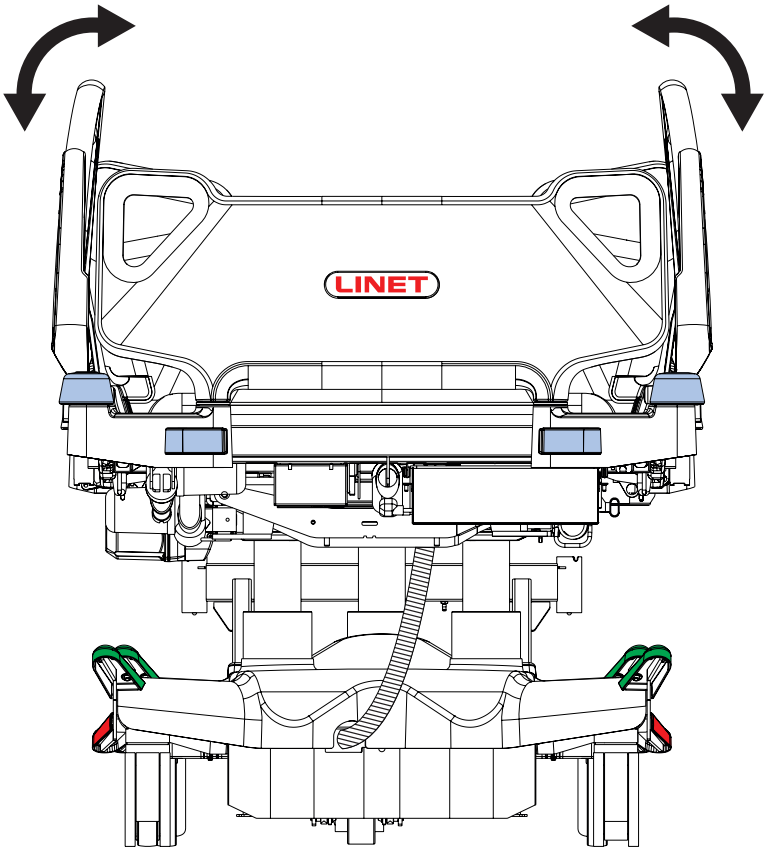
Fig. Cardiac Chair Position Button (Attendant Control Panel)

Attendant Control Panel:

► Press button  .

► Press Cardiac Chair Position Button until intended position is reached.

13.12 Lateral Tilt



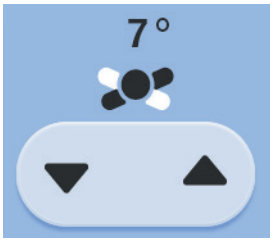


Fig. Lateral Tilt Angle on Multiboard X Display

It is not possible to position Lateral Tilt with a siderail folded down without use of an additional function.

To position Lateral Tilt use:

► Multiboard X
► Lateral Tilt Foot Control
► Attendant Control Panel

Multiboard X Display shows Lateral Tilt Angle. Maximum Lateral Tilt Angle is 30 degrees.

The Maximum Lateral Tilt Angle depends on position of the mattress support platform, on position of siderails (Transfer Mode), on how much the bed is loaded and on patient position on the bed.
The following table shows Maximum Possible Lateral Tilt Angle values in relation to the patient's weight, while lying in the middle of the bed. Other position of the patient in the bed can decrease the Maximum Lateral Tilt Angle.

Maximum Possible Lateral Tilt Angle	Working Load
5°	250 kg
10°	225 kg
15°	199,5 kg
20°	170 kg
25°	153 kg
30°	150 kg

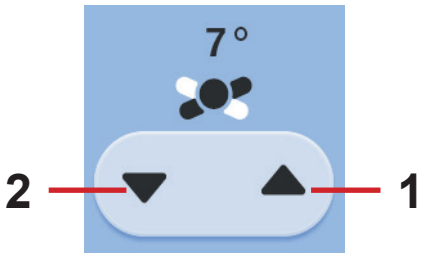


Fig. Lateral Tilt Buttons (Multiboard X)

Multiboard X:

► Press button .

► Press Lateral Tilt Button until intended position is reached.

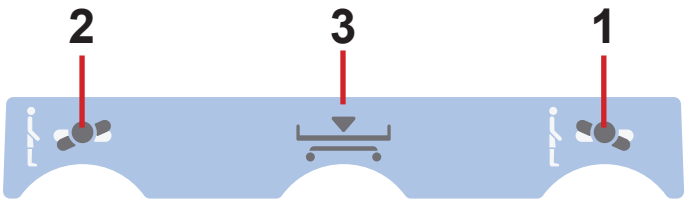


Fig. Lateral Tilt Pedals (Lateral Tilt Foot Control)

Lateral Tilt Foot Control:

► Press the selected Lateral Tilt Pedal and release it.
► Press and hold selected Lateral Tilt Pedal once more until intended position is reached.

NOTE: Lateral Tilt Foot Control is activated for 30s after this procedure. Selected Pedal must be pressed twice in 3 seconds.

1. Tilt Right
2. Tilt Left
3. Low Flat Position

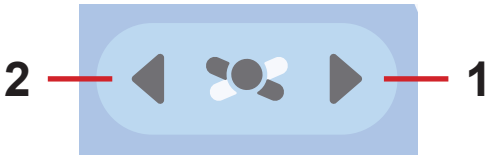


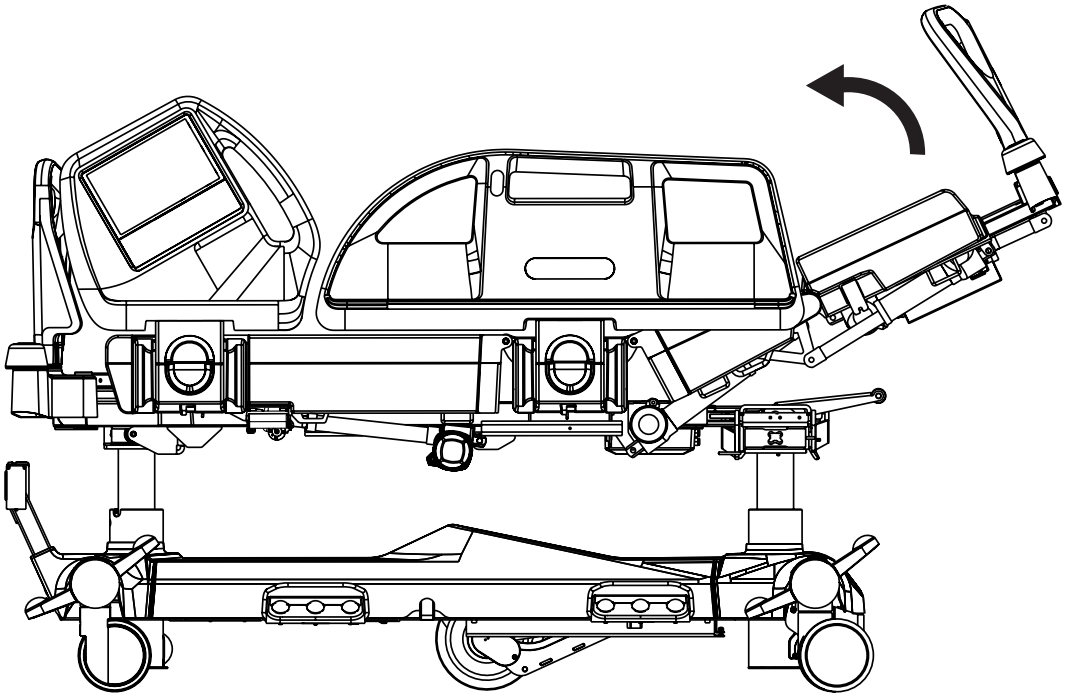
Fig. Lateral Tilt Buttons (Attendant Control Panel)

Attendant Control Panel:

► Press button .

► Press selected part of Lateral Tilt Button until intended position is reached.

13.13 Vascular Position



In Vascular Position Thighrest and Calfrest are lifted up to lift up patient´s legs.

To position Vascular Position use:

► Multiboard X



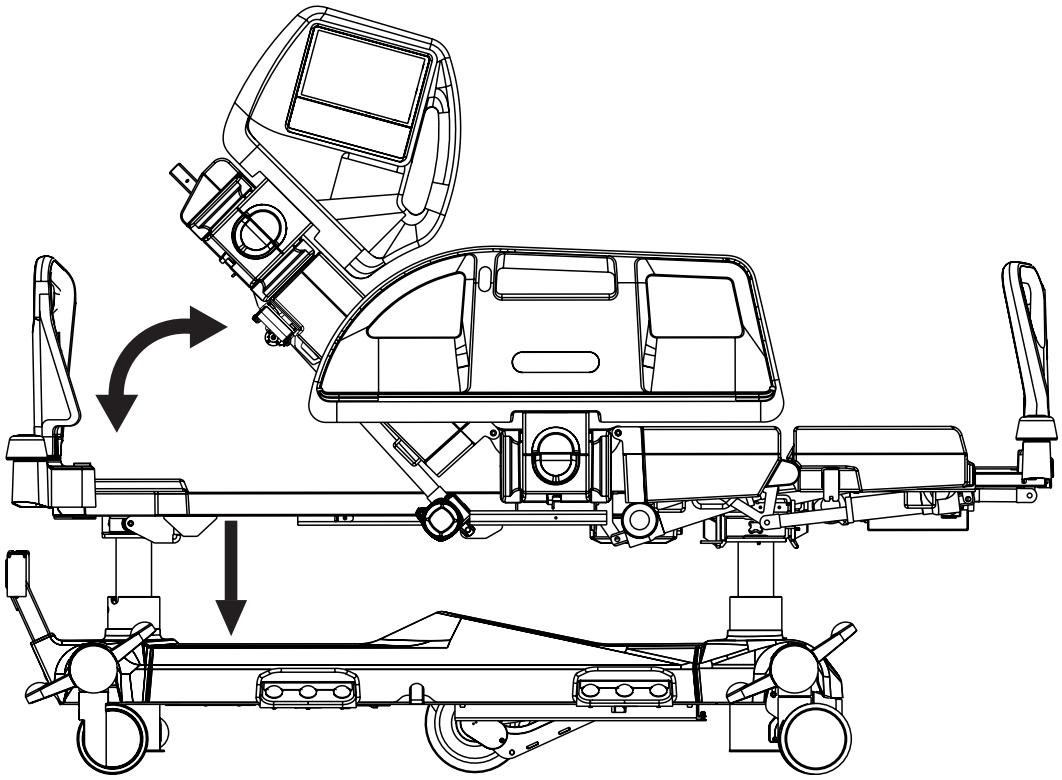
Fig. Vascular Position Icon (Multiboard X)

Multiboard X:

► Press button  .

► Press Vascular Position Icon until intended position is reached.

13.14 Mobilisation Position



In Mobilisation Position bed is descending to the lowest Bed Height and Backrest reaches the maximum angle.

To position Mobilisation Position use:

► Multiboard X



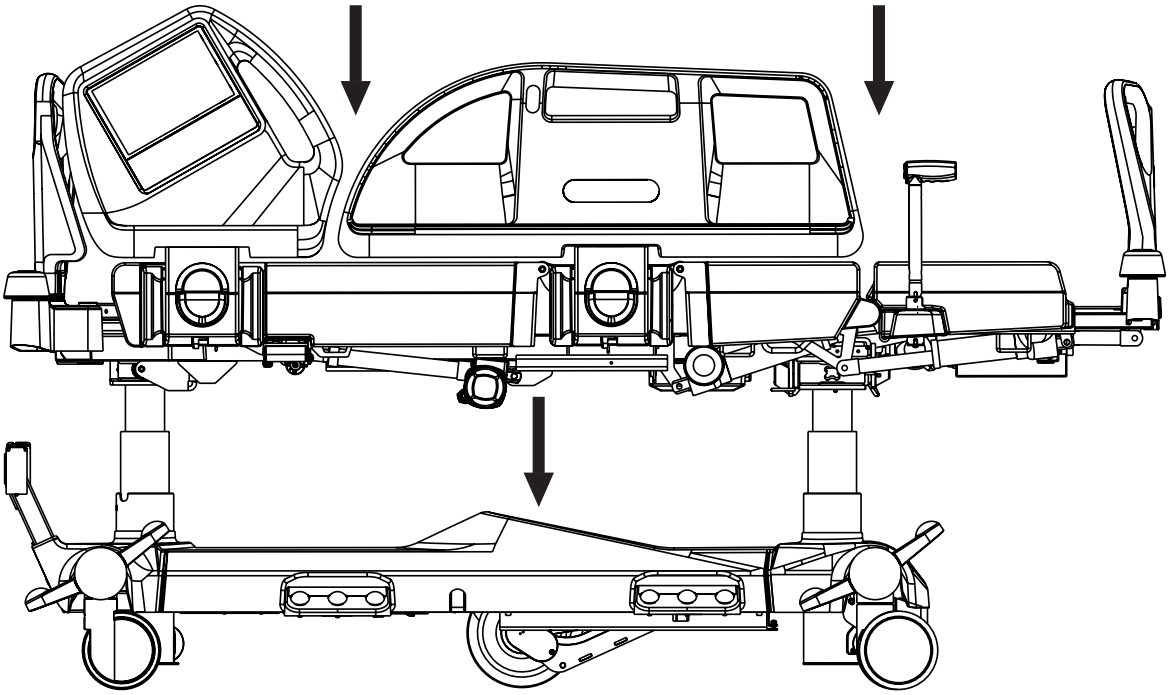
Fig. Mobilisation Position Button

Multiboard X:

► Press button .

► Press Mobilisation Position Button until intended position is reached.

13.15 Low Flat Position



In Low Flat Position the mattress support platform is firstly adjusted to flat position without any lateral tilt and then lowered to the minimum height.

To position Low Flat Position use:

► Lateral Tilt Foot Control

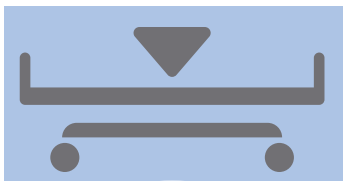


Fig. Low Flat Position Pedal (Lateral Tilt Foot Control)

Lateral Tilt Foot Control:

► Press Low Flat Position Pedal and release it.
► Press and hold Low Flat Position Pedal once more until intended position is reached.

NOTE: Lateral Tilt Foot Control is activated for 30s after this procedure.

13.16 Ergoframe

Ergoframe® is the kinematic system of Backrest and Thighrest Adjustment resulting in extension of the Mattress support platform in the seat section. Ergoframe® enlarges the space for pelvic area during Auto-contour. Because of increasement of the space the force applied results in decrease of the pressure that can cause pressure injuries in the pelvic area. Ergoframe maintains a stable ergonomic position of the body and spine of the patient, thus limiting unwanted movement of the patient by moving down or up in beds. Unified movement eliminates the patient‘s shift over the mattress and thus maintains a uniform position of the patient‘s body that is not bound to the position of the bed parts.

14 Scales Control

Multicare X is equipped with a weighing system that allows weighing the patient in bed. The control and display elements for the weighing system are situated on the Scales screen on the Multiboard X LCD touchscreen.



Fig. Scales Screen - LCD touchscreen

1. Weight Value Indicator – Current Weight
2. NEW PATIENT Icon (press to enter NEW PATIENT Guide)
3. Scale Interval Switch Icons (0,5kg/0,1kg)
4. HOLD Icon (press to enter HOLD Mode Guide)
5. Stabilized Scales Indicator
6. Scales Screen Icon
7. ZERO/T Icon (press to enter Guide for Taring)
8. Memory Icon (save weight value)

14.1 Preparation

CAUTION!
Incorrect use of scales due to incomplete preparation!
► Before each patient admission tare the scales.

► Install mattress and accessories to prepare bed before patient admission and using the scales.

14.2 Taring

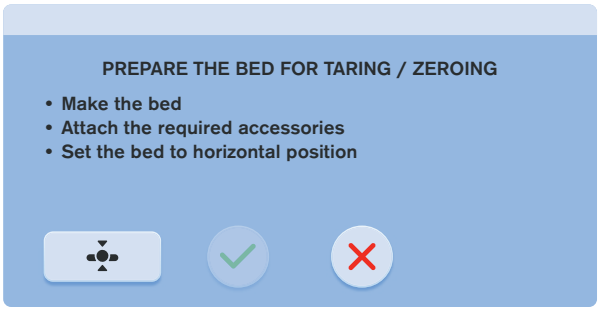
Taring can be done in a range of 5kg to 249.5kg. Taring is used to set “0” on the display before placing the patient on the bed. Taring must be done with an unloaded bed with mattress, bed sheets, pillows and necessary accessories, without the patient. It is recommended to position the mattress support platform about 20 cm above the lowest horizontal position.

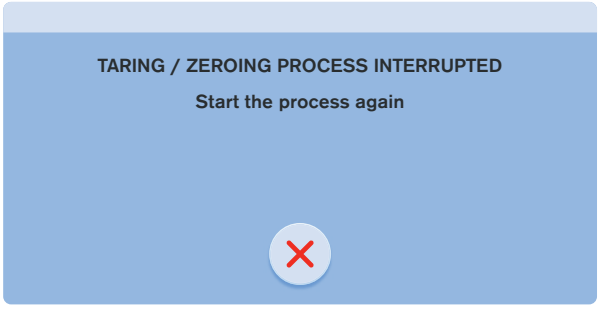
To tare weight:

► Ensure that nothing and nobody touches the bed except you.
► Press and hold ZERO/T Icon.
► Follow Guide for Taring.

To cancel Taring:
► Press **Cross** Icon on the corresponding window of the Guide for Taring.

GUIDE FOR TARING

Order of the Guide for Taring steps	Signalisation & Settings
1) **To start the Taring:** ► Make the bed. ► Add the required accessories to the bed. ► Adjust the bed to horizontal position by pressing the icon  . It is not possible to advance to the next step without the bed in horizontal position! ► Press **Tick** Icon.	
2) **Do not touch the bed and wait for the end of the processing!**	

Cancelling the Taring	Signalisation & Settings
To cancel the Taring: ► Press **Cross** Icon on the corresponding Guide for Taring window.	

14.3 Displaying

Weight Value Indicator (**1**) displays the calibrated and metrological certified weight value.
Verification Scale Interval is 0,5 kg.

To change scale interval:
► Press Scale Interval Switch Icon with 0,1 (**3**) to display value with actual scale interval 0,1 kg.

14.4 Hold Mode

Hold Mode can be used only when scales are stabilized.
It allows adding or removing bed accessories and other items without changing the weight value.

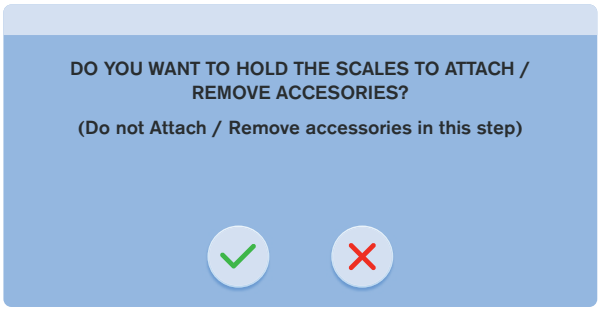
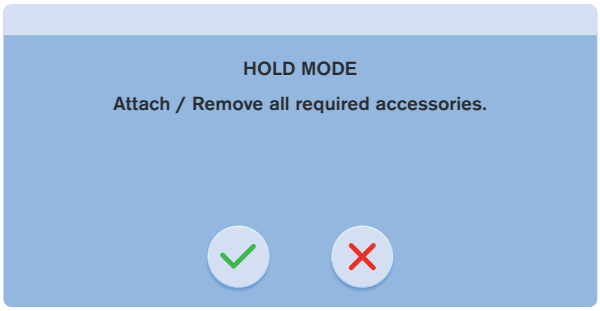
To activate Hold Mode:
► Wait until the scales are stabilized. The Stabilized Scales Indicator (**5**) is illuminated when the scales are stabilized.
► Press HOLD Icon**.**
► Follow the HOLD Mode Guide.
Snowflake icon appears on the display instead of weight value when the HOLD Mode is set.

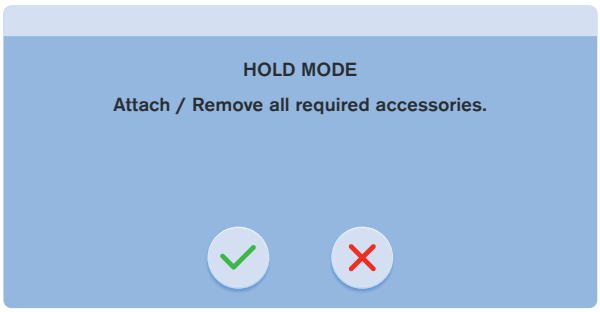
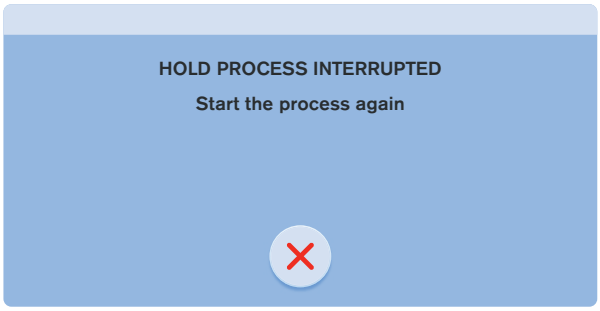
To deactivate Hold Mode:
► Press **Cross** Icon on the corresponding window of the HOLD Mode Guide.
Display shows the original weight value.



Fig. Hold Mode (displayed snowflake symbol)

HOLD MODE GUIDE

Order of the HOLD Mode Guide steps	Signalisation & Settings
1) **Ensure the following condition is met:** ► Scales are stabilized. **To start HOLD Mode setting:** ► Press **Tick** Icon. **To cancel HOLD Mode setting:** ► Press **Cross** Icon.	
2) **Do not touch the bed and wait for the end of the processing!**	
3) **To continue setting the HOLD Mode:** ► Add the required accessories to the bed or remove the required accessories from the bed. ► Press **Tick** Icon.	
4) **Do not touch the bed and wait for the end of the processing!** **The HOLD Mode is set after this step.**	
5) **The third HOLD Mode Guide window is displayed during the set HOLD Mode on the Multiboard X touchscreen where the HOLD Mode has been set.** **Snowflake icon appears on the other Multiboard X touchscreen instead of weight value.**	

Cancelling the HOLD Mode	Signalisation & Settings
To cancel the HOLD Mode: ► Press **Cross** Icon on the corresponding HOLD Mode Guide window.	
See the window displayed in the case of the interrupted HOLD Mode setting on the right side.	

14.5 Bed Overload

If load of the bed is over 254,5 kg:
► „**Hi**“ is shown on the display.

If load of the bed is over 260 kg:
► Warning popu-up window is displayed over the Scales screen.

NOTE If the bed is overloaded, it is impossible to position or manipulate the bed until overloading is removed. Bed overloading always has higher priority than Hold Mode and Taring.



Fig. First degree of the bed overload (displayed Hi)

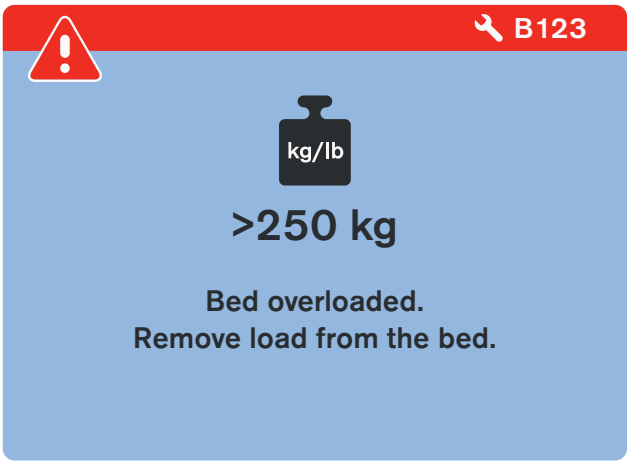


Fig. Overloaded bed (warning pop-up window)

14.6 Bed Underload

If the bed is underloaded:

► Display shows „**Lo**“.



Fig. Underloaded bed (displayed Lo)

14.7 Weighing in tilt

Accuracy is conditioned by the spirit level, which is located on the right head corner of the bed.
If the bubble is in the highlighted circle then weighing is accurate.

14.8 Factory Zero Setting

Factory Zero Setting is only possible in a range of ± 5 kg from factory zero. Zeroing is used to reset weight on the display and set up user zero, which sets the maximum weight range of the weighing system. Factory Zero Setting must be done with an empty, unloaded bed, without the mattress and accessories. Factory Zero Setting is done after installation, weight verification or servicing. Only authorised and trained service technician is allowed to change the factory zero setting in the Service Settings. Guide for Factory Zero Setting is described in Service Manual for Multicare X.

14.9 History of Weight Values



Fig. Settings Menu of the Scales Screen

1. Settings Icon (to enter Settings Screen)
2. Settings Screen Icon (to enter Settings Menu of the selected screen)
3. Weight Values History Screen Icon (to enter Weight Values History Screen)
4. NEW PATIENT Icon
5. Illumination Control Icons (Patient Control Panels keyboards, Handset keyboard and Bed Illumination)

14.10 NEW PATIENT FUNCTION



It is recommended to use New Patient function when replacing patients and no patient lies on the Multicare X bed.

The New Patient function has following effects on the Multicare X bed with OptiCare X integrated mattress:

- Scales Taring (only if the scales are stabilised)
- Deletion of the Scales history
- Deletion of the ALT history
- Deletion of the Backrest History
- Setting of the MOBILE Mode with pressure level 3 (only for OptiCare X)
- Deletion of the Pressure Comfort Setting (only for OptiCare X)
- Setting of the MCM with HIGH intensity level (only for OptiCare X)

To activate New Patient function:

► Wait until the scales are stabilized.
► Press and hold NEW PATIENT Icon.
► Follow NEW PATIENT Guide (See „NEW PATIENT GUIDE“ on the page 64.).

Beep indicates confirmation of the activated New Patient function.
Scales have been tared, histories deleted and it is recommended to place new patient on the bed.

15 Bed Exit Alarm Monitoring (only version with scales)

Multicare X bed is equipped with a Bed Exit Alarm Monitoring system that monitores patient´s presence in bed and triggers alarms when patient is not present in bed in ordered position. Enter Bed Exit Alarm Monitoring Screen by pressing Bed Exit Alarm Monitoring Screen Icon on Multiboard X LCD touchscreen to control the Bed Exit Alarm Monitoring functions.

15.1 Preparation

► Place a patient on the bed with suitable mattress.
► Place the patient towards the middle of the bed for the correct function of the Bed Exit Alarm Monitoring in Inner Zone.

15.2 Activation

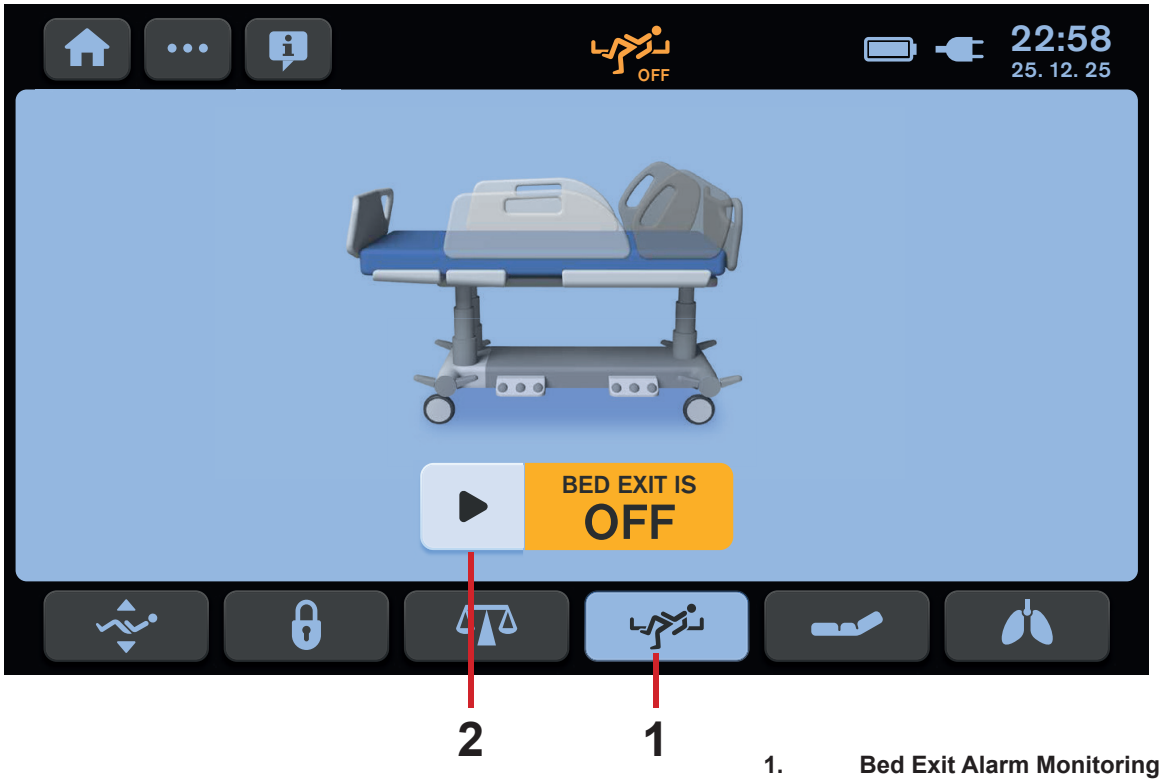


Fig. Bed Exit Alarm Monitoring Screen (OFF)

1. **Bed Exit Alarm Monitoring Screen Icon**
2. **ON Icon (activation)**

To enter Bed Exit Alarm Monitoring Screen:
► Press Bed Exit Alarm Monitoring Screen Icon (**1**).

To activate Bed Exit Alarm Monitoring:
► Press ON Icon (**2**) when patient is on the bed.

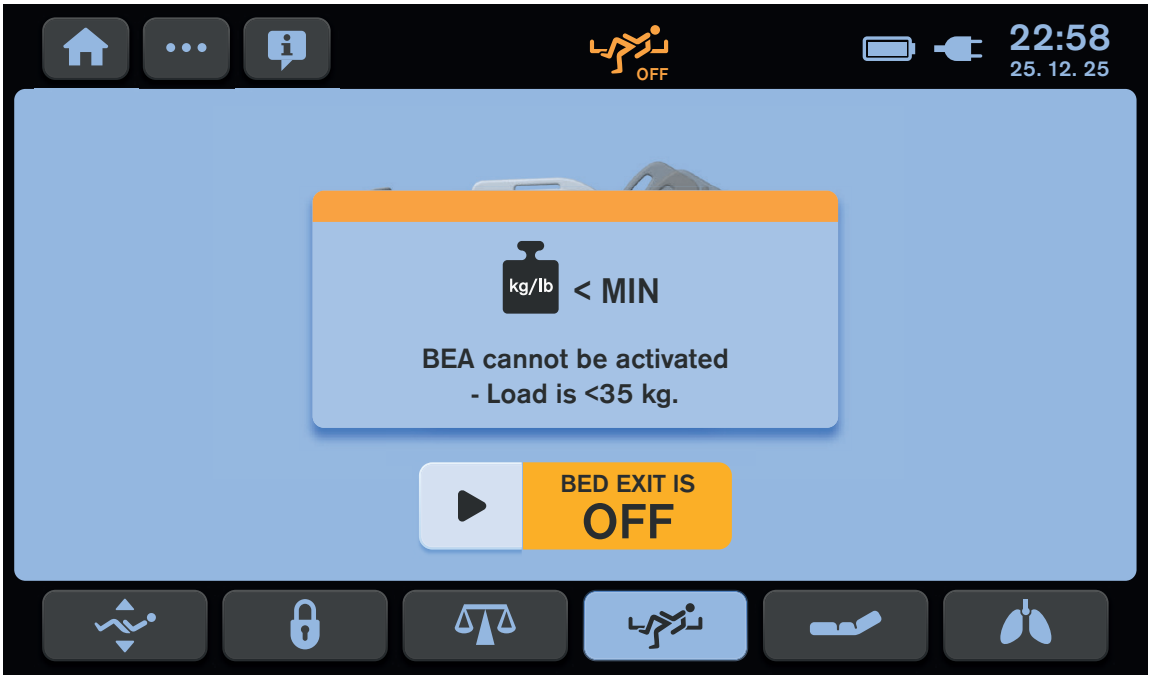


Fig. Notification of Insufficiently Loaded Bed

Bed Exit Alarm Monitoring Screen is displayed with Bed Picture and Patient Picture.

If you press ON Icon without patient on the bed, Notification of Insufficiently Loaded Bed is displayed and the Bed Exit Monitoring is not activated. Minimum patient weight for Bed Exit Monitoring is **35 kg**.

15.3 Bed Exit Alarm Monitoring Screen

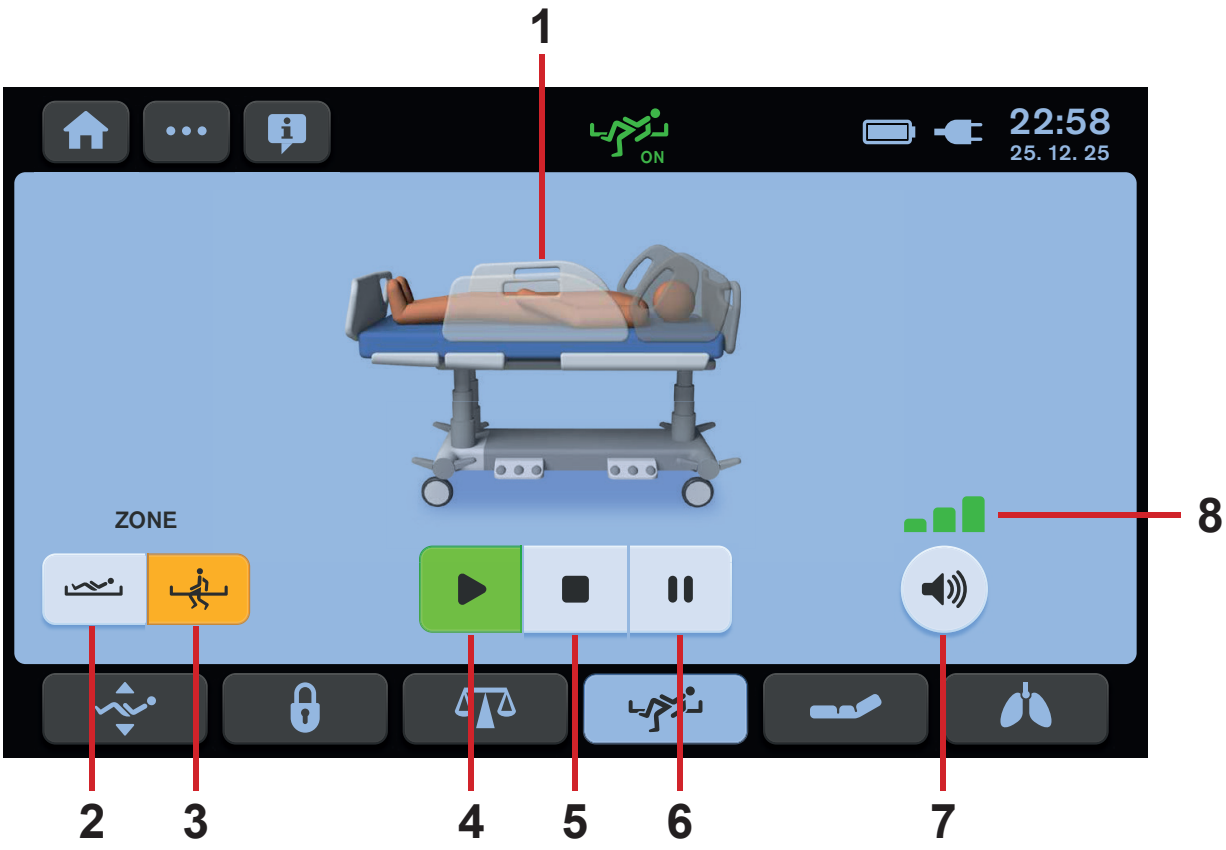


Fig. Bed Exit Alarm Monitoring Screen

1. **Bed Picture (Patient Picture is displayed when mattress support platform is loaded by more than 35 kg.)**
2. **Inner Zone Icon**
3. **Outer Zone Icon**
4. **ON Icon (activation)**
5. **OFF Icon (deactivation)**
6. **PAUSE Icon**
7. **VOLUME Icon**
8. **Indicator of 3 volume levels**

15.4 Monitored Zone

Bed Exit Monitoring provides Inner Zone Monitoring or Outer Zone Monitoring.
Inner Zone covers the mattress support platform without margins around siderails, head board and foot board.
Outer Zone covers the mattress support platform up to the margins.
Inner Zone Monitoring is set by default.

To set Outer Zone Monitoring:
► Press Outer Zone Icon (**3**).
Pressed icon turns orange.

To set Inner Zone Monitoring:
► Press Inner Zone Icon (**2**).
Pressed icon turns orange.

15.5 PAUSE

During PAUSE mode the Bed Exit Alarm Monitoring is temporarily interrupted and alarms are not activated.
PAUSE period is terminated automatically and the Bed Exit Alarm Monitoring is reactivated again when patient returns just to the selected zone.

To PAUSE Bed Exit Alarm Monitoring:
► Press PAUSE Icon (**6**).
PAUSE Icon turns yellow and countdown timer (15 min) appears on the display in the upper right corner of the screen.
After terminated PAUSE period when patient is in ordered position, the Bed Exit Alarm Monitoring is reactivated again.

To extend the PAUSE period:
► Press PAUSE Icon (**6**) to extend the countdown to 15 minutes period again.

To terminate the PAUSE period:
► Press ON Icon (**4**).

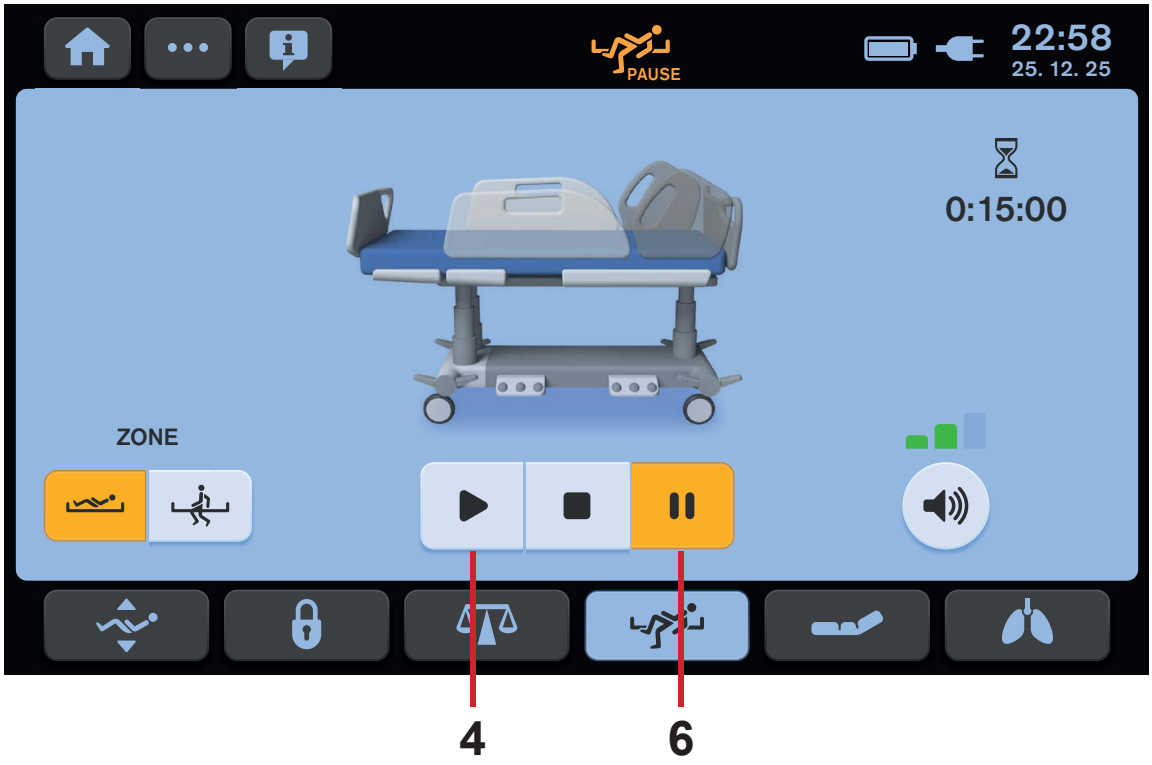


Fig. PAUSED Bed Exit Alarm Monitoring

15.6 BED EXIT ALARM

Audible alarm is triggered when patient has left selected monitored zone or when PAUSE period is terminated and patient is not just in the ordered position. During this alarm a text „BED EXIT ALARM“ in a red rectangle is displayed on the Bed Exit Alarm Monitoring Screen.

To stop Alarm:
► Press OFF Icon (**5**).
Bed Exit Monitoring is deactivated and text „**BED EXIT IS OFF**“ in a yellow field is displayed on the screen.
The audible alarm is muted.

To pause Alarm:
► Press PAUSE Icon (**6**).
Countdown timer (15 min) appears on the display in the upper right corner of the screen. The audible alarm is muted.

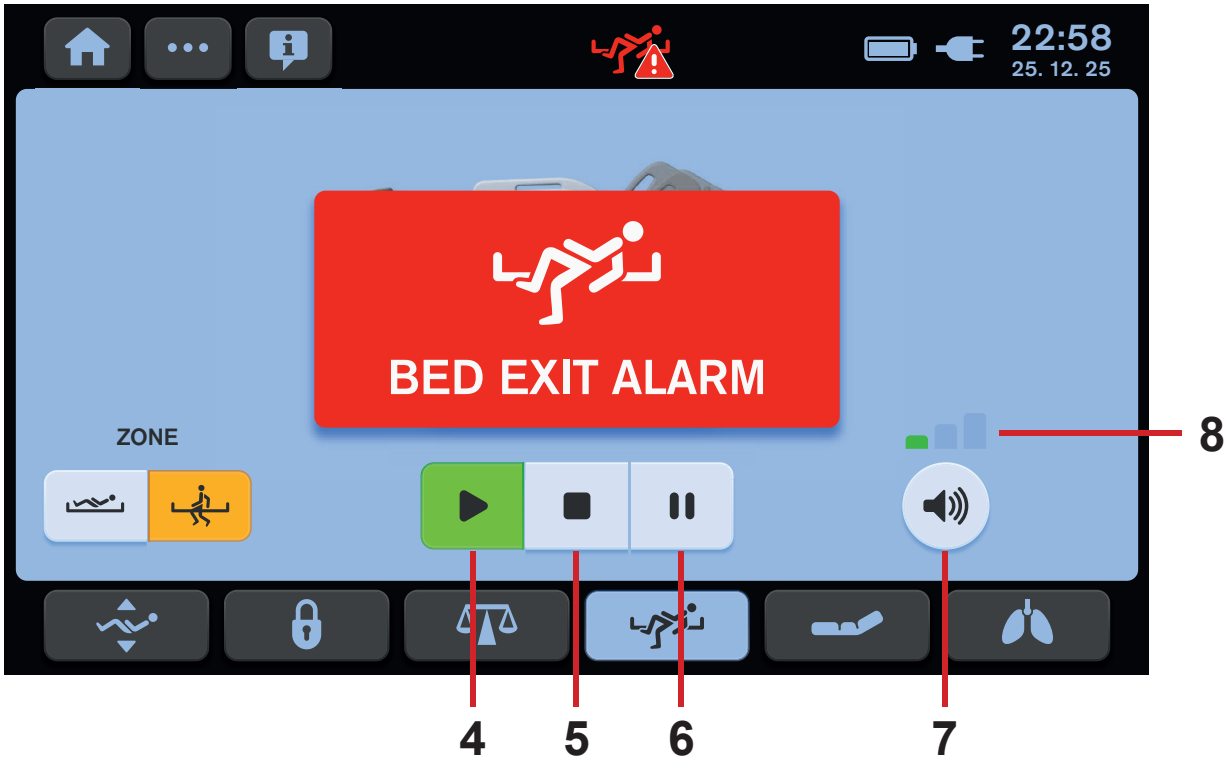


Fig. BED EXIT ALARM (Alert)

ALARM VOLUME

It is possible to set Alarm Volume before and during triggered audible alarm.
Maximum Alarm Volume Level is set by default.
It is not possible to mute completely the audible alarm with this volume setting.

To lower Alarm Volume Level:
► Press Volume Icon (**7**).
Indicator with lower volume levels (**8**) appears on the display.
Volume is lowered.

To return to Maximum Alarm Volume Level:
► Press Volume Icon (**7**) after Minimum Alarm Volume Level has been reached.
Indicator with the 3 volume levels (**8**) appears on the display.

15.7 Deactivation

To deactivate Bed Exit Alarm Monitoring:
► Press OFF Icon (**5**).
► Press **Tick** Icon on the following window to confirm deactivation of the Bed Exit Alarm Monitoring.
Text "**BED EXIT IS OFF**" in a yellow field is displayed on the touchscreen.

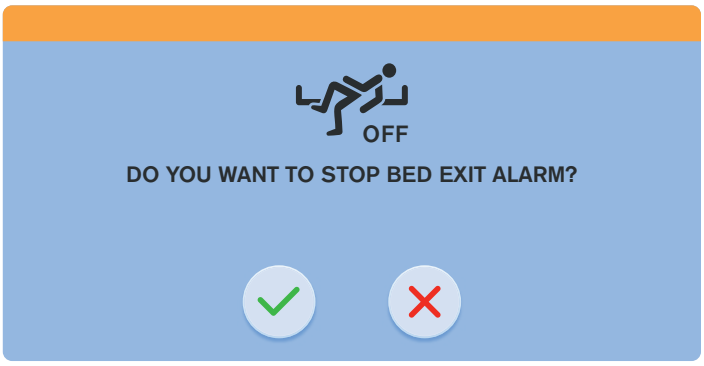


Fig. Confirmation window of the Bed Exit Alarm Monitoring deactivation

15.8 Fault Status (disconnected from the mains)

When the bed is disconnected from the mains power, the Bed Exit Alarm Monitoring system is out of order. If Bed Exit Alarm Monitoring is turned on and the bed is disconnected from the mains, a fault status appears with the corresponding pop-up window. During this Fault Status a continuous beeping sounds.

To mute the audible alarm:
► Press the MUTE icon on the displayed pop-up window during this fault status.

To remove this fault status:
► Connect the bed to the mains again.



Fig. Bed Exit Alarm Monitoring is deactivated because of the bed disconnected from the mains power

16 Automatic Lateral Therapy (ALT)

WARNING!
Risk of injury due to lateral tilt!
► Ensure that the tilting bed does not interfere with the functioning of cannulas, intubation tubes etc.
► Ensure that the tilting bed does not collide with any objects.
► Interrupt ALT immediately if the patient's condition worsens, a device or the bed is damaged or any risks to the patient are detected.

ALT allows tilting the mattress support platform in order to optimise the patient's pulmonary function and prevent decubitus. Speed of the ALT cycle minimalizes the shock effect and is in accordance with patient comfort.

Before starting ALT:
► Ensure that siderails are folded up.
► Always use LINET ® Stabilising ALT Pads or Advanced Stabilising ALT Pads for positioning patient in middle of the bed.
► Always use LINET ® Ventilation Circuit Holder to prevent extubation.
► Ensure that IV lines, breathing tubes etc. are not obstructed and work correctly.

16.1 Initial ALT Screen

Values of periods and angles in the selected Preset ALT Program are changed when they are changed manually and saved in the selected Preset ALT Program.

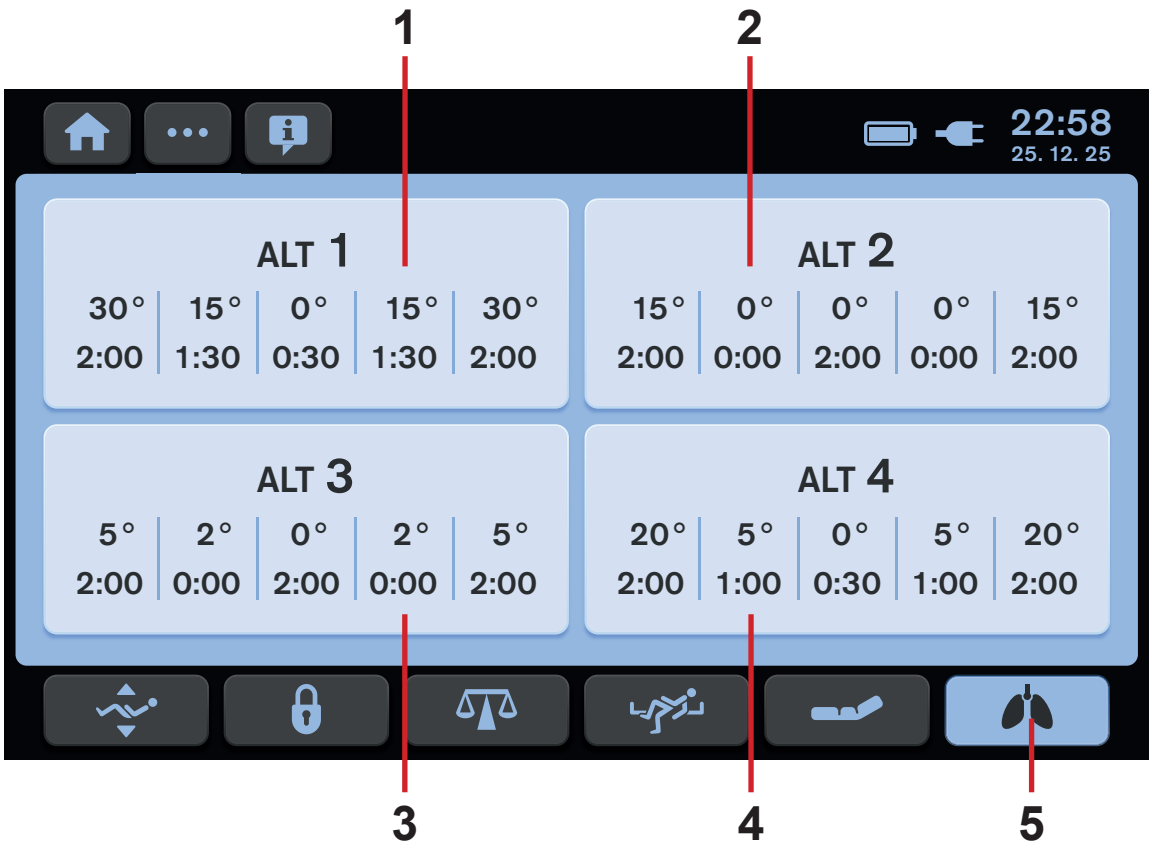


Fig. Initial ALT screen with 4 preset ALT programs

1. Preset ALT Program Tile (ALT 1)
2. Preset ALT Program Tile (ALT 2)
3. Preset ALT Program Tile (ALT 3)
4. Preset ALT Program Tile (ALT 4)
5. ALT Screen Icon

To enter ALT Screen:
► Press ALT Screen Icon (**5**).
Initial ALT Screen with 4 preset ALT programs appears on the LCD.

To select one Preset ALT Program:
► Press one of the 4 Preset ALT Program Tiles (**1** or **2** or **3** or **4**).
ALT Screen with preset angles of the lateral tilt and preset periods during which mattress support platform occupies corresponding angles appears on the LCD.

16.2 Description of ALT Screen

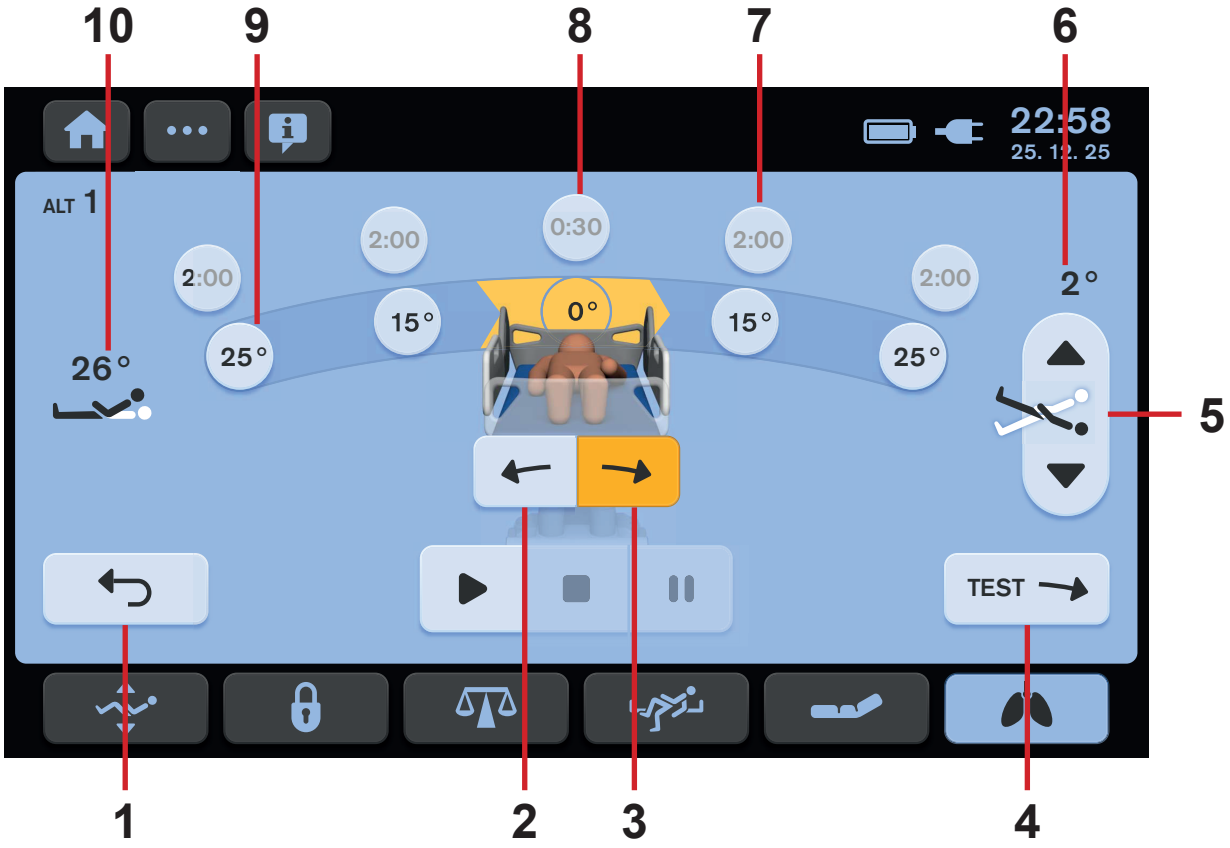


Fig. ALT Screen with settings

To adjust initial direction of the Automatic Lateral Therapy:
► Press corresponding Indicator of Initial Direction of the Automatic Lateral Tilt (**2** or **3**).
Orange colour indicates selected direction.

To adjust Longitudinal Tilt before ALT:
► Press one of the two Longitudinal Tilt Adjustment Icons (**5**).

To return to the Initial ALT Screen:
► Press EXIT Icon (**1**).
Initial ALT Screen appears on the LCD.

To leave ALT Screen:
► Press any screen icon in the bottom strip on the LCD.
Selected screen appears on the LCD.

1. EXIT Icon (to return to the Initial ALT Screen)
2. Indicator of Initial Direction of the Automatic Lateral Tilt (direction to the right from the perspective of patient)
3. Indicator of Initial Direction of the Automatic Lateral Tilt (direction to the left from the perspective of patient)
4. TEST Icon
5. Longitudinal Tilt Adjustment Icons (Trendelenburg or Antitrendelenburg position)
6. Indicator of Longitudinal Tilt Angle (Trendelenburg Angle or Antitrendelenburg Angle)
7. Indicator of Period of the selected Lateral Tilt Angle
8. Indicator of Period in bed horizontal position
9. Indicator of Lateral Tilt Angle
10. Indicator of Backrest Angle

16.3 Bed collisions with the environment

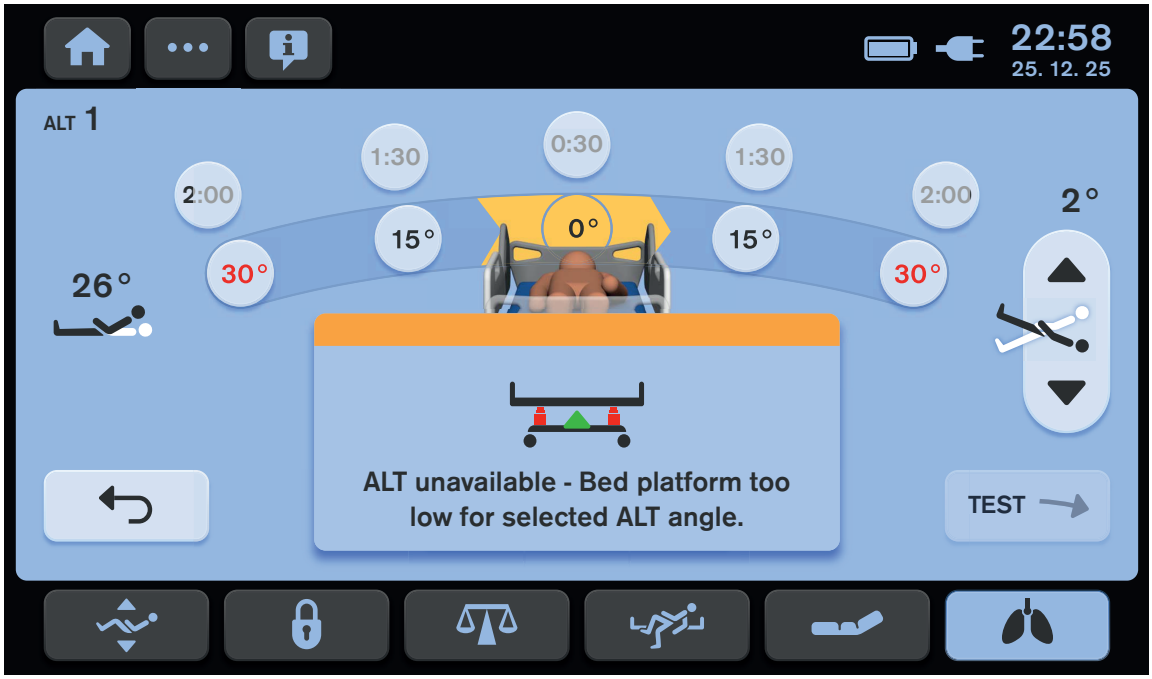


Fig. Pop-up window indicating a preset program that is not compatible with current position of the bed

To enable Automatic Lateral Therapy:

► Adjust suitable bed position or select manually Lateral Tilt Angles compatible with current position of the bed.

16.4 Adjustment of angles and periods

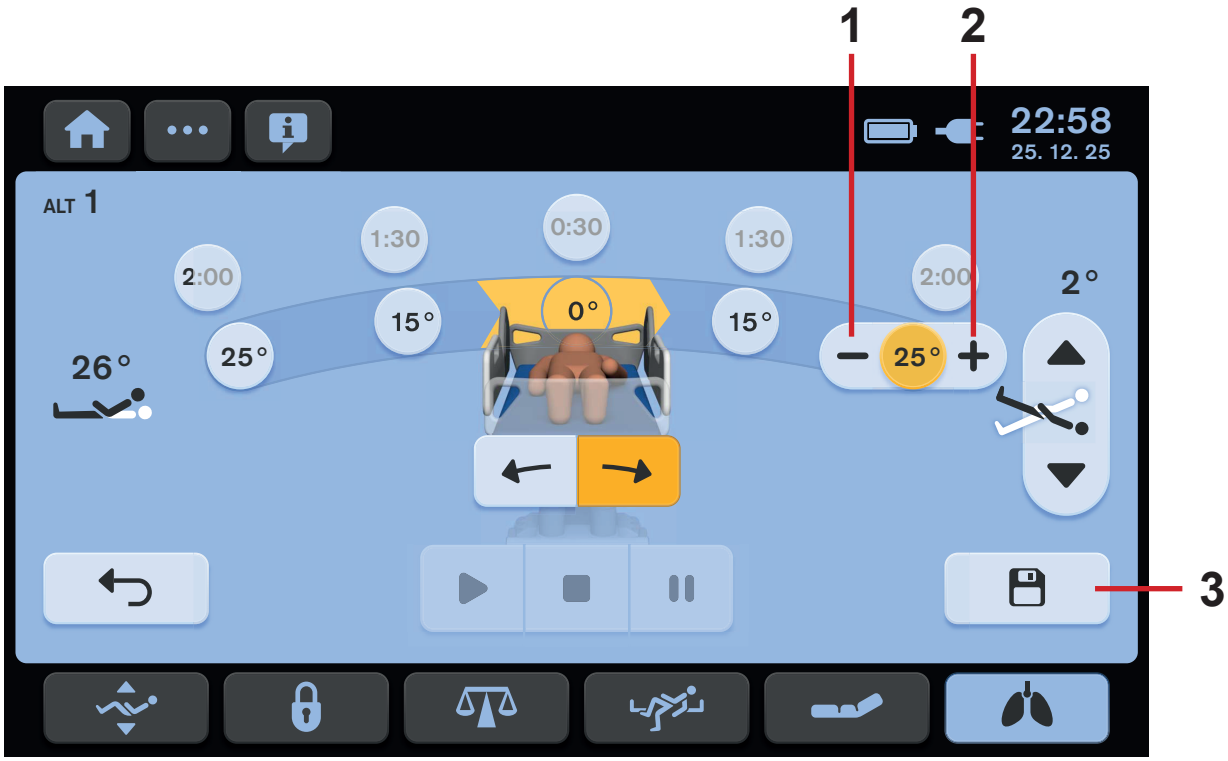


Fig. Adjustment of the Lateral Tilt Angle

1. **MINUS Icon (Lateral Tilt Angle Adjustment)**
2. **PLUS Icon (Lateral Tilt Angle Adjustment)**
3. **SAVE Icon (to save period settings and angles settings)**

To adjust Lateral Tilt Angle:

► Press selected Indicator of Lateral Tilt Angle.
► Press MINUS Icon (**1**) or PLUS Icon (**2**).
► Press selected Indicator of Lateral Tilt Angle once more or press another Indicator of Lateral Tilt Angle.

Selected Lateral Tilt Angle is changed.

► Press SAVE Icon (**3**) to save the changed angle settings before necessary TEST.

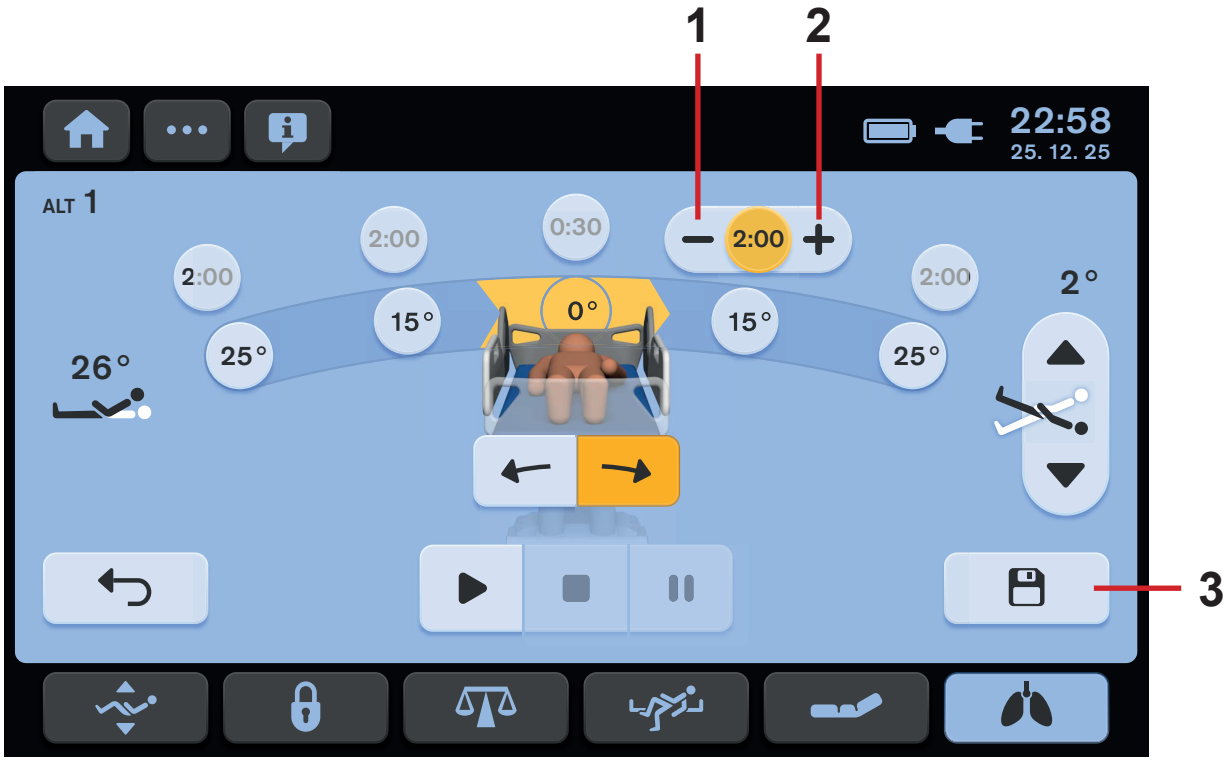


Fig. Adjustment of the period of Lateral Tilt Angle

1. MINUS Icon (Period of Lateral Tilt Angle)
2. PLUS Icon (Period of Lateral Tilt Angle)
3. SAVE Icon (to save period settings and angles settings)

To adjust period for the Bed Position in corresponding Lateral Tilt Angle:

► Press selected Indicator of Period of Lateral Tilt Angle.
► Press MINUS Icon (**1**) or PLUS Icon (**2**).
► Press selected Indicator of Period of Lateral Tilt Angle once more or press another Indicator of Period of Lateral Tilt Angle.

Selected Period of Lateral Tilt Angle is changed.

► Press SAVE Icon (**3**) to save the changed period settings before necessary TEST.

16.5 TEST of the Automatic Lateral Therapy

WARNING!
Risk of injury due to lateral tilt!
► TEST is always required if bed extension adjustment has been changed.
► TEST is recommended if bed position has been changed in another way.

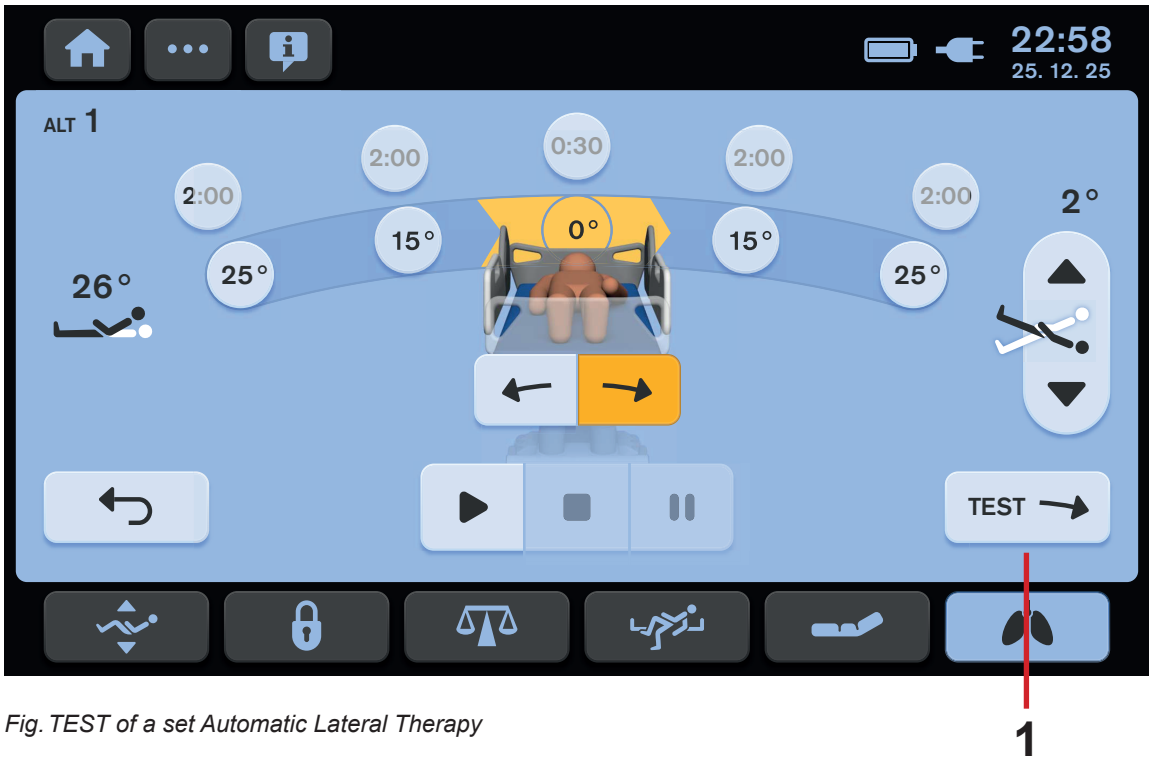


Fig. TEST of a set Automatic Lateral Therapy

1. TEST Icon (to start TEST of the Automatic Lateral Therapy)

To start TEST of a set Automatic Lateral Therapy:
► Press TEST Icon (**1**).
Multicare X bed will reach horizontal position and then it will be successively adjusted to each position of the preset Automatic Lateral Therapy. TEST of the Automatic Lateral Therapy ends in the bed horizontal position. Initial direction of the TEST is always to the right from the perspective of a patien lying on the bed. The bed will be automatically tilted to the selected angles where it will be stopped just for a moment. The bed does not stop in any selected angle repeatedly during movement to both sides. TEST is not intended for real time performance of a preset Automatic Lateral Therapy but for checking bed positions in corresponding Lateral Tilt Angles.

16.6 Activated Automatic Lateral Therapy

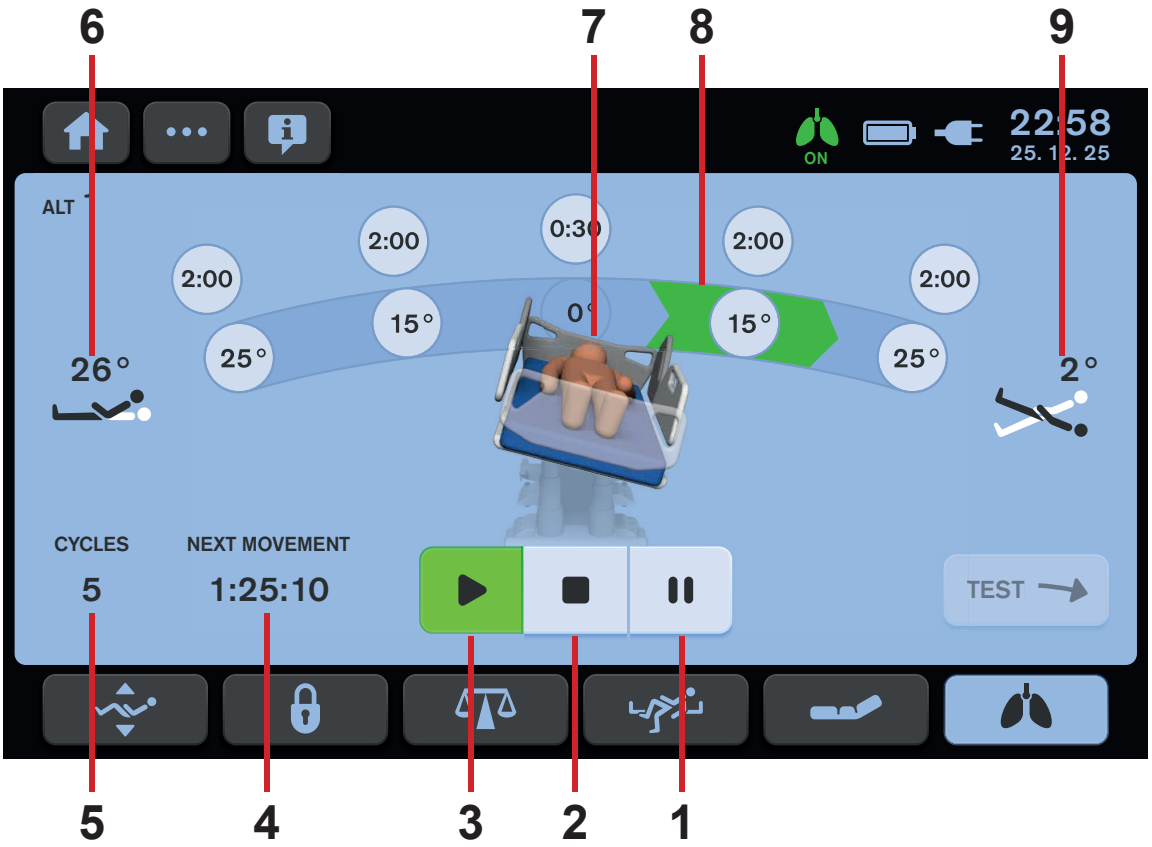


Fig. Activated Automatic Lateral Therapy

To start a set Automatic Lateral Therapy:

► Press PLAY Icon (**3**).

1. PAUSE Icon
2. STOP Icon (to stop a running Automatic Lateral Therapy)
3. PLAY Icon (to start a selected Automatic Lateral Therapy)
4. Countdown to next change of Lateral Tilt (remaining HOURS:MINUTES:SECONDS)
5. Cycle counter
6. Indicator of Backrest Angle
7. Bed picture in current Lateral Tilt
8. Indicator of current direction to next phase of Automatic Lateral Therapy
9. Indicator of Longitudinal Tilt Angle (Trendelenburg Angle or Antitrendelenburg Angle)

To stop a running Automatic Lateral Therapy:

► Press STOP Icon (**2**).

► Adjust the bed to horizontal position by pressing the icon  .

► Press **Tick** Icon.

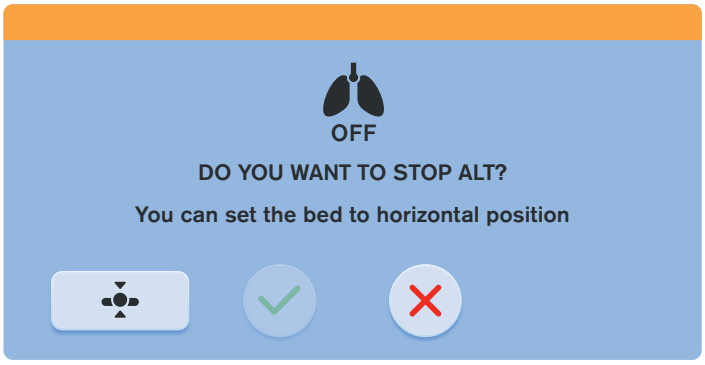


Fig. Confirmation window of the Automatic Lateral Therapy deactivation

16.7 PAUSED Automatic Lateral Therapy

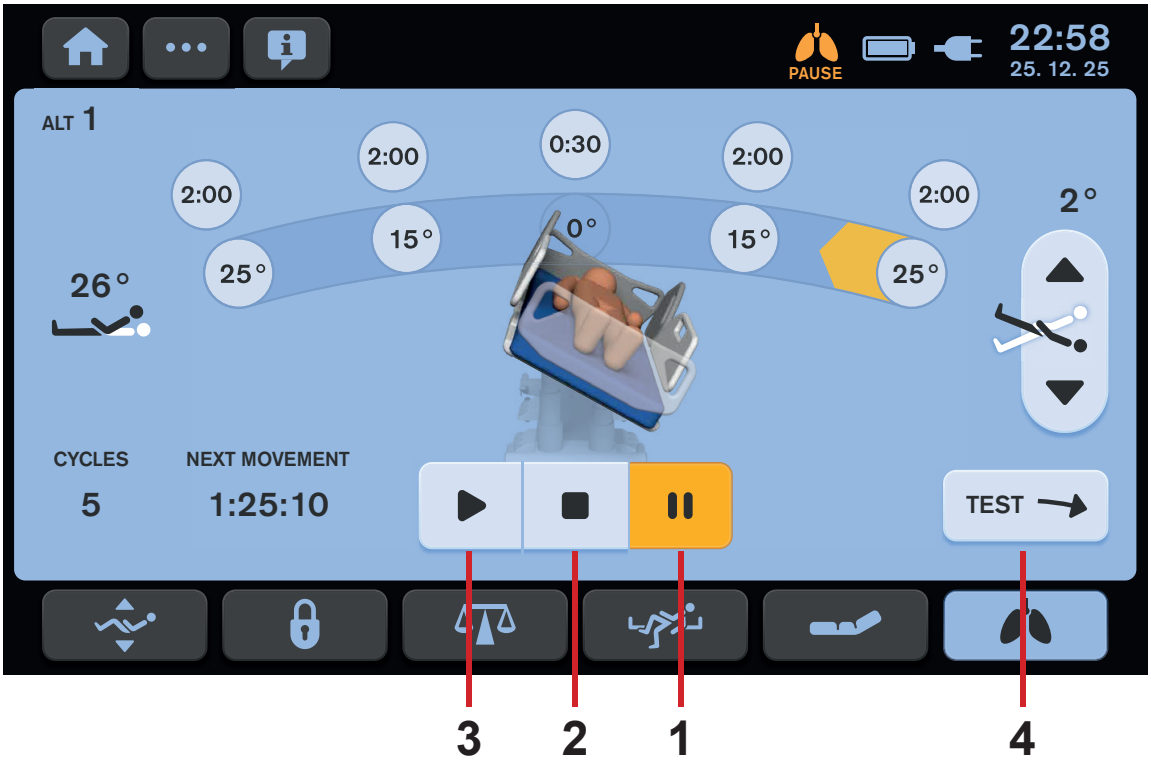


Fig. PAUSED Automatic Lateral Therapy

1. PAUSE Icon
2. STOP Icon (to stop the running Automatic Lateral Therapy)
3. PLAY Icon (to start the selected Automatic Lateral Therapy)
4. TEST Icon (to start test of the Automatic Lateral Therapy)

To pause the running Automatic Lateral Therapy:
► Press PAUSE Icon (**1**).

To start the set Automatic Lateral Therapy again without changed bed position:
► Press PLAY Icon (**3**).

To stop the set Automatic Lateral Therapy:
► Press STOP Icon (**2**).

To start test of the set Automatic Lateral Therapy:
► Press TEST Icon (**4**).

16.8 Return to the bed position before PAUSE

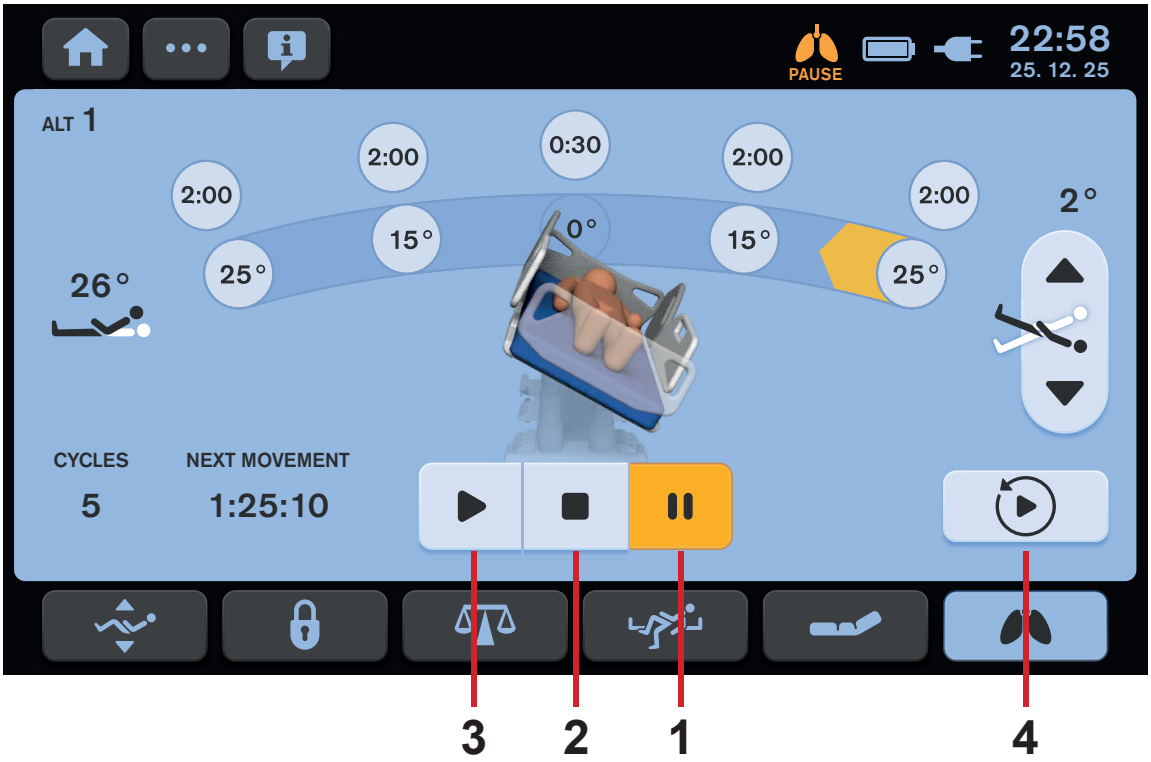


Fig. Return to the bed position before PAUSE

1. PAUSE Icon
2. STOP Icon (to stop the running Automatic Lateral Therapy)
3. PLAY Icon (to start the selected Automatic Lateral Therapy)
4. RETURN Icon (to return to the bed position which was set before PAUSE)

RETURN Icon (4) appears on the Automatic Lateral Therapy Screen if bed position was changed after activated PAUSE mode.

To return bed to the position before PAUSED Automatic Lateral Therapy:
► Press RETURN Icon (**4**).
TEST is not required after the return to the bed position before activated PAUSE mode.

To start the set Automatic Lateral Therapy again:
► Press PLAY Icon (**3**).

16.9 History of ALT Cycles

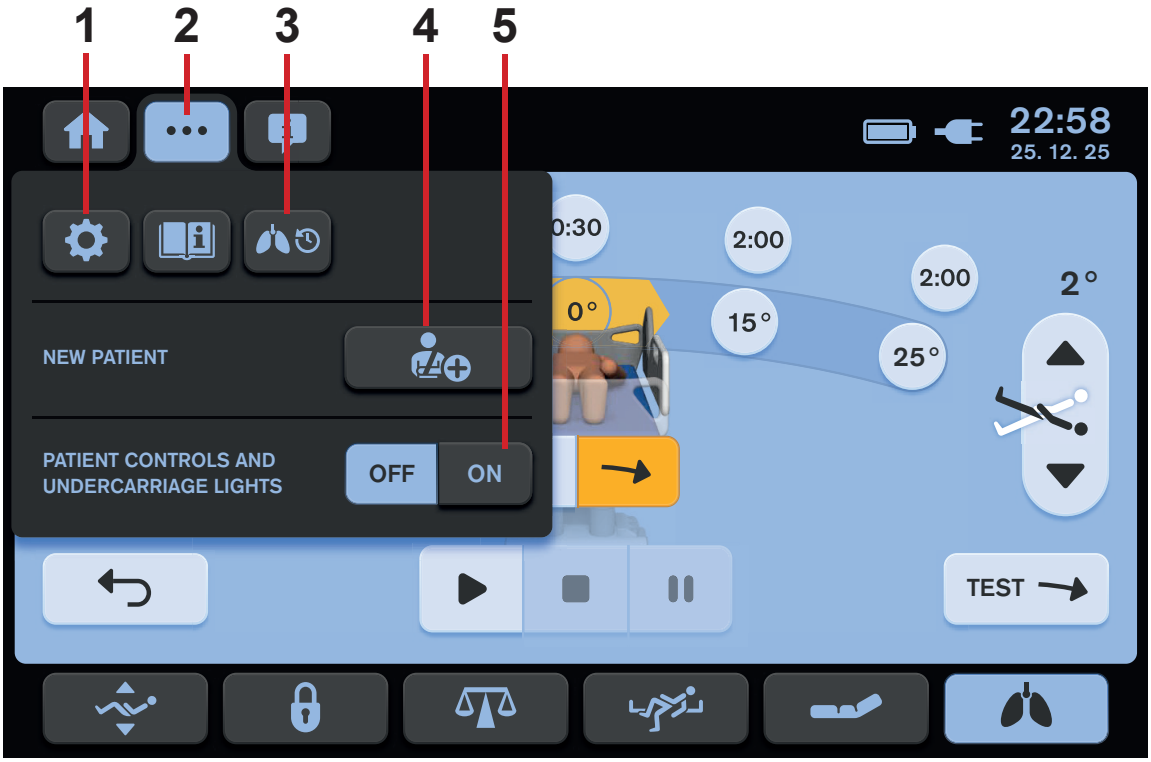


Fig. Settings Menu of the ALT Screen

1. Settings Icon (to enter Settings Screen)
2. Settings Screen Icon (to enter Settings Menu of the selected screen)
3. ALT Cycles History Screen Icon (to enter Weight Values History Screen)
4. NEW PATIENT Icon
5. Illumination Control Icons (Patient Control Panels keyboards, Handset keyboard and Bed Illumination)

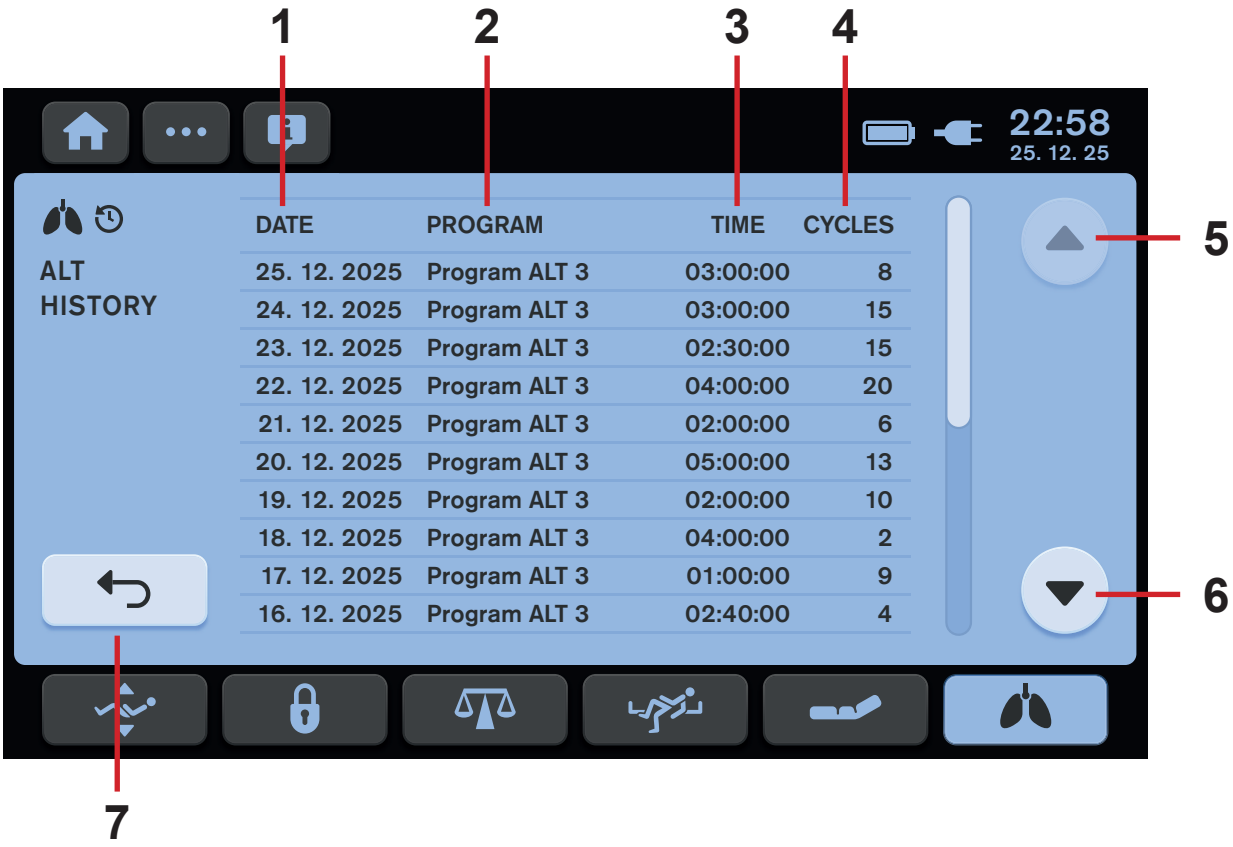


Fig. ALT Cycles History Screen

1. Column with recorded dates
2. Column with recorded used ALT Programs
3. Column with recorded periods during which the selected ALT Program was running
4. Column with numbers of cycles performed during the selected ALT Program
5. Previous Lines Icon
6. Next Lines Icon
7. Return to the ALT Screen

17 Equipment

Product equipment depends on product configuration so the equipment is always optional.

17.1 Accessory Rail with plastic hooks

Accessory Rail with 2 plastic hooks is intended for hanging accessories.
It is located on the sides of bed.

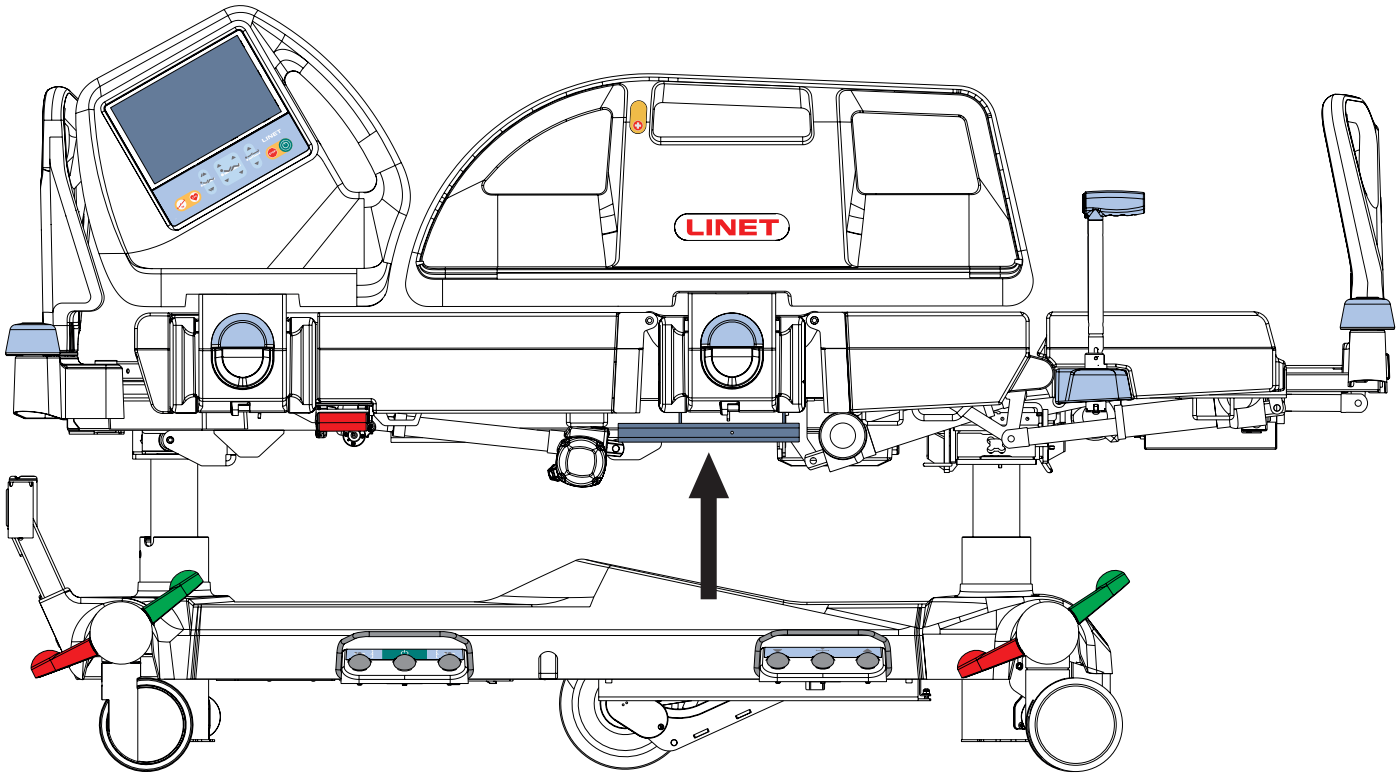


Fig. Accessory Rail (on the sides of bed)

17.2 Brake Signal

If bed is equipped with Brake Signal and this bed is connected to the mains power, the Brake Signal sounds when the bed is not braked.

17.3 i-Brake®

It is possible to equip the bed with an automatic castor brake. The automatic castor brake prevents injuries of patients and staff due to an unbraked bed. The brakes are activated automatically 60 seconds after the bed is plugged in, and 60 seconds after they have been released if the bed is not being moved. It is possible to activate the brakes manually as well.

17.4 Retractable Fifth Castor

It is possible to equip the bed with Fifth Castor in the centre of undercarriage. The Fifth Castor helps to steer and manoeuvre the bed in long corridors and small rooms. If the bed is plugged in, the Fifth Castor automatically retracts. Retracted Fifth Castor does not obstruct access to any devices under the undercarriage.

To activate the 5th wheel:
► Disconnect the bed from the mains.
► Adjust the castor control so that the green lever points down.

17.5 LINIS SafetyPort

LINIS SafetyPort is a medical device data system for capturing and transferring data from LINET beds into SafetyPort Dashboard and third party systems, including nurse calls, EHR and digital whiteboards. Data collection and evaluation takes place at one central location for all beds connected to the system simultaneously. The records are completely anonymous and the system does not work with any personally identifiable information. The customer can decide which data will be sent to the 3rd party system and adjust their sending period. LINIS SafetyPort is intended to be used to increase efficiency of healthcare personnel workflows by saving their time spent on documentation and eliminating errors. This is achieved by automated recording of different parameters of medical beds and their subsequent transfer to various hospital systems in HL7 format. Optional feature LINIS SafetyPort Dashboard is intended to save time the healthcare personnel spends on checking different beds at their workspace and to provide them with both near-real-time data and their aggregation to be able to check the history of provided care. LINIS SafetyPort may be used in various healthcare environments, including both intensive and non-intensive care units as well as units providing speciality care to a broad population of patients. The product is intended to be used by variety of healthcare personnel who have the cognitive skills to operate the product and are trained to use the product. LINIS SafetyPort is not an alarm system and the use of this product for this purpose means incorrect use.

17.6 Undercarriage

CAUTION!
Risk of material damage due to objects on the undercarriage cover!
► Do not place objects on the undercarriage cover!

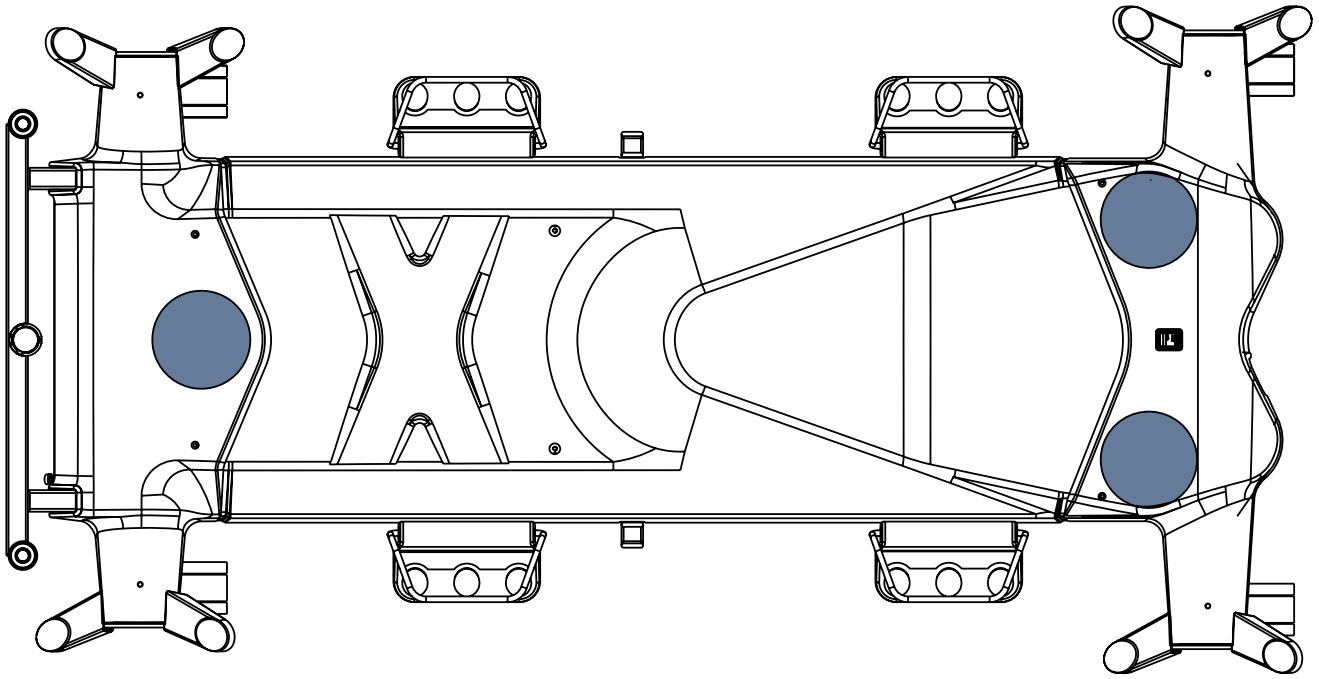


Fig. 3-part undercarriage cover

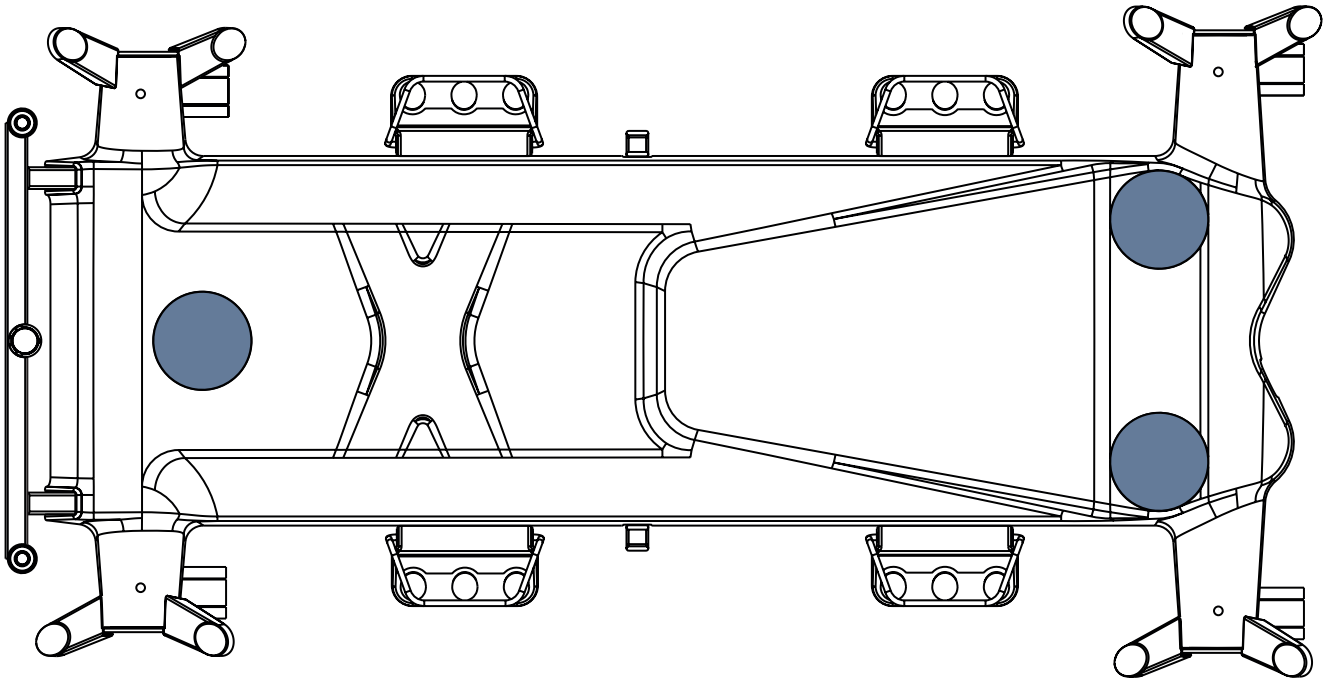


Fig. 1-part undercarriage cover

17.7 i-Drive Power

17.7.1 i-Drive Power System - Basic Description

It is possible to equip the bed with the i-Drive Power wheel. The i-Drive Power helps hospital staff to drive the bed during patient transport with minimal manpower. The i-Drive Power wheel is located in the center of the bed under the undercarriage. i-Drive Power is equipped with its own accumulator and charger and it is not dependent on the bed functions so, if discharged you can still use the bed functions. The bed is equipped with one i-Drive Power controller. i-Drive Power is oriented in straight direction of the bed.

17.7.2 Safety instruction for i-Drive Power

► Follow the instructions carefully.
► Ensure that the bed is operated exclusively by qualified staff.
► Make sure the siderails are raised up during the transport.
► Never use bed positioning buttons during transport.
► Never use Fast forward button when descending. The Fast forward button is recommended for use when ascending as it is more efficient.
► Special precaution need to be considered when reversing. Always keep distance from the bed and never use reverse button when descending or ascending.
► Do not use Free Drive to transport on a slope over 1 degree unless adequate personnel are available to manage safe bed transport.
► The driving down the slope that exceeds 6 degrees will require adequate contribution of a manpower.
► Never leave the bed with an activated i-Drive Power system without supervision of the trained staff.
► Always use the regular mechanical brake system to brake and stabilize the bed.
► Pay increased attention when driving the bed using i-Drive Power. Be aware of people and objects in close proximity and avoid collision with them by careful driving, especially by appropriate speed control.
► Make sure the bed is unplugged and bed brakes are released before using i-Drive Power.
► Push the emergency stop drive button if immediate movement interruption is needed (e.g. to avoid collision with other persons or objects).
► Retract the i-Drive Power wheel to the undercarriage when parking. This will prevent misuse when unbraking and braking the bed.
► The i-Drive Power electromagnetic brake is designed just for temporary bed stop and not for the permanent parking.
► Switch off the i-Drive Power accumulator prior to long-term storage or transport.
► Push the emergency retraction button under the chassis cover to retract the i-Drive Power wheel in case of the i- Drive Power system failure. This will enable moving the bed to a safe area manually without using i-Drive Power.
► Retract the i-Drive Power wheel to the undercarriage every time you intend to move the bed sideways.
► Pay attention to the LED accumulator status indicator and plan your drive using the i-Drive Power accordingly. Insufficient accumulator capacity can cause unexpected complications and risks during the drive.
► Always plug the bed in when you finish your drive in order to recharge the accumulator and keep your bed ready to go using the i-Drive Power.
► The i-Drive Power accumulator must be replaced every 2 years to maintain proper functions of the i-Drive Power.

17.7.3 Specifications of Use



WARNING!
Risk of injury due to careless driving!
► Always drive safely and carefully.
► Observe the path for any obstacles and avoid collisions.
► Ensure there are no people in your way.
► Manipulate with the bed carefully not to drive over any staff or patients.



CAUTION!
Maximal clearance underneath the bed is 15 cm!
► Observe the path for any obstacles and avoid collisions.

Intended use:
► bed transport (with or without patient) by the hospital staff

Unintended use:
► riding the bed
► other usage than described in instructions for use
► by other person than the trained staff

NOTE Each bed can transport only single patient at a time and cannot be used to transport other items (except bed accessories in secured position).

NOTE For information concerning uses other than those outlined in the “Specifications of Use” section above, please contact LINET ®.

17.7.4 Manipulation

CAUTION!
Damage to i-Drive Power main control panel cable due to wrong cable placement!
► Ensure that the main control panel connecting cable is placed correctly.

CAUTION!
Material damage due to incorrect use!
► Do not hang anything on the main control panel and its cable!

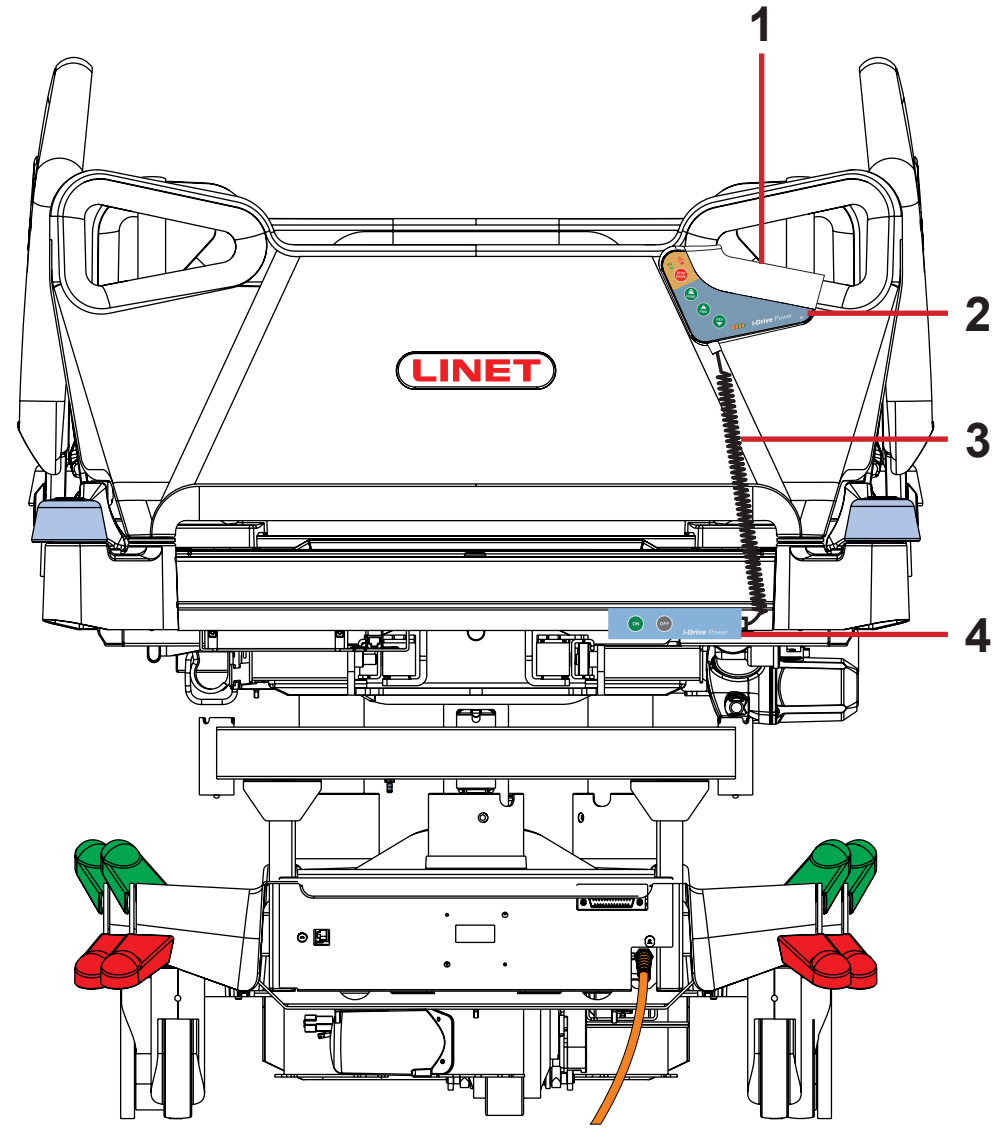


Fig. Position of Main Control Panel

1. Safety Sense (touch sensor)
2. Main Control Panel
3. Main Control Panel Cable – correct cable placement
4. Activation Panel

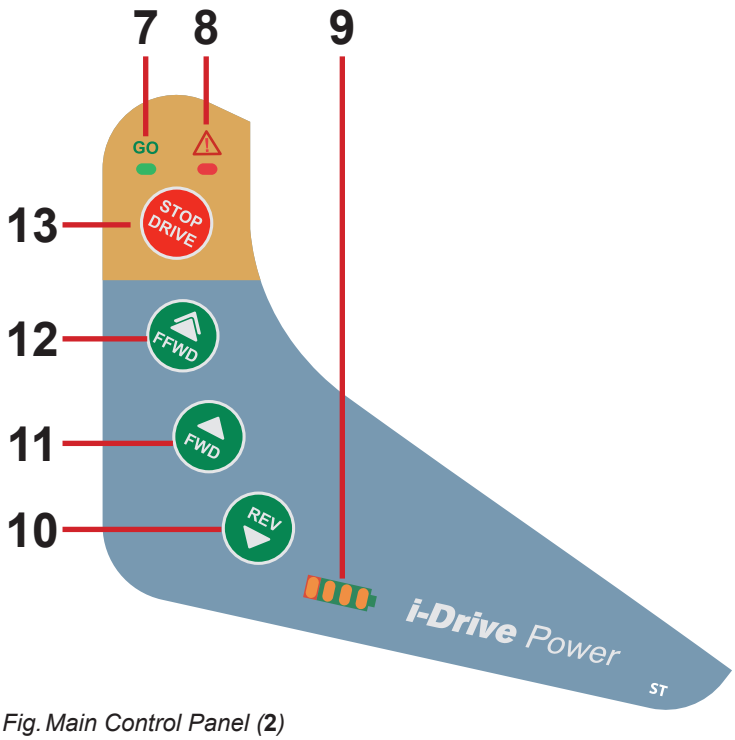


*Fig. Main Control Panel (**2**)*

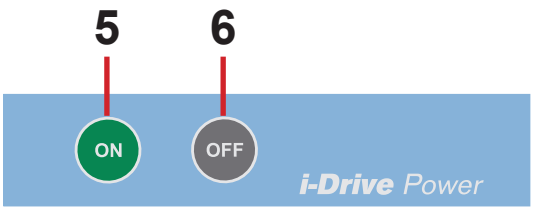


*Fig. Activation Panel (**4**)*

5. ON Button (i-Drive Power Wheel Activation Button)
6. OFF Button (i-Drive Power Wheel Retraction and Deactivation Button)
7. GO LED
8. Fault LED
9. State of charge and Fault LEDs
10. REVERSE Button
11. FORWARD Button
12. FAST FORWARD Button
13. STOP DRIVE Button

NOTE The i-Drive Power controller cannot control the bed functions. Control the bed using the bed control elements.

NOTE The main control panel is enhanced with a touch sensor (**1**); your hand must always be in contact with the i-Drive Power control panel to use the functions. If released, the i-Drive Power will stop.

NOTE Raising and lowering of the i-Drive Power wheel is electrically controlled by the i-Drive Power activation panel.

17.7.5 i-Drive Power Activation/Deactivation

To activate the i-Drive Power:

1. Check, if the mains switch of i-Drive Power is activated.
2. Press the Activation button ON located on the Activation Panel. The i-Drive Power wheel will lower and the green indicator will flash.

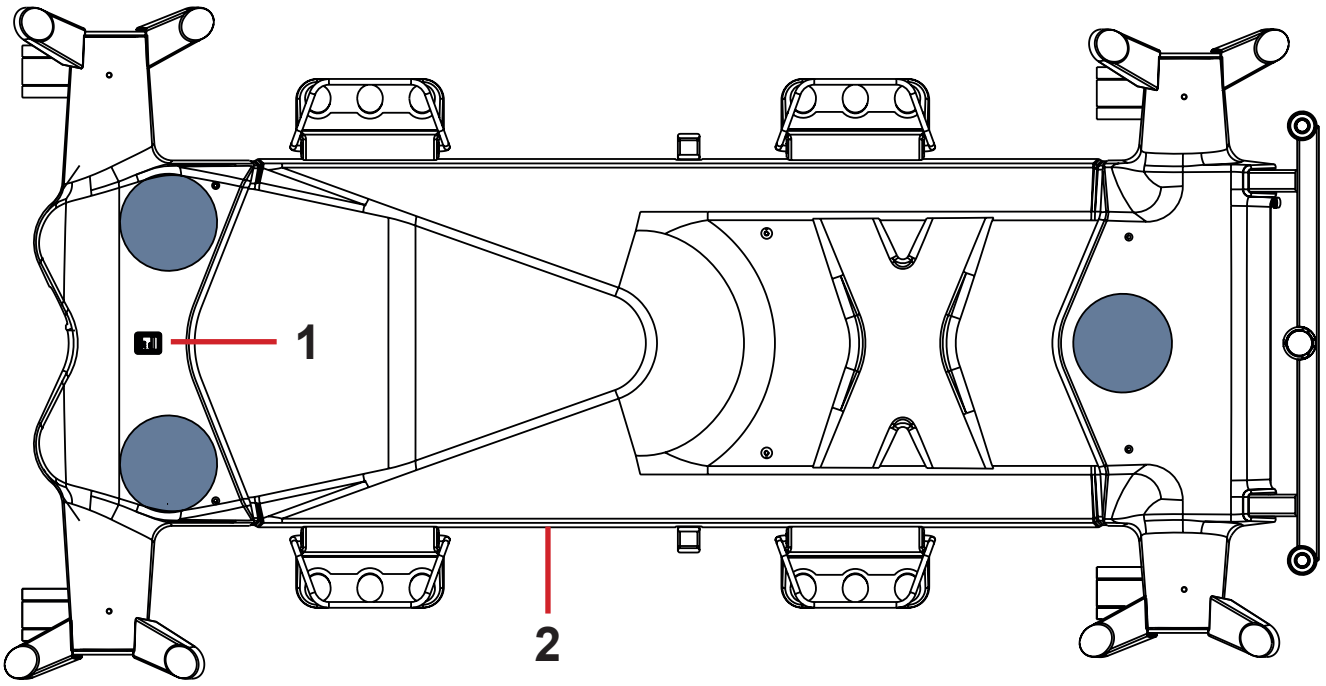
To deactivate the i-Drive Power:

1. Retract the i-Drive Power wheel using the button OFF located on the Activation Panel.
2. Deactivate the i-Drive Power using the mains switch.

Emergency i-Drive Power wheel retraction:

1. Press any button on the bed.
2. Deactivate the i-Drive Power using the mains switch.
3. Press the i-Drive Power Emergency Retraction Button situated on the bottom side of undercarriage under the label.

NOTE Use emergency retraction in case of accumulator discharge or drive malfunction to move the bed to a safe area manually without using i-Drive Power.



1. i-Drive Power Mains Switch
2. i-Drive Power Emergency Retraction Button

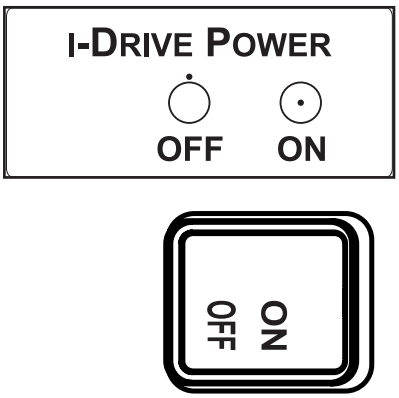


Fig. i-Drive Power Mains Switch with Label

TO RETRACT THE I-DRIVE POWER WHEEL IN EMERGENCY:

1. PRESS ANY GO BUTTON ON THE BED
2. SWITCH OFF THE MAIN POWER SWITCH
3. HOLD THE EMERGENCY RETRACTION BUTTON UNDER THE CHASSIS COVER

Fig. i-Drive Power Emergency Retraction Button Label

17.7.6 Powered Drive

CAUTION!
Damage to property due to incorrect transport and involuntary movement!

- ► Prior to transport, ensure that the bed is disconnected from the mains.
- ► Prior to transport, ensure that the auxiliary outlet plug (if available) is disconnected from the mains.
- ► Ensure that the castors are locked prior to assembly, disassembly and maintenance (e.g.: i-Drive Power maintenance).
- ► Ensure that the castors are locked when the bed is occupied.
- ► Hang the mains cable on the appropriate hook on the bed during transport.

1. Check, if the mains switch of i-Drive Power is activated.
2. Press the button ON on the Activation Panel. The i-Drive Power wheel will lower and the LED GO will flash.
3. Place your hand on the Safety Sense touch sensor (**1**) and push the button FFWD or button FWD or button REV .

Your hand must be placed on the Safety Sense sensor to use the i-Drive Power, if released, the i-Drive Power will stop.

4. The i-Drive Power motor is immediately stopped and the electric brake is activated after pressing the red button STOP DRIVE when braking or in emergency.
5. i-Drive Power control system is automatically deactivated and the electric brake is activated if no i-Drive Power function is used for 3 minutes. This is signalized by the green LED GO which is extinguished after 3 minutes.

NOTE i-Drive Power is not designed for ascending or descending a slope greater than 6° or longer than 20 m. The support of personnel is needed when ascending or descending with a full SWL.

NOTE When i-Drive Power wheel is lowered, it is not possible to move the bed sideways. Press the button OFF to retract the wheel, release the castors to the neutral position and then move the bed to any direction required.

17.7.7 Braking

1. Press and hold the button STOP DRIVE to brake immediately.

OR

2. Press and hold the button REV to brake slowly (Press the button FWD to brake when reversing).

OR

3. Release your hand from the touch sensor area and i-Drive Power will brake automatically.

NOTE Always brake the bed by using the castor control lever when the transport is finished or interrupted. The i-Drive Power electromagnetic brake is not designed to permanently brake the bed.

NOTE In a crisis situation (e.g. acceleration when driving down a steep slope) i-Drive Power dual braking prevents acceleration and slows down bed movement. However, it is not guaranteed the bed will stop by itself without personnel support (using button STOP DRIVE and castor control lever).

NOTE When descending, it is possible to actively brake using the opposite direction button to slow.

17.7.8 Free Drive

The i-Drive Power motor is equipped with free drive, which is active after pressing the forwards (FFWD or FWD) or backwards (REV) buttons (until user holds the touch sensor area).

Free Drive is deactivated and the brake is activated when the direction of motion is changed. This is feature for lowering the risks when going to a slope.

17.7.9 Accumulator

WARNING!
It is not possible to charge the accumulator of the i-Drive Power system when the i-Drive Power Mains Switch is in OFF position!

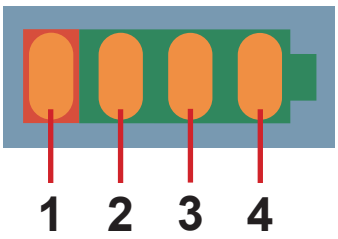


Fig. Accumulator Charge Status

Accumulator charge status:
1. **While this indicator is flashing, the accumulator is critically discharged. (LED1)**
2. **50% (LED2)**
3. **75% (LED3)**
4. **100% - the accumulator is charged (LED4)**

To charge the accumulator:
- ► Connect the bed main cable to mains power.
- ► i-Drive Power will be charged (with the accumulator discharged, the charging may take up to 9 hours).

NOTE Accumulator charge values are just informational. Accumulator life is reduced when the accumulator is allowed to discharge completely.

17.7.10 Fault Signalization

The system is protected against failure states, by stopping and braking the drive system, and respective signalization. The fault indicator flashing briefly and the accumulator indicator shows the fault state. Some defects are cleared automatically (e.g.: drive overheating). When drive or electronics is overheated, an short acoustic signal occurs before the drive is blocked.

ERROR	LED1	LED2	LED3	LED4
Drive overheated	OFF	OFF	OFF	ON
Electronics overheated	OFF	OFF	ON	OFF
Brake error	OFF	OFF	ON	ON
Retraction not completed	OFF	ON	OFF	OFF
Internal system error	OFF	ON	OFF	ON
Closing of the Field-effect transistor is penetrated	OFF	ON	ON	OFF
Control circuit overheated	OFF	ON	ON	ON
Controlcircuiterror	ON	OFF	OFF	OFF
Activation button stuck	ON	OFF	OFF	ON
Retraction button stuck	ON	OFF	ON	OFF
A button on the main control panel is pressed when activating the i-Drive Power system by ON button	ON	OFF	ON	ON

17.7.11 Light Indicators

Indicator	Meaning
Go Indicator ► Constantly lit ► Flashing	 Hand is on touch sensor; i-Drive Power wheel is ready for use. Hand is not on touch sensor; i-Drive Power is not ready for use.
Fault Indicator ► Constantly lit ► Flashing	 i-Drive Power cannot be activated (i-Drive Power wheel is not lowered, castor control lever is braked, bed is connected to the mains). System is faulty (indicated on accumulator status indicator). OR i-Drive Power control box heat protection is activated

17.7.12 Technical Specifications

Parameter	Value
i-Drive Power wheel diameter	21 cm
Max. fast forward speed (flat ground, loaded)	4,43 Km/h (±15%)
Max. forward speed (flat ground, loaded)	2,16 Km/h (±15%)
Max. reverse speed (flat ground, loaded)	2,16 Km/h (±15%)
Max. angle of ascent	6°
Noise level (when retracting the drive wheel)	65 dB

17.7.13 Electrical specification

Parameter	Value
Input Voltage, Frequency	**230 V AC, 50/60 Hz** **127 V AC, 50/60 Hz** **120 V AC, 50/60 Hz** **110 V AC, 50/60 Hz** **100 V AC, 50/60 Hz**
Accumulator Voltage	**36 V DC, Capacity: 9 Ah**
Maximum Power Input	**300 W**
Fuse **Version 230 V** **Version 127 V** **Version 120 V** **Version 110 V** **Version 100 V**	 **2 x T1,6A L 250V** **2 x T3,15A L 250V** **2 x T3,15A L 250V** **2 x T3,15A L 250V** **2 x T3,15A L 250V**

17.7.14 i-Drive Power Maintenance

Periodical maintenance of the i-Drive Power must be done by qualified service technician or authorized service organization at least once a year. To continue maintenance please see chapter Maintenance.

Service technician must check the following:

- ► accumulator status and eventual replacement of the accumulator (after maximum of three years of duty)
- ► gas spring – replace if necessary (after maximum of three years of duty)
- ► i-Drive Power wheel – replace if necessary
- ► lifting mechanism – grease if necessary
- ► cables, control elements – replace if necessary
- ► i-Drive Power function

17.8 Mobi-Lift®

WARNING!
Risk of injury due to slipping or falling when standing up!
- ► Ensure that the support handles are completely inserted in the sleeve fittings.
- ► Ensure that no bed linen is caught between the sleeve fitting and the support handle.

Mobi-Lift® is optional. It serves as a support handle to enhance the patient's safety when getting up. Mobi-Lift® is a support handle with a built-in Height Adjustment button. It allows the patient to raise and lower the Mattress support platform.

17.8.1 Using the Support Handles

To adjust the support handle:
- ► Lift the handle up towards the bed.
- ► Push the handle into the sleeve fitting as far as it will go.

To adjust the height of the mattress support platform:

- ► Press button on any control element.
- ► Press the button to adjust the bed height.

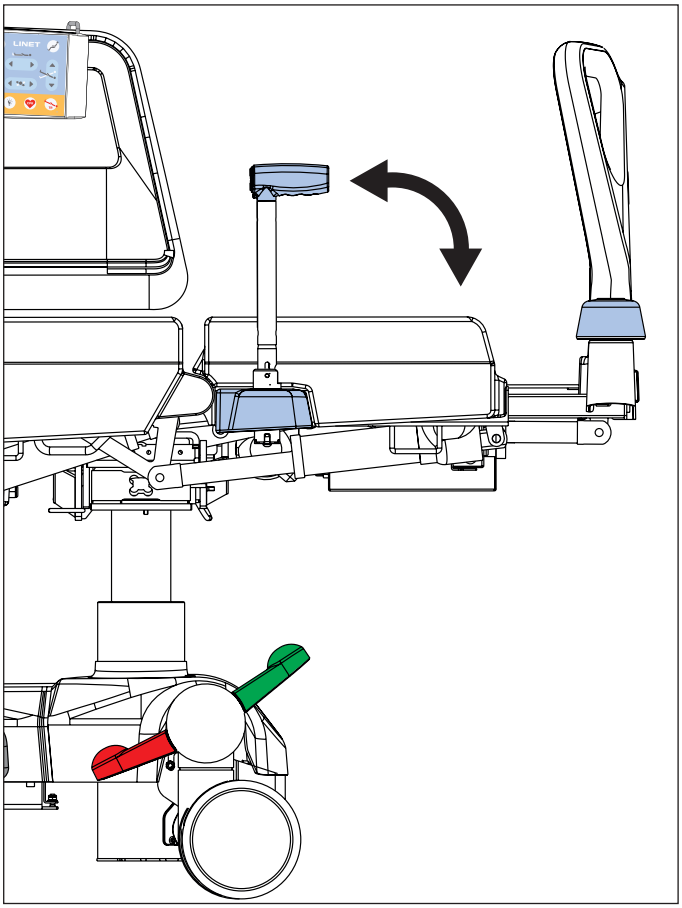


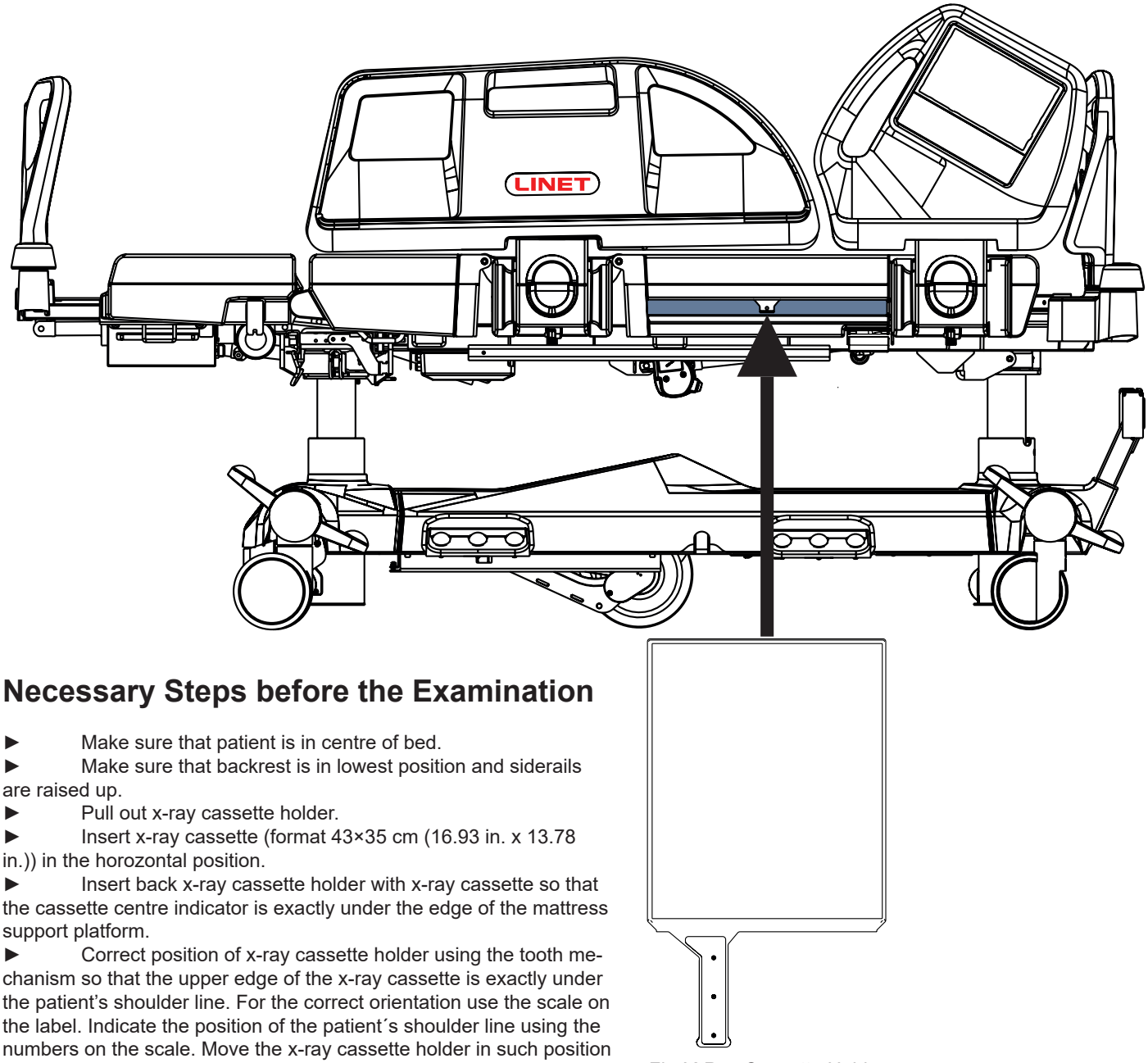
Fig. Mobi-Lift Handle

17.9 X-Ray Lung Examination

CAUTION!
It is not possible to adjust bed positions unless x-ray cassette holder is correctly inserted to the bed!
► Check regularly if the x-ray cassette holder is correctly inserted to the bed!

CAUTION!
Prevent x-ray images from being devalued!
► Take x-ray images when the bed is braked and no part of the bed is forced to move!

The Backrest of the bed consists of HPL and is x-ray translucent. The bed is equipped with an x-ray cassette holder inseted under the Backrest left side. This design allows taking x-ray images of the patient's lungs without moving the patient manually.



Necessary Steps before the Examination

► Make sure that patient is in centre of bed.
► Make sure that backrest is in lowest position and siderails are raised up.
► Pull out x-ray cassette holder.
► Insert x-ray cassette (format 43×35 cm (16.93 in. x 13.78 in.)) in the horozontal position.
► Insert back x-ray cassette holder with x-ray cassette so that the cassette centre indicator is exactly under the edge of the mattress support platform.
► Correct position of x-ray cassette holder using the tooth mechanism so that the upper edge of the x-ray cassette is exactly under the patient's shoulder line. For the correct orientation use the scale on the label. Indicate the position of the patient´s shoulder line using the numbers on the scale. Move the x-ray cassette holder in such position so that the centre of the handrail is on the respective scale number.
► Adjust parameters of the x-ray device and do the image.

Fig. X-Ray Cassette Holder

NOTE This procedure is above all suitable for patients who cannot be moved due to critical conditions (e. g. internal bleeding) or unstable patients.

17.10 Nurse Call

WARNING!
Functions of the Nurse Call system depends on the local hospital information system!
► Ensure the Nurse Call system is compatible with local hospital information system!
► Nurse Call cable running from the local hospital information system must be connected to the connector at head end of the bed!

CAUTION!
Ability to use the Nurse Call correctly increases patient´s safety!
► Hospital staff should inform patient how to use the Nurse Call system!

Intended use

Nurse Call system is intended for sending signals from the bed to hospital staff.
Nurse Call system can be used by hospital staff and by patient.

Positions of the Nurse Call control elements

The buttons for activating the Nurse Call function are located on the inner and outer sides of the foot siderails. Speakers and microphones are located on the inner sides of the head siderails.

Activating the Nurse Call function:
► Press Nurse Call button.
The patient can speak into the microphone located on the inner side of the head siderails.

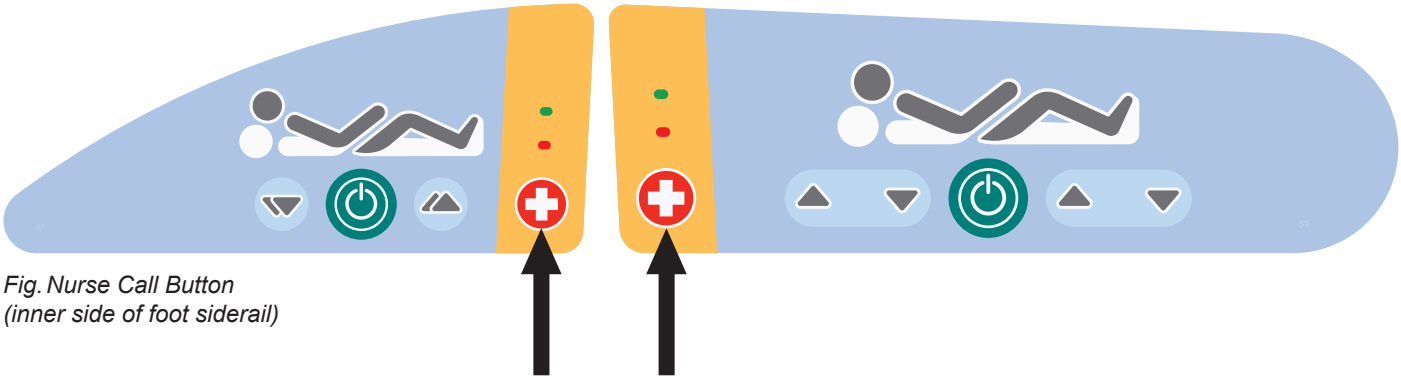


Fig. Nurse Call Button (inner side of foot siderail)

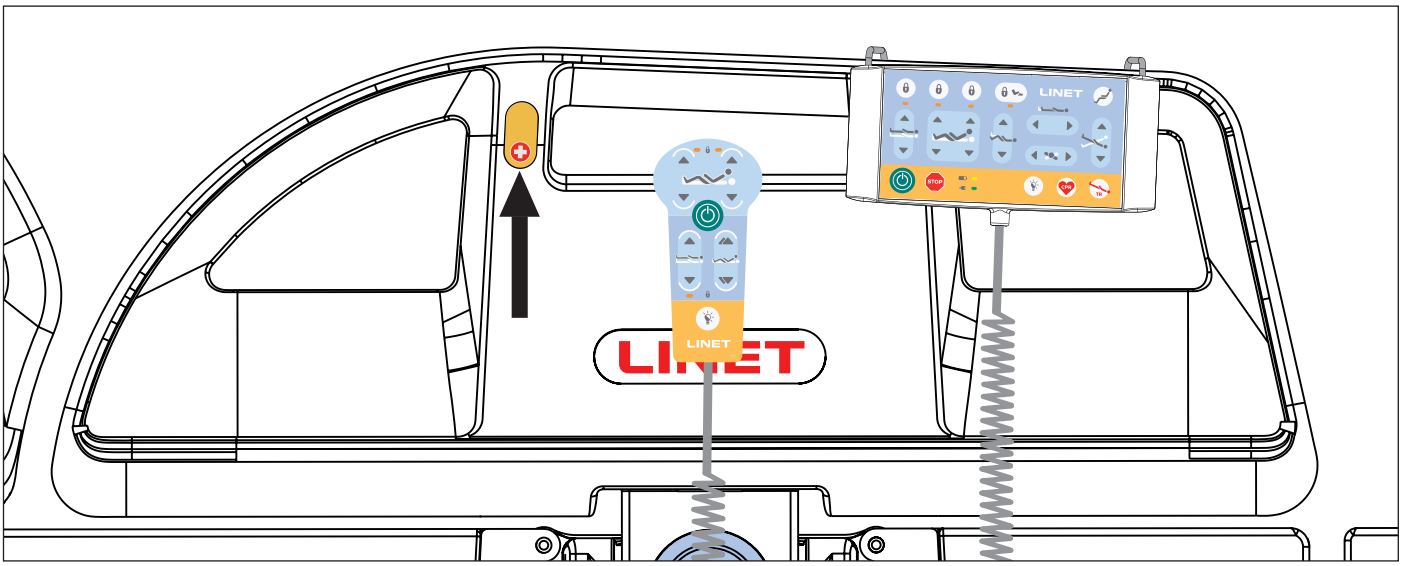


Fig. Nurse Call Button (outer side of foot siderail)

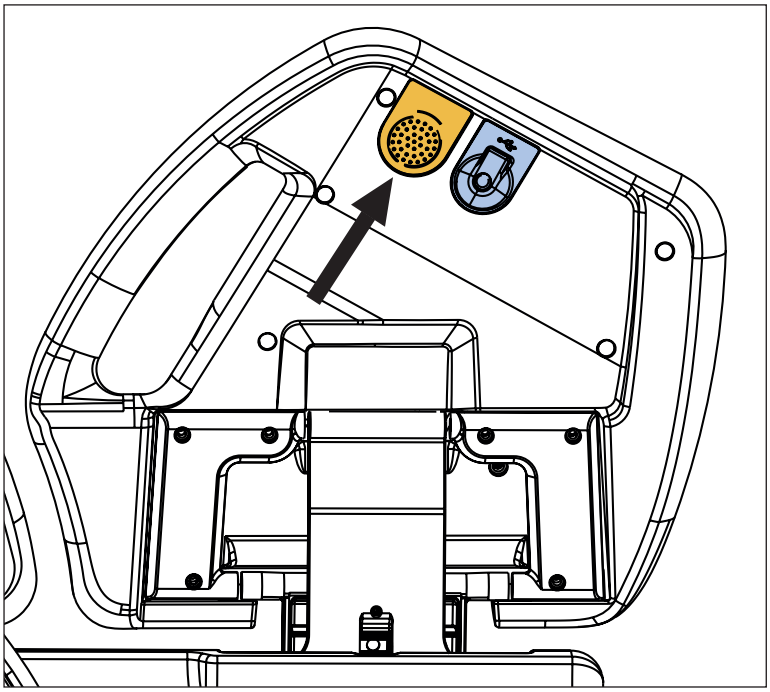


Fig. Speaker and Microphone (inner side of head siderail)

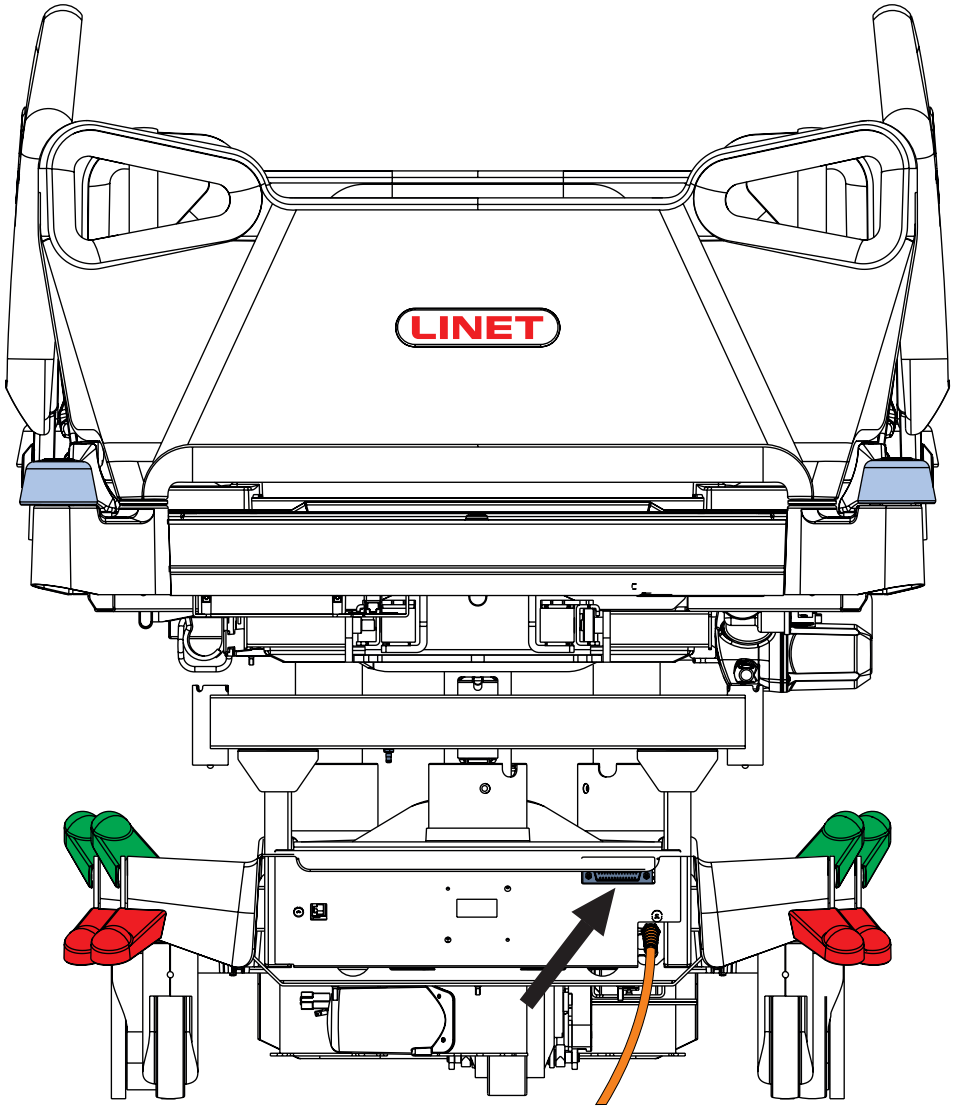


Fig. Position of the Nurse Call Connector at head end of the bed)

17.11 USB Connector

WARNING!
Risk of injury due to incorrect use!
► Ensure accessory pluged in USB connector is in pristine condition!
User of the bed is responsible for the fact that this requirement is met.

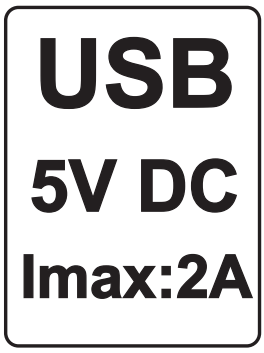
CAUTION!
Risk of material damage due to incorrect use!
► Do not plug heating element into USB connector!
User of the bed is responsible for the fact that this requirement is met.

WARNING!
Risk of injury due to squeezed cable!
► Ensure that cable of the plugged accessory is not squeezed by the head siderail or by the foot siderail or by parts of the mattress support platform!
User of the bed is responsible for meeting of this requirement.

CAUTION!
Risk of material damage due to incorrect use!
► Ensure that plugged accessory is prevented from falling down!
User of the bed is responsible for meeting of this requirement.

USB Connector situated on the both inner sides of head siderails is intended for charging mobile phones and tablets.

NOTE Maximum current for this device is 2 A.



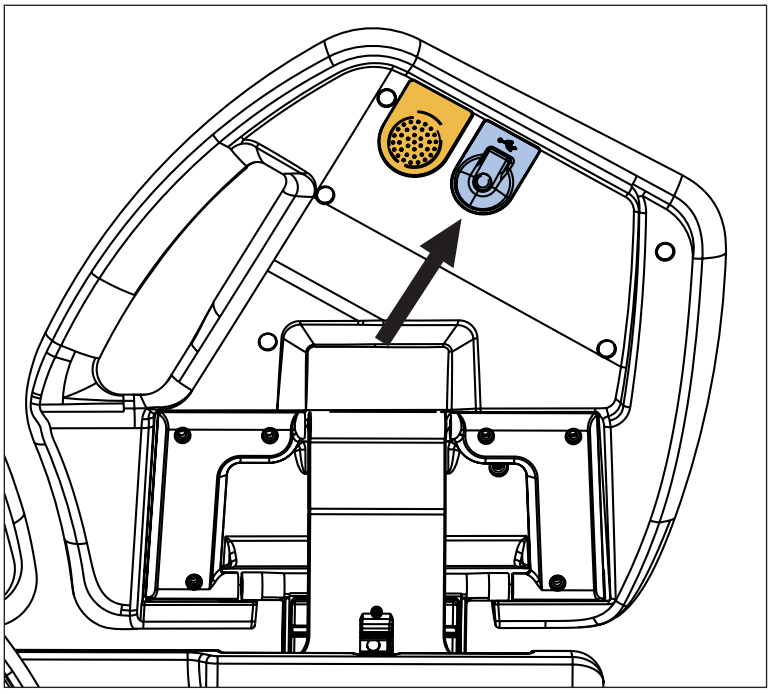


Fig. USB Connector on the inner side of head siderail

17.12 m-Panel

Intended Use

m-Panel is intended to signalize if the safety statuses of Multicare X bed are monitored and if the corresponding alerts are triggered in the case of insecure statuses. Monitorable statuses of the bed are: brake status (braked castors/unbraked castors), siderail status (siderails up/siderail down), bed height (bed in the lowest position/bed not in the lowest position) and backrest angle (backrest in more than 30°/backrest in less than 30°). The secure statuses are: braked bed, siderails up and locked, bed in the lowest position and backrest in more than 30°. Alerts are notice signals for insecure statuses indicated visually by the orange colour on the display of the m-Panel. Monitoring of the 4 statuses (brake status, siderail status, bed height and backrest angle) can be also set on the m-Panel.

Control Panel

It is possible to hold the m-Panel in the hand while using.
It is recommended to hang the m-Panel on the Foot Board while not using.

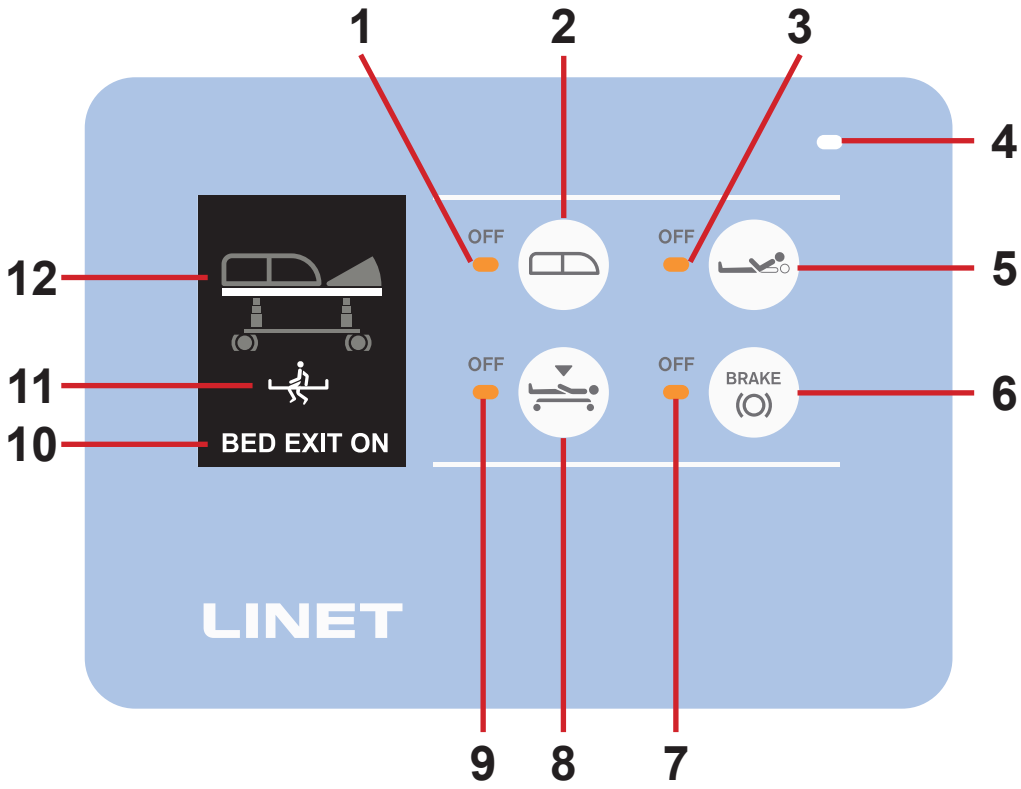


Fig. m-Panel - Display and Keyboard

1. Siderail Status Monitoring LED (lit orange LED - siderail status is not monitored)
2. Siderail Status Monitoring Button (press the button to turn on or turn off the Siderail Status Monitoring)
3. Backrest Angle Monitoring LED (lit orange LED - backrest angle is not monitored)
4. Ambient light sensor (the higher ambient light intensity the higher light intensity of the LEDs on the keyboard)
5. Backrest Angle Monitoring Button (press the button to turn on or turn off the Backrest Angle Monitoring)
6. Brake Status Monitoring Button (press the button to turn on or turn off the Brake Status Monitoring)
7. Brake Status Monitoring LED (lit orange LED - brake status is not monitored)
8. Bed Height Monitoring Button (press the button to turn on or turn off the Bed Height Monitoring)
9. Bed Height Monitoring LED (lit orange LED - bed height is not monitored)
10. Bed Exit Alarm Status (BED EXIT OFF - Bed Exit Alarm is not activated, BED EXIT ON - Bed Exit Alarm is activated)

11. Bed Exit Alarm Mode (Inner Zone: , Outer Zone:)

12. Bed picture with bed statuses

17.12.1 Signalisation (Bed picture)

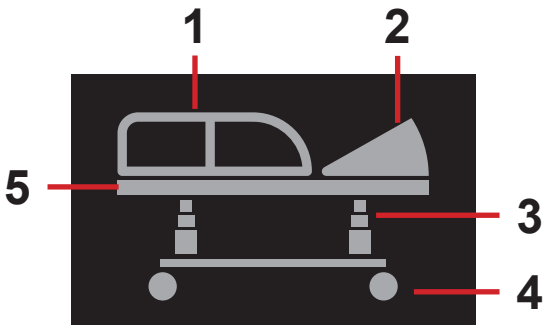


Fig. Bed picture with all not monitored statuses (grey - not monitored statuses)

1. siderail status (all siderails up/ siderail down)
2. backrest angle (backrest in more than 30°/backrest in less than 30°)
3. bed height (bed in the lowest position/ bed not in the lowest position)
4. brake status (braked castors/unbraked castors)
5. Bed Exit Alarm Status (grey - Bed Exit Alarm is not activated)

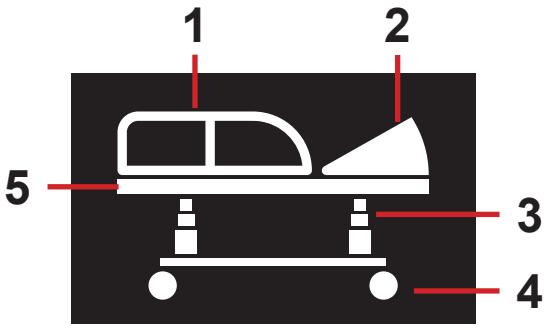


Fig. Bed picture with all secure bed statuses (white - secure monitored statuses)

1. siderail status (all siderails up)
2. backrest angle (backrest in more than 30°)
3. bed height (bed in the lowest position)
4. brake status (braked castors)
5. Bed Exit Alarm Status (white - Bed Exit Alarm is activated)

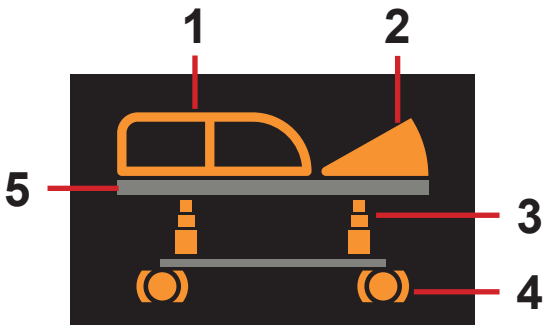


Fig. Bed picture with all insecure bed statuses (flashing orange - alerts/insecure statuses)

1. siderail status (flashing orange - siderail down)
2. backrest angle (flashing orange - backrest in less than 30°)
3. bed height (flashing orange - bed not in the lowest position)
4. brake status (flashing orange - unbraked castors)
5. Bed Exit Alarm Status (grey - Bed Exit Alarm is not activated)

17.12.2 Bed Exit Alarm Signal

Bed Exit Alarm is signalized visually on the display of m-Panel.

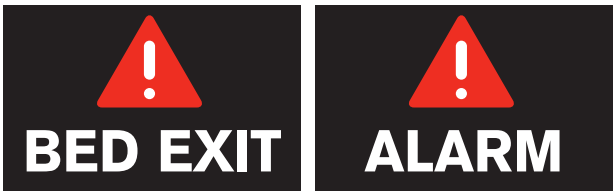


Fig. Visual signalisation of Bed Exit Alarm (alternation of the two inscriptions)

17.13 Adaptor for Traction Frames

Multicare X bed is compatible with Traction Frame M and with Traction Frame T41 if bed is equipped with Adaptor for Traction Frames.

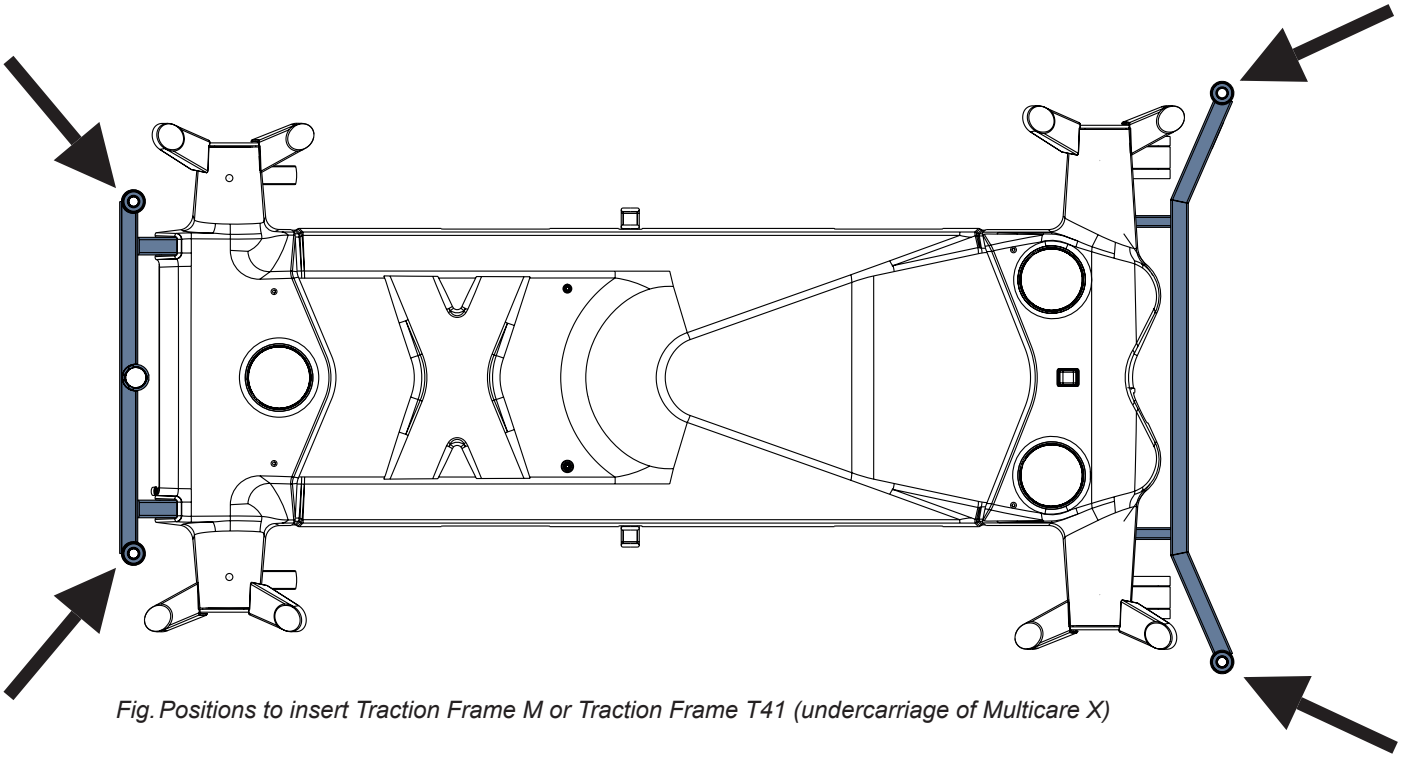


Fig. Positions to insert Traction Frame M or Traction Frame T41 (undercarriage of Multicare X)

17.14 Safestop

Safestop prevents user of the bed from injuries due to crushing by the lowered Mattress support platform.
When obstacle occurs on the undercarriage and Mattress support platform is going down, the motion is automatically stopped.
Multiboard X display shows pop-up window when the Safestop caution is indicated.

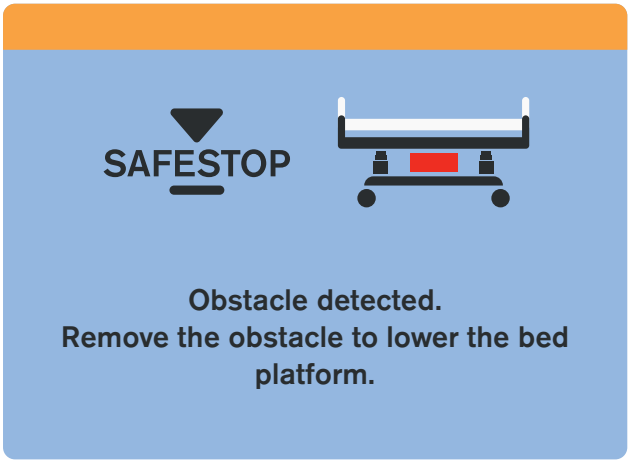


Fig. Safestop caution (caution pop-up window)

18 Mattress

Multicare X bed is designed for passive and active mattresses from LINET portfolio.

CAUTION!
Incompatibility with bed due to incorrect mattress dimensions!
► Check maximum approved mattress dimensions (chapter Technical Specification).

The manufacturer recommends the use of the following mattress systems on the Multicare X bed:

PASSIVE MATTRESSES
- CliniCare 10
- CliniCare 20
- CliniCare 30

ACTIVE MATTRESSES
- Virtuoso Pro (not integrated)
- CliniCare 100 HF (not integrated)
- OptiCare X (integrated)

18.1 Fixation of a mattress on the mattress support platform

To fix mattress on the Mattress Support Platform:

► Run three straps through the three corresponding holes in the covers of Mattress Support Platform.
► Run these three straps under the bars of the Mattress Support Platform.
► Lock the three side release buckles by connecting their male and female parts together.

To remove mattress from the Mattress Support Platform:

► Release the three buckles by pressing them from both sides and by disconnecting their male and female parts.
► Pull these three straps out of the Mattress Support Platform.
► Remove mattress from the Mattress Support Platform.

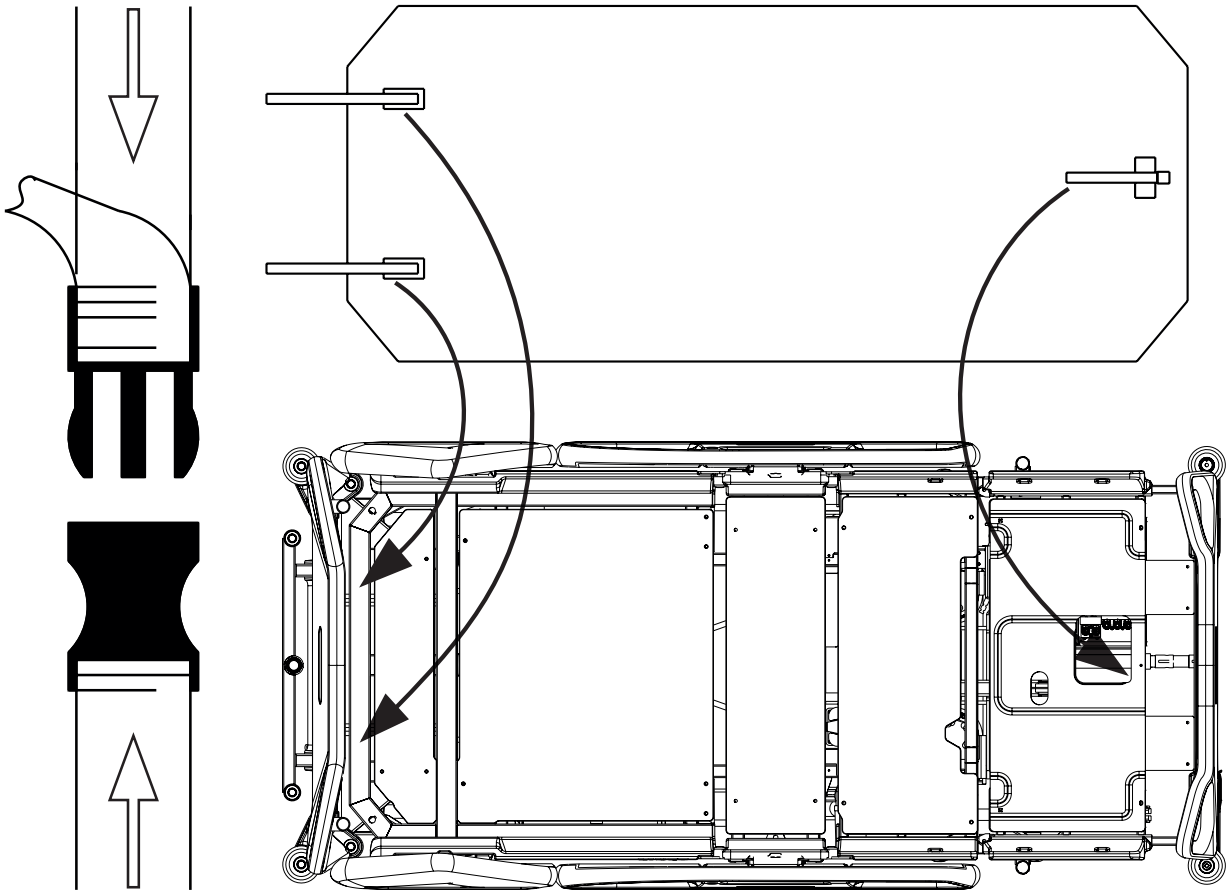


Fig. Fixation of the mattress with straps on the mattress support platform of Multicare X bed

18.2 Passive Mattress

Recommended Passive Mattresses are equipped with straps (**1**) intended for fixing mattress on the Mattress support platform.

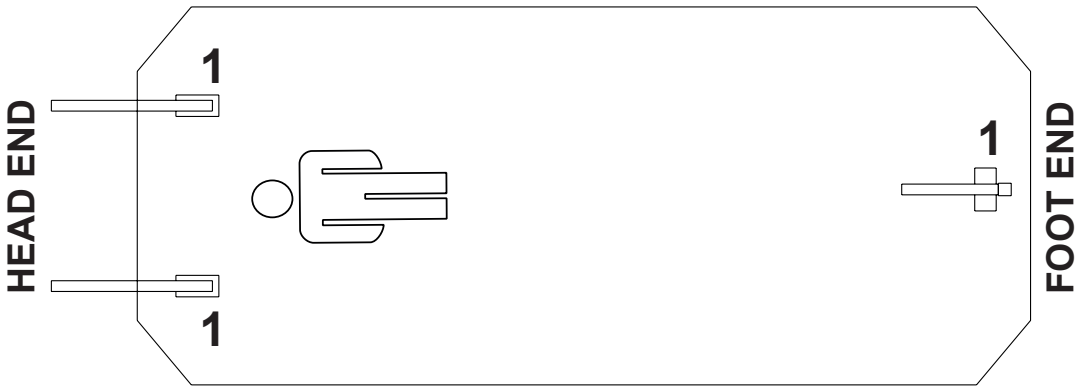


Fig. Bottom of Passive Mattress

18.3 Active Mattress (not integrated)

WARNING!
Follow instructions for use of a compatible active mattress carefully!

CAUTION!
Risk of material damage due to an incorrect fixation of compatible active mattress on the mattress support platform!
► Adjust the bed to maximum Cardiac Chair Position before fixing all the straps of the inflated mattress to the mattress support platform!

Installation instructions:
► Remove any existing mattress.
► Observe mattress dimensions and its orientation before putting it on the Mattress support platform.
► Place SCU on the foot board of the bed or on the floor.
► Fix mattress on the Mattress support platform with straps (**1**).

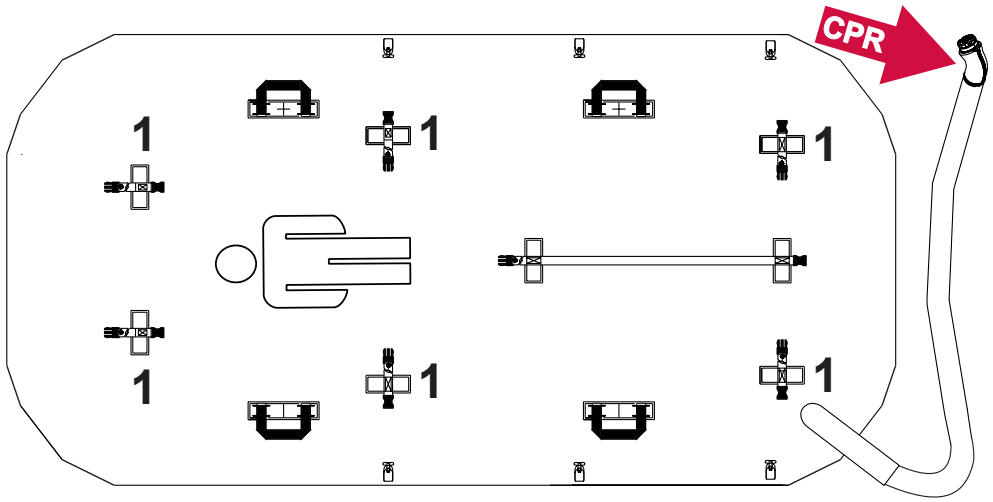


Fig. Bottom of Active Mattress (not integrated)

18.4 Integrated Mattress



WARNING!
Follow instructions for use of compatible integrated mattress system carefully!



CAUTION!
Risk of material damage due to an incorrect fixation of compatible integrated mattress on the mattress support platform!
► Adjust the bed to maximum Cardiac Chair Position before fixing all the straps of the inflated mattress to the mattress support platform!



WARNING!
OptiCare X mattress is compatible with System Control Unit delivered by manufacturer only!
► Do not use any other System Control Unit with OptiCare X mattress!



CAUTION!
Material damage due to incorrect installation of SCU!
► If the SCU does not come factory-fitted, have it installed by a service engineer authorised by LINET ®.

18.4.1 Integrated Mattress Screen (OptiCare X)

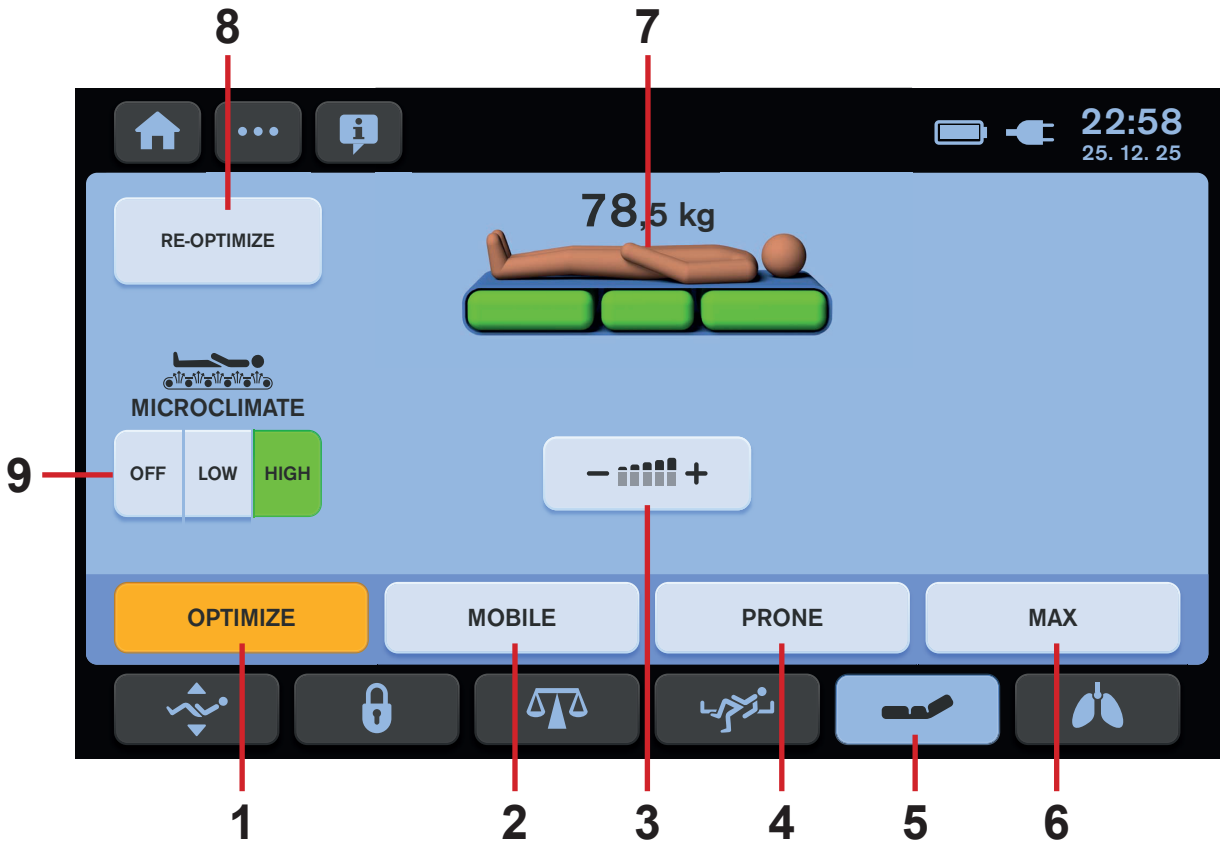


Fig. Integrated Mattress Screen - LCD touchscreen

1. OPTIMIZE Mode Icon (press to enter OPTIMIZE Mode)
2. MOBILE Mode Icon (press to enter COMFORT Mode)
3. Manual Pressure Settings Icon (press to enter Manual Pressure Settings)
4. PRONE Mode Icon (press to enter PRONE Mode)
5. Integrated Mattress Screen Icon (press to enter Integrated Mattress Screen)
6. MAX Mode Icon (press to enter MAX Mode)
7. Mattress Status Indicator (signalising mattress condition in relation to patient)
8. RE-OPTIMIZE Icon (press to start pressure optimisation process manually)
9. MICROCLIMATE Management Icons (OFF/LOW/HIGH)

Yellow colour on the Integrated Mattress Screen indicates activated function.
Three green mattress parts are flashing during any mattress inflation process.

19 Accessories



WARNING!
Risk of injury due to incompatible accessories!
► Use exclusively original accessories from the manufacturer.
The manufacturer is not responsible for the use of unapproved accessories.



WARNING!
Risk of injury due to damaged accessories!
► Use exclusively accessories in perfect condition.



WARNING!
Avoid collisions between accessories and bed parts before use of the accessories!



WARNING!
Risk of injury or material damage due to incorrect use!
► Compatible accessories manufactured by different manufacturers have their own instructions for use. It is necessary to read instructions for use of a compatible accessory with instructions for use of the compatible LINET product to respect especially technical parameters, warning notifications, cleaning and maintenance instructions of LINET products and their compatible accessories!

Compatible Accessories	Identification Numbers	Accessory Weight
Lifting pole	1101141000000, 11011410A0000, 11011410B0000	
with Triangular holder	4ROTGERSG700-2, 4ROTGNR-100GR-2	
with Infusion holder	16010700A0000, 16010700B0000, 4MAPL00N1001, 1101030000000	
Infusion Stand	4PKV26107200	0,7 kg
with Infusion bottle basket	4DR426101	
with Adaptor for infusion stand 4PKV26107200	11029700A0000	
Mobile Infusion Stand	4ZZ426100	4 kg
Writing shelf	11023230B0000	1,35 kg
Monitor shelf	11026300A0006	4 kg
Utility shelf	11025800B0000	1,1 kg
Vertical oxygen bottle holder	4MAR2010PC007-1, 4MAR2015PC001	2,4 kg (4MAR2010PC007-1)
with Adaptor for vertical oxygen bottle holder 4MAR2010PC007-1	11029700A0000	2,4 kg
Horizontal oxygen bottle holder	4MAR2010PC004	1,6 kg
Ventilation circuit holder	4MAS600877600, 4MAS25012600	0,42 kg (4MAS600877600); 0,9 kg (4MAS25012600)
Urinary bag holder	11023820B0000, 4MARD6017110, 11023700B0000	0,01 kg (4MARD6017110); 0,05 kg (11023700B0000)
Urinary bag basket	11023800B0000	0,18 kg
Handset holder	110295000000	0,04 kg
Positioning cushion	4SET17500001	1 kg
Traction frame M	4MAEXM000000	
Traction frame Kinetec T41	4KI4655004411	
Protectors (pair)	11005900B0MCR-1	1,52 kg
Stabilising ALT Pads	4GMKLS000003A	3 kg
Advanced Stabilising ALT Pads	4ZE104041317	
Foldable IV & Drive	11022200N0MCX	9,8 kg
Foldable IV & Drive with i-Drive Power control panel holder	11022200Y0MCX	10 kg

19.1 Lifting Pole

Lifting Pole is intended for supporting a patient who uses it to sit or lift by himself/herself or with the help of a caregiver.

To ensure safe use of the lifting pole:

- ► Never exceed the maximum load of 75 kg.
- ► Avoid collision between Lifting Pole and the head board during tilting to the Trendelenburg Position.
- ► Never use the lifting pole for rehabilitation exercises.
- ► To prevent the bed from tipping over, ensure that the lifting pole does not project out from the bed.

To install the lifting pole:

- ► Insert lifting pole in corresponding sleeve fitting on accessory adapter at head end.
- ► Ensure that safety pin locks into place.
- ► Attach a plastic grab handle with an adjustable strap to the lifting pole.

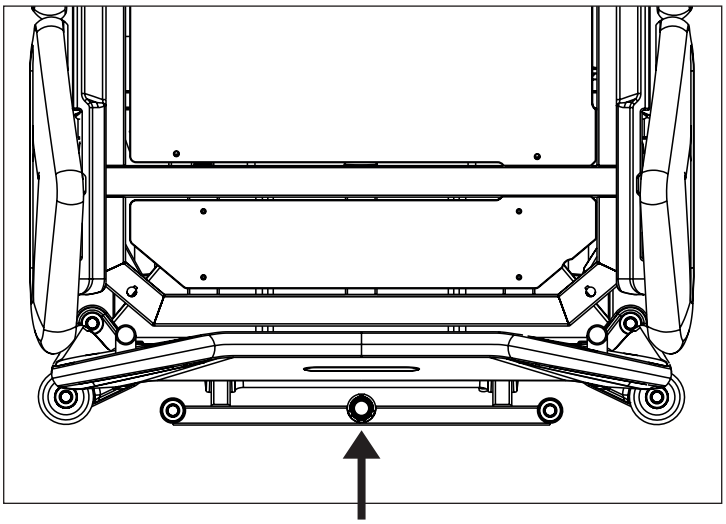


Fig. Places for lifting pole (sleeve fitting on accessory adapter)

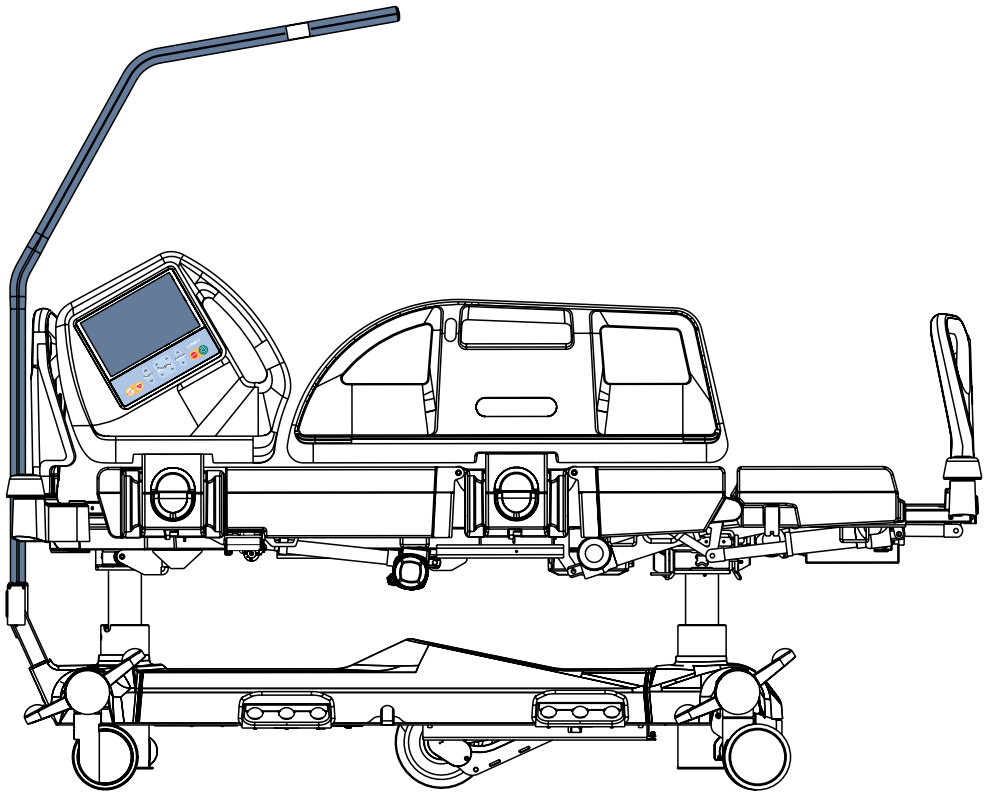


Fig. Lifting pole (at head end of the bed)

19.2 Triangular Holder for Lifting Pole



WARNING!
Read Instructions for use of the Triangular Holder before use of this product!

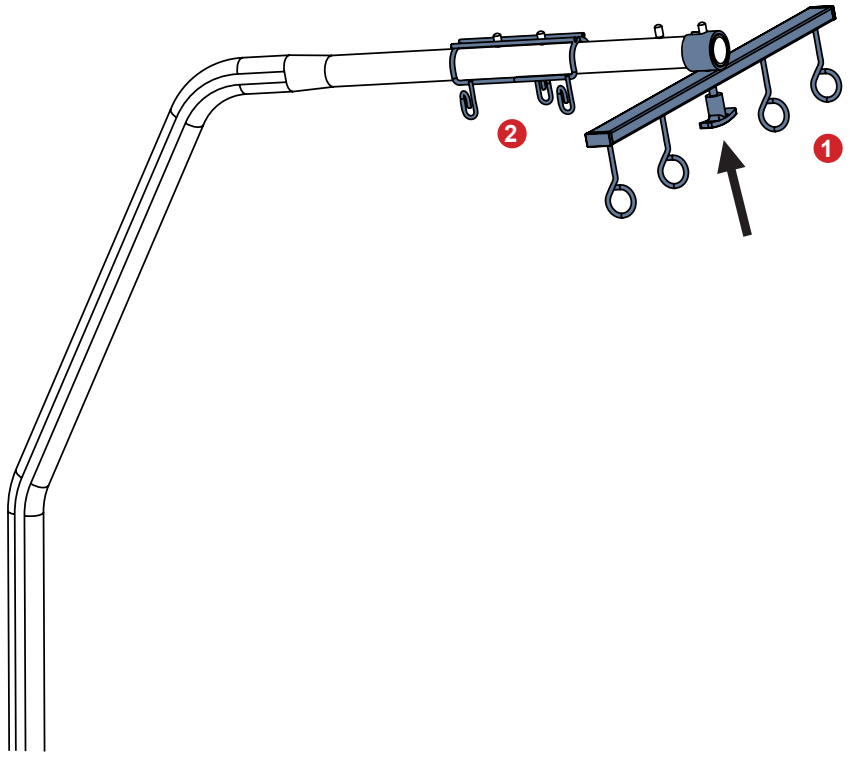
WARNING!
Replace Triangular Holder when this replacement is recommended by its manufacturer! Read Instructions for use of the Triangular Holder before use of this product!

Triangular Holder is intended for supporting a patient when lifting the patient on the bed.

Maximum Load of the Triangular Holder is 75 kg.

Fig. Places on the Lifting Pole intended for Triangular Holder

19.3 Infusion Holders for Lifting Pole



WARNING!
Fix the adjusting element by turning to ensure the Infusion Holder 1101030000000 is secured on the Lifting Pole! Inform patient that it is not allowed to release the adjusting element!

Infusion Holders are intended for IV bags with intravenous solutions. They are intended to be suspended on Lifting Pole.

Maximum Load of the Infusion Holders is 10 kg.

1. Infusion Holder 1101030000000
2. Infusion Holder 16010700B0000

Fig. Infusion Holders placed on the Lifting Pole

19.4 Infusion Stand

WARNING!
Risk of injury due to use of incorrect accessories or because of incorrect use!
Infusion Stands must only be used for their intended use. Always read the instructions for use of the corresponding infusion stand!

- ► Only mount an infusion pump to the lower (wider) telescopic section of an infusion stand above the head board or foot board.
- ► Never mount an infusion pump to the upper (thiner) telescopic section of an infusion stand.
- ► Ensure the infusion pump will not collide with any movable parts of the bed (especially Backrest part) or with the patient. This must be verified during installation.
- ► Do not over tighten the infusion pump clamps during fitment. Overtightening may damage the infusion stand.
- ► Infusion pump can be only used if the infusion stand is fitted in the accessory holder socket in the head end on the under carriage of the bed.
- ► Do not use the infusion stand as driving/pushing device during the bed transport.
- ► Do not insert Infusion Stand 4PKV26107200 to the holes in the corner bumpers!
- ► Use exclusively infusion stands with hooks for hanging IV bags or baskets for intravenous solutions.
- ► Ensure the infusion stand individual hook 2kg maximum Safe Working Load is not exceeded.
- ► Ensure the infusion stand 20kg maximum Safe Working Load is not exceeded.

Infusion stands are intended to provide a suitable support for the attachment of the infusion pumps/syringe pumps and suspension of the IV bags, bottles or baskets for intravenous solutions.

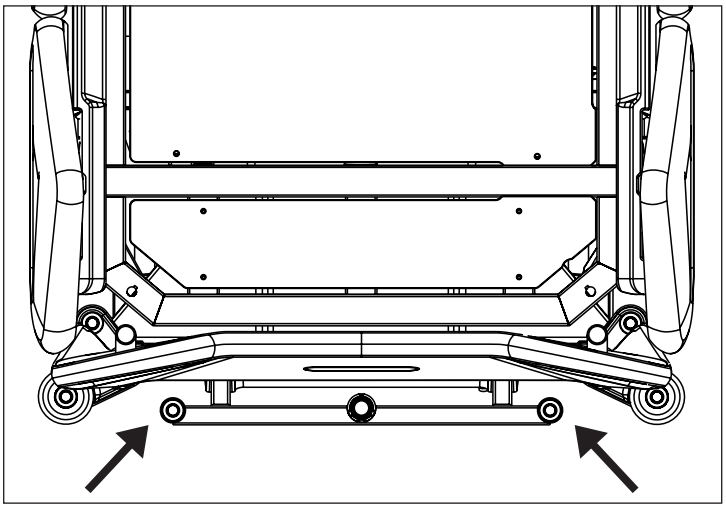


Fig. Places for Infusion Stand 4PKV26107200 (sleeve fittings on accessory adaptor)

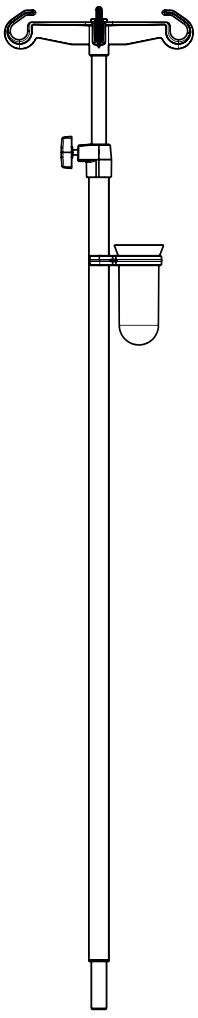


Fig. Infusion Stand with receptacle for cannulas (4PKV26107200)

19.5 Infusion Bottle Basket for Infusion Stand

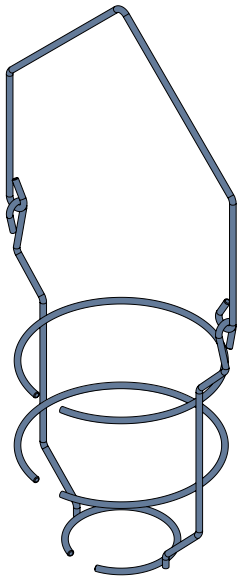


Fig. Infusion Bottle Basket

Infusion Bottle Basket is intended for carrying bottles with intravenous solutions. It is intended to be suspended on Infusion Stand.

Maximum Load of the Infusion Bottle Basket is 2 kg.

19.6 Adaptor for Infusion Stand

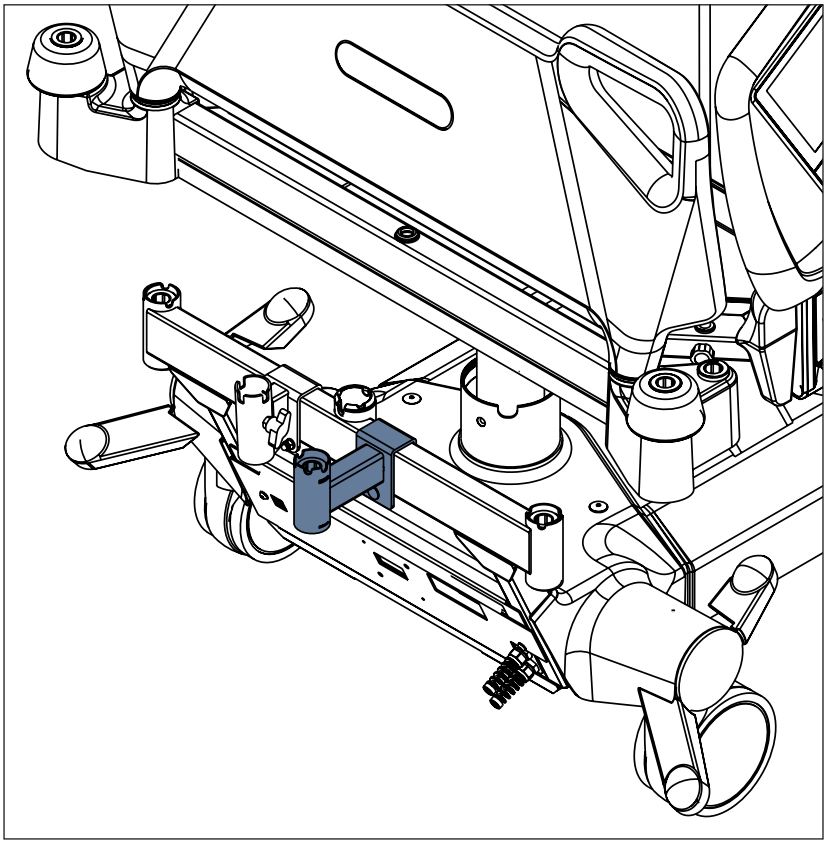


Fig. Adaptor 11029700A0000 for Infusion Stand 4PKV26107200

WARNING!
Adaptor 11029700A0000 must be fixed on the head end Accessory Adaptor by the original screw before use!

Adaptor for Infusion Stand is intended to allow the Infusion Stand to be placed properly on the bed.

Maximum Load of the Adaptor 11029700A0000 is 25 kg.

19.7 Mobile Infusion Stand

WARNING!
Read Instructions for use of the Mobile Infusion Stand before use of this product!

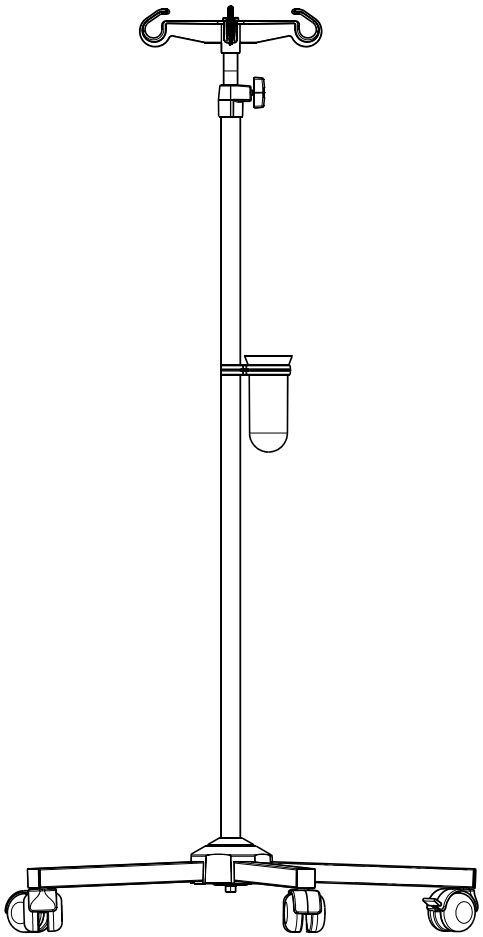
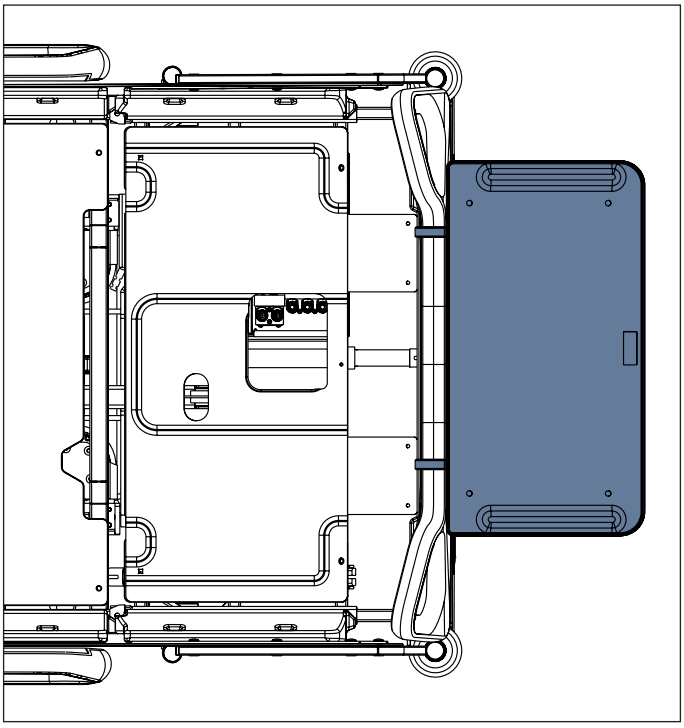


Fig. Mobile Infusion Stand with receptacle for cannulas (4ZZ426100)

19.8 Writing Shelf

The Writing Shelf is intended for writing of nursing staff.
It can be placed only on the foot board as on the following pictures.
Maximum Load for the Writing Shelf is 10 kg.



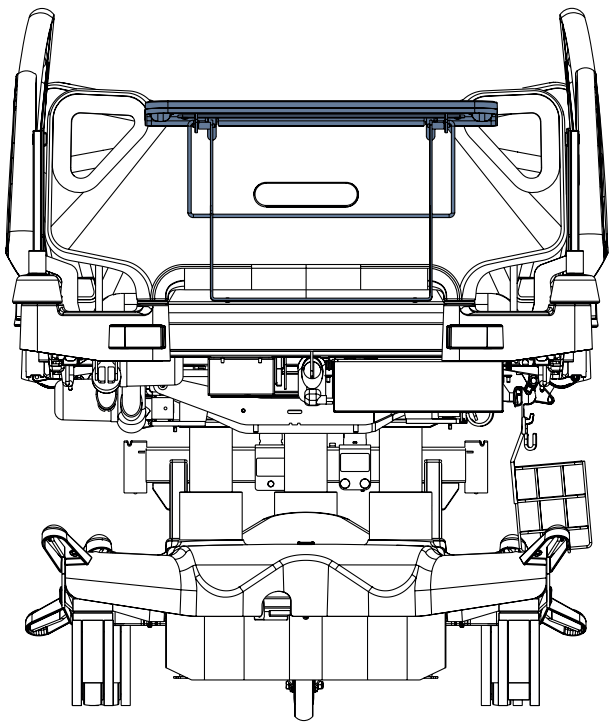


Fig. Writing Shelf on the foot board

19.9 Monitor Shelf

The Monitor Shelf is intended for transport of the monitors with a weight of up to 15 kg.

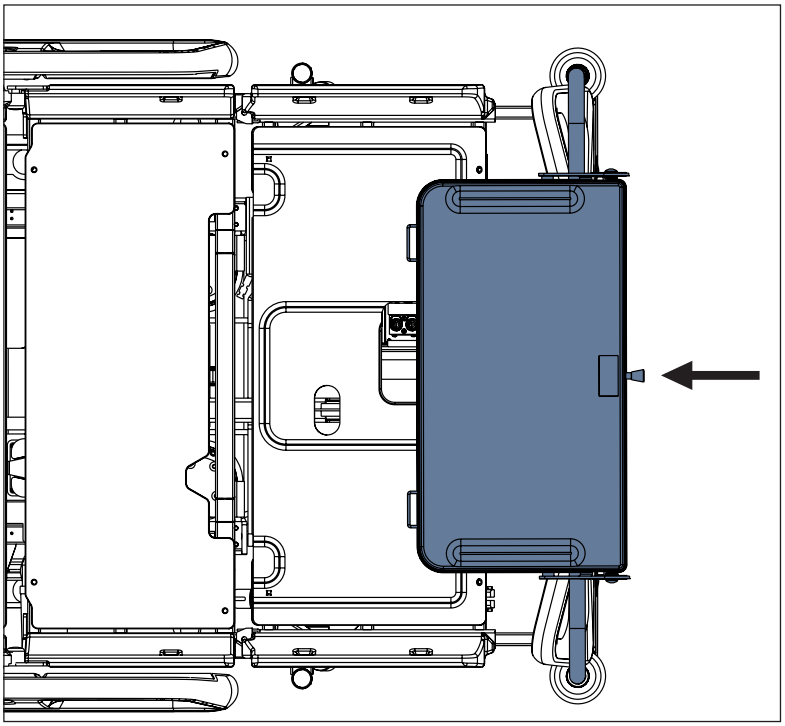


Fig. Monitor Shelf above the foot board

Installing the Monitor Shelf:

► Place the Monitor Shelf to the holes in the corner bumpers at foot end.
► After pulling the stop as on the label with instructions (**1**), adjust orientation of the Monitor Shelf board by tiping it out (**2**).
► Fixate monitor with safety belts in order to avoid any damage during transport.

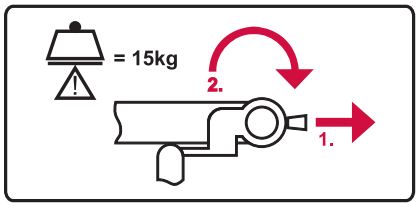


Fig. Monitor Shelf label with instructions for manipulation with board of the Monitor Shelf

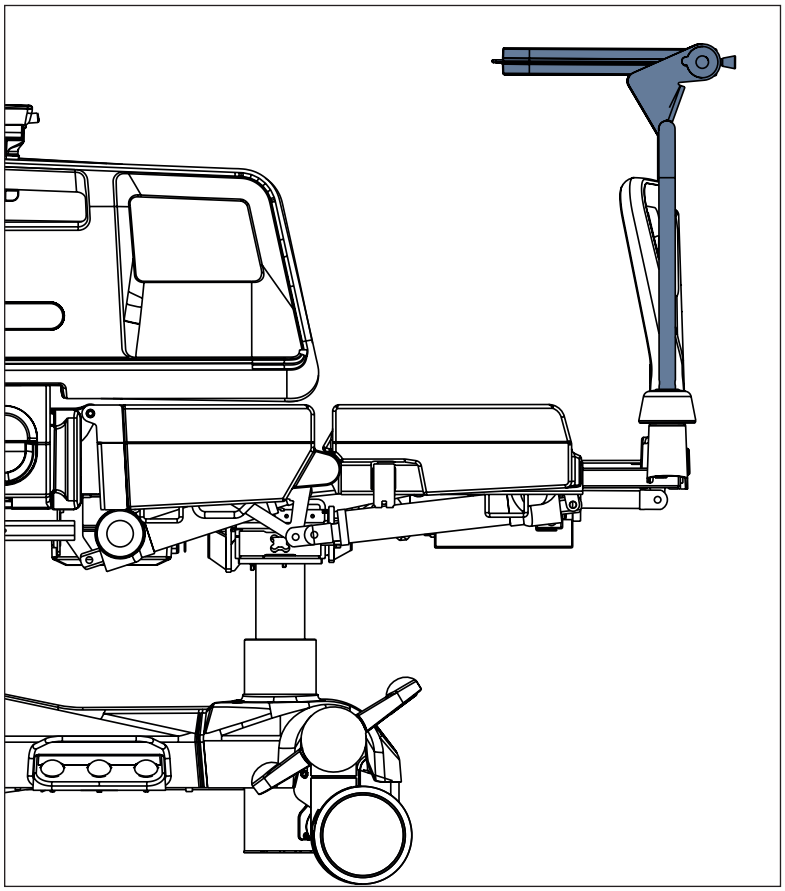
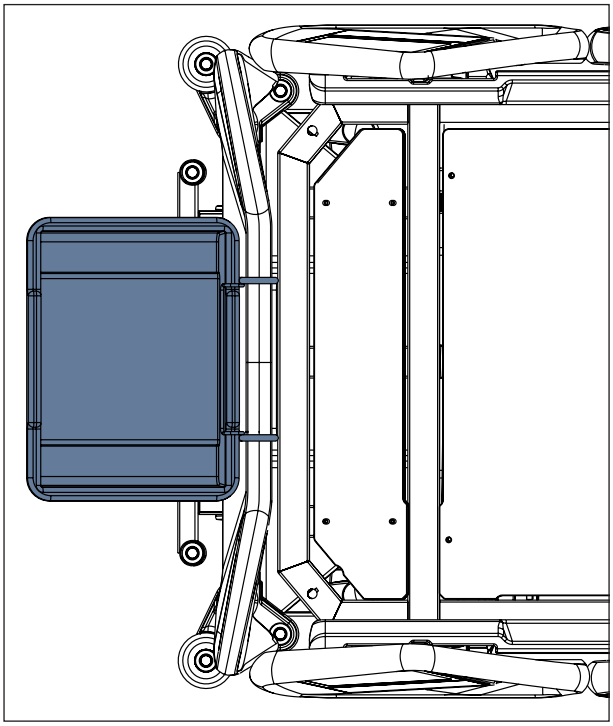


Fig. Monitor Shelf (side view)

19.10 Utility Shelf



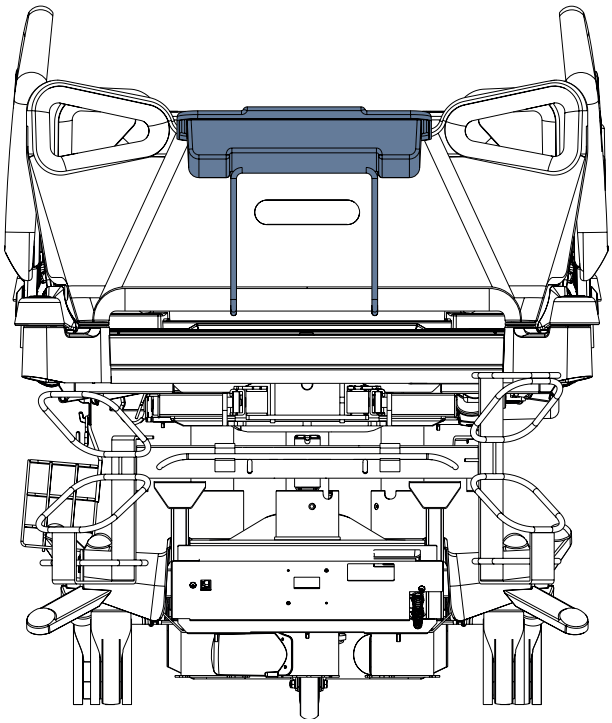


Fig. Utility Shelf on the head board

The Utility Shelf is intended for linens or sheets.
It can be placed on the head board or the foot board.
Maximum Load for the Utility Shelf is 10 kg.

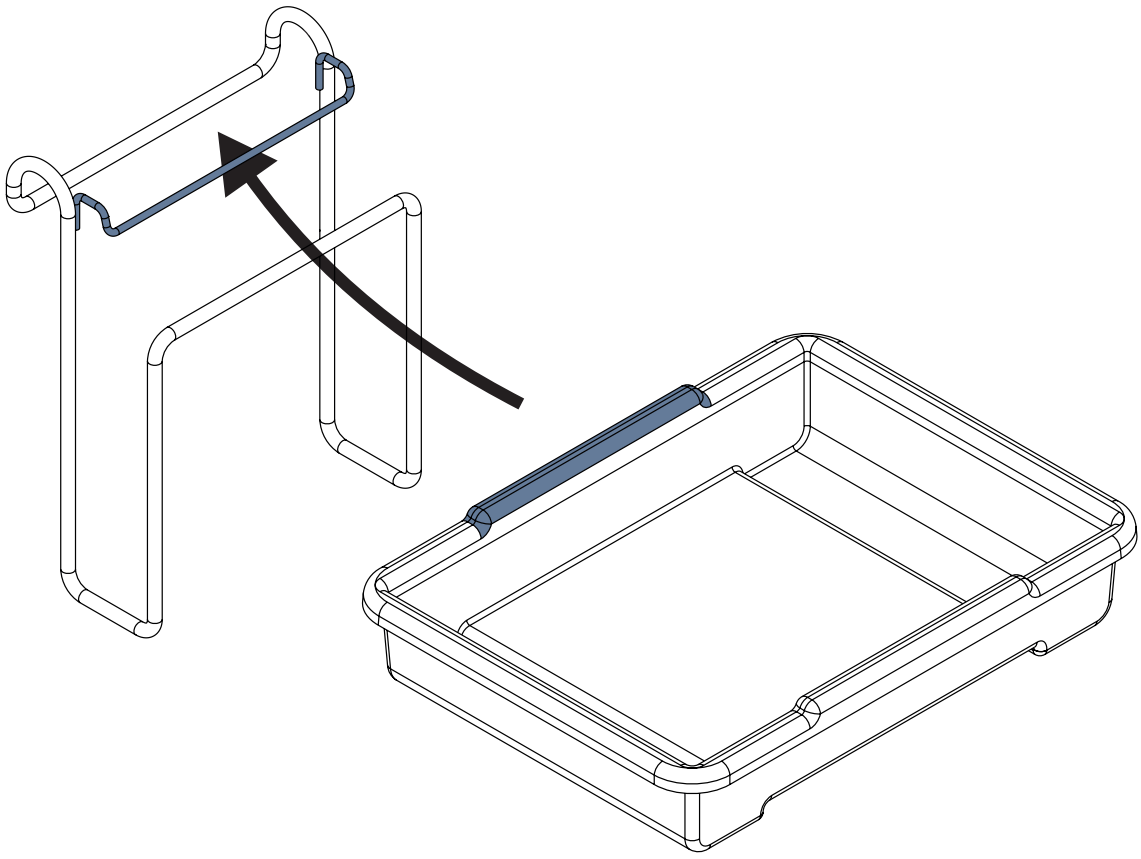


Fig. Placement of plastic container to wire construction (Utility Shelf)

To place Utility Shelf on head board or foot board:

► Place wire construction on the head board or foot board.
► Insert upper edge of the plastic container under the upper holder of the wire construction as on the picture above.
► Lower the rest of the plastic container to hang it on the wire construction.

19.11 Oxygen Bottle Holders

WARNING!
Risk of injury with oxygen bottle holder due to incorrect use or due to careless driving!

► Ensure the oxygen bottle holder is correctly fitted in correct position.
► It is necessary to place oxygen bottle holder (with or without O2 bottle) before transport to secure transport position.
► Be aware of people or objects in close proximity when driving or manipulating the bed equipped with oxygen bottle holder.
► Secure the oxygen bottles against falling or involuntary movement with rubber strap.
► Ensure the oxygen bottle valve will not get damaged by careless or incorrect manipulation or placement.

The oxygen bottle holders are suitable for transporting oxygen bottles with a weight of up to 15 kg and a volume of 5 litres.

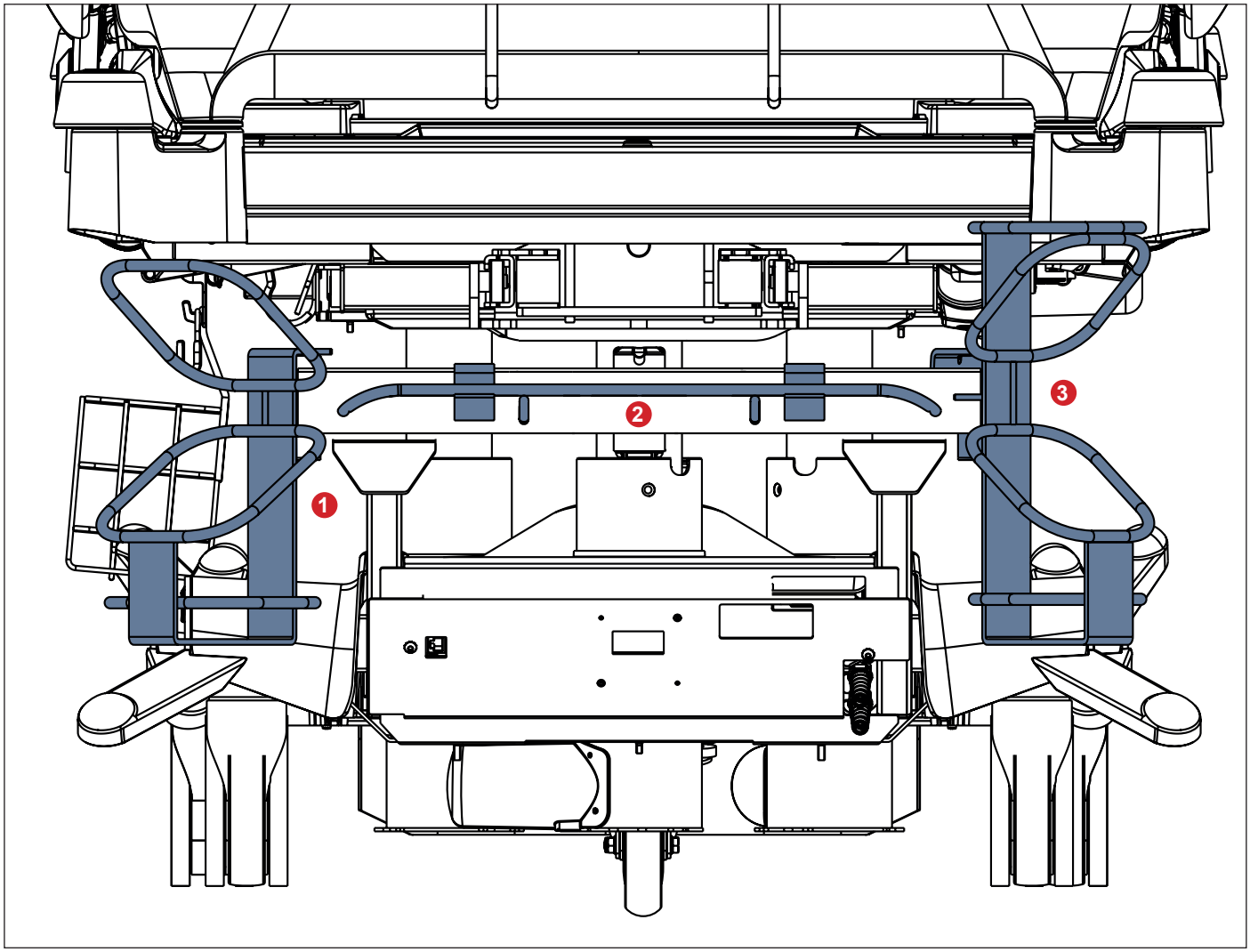


Fig. Oxygen Bottle Holders

1. Vertical Oxygen Bottle Holder 4MAR2010PC007-1
2. Horizontal Oxygen Bottle Holder 4MAR2010PC004
3. Vertical Oxygen Bottle Holder 4MAR2015PC001

19.11.1 Vertical Oxygen Bottle Holders

WARNING!
Adaptor 11029700A0000 must be fixed on the head end Accessory Adaptor by the original screw before use!
Maximum Load of the properly installed Adaptor 11029700A0000 is 25 kg.

Maximum diameter of an oxygen bottle in the Vertical Oxygen Bottle Holders 4MAR2010PC004 and 4MAR2010PC007-1 is 14 cm.
Maximum diameter of an oxygen bottle in the Vertical Oxygen Bottle Holder 4MAR2015PC001 is 11 cm.

To place Vertical Oxygen Bottle Holders on the bed:
► Put Vertical Oxygen Bottle Holder on the sleeve fittings in the accessory adapter on head end. Vertical Oxygen Bottle Holder 4MAR2010PC007-1 can be placed to the sleeve fittings of the Adaptor for Oxygen Bottle Holder 11029700A0000.
► Ensure the locking pin (or pins) of Vertical Oxygen Bottle Holder is (are) locked in the sleeve fitting of the compatible adaptor.

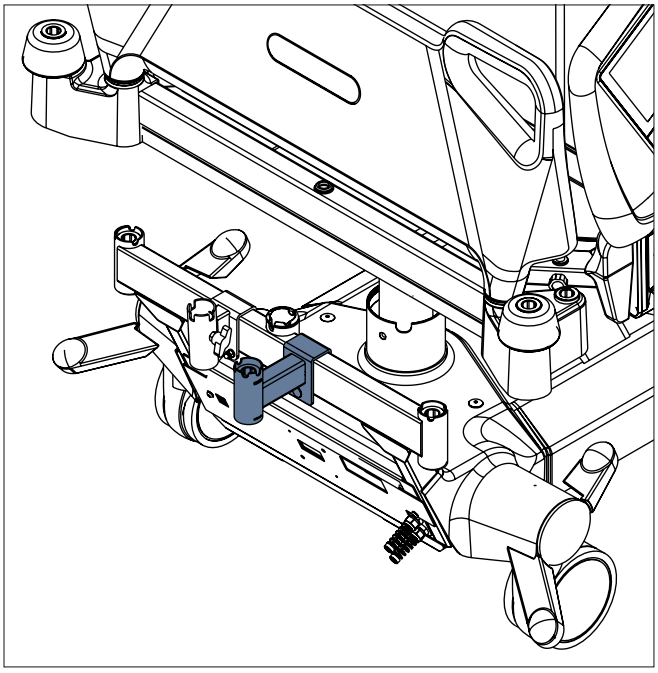


Fig. Adaptor 11029700A0000 for Vertical Oxygen Bottle Holder 4MAR2010PC007-1

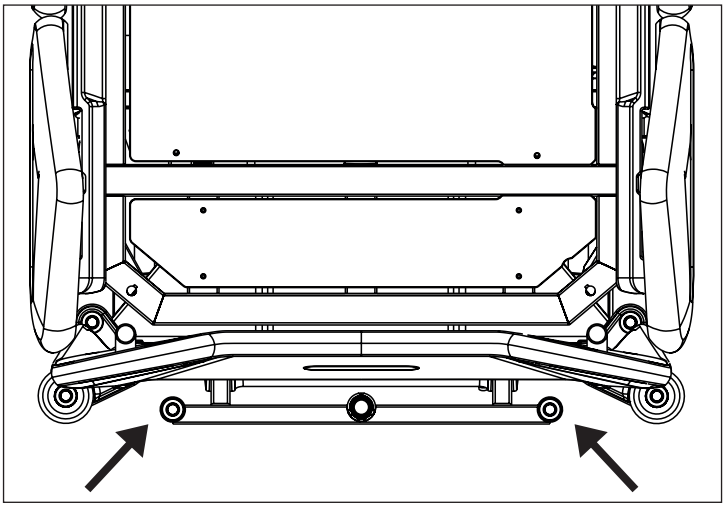


Fig. Places for Vertical Oxygen Bottle Holders (sleeve fittings on accessory adaptor)

19.11.2 Horizontal Oxygen Bottle Holder

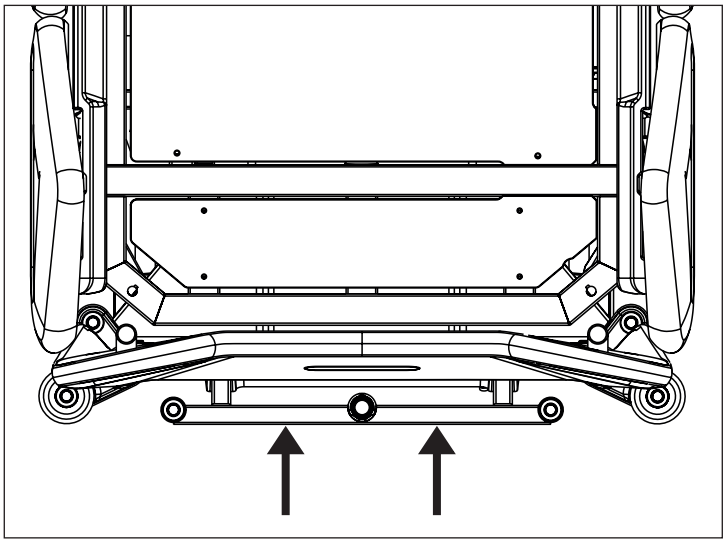


Fig. Places for Horizontal Oxygen Bottle Holder

► Put Horizontal Oxygen Bottle Holder on crossbar on the head end of the bed.
► Secure the oxygen bottle against falling or involuntary movement with rubber strap.

19.12 Ventilation Circuit Holder

CAUTION!
Both Ventilation Circuit Holders are not compatible with Hercules Patient Repositioner!

The ventilation circuit holder prevents extubation of the patient connected to the ventilator.
► Always use LINET ® ventilation circuit holders to prevent extubation during any procedures.

Applying ventilation circuit holder:
► Raise the Backrest so that the Backrest frame is accessible.
► Put ventilation circuit holder in hole on right or left side of the Backrest frame.
► Fasten ventilation circuit holder with wing screw provided.
► Put intubation tube through plastic head of ventilation circuit holder.
► Tilt mattress support platform left and right by 15° to check if intubation tube is fastened securely. The fastening is secure if no parts of the ventilation circuit are disconnected.

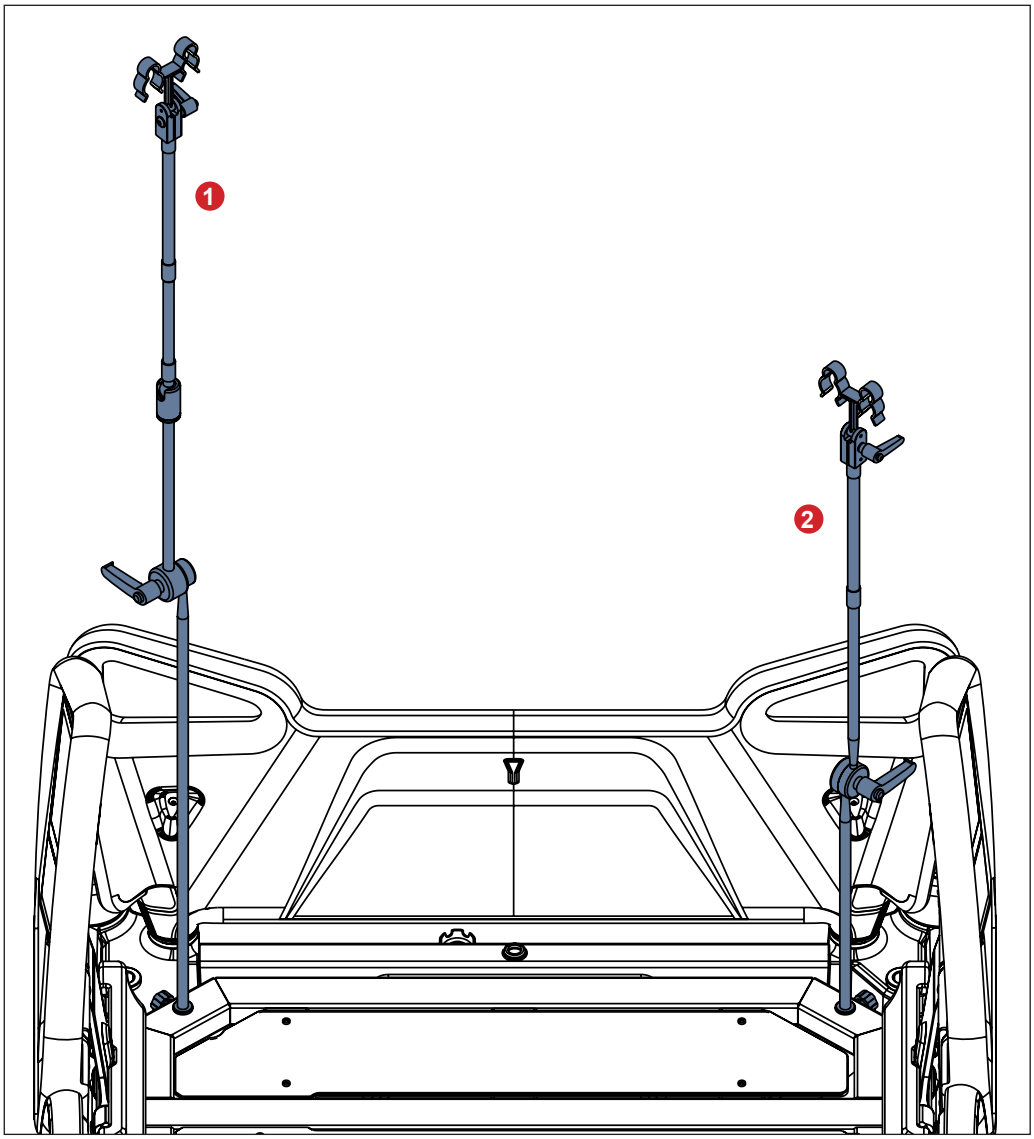


Fig. Ventilation Circuit Holders placed on the Backrest

1. Ventilation Circuit Holder 4MAS25012600
2. Ventilation Circuit Holder 4MAS600877600

19.13 Urinary Bag Holders

CAUTION!
Urinary Bag Holder 11023820B0000 is intended only for one urinary bag which is suspended on both hooks of the Urinary Bag Holder!

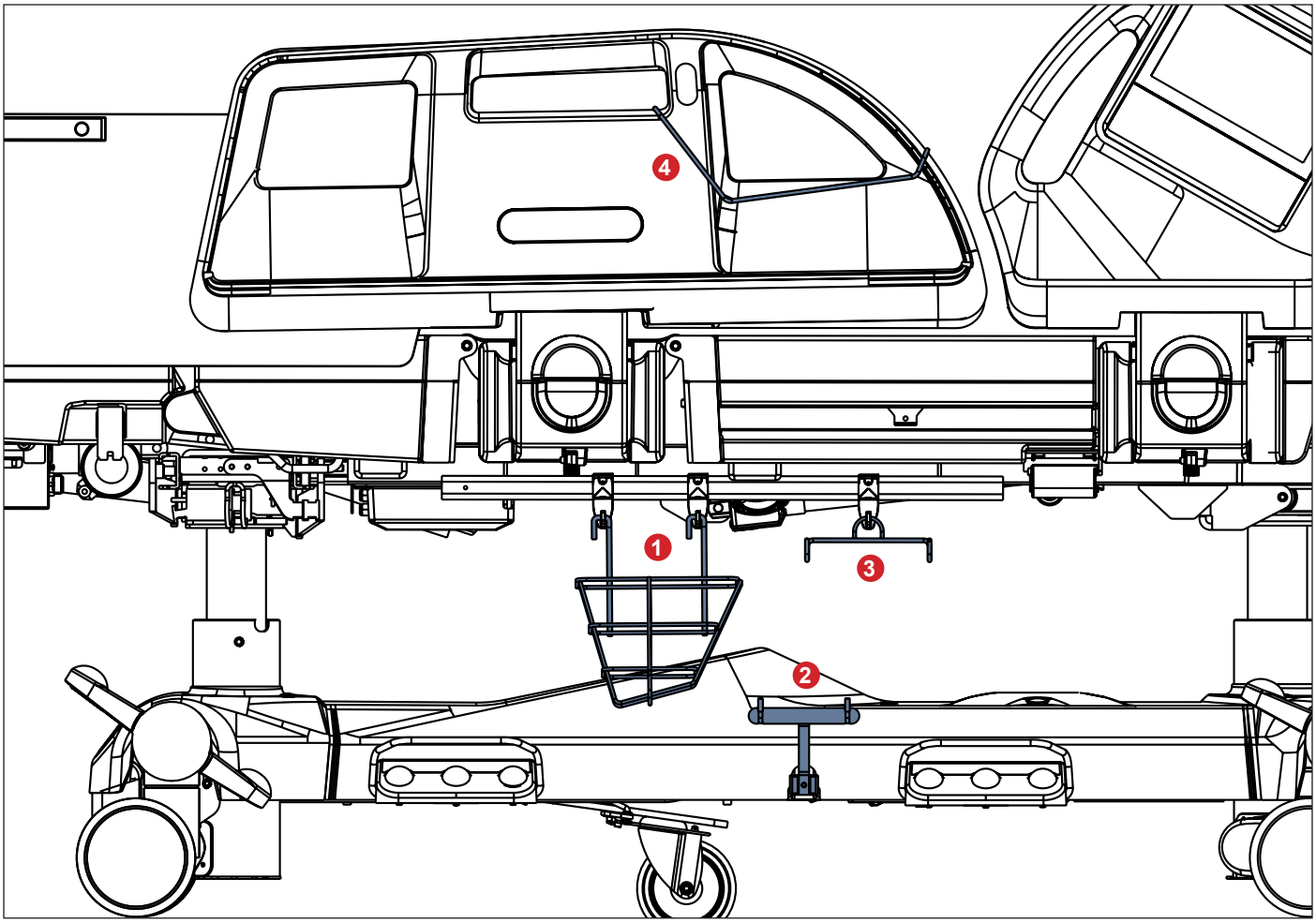


Fig. Urinary Bag Holders

1. Urinary Bag Basket 11023800B0000
2. Urinary Bag Holder 11023820B0000
3. Urinary Bag Holder 11023700B0000
4. Urinary Bag Holder 4MARD6017110

Maximum Load of the Urinary Bag Basket 11023800B0000 is 5 kg.
Maximum Load of the Urinary Bag Holder 11023820B0000 is 5 kg.
Maximum Load of the Urinary Bag Holder 11023700B0000 is 2 kg.
Maximum Load of the Urinary Bag Holder 4MARD6017110 is 2 kg.

19.13.1 Urinary Bag Basket

CAUTION!
Hang the Urinary Bag Basket on the two hooks placed on the accessory rail to avoid collision between Urinary Bag Basket and Bed Height Foot Control!

19.14 Handset Holder

CAUTION!
Place Handset Holder on the outside of Foot Siderail Handle! Ensure the Handset Cable runs along the outside of the Foot Siderail to avoid damaging of the cable during positioning of the bed!

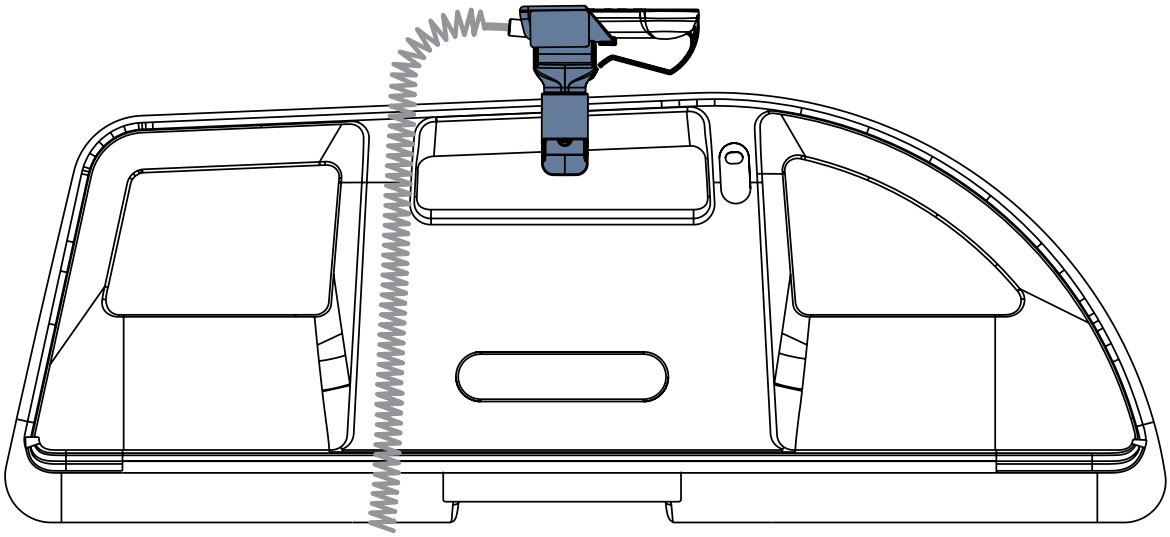


Fig. Handset Holder on the Foot Siderail Handle (outer side of the Foot Siderail)

19.15 Positioning Cushion

Positioning Cushion provides additional support for a patient during lateral tilting of the Multicare X bed.



Fig. Positioning Cushion

19.16 Traction Frame M

WARNING!
Read Instructions for use of the Traction Frame M before use of this product!

WARNING!
Risk of injury due to incorrect use!
► Multicare X bed is compatible with Traction Frame M only if the bed is equipped with the Adaptor for Traction Frames!
► There must be no patient on the bed when installing the Traction Frame!
► Avoid collisions between the Traction Frame and the bed (Foot Board, Backrest and Lateral Tilt) during bed positioning!
► Avoid collisions between the Traction Frame and accessories!
► Cross the thresholds with caution during transporting the bed with installed Traction Frame!
► It is allowed to transport a patient on the bed with Traction Frame just in emergency cases and with caution!
► Respect the Safe Working Load of the bed, of the Traction Frame and of its hooks and pulleys!
► Remove the Traction Frame from the bed if it is not needed for treatment!

Intended Use
Traction Frame is a supporting construction intended for fixation, traction and relief of limbs, spine and pelvis.
Traction Frame is intended for orthopaedic department, surgery department, traumatologic department and for ICU.

Placement
Traction Frame is inserted to the holes in the Accessory Adaptor at head end and to the holes in the Adaptor for Traction Frames at foot end.

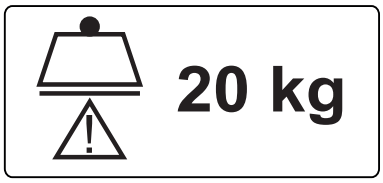


Fig. Safe Working Load of the pulley

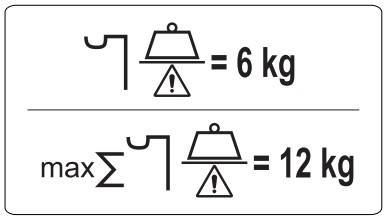


Fig. Safe Working Load of the hooks (Infusion Holder)

19.17 Traction Frame Kinetec T41

WARNING!
Read Instructions for use of the Traction Frame Kinetec T41 before use of this product!

WARNING!
Risk of injury due to incorrect use!
► Multicare X bed is compatible with Traction Frame Kinetec T41 only if the bed is equipped with the Adaptor for Traction Frames!
► There must be no patient on the bed when installing the Traction Frame!
► Avoid collisions between the Traction Frame and the bed (Foot Board, Backrest and Lateral Tilt) during bed positioning!
► Avoid collisions between the Traction Frame and accessories!
► Cross the thresholds with caution during transporting the bed with installed Traction Frame!
► It is allowed to transport a patient on the bed with Traction Frame just in emergency cases and with caution!
► Respect the Safe Working Load of the bed, of the Traction Frame and of its hooks and pulleys!
► Remove the Traction Frame from the bed if it is not needed for treatment!

Intended Use
Traction Frame is a supporting construction intended for fixation, traction and relief of limbs, spine and pelvis.
Traction Frame is intended for orthopaedic department, surgery department, traumatologic department and for ICU.

Placement
Traction Frame is inserted to the holes in the Accessory Adaptor at head end and to the holes in the Adaptor for Traction Frames at foot end.

19.18 Protectors

WARNING!
Risk of injury due to the patient falling off the bed!
- ► Ensure that the Protector is installed securely.
- ► Always check that the siderails are properly locked in the „up“ position.
- ► Make sure the fall risk assessment was done properly before Protector use.

CAUTION!
Right Protector and left Protector are not interchangeable! Ensure the both Protectors are properly installed on the bed!

The Protector is an optional accessory for the Multicare X bed. The main purpose of the Protector is to reduce the risk of fall especially at very risky patients (confused restless patients). The Protector can be used with extended or standard beds.

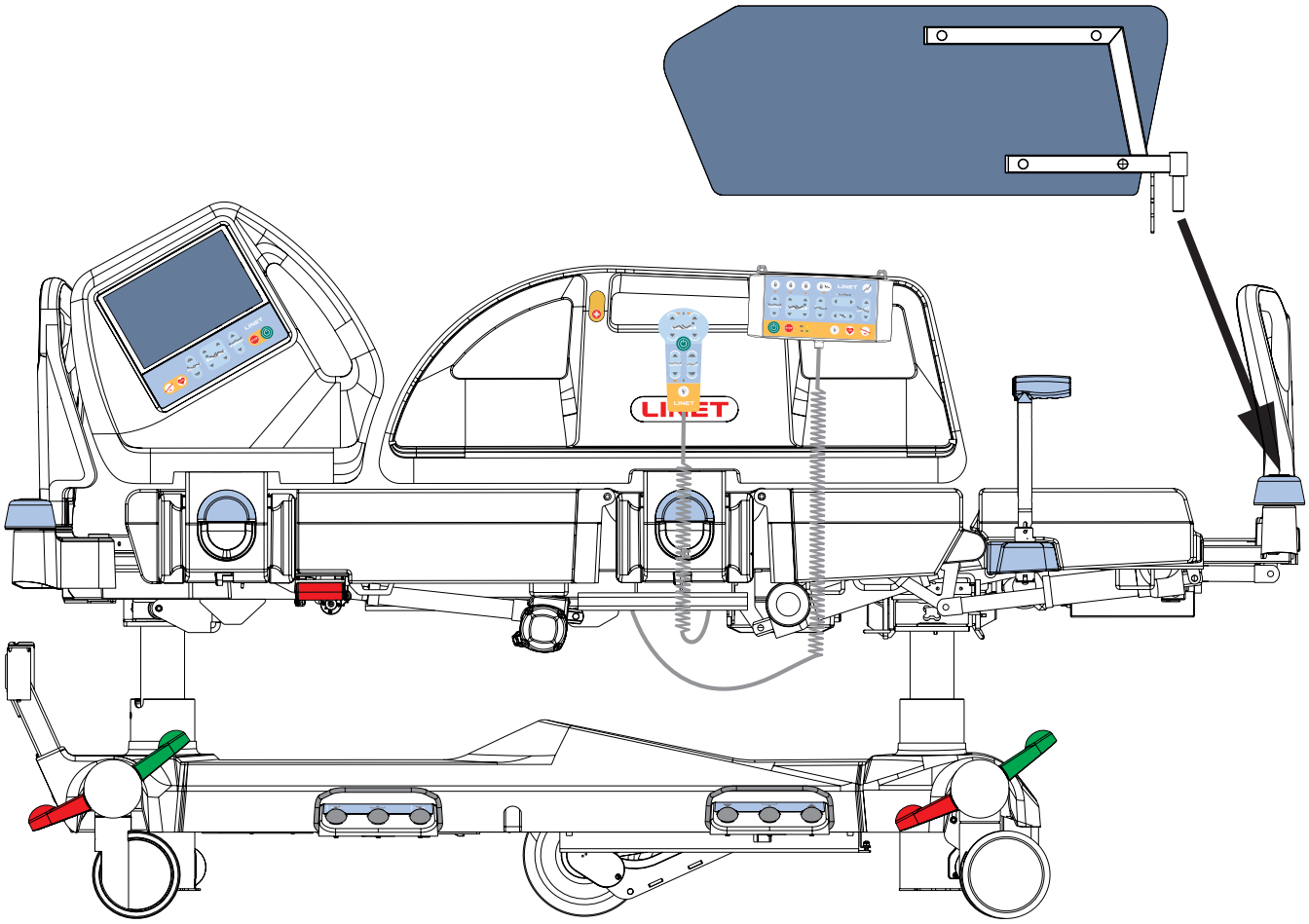


Fig. Placement of Protector

Placement

Attach the Protector to the bed as follows:
- ► Insert the Protector pin into the casing in the protective ring at the corner of the foot end of the bed.
- ► Ensure that the fixing element is secured to the telescopic profile of the bed extension.

Remove the Protector from the bed as follows:
- ► Grasp the upper end of the Protector.
- ► Remove the Protector from the casing.

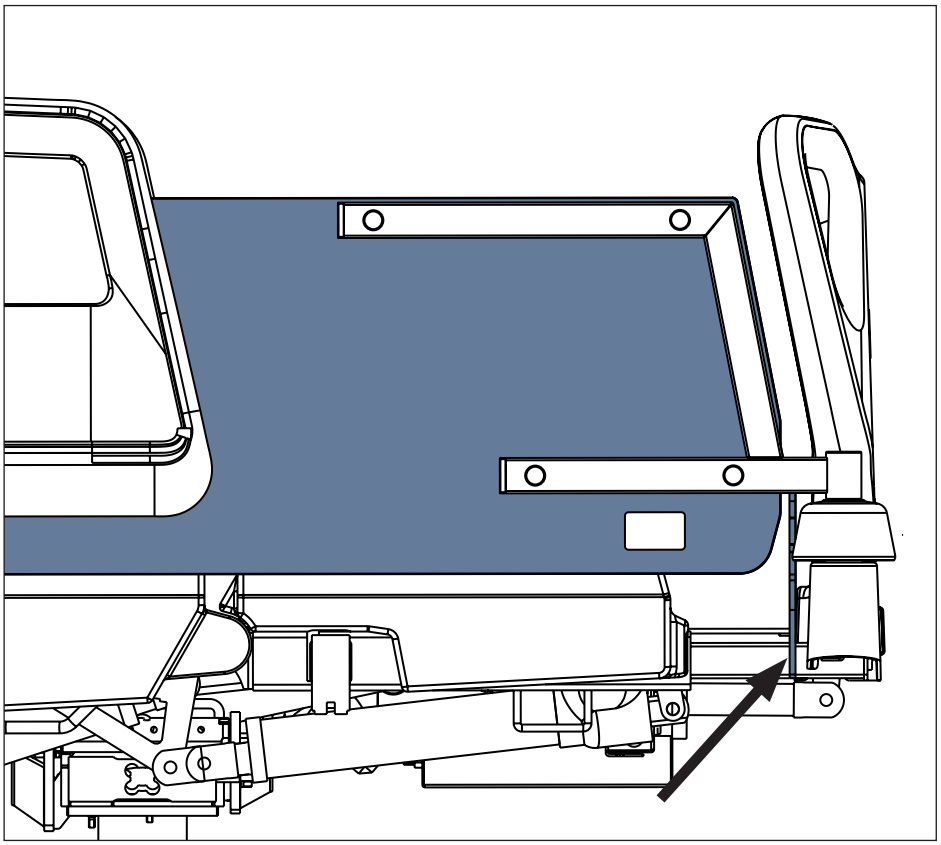


Fig. Fixing element on the telescopic profile of the bed extension

19.19 Stabilising ALT Pads

The Stabilising ALT Pads ensure a stable position of the patient during ALT in order to prevent extubation or disconnection of IV lines or other equipment. Always use LINET ® Stabilising ALT Pads for positioning patient in centre of bed during Automatic Lateral Therapy.

Stabilising ALT Pads set:

- 2 lateral arm pads
- 2 lateral leg pads
- 2 head pads
- 1 internal leg pad

To apply the Stabilising ALT Pads:

- ► Position the patient in the middle of the bed.
- ► Place lateral pads between patient and siderails.
- ► Attach head pads to arm pads with Velcro.
- ► Place internal pad between the patient's legs.
- ► Tilt mattress platform left and right by 30° to ensure the patient's position is stable.
- ► The position is stable if the patient does neither shift nor turn over.

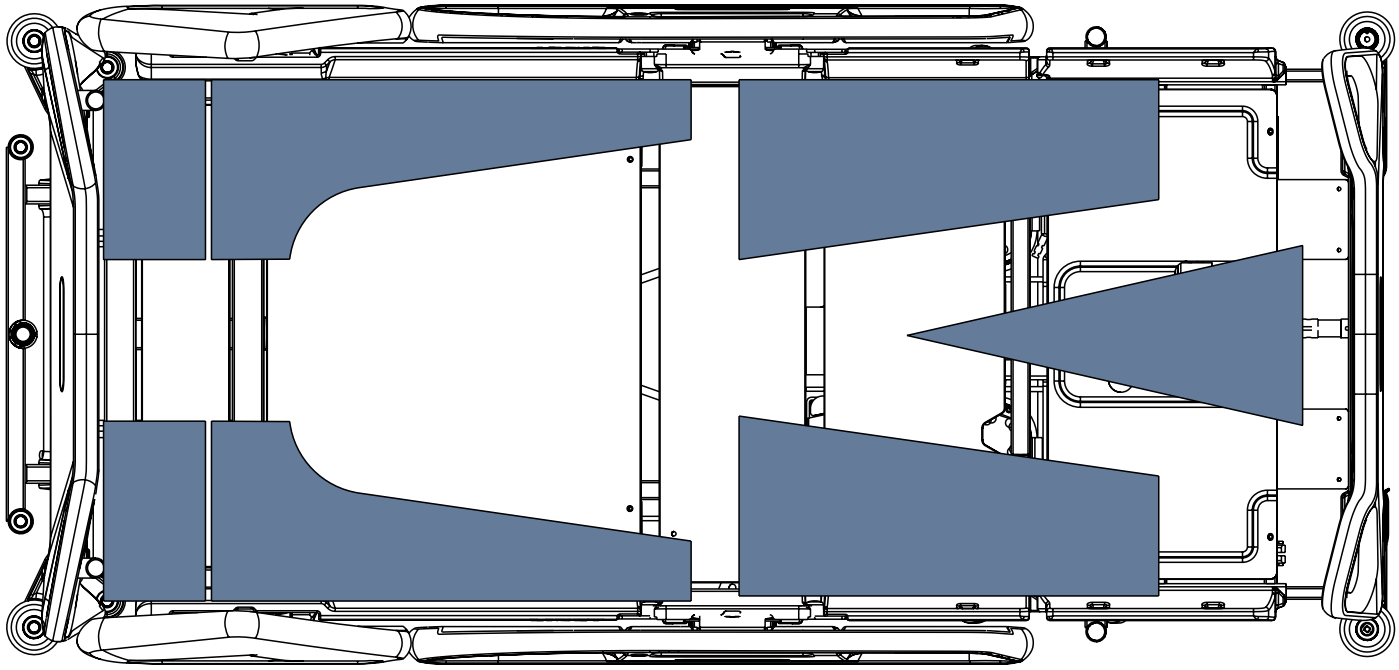


Fig. Positions of the 7 Stabilising ALT Pads on the mattress support platform

19.20 Advanced Stabilising ALT Pads

WARNING!
Hospital staff is responsible for assessing how many pads and pillows and in which positions should be used for a stable patient position!

The Advanced Stabilising ALT Pads ensure a stable position of the patient during ALT in order to prevent extubation or disconnection of IV lines or other equipment. Always use LINET ® Advanced Stabilising ALT Pads for positioning patient in the middle of the bed during Automatic Lateral Therapy. The Advanced Stabilising ALT Pads should be stored in the two original suitcases when they are not used on the bed. The suitcases contain pictures intended to explain how to put the 21 parts back to the suitcases.

Advanced Stabilising ALT Pads set:
- 6 foam frame pads
- 15 pearl balls fixation pillows

To apply the Advanced Stabilising ALT Pads:
- ► Position the patient in the middle of the bed.
- ► Place as many pads and pillows as needed for stable position of the patient on the bed.
- ► Tilt mattress platform left and right by 30° to ensure the patient's position is stable.
- ► The position is stable if the patient does neither shift nor turn over.

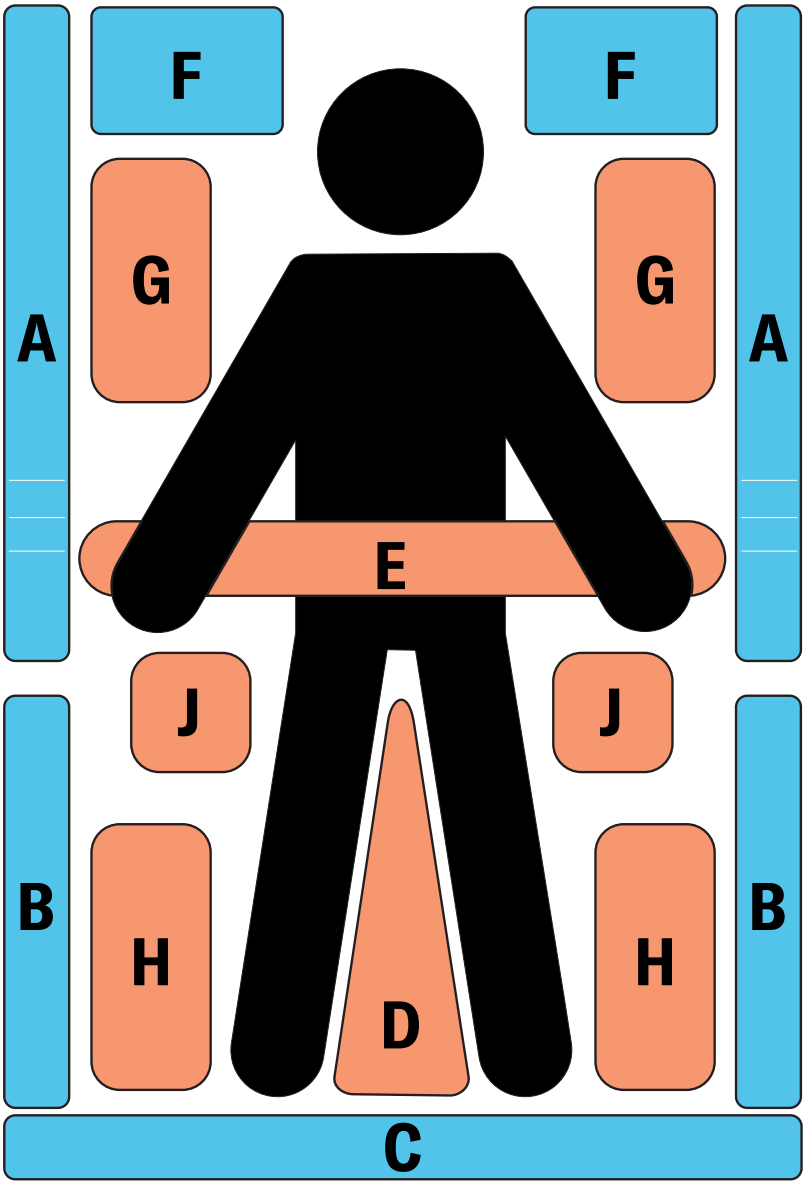


Fig. Intended positions of the 21 Advanced Stabilising ALT Pads on the mattress support platform

19.21 Foldable IV & Drive (Infusion Stands/Pushing Handles)

WARNING!
Risk of injury due to incorrect placement of an infusion pump!
► Ensure the infusion pump on the Foldable infusion stands will not collide with any movable parts of the Multicare X (especially Backrest) or with the patient!

CAUTION!
Risk of material damage due to incorrect placement of an infusion pump!
► Place an infusion pump carefully on the telescopic part of the Foldable infusion stands in order to prevent the telescopic part from being damaged!

Foldable infusion stand equipped with 2 hooks is intended for carrying IV bags or baskets for intravenous solutions.
The pair of Foldable infusion stands can serve as handles for bed transport when they are raised.
It is possible to extend height of the Foldable infusion stand and to fold down the Foldable infusion stand again.
Pair of the Foldable infusion stands should be located on the head end Accessory Adaptor.
Maximum load of one hook is 5 kg.

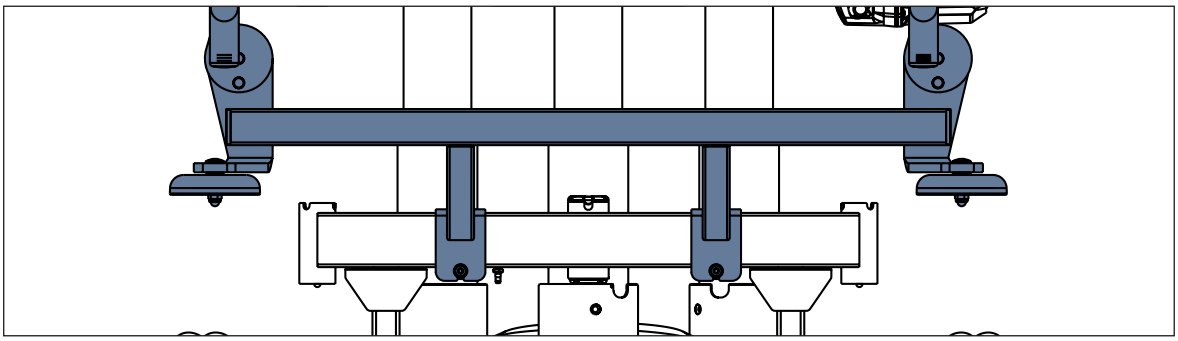


Fig. Position of the Foldable IV & Drive on the Accessory Adaptor

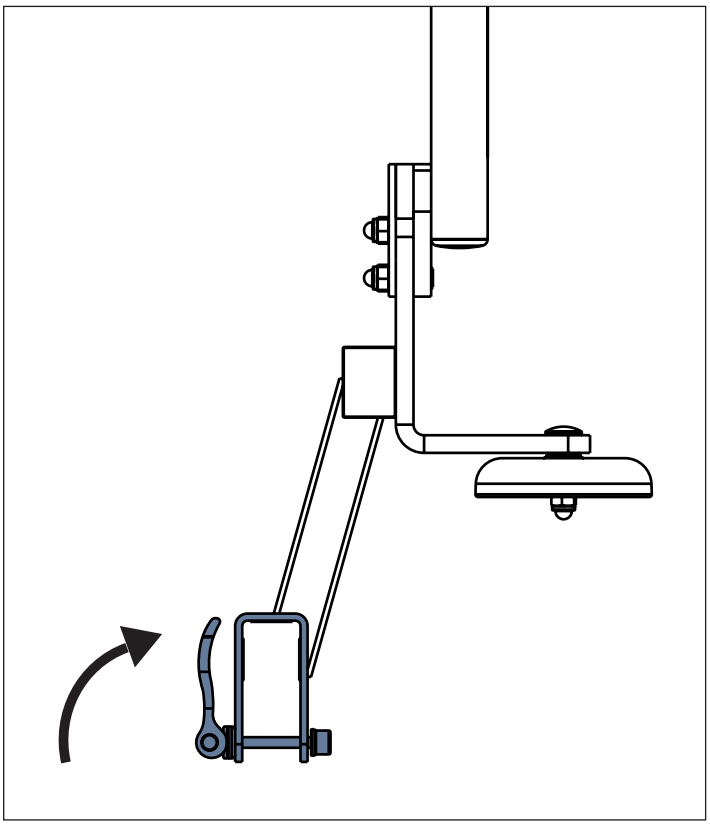


Fig. Fixation of the Foldable IV & Drive on the Accessory Adaptor

To install Foldable IV & Drive on the head end Accessory Adaptor:

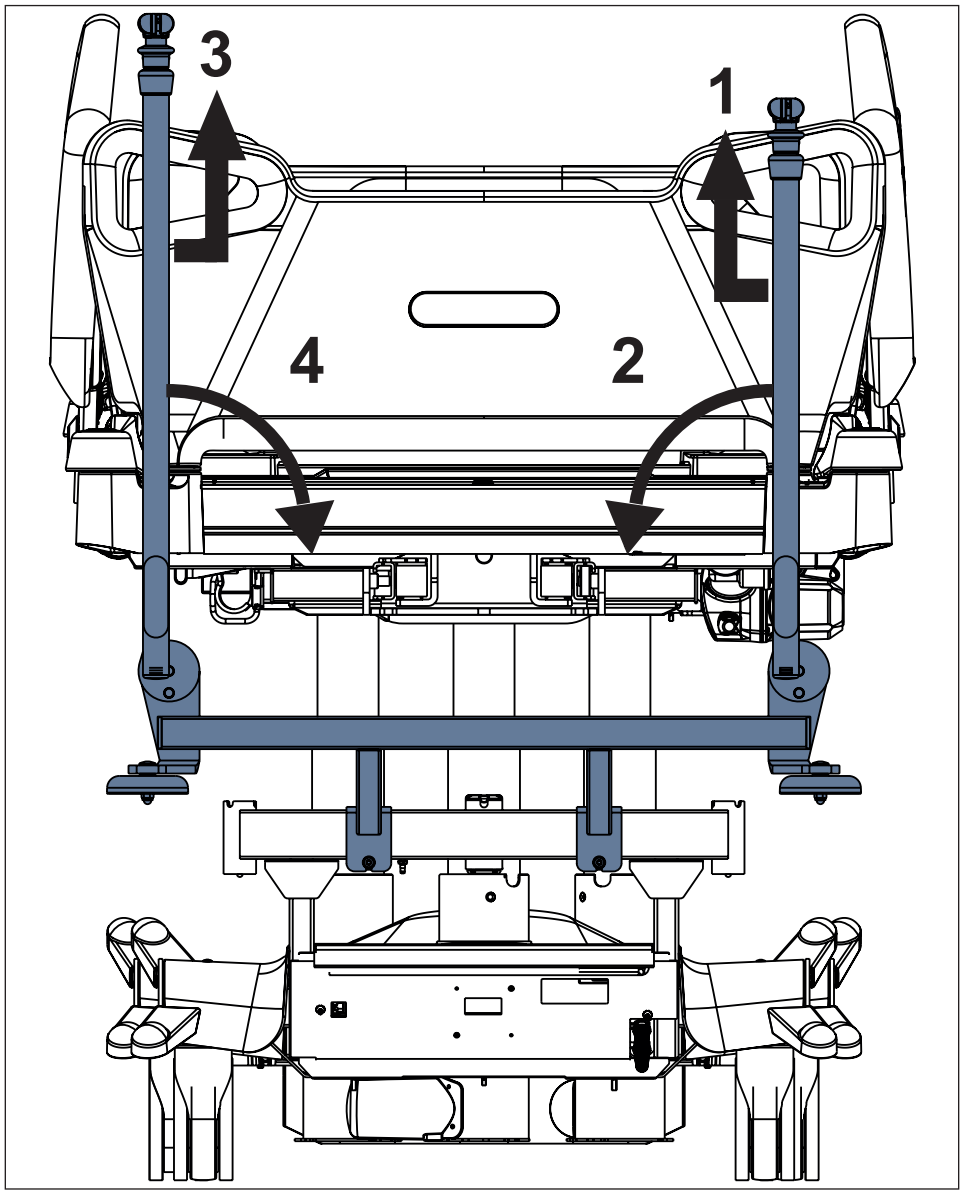
► Place IV & Drive on the Accessory Adaptor.
► Insert the screw from below so that the clamping lever points inwards.
► Push the clamping lever upwards.

To remove Foldable IV & Drive from the head end Accessory Adaptor:

► Release the clamping lever by pushing it down.
► Remove the screw from below.
► Remove the IV & Drive from the Accessory Adaptor.
► Place the IV & Drive in a safe position outside the bed.



FOLD THE MARKED FOLDABLE INFUSION STAND AS THE SECOND ONE.





FOLD THE MARKED FOLDABLE INFUSION STAND AS THE FIRST ONE.

Fig. Pair of Foldable infusion stands (head end)

To fold Foldable infusion stands down:

- ► Ensure the right Foldable infusion stand is not extended.
- ► Grasp grey bar of the right Foldable infusion stand.
- ► Lift the right Foldable infusion stand up (**1**) to unlock it.
- ► Fold the right Foldable infusion stand down (**2**).
- ► Ensure the left Foldable infusion stand is not extended.
- ► Grasp grey bar of the left Foldable infusion stand.
- ► Lift the left Foldable infusion stand up (**3**) to unlock it.
- ► Fold the left Foldable infusion stand down (**4**).

To lift Foldable infusion stands up:

- ► Grasp grey bar of the left Foldable infusion stand.
- ► Lift the left Foldable infusion stand up.
- ► Check if the left Foldable infusion stand is locked in place.
- ► Grasp grey bar of the right Foldable infusion stand.
- ► Lift the right Foldable infusion stand up.
- ► Check if the right Foldable infusion stand is locked in place.

To extend Foldable infusion stand:

► Put control ring up (**5**).
► Extend the Foldable infusion stand by taking its telescopic part out.

To shorten Foldable infusion stand:

► Put control ring up (**5**).
► Insert the telescopic part into the Foldable infusion stand.

To prepare hooks of the Foldable infusion stand:

► Take a hook out (**6**).

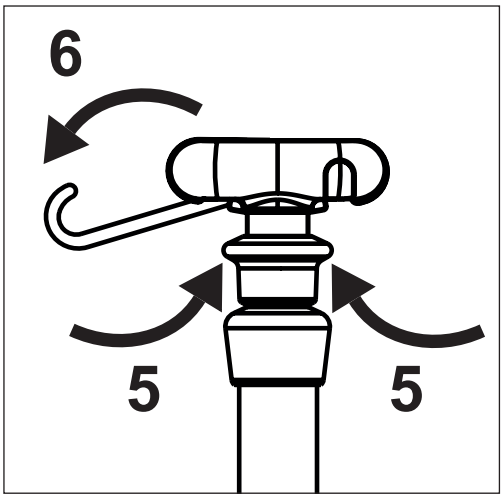


Fig. Control ring and hooks

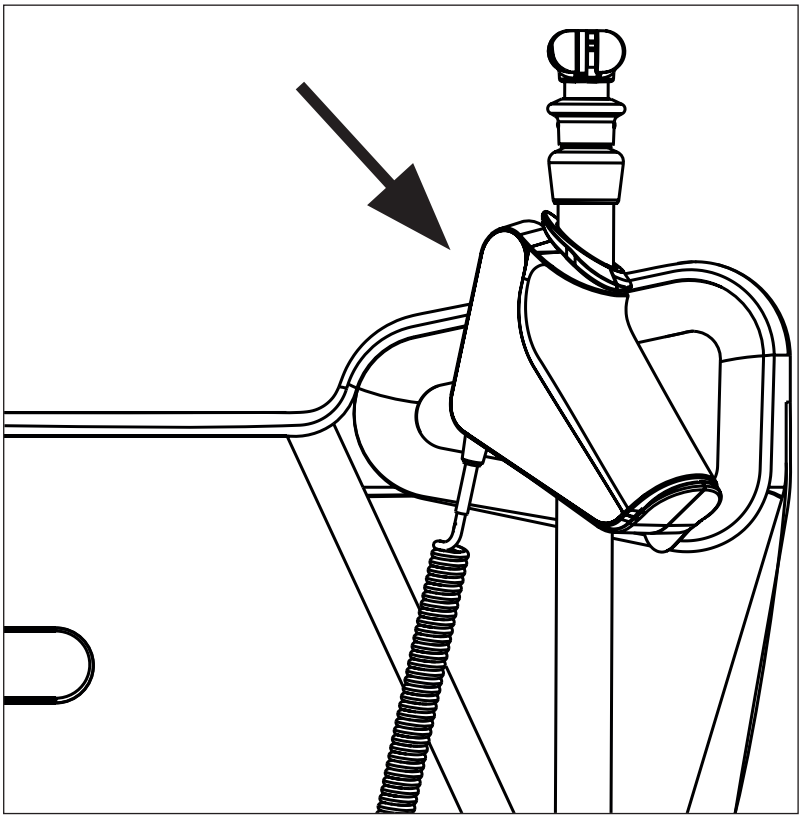


Fig. Foldable IV & Drive with fixed holder for i-Drive Power control panel

20 Cleaning/Disinfection

WARNING!
Risk of injury due to accidental bed movement!
► Always disable the function buttons when cleaning between the undercarriage and mattress support platform.

CAUTION!
Material damage due to incorrect cleaning/disinfection!
► Do not use washing machines.
► Do not use pressure or steam cleaners.
► Follow the instructions and observe the dosages recommended by the manufacturer.
► Ensure that disinfectants are selected and applied exclusively by qualified hygiene experts.
► **Check if used cleaning agents and disinfectants are compatible with materials that the product consists of! For information see the following table.**

BED COMPONENTS THAT ARE INTENDED TO BE CLEANED Do not clean what is not mentioned in this column!	MATERIALS (SURFACES OF THE MENTIONED BED COMPONENTS) Competent user is responsible for check if used cleaning agents and disinfectants are compatible with mentioned materials!
Head board and foot board	Polypropylene (PP)
Head siderails and foot siderails	Polypropylene (PP)
Decors (head board, foot board, head siderails, foot siderails)	Acrylonitrile butadiene styrene (ABS)
Mattress support platform cover (Backrest)	High Pressure Laminate (HPL)
Mattress support platform covers (Thighrest, Calfrest)	High Pressure Laminate (HPL) + Lacquered steel
Mattress support platform cover (Seat section)	High Pressure Laminate (HPL)
Covers of frame of the mattress support platform	Polypropylene (PP) + Acrylonitrile butadiene styrene (ABS)
Frame of the mattress support platform	Lacquered steel
Castors	Polypropylene (PP)
Columns	Oxidized aluminium alloy
Siderail release mechanisms	Lacquered aluminium (Al)
Undercarriage cover	Acrylonitrile butadiene styrene (ABS)
Corners and corner covers	Polypropylene (PP)
Handles of head board lock and foot board lock	Polyamide (PA)
Corner bumpers	Polypropylene (PP)
Keyboards (Attendant Control Panel, Handset, control elements integrated in the siderails)	Autotex film
CPR levers	Polyamide (PA)
Mobi-Lift® handles	Polyamide (PA)
Accessory rail	Lacquered steel + Polyethylene (PE)
Labels	siliconized paper with lamination or with resin

For safe and gentle cleaning:
► Do not use any strong acids or bases (optimum pH range 6 - 8).
► Exclusively use detergents that are suitable for cleaning medical equipment.
► Do not use abrasive powders, steel wool, or other materials and cleaning agents that might damage the mattress replacement system.
► Never use any corrosive or caustic detergents.
► Never use detergents that deposit calcium carbonate.
► Never use detergents with solvents that might affect the structure and consistency of the plastics (benzene, toluene, acetone, etc.).
► Clean electrical components carefully and allow them to dry completely.
► Do not immerse SCU in water or steam-clean it.
► Observe local directives regarding infection control.
► Make sure any cleaning agent used is approved by:
  ■ the facility in which the mattress replacement system is to be used.
  ■ by the environmental protection agency of the country in which the mattress replacement system is to be used.

20.1 Cleaning (Multicare X)

Prepare for cleaning as follows:
► Put the mattress support platform in the highest position.
► Adjust the back and thigh rests so that the reverse sides are accessible.
► Disable the function buttons on the control elements using the Attendant Control Panel.
► Disable the foot controls using the Attendant Control Panel.
► Disconnect the bed from the mains.
► Move the bed to the location where it will be cleaned.
► Lock the brakes on the bed.

20.1.1 Daily Cleaning

Clean the following bed parts:
■ All control elements for adjusting the bed
■ All handles
  □ CPR release handle
■ Head board and Foot board
■ Siderails (in highest position)
■ Freely accessible mattress surface
■ Mobi-Lift®
■ Accessory rails

20.1.2 Cleaning before Changing Patients

Clean the following bed parts:
■ All control elements for adjusting the bed
■ All handles
  □ CPR release handle
■ Head board and Foot board
■ Siderails (in highest position)
■ Freely accessible mattress surface
■ Mobi-Lift®
■ Accessory rails
■ All plastic mattress support platform covers
■ Plastic undercarriage covers
■ Telescopic columns
■ Mattress on all sides
■ Freely accessible metal parts of mattress support platform
■ Cable ducts
■ Lifting pole sleeve fitting
■ Infusion stand sleeve fitting
■ Bumpers
■ Castors
■ Brakes

20.1.3 Complete Cleaning and Disinfection

Clean the following bed parts:

- ■ All control elements for adjusting the bed
- ■ All handles
  - □ CPR release handle
- ■ Head board and Foot board
- ■ Siderails (in highest position)
- ■ Freely accessible mattress surface
- ■ Mobi-Lift®
- ■ Accessory rails
- ■ All plastic mattress support platform covers
- ■ Plastic undercarriage covers
- ■ Telescopic columns
- ■ Mattress on all sides
- ■ Freely accessible metal parts of mattress support platform
- ■ Cable ducts
- ■ Lifting pole sleeve fitting
- ■ Infusion stand sleeve fitting
- ■ Bumpers
- ■ Castors
- ■ Brakes
- ■ Interior parts (accessible after removing mattress support platform covers)

21 Troubleshooting

DANGER!
Risk of mortal injury due to electric shock!
► If a fault occurs, have the electric motor, power box or other electrical parts repaired by qualified personnel exclusively.
► Do not open the protective covers of the electric motor or the power box.

Error/Fault	Cause	Solution
Adjusting with position buttons not possible	GO Button was not pressed.	Press the GO button.
	Function disabled on Attendant Control Panel.	Enable disabled function.
	Actuators have no power. Defective actuators. Defective accumulator.	Check the mains connection. Notify the manufacturer´s service department.
	Mains Plug inserted incorrectly.	Insert the Mains Plug correctly.
	Faulty Power Source.	Notify the manufacturer´s service department.
	Faulty Control Element.	Notify the manufacturer´s service department.
Faulty Mattress support platform Height/Tilt Adjustment	Obstacle on the undercarriage cover.	Remove the obstacle.
	Function disabled on Attendant Control Panel.	Enable disabled function.
	Actuators have no power. Defective actuators. Defective accumulator.	Check the mains connection. Notify the manufacturer´s service department.
	Mains Plug inserted incorrectly.	Insert the Mains Plug correctly.
	Faulty Power Source.	Notify the manufacturer´s service department.
	Faulty Control Element.	Notify the manufacturer´s service department.
Lowering Backrest from the upright position not possible	Obstacle under the Backrest or in the drive mechanism.	Remove the obstacle
	CPR Release Handle is defective.	Notify the manufacturer´s service department.
Adjusting Siderails not possible	Obstacle in the Siderail Release Mechanism.	Remove the obstacle.
	Siderail Release Mechanism is defective.	Notify the manufacturer´s service department.
Faulty brakes	Obstacle blocking brakes mechanically.	Remove the obstacle.
	The brake mechanism is defective.	Notify the manufacturer´s service department.

22 Maintenance

WARNING!
Risk of injury when working on the bed!
► Ensure that the bed is disconnected from the mains power prior to installation, putting into service, maintenance and deinstallation.
► Ensure that the castors are locked prior to installation, putting into service, maintenance and deinstallation.
► No part of the Multicare X ME equipment shall be serviced or maintained while in use with a patient.

WARNING!
Risk of injury due to defective bed!
► Have a defective bed repaired immediately.
► If the defect cannot be repaired, do not use the bed.

CAUTION!
Material damage due to incorrect maintenance!
► Ensure that maintenance is performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► If the defect cannot be repaired, do not use the bed.

LINET ® recommends attaching the maintenance plaque to the bed.

22.1 Regular maintenance

► Check regularly movable parts for wear.
► Perform regularly visual check of the product (with delivery note if necessary).
► Ask service department of the manufacturer for addition of the original spare parts if some product parts are missing.
► Ask service department of the manufacturer for replacement of any damaged product parts by the original spare parts.
► Check that the accumulator is working properly. Disconnect the bed from the mains power to check signalisation of accumulator indicator according to the instructions for use.
► Have the accumulator replaced if it is not working properly.
► Check regularly that all accessories are working properly.
► Replace damaged accessories immediately.

22.2 Spare Parts

The serial label is located on the frame of the mattress support platform. The serial label contains information for claims and ordering replacement parts.

Information about spare parts is available from:
■ Manufacturer´s customer service
■ Sales department

22.3 Safety Technical Checks

WARNING!
Risk of injury due to incorrect safety technical checks!
► Ensure that safety technical checks are performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► Ensure that the safety technical checks are recorded in the service and maintenance log.

Safety technical check of the medical bed must be performed at least once every 12 months.

The procedure for performing the safety technical check is stipulated in EN 62353:2014.

NOTE On request, the manufacturer will provide service documentation (e.g. circuit diagrams, component part lists, descriptions, calibration instructions etc.) for service personnel for the repair of ME equipment designated by the manufacturer as repairable by service personnel.

23 Disposal

23.1 Environment Protection

The company LINET® is aware of the importance of environmental protection for future generations. Within this company the environmental management system is applied in accordance with the internationally agreed standard ISO 14001. The compliance with this standard is annually tested by the external audit executed by an authorised company. Based on the Directive No. 2002/96/EC (Directive **WEEE** - Waste, Electric and Electronic Equipments) the company LINET, s. r. o. is registered in the List of Electric and Electronic Equipment Producers (**Seznam výrobců elektrozařízení**) on the Ministry of the Environment of the Czech Republic (Ministerstvo životního prostředí). Materials used in this product are not environmentally hazardous. LINET® products meet valid requirements of national and European legislation in the areas of **RoHS** and **REACH**, so they do not contain any prohibited substances in excess quantities. None of the wooden parts is made of tropical wood (such as mahogany, rosewood, ebony, teak etc.) or made of timber from the Amazon region or from similar rainforests. Product noise (sound pressure level) meets requirements of the regulations for the protection of public health against undesirable effects of noise and vibration in protected interior spaces of buildings (according to standard IEC 60601-2-52). Used packaging materials are in accordance with requirements of the Packaging Act (**Zákon o obalech**). For disposal of packaging materials after installation of products contact your sales representative or manufacturer´s customer service about the possibility of a free take-back of packaging through an authorized company (more details on **www.linet.cz**).

23.2 Disposal

The main objective of the obligations arising from the European Directive No. 2012/19/EU on Waste, Electric and Electronic Equipments (nationally regulated in Act No. 185/2001 Coll. as amended. On Waste and in Decree of the Ministry of the Environment No. 352/2005 Coll. as amended), is to increase the re-use, material recovery and recovery of electric and electronic equipment at the required level, thereby avoiding the production of waste and thereby avoiding the possible harmful effects of hazardous substances contained in electric and electronic equipment on human health and the environment. LINET® electric and electronic equipments that have a built-in battery or accumulator are designed so that the used batteries or accumulators can be safely removed by LINET® qualified service technicians. There is an information about its type on the built-in battery or accumulator.

23.2.1 Within Europe

To dispose of the electric and electronic equipment:

- ► The electric and electronic equipment must not be disposed of as household waste.
- ► Dispose of this equipment at designated collection points or take-back points.

To dispose of the other equipment:

- ► The equipment must not be disposed of as household waste.
- ► Dispose of this equipment at designated collection points or take-back points.

LINET® participates in a collective system with take-back company REMA System (see **www.remasystem.cz/sberna-mista/**). By bringing electric and electronic equipment to a take-back point, you participate in recycling and you save primary raw material resources while protecting your environment from effects of unprofessional disposal.

23.2.2 Outside Europe

- ► Dispose of the product or its components in accordance with local laws and regulations!
- ► Hire an approved waste disposal company for disposal!

24 Warranty

LINET ® will only be held responsible for the safety and reliability of products that are regularly serviced, maintained and used in accordance with the safety guidelines.

Should a serious defect arise that cannot be repaired during maintenance:

► Do not continue to use the bed.

Warranty duration is subject to individual purchasing agreements with a minimum length of 24 months.

The warranty covers all material and manufacturing-related failures and errors. Failures and errors caused by incorrect use and external effects are not covered. Justified complaints will be fixed free of charge during the warranty period. Proof of purchase, with the date of purchase, is required for all warranty service. Our standard terms and conditions apply.

25 Standards and Regulations

25.1 Multicare X

Apllied norms are stated on Declaration of Conformity.

25.2 Manufacturer

The manufacturer adheres to a certified quality management system in compliance with the following standards:

- **ISO 9001**
- **ISO 14001**
- **ISO 13485**
- **MDSAP (Medical Device Single Audit Program)**