LINET

Instructions for Use and Technical Description

LATERA

Universal hospital bed

CE

D9U001L20-0101

Version: 04

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Latera
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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 key 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:

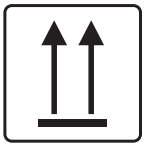
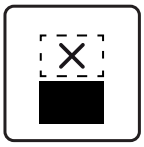
► Perform this step.
Results, if necessary.

1.3 Lists

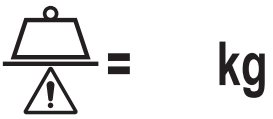
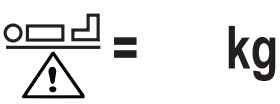
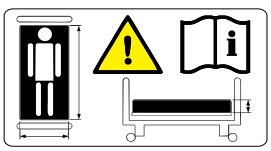
Structure of bulleted lists:

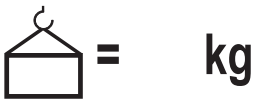
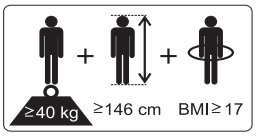
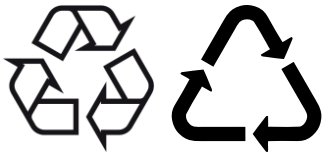
- List level 1
  - List level 2
    - List level 3

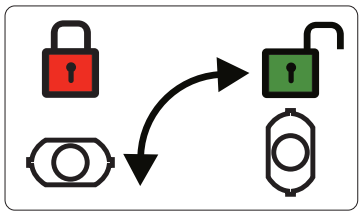
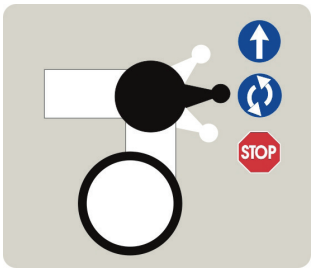
1.4 Symbols on the Package

	FRAGILE, HANDLE WITH CARE
	THIS WAY UP
	KEEP DRY (PROTECT FROM HUMIDITY)
	PAPER RECYCLING SYMBOL
	DO NOT USE HAND TRUCK HERE
	DO NOT STACK DURING STORAGE

1.5 Symbols and Labels on the Bed

	READ INSTRUCTIONS FOR USE.
	ATTENTION - CONSULT ACCOMPANYING DOCUMENTS.
	THERMAL PROTECTION OF TRANSFORMER
	ONLY SUITABLE FOR INDOOR USE
	PROTECTION AGAINST ACCIDENTS DUE TO ELECTRICAL CURRENT - TYPE B INSTRUMENTS
	SAFETY ISOLATING TRANSFORMER, GENERAL
	CE MARK
	JACK FOR ATTACHMENT OF CONDUCTOR FOR POTENTIAL EQUALISATION
	SAFE WORKING LOAD
	WARNING AGAINST CRUSHING OR TRAPPING
	MAXIMUM WEIGHT OF PATIENT
	USE MATTRESS RECOMMENDED BY MANUFACTURER

	LOCATION OF CPR BACKREST RELEASE LEVER
	WEIGHT OF BED
	DESIGNATION OF HOSPITAL BED FOR ADULTS
	WEEE SYMBOL (RECYCLE AS ELECTRONIC WASTE, DO NOT PUT INTO THE HOUSEHOLD WASTE)
	MEDICAL DEVICE (COMPATIBLE WITH MEDICAL DEVICE REGULATION)
	RECYCLING SYMBOL
	DO NOT POLLUTE THE ENVIRONMENT
	MANUFACTURER
	MANUFACTURING DATE
	REFERENCE NUMBER (PRODUCT TYPE DEPENDING ON CONFIGURATION)
	SERIAL NUMBER

	INSTRUCTIONS FOR HEAD BOARD LOCK AND FOOT BOARD LOCK (POSITION **"—"** MEANS LOCKED AND POSITION **"I"** MEANS UNLOCKED)
	INSTRUCTIONS FOR CASTOR CONTROL
	GO BUTTON (PRESS TO ACTIVATE CONTROL ELEMENT)
	STOP BUTTON (PRESS TO INTERRUPT BED POSITIONING)

1.6 Acoustic signalisation

SOUND	MEANING
CONTINUOUS SOUND	overheating
	accumulator overcurrent
	actuator overload
REPEATED BEEP: 0,6s sound / 2,6s silence	STOP error (all STOP buttons are disabled)
BEEP lasting 0,3s	confirmation
	stopping or locked function
	optionally: transition from tilt (lateral tilt, Trendelenburg, Antit-rendelenburg) to horizontal position
BEEP lasting 0,5s	start of service mode or end of service mode
	keyboard error (positioning blocked)
BEEP lasting 3s	system error
REPEATED BEEP during 3 minutes: 1,1s sound / 1,1s silence	Brake Signal (only version with Brake Signal)

1.7 Visual signalisation

1.7.1 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

1.7.2 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

1.7.3 Lock LED (Attendant Control Panel)

 VISUAL SIGNALISATION / LOCK LED	lit	flashing: 0,6s lit / 0,6s not lit			not lit
Thighrest 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, Trende-lenburg 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

1.8 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 (patient, mattress, accessories and the load supported by those accessories)
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 (level - 0°) position. ■ 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).

1.9 Abbreviations

AC (~)	Alternating Current
ACP	Attendant Control Panel
CE	European Conformity
CPR	Cardiopulmonary Resuscitation
dBA	Sound Intensity Unit
DC (⎓)	Direct Current
CUC	Configuration number
EMC	Electromagnetic Compatibility
FET	Field-effect transistor
HF	High Frequency
HPL	High Pressure Laminate
HW	Hardware
ICU	Intensive Care Unit
INT.	Duty Cycle
IP	Ingress Protection
IV	Intravenous
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 (active mattress)
SN	Serial Number
SW	Software
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!
Latera 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 Latera 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 Latera bed avoid squeezing those between parts of the Latera bed!

WARNING!
Latera bed should not be used with bed hoists and bed lifts!

WARNING!
The bed is intended for adults.
► Follow 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.

DANGER!
Risk of injury or death due to use of incorrect equipment!
► Always conduct the risk assessments required for the selection of suitable equipment.

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

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!

- ► Follow the instructions for use carefully.
- ► Only use the bed if it is in perfect working order.
  If necessary, check the bed functions daily or at each shift change.
- ► Use the bed with the correct mains supply only.
- ► 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 on even, hard-surfaced floors only.
- ► Replace any damaged parts immediately with original spare parts only.
- ► Ensure that maintenance and installation are performed only by qualified personnel who have been trained by the manufacturer.
- ► Do not apply excess weight or loads to the bed.
- ► During peak loads or unavoidable excess loads (CPR), place mattress platform in the lowest position.
- ► Ensure that only one patient uses the bed at any time.
- ► Take care to avoid injuries or squeezing when operating moving parts.
- ► Take care to avoid injuries or squeezing when adjusting the reverse Trendelenburg position if the mattress platform is extended and the linen shelf is pulled out.
- ► 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.
- ► Adjust the height of the mattress platform to suit the patient’s height and condition.
- ► Ensure that siderails are operated by healthcare personnel only.
- ► Never use the bed in areas where there is a hazard of explosion.
- ► Enable or disable functions on the handset 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.
- ► Remove the mains cable by pulling on the plug only.
- ► Position the mains cable so that there are no loops or bends in the cable; protect the cable from mechanical wear and tear.
- ► Ensure that the mains cable is not trapped or crushed and that there are no objects standing on the cable.
- ► Use the bed on an electrical circuit with a residual-current circuit-breaker that has a maximum rating of 30 mA only.
- ► Ensure that the stipulated duty cycle (on-time) is not exceeded.
- ► Ensure that the moving parts of the bed are not blocked.
- ► To prevent failures, use the manufacturer’s original accessories and mattresses only.
- ► Ensure that the stipulated safe working load is not exceeded.
- ► Keep the mattress platform in the lowest position at any time when the healthcare personnel are not trea- ting the patient in order to prevent the patient from falling or injuries.
- ► If the patient‘s condition could lead to an entrapment, leave the mattress support platform in the flat posi- tion whilst unattended.
- ► Adjust bed height to approx. 20 cm below maximum height when transporting the bed in order to facilitate overcoming possible obstacles.
- ► Do not exceed maximum load of 80 kg for mattress platform extension.
- ► Do not use lateral tilting when the bed is in Trendelenburg or Antitrendelenburg position.
- ► Always set mattress platform to its lowest position and single parts of mattress platform to horizontal position in case the patient is left on the bed without supervision of personnel and if his health and mental status may indicate increase risk of falling out of the bed or entrapment.
- ► Personnel must consider overall adjustment of the bed and locking all of the positioning functions in accordance to health and mental status of patient, especially if the patient is left without supervision (even for short period of time) of the personnel.
- ► Manual positioning of parts of the bed which are designed for electronic positioning (e.g. backrest) is forbidden. Otherwise there is a risk of damaging and dysfunction of the backrest actuator or unprompted fall of the backrest.
- ► Manufacturer recommends to use soft guards for siderails (model number 4PRS6012747) for patients:
  - ■ with mental disorders (e.g. restless patients, dementia etc.)
  - ■ with increased medication which affects coordination of movements
  - ■ with increased risk of damaging skin when entrapped between siderails (e.g. older patients, patients with sensitive skin, patients with decreased skin elasticity, patients with burning etc.)
- ► Hospital personnel must decide if the siderail guard will be used depending on the health and mental status of the patient. there is a risk of damaging and dysfunction of the backrest actuator or unprompted fall of the backrest.

3 Intended use

The intended use is the hospitalization of the patient in the acute and long-term 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.

3.1 User population

► Adult patients (weight >= 40 kg, height >= 146 cm, BMI >= 17) in the acute and long-term care units (Application Environment 2 and 3, 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 Incorrect Use

The bed is not suitable for:

- Patients
  - Not fulfilling conditions stated in chapter “Intended use”

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

LINET®’s efforts in research, design and manufacture make sure LINET® products are of the highest quality and fit for their intended purpose. However, LINET® can take no responsibility for any damage to the products or any harm to patients, staff or other individuals resulting from:

- Not following the instructions in the manual, including warning notices.
- Using the product for a purpose other than the intended purpose stated in the relevant documentation provided by LINET® (see Intended use).

5 Product Description

5.1 Latera Acute

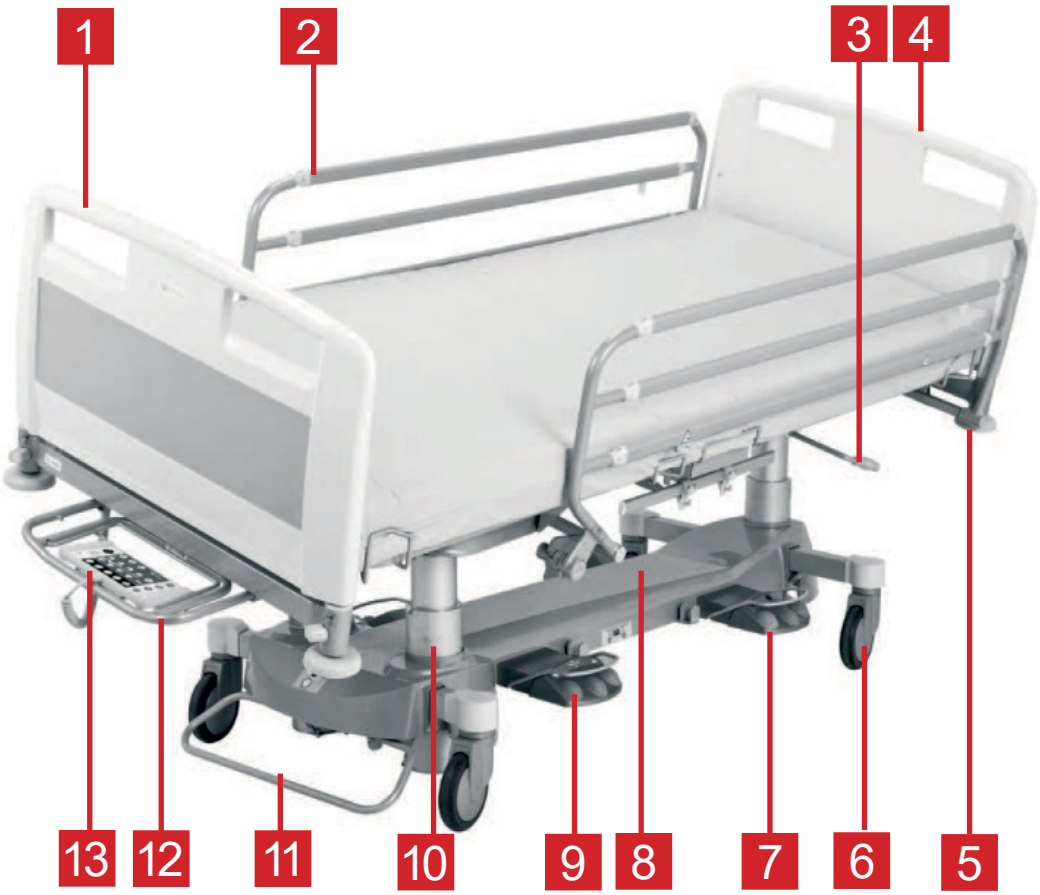


Fig. Overview of Latera Acute

1. Foot Board
2. Single Collapsible Siderail
3. Emergency Backrest Release
4. Head Board
5. Bumpers
6. 150 mm Castor
7. Foot Control for Lateral Tilt
8. Siderail Unblocking Mechanism
9. Foot Control for Height Adjustment and Examination Position
10. Telescopic Column 11. Castor Control Lever
12. Linen Shelf
13. Attendant Control Panel

NOTE For safe, easy handling, LINET® recommends that two technicians assemble the bed.

5.2 Latera Thema

Fig. Overview of Latera Thema

1. Head Board
2. Satellite Panel
3. Full-length Siderail in folded-up position
4. Foot Board
5. Linen Shelf with Attendant Control Panel
6. Castor Control Lever
7. Foot Control for Height Adjustment and Examination Position
8. Foot Control for Lateral Tilt
9. 150 mm Castor
10. Full-length Siderail in lowered position

NOTE For safe, easy handling, LINET® recommends that two technicians assemble the bed.

6 Technical Specification

6.1 Mechanical Specification

Parameter	Value
Outer dimensions	219 x 98,5 cm (Latera Acute) 219 x 102,5 cm (Latera Thema)
Mattress Platform Dimensions (Mattress)	200 x 86 cm
Maximum Mattress Height	14 cm (Latera Acute) 18 cm (Latera Thema)
Mattress Platform Extension/Shortening	12,5 cm (Latera Acute, Latera Thema)
Mattress Platform Height Adjustment	43 - 81 cm
Backrest Angle	60° +0/-4
Thighrest Angle	46° +0/-4
Auto-Regression (Length Compensation) of Backrest	11 cm
Lateral Tilt	+15°/-15°
Max. Patient Weight for Lateral Tilt	135 kg
Trendelenburg/Antitrendelenburg Tilt	+16°/-16°
Weight (Depending on Equipment)	160 kg
Safe Working Load (including Mattress and Accessories)	200 kg
Max. Lifting Pole Load	75 kg

6.2 Environment Conditions

Environmental Conditions - Operation	
■ Temperature ■ Humidity ■ Atmospheric Pressure	10 °C — 40 °C 30 % — 75 % 795 hPa — 1060 hPa
Environmental Conditions - Storage and Transport	
■ Temperature ■ Humidity ■ Atmospheric Pressure	-20°C — 50°C 20% — 90% (non-condensing) 795 hPa — 1060 hPa

6.3 Electrical Specifications

Parameter	Value
Input Voltage	230 V, 50/60 Hz
Maximum Power Input	370 VA
Ingress Protection	IP54
Safety Class	Class I (with type B applied parts)
Electrical Motor Operation Time	max. 2 min ON / 18 min OFF

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

6.4 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!
It is recommended to avoid the use of this device next to or in block with other device, because it could lead to improper operation. If such use is needed, this device and the other equipment should be under surveillance to verify proper operation.

List of used cables:
1. Mains cable, maximum length 6 m
2. ACP Attendant Control Panel, maximum length 3m
3. 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 Latera, 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 18 Maintenance in order to maintain the basic safety with regard to electromagnetic disturbances for the expected service life.

6.4.1 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

6.4.2 Manufacturer instructions - electromagnetic susceptibility

Immunity Tests	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV for contact discharge ± 15 kV for contact 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° a 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 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 communication 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).

7 Use and Storage Conditions

The bed may be used in an indoor environment where the:
- Range of the surrounding temperature is from +10°C to +40°C
- Range of relative humidity is from 30% to 75%
- Range of atmospheric pressure is from 795 hPa to 1060 hPa

The bed may not be used in an indoor environment:
- where there is a risk of explosion
- containing inflammable anaesthetics

The bed is 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 during exceptional cases. (i.e. lightnings, earthquake).

8 Scope of Delivery and Bed Variants

8.1 Scope of Delivery

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.

8.2 Bed Variants

Basic models:
- Latera Acute
- Latera Thema

Optional bed features for Latera Acute and Thema (standard = bold):
- Siderails - type B applied parts
  - **Single siderail, powder-coated (Acute)**
  - **Full-length siderail, aluminium with coloured plastic inlay, extendable (Thema)**
- Head Board and Foot Board - type B applied parts
  - **Plastic head board and foot board with coloured plastic inlay (Acute)**
  - Powder-coated head board and foot board (Acute)
  - Chromium-plated head board and foot board (Acute)
  - **Head board and foot board, design H05 with aluminium frame and removable laminated boards (Thema)**
- Control Elements
  - Attendant Control Panel - type B applied part
  - Handset - type B applied part
  - Foot control for lateral tilt
  - Foot control for height adjustment and examination position
  - Satellite panel - type B applied part
- Mattress Platform - type B applied part
  - **Removable plastic plate**
- Castors
  - Tente Motion (with or without plastic cover) 150 mm
  - Tente Motion (with or without plastic cover) 150 mm with fifth castor
  - Tente Integral 150 mm with fifth castor
  - Tente Integral 150 mm double castors with fifth castor
- Linen Shelf (optional without)
- Safety Night Light
- Unbraked Bed Alarm
- Automatical selection of power source (110V/127V/220V)

9 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.

Set up the bed as follows:
► Unpack the bed.
► Check the delivery (see Scope of Delivery and Bed Variants).
► Install equipment and accessories.
► Set up the bed on a suitable floor surface only.

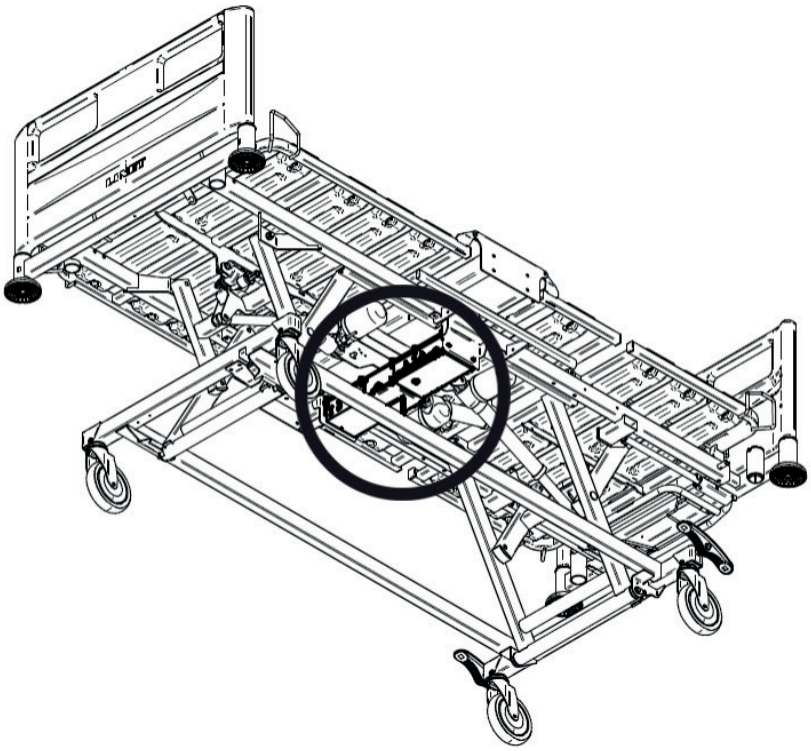
■ Suitable surfaces:
- □ Tile
- □ Hard linoleum
- □ Poured flooring

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

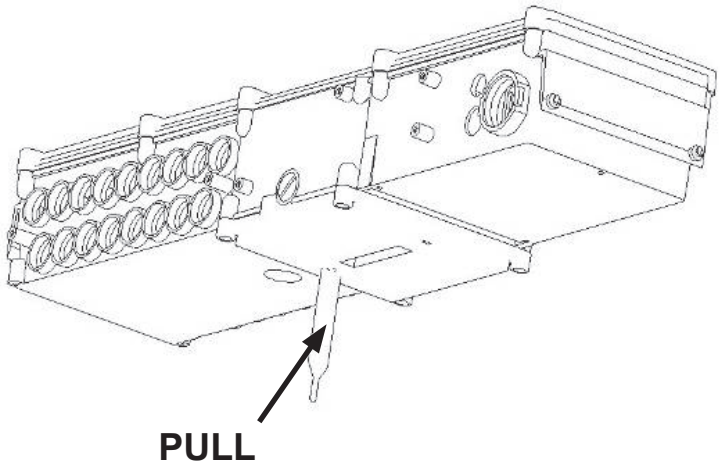
► Observe the specified minimum distances (see Technical Specifications).
► Ensure that the mains cable does not collide or get stretched when adjusting the bed. Check that the plug is inserted correctly.
► Do not leave any extension cords or power strips loose on the floor.
► Ensure that all of the required mechanical and electrical prevention mechanisms are available onsite (protective wall bumpers, corner bumpers, circuit breakers, etc.).

9.1 Accumulator Activation

9.1.1 Placement of Control Section



9.1.2 Removing the Isolating Foil



9.1.3 Isolating Foil

Check if isolating foil is complete and undamaged as shown:

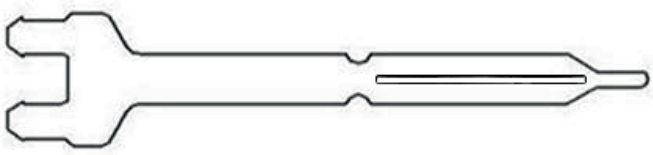


Fig. Isolating Foil

NOTE It is advisable to wear protective gloves to prevent cuts from isolation foil.

9.2 Head Board and Foot Board

WARNING!
Risk of injury when inserting the head board and foot board!
► To insert the head board and foot board into the corner posts, hold them by the corner handles on the top of the board.
► Install the head board and foot board before the first use.

WARNING!
Risk of injury due to incorrectly installed head board and foot board!
► Ensure that the head board and foot board are correctly inserted, especially when moving the bed.
► Ensure that the bushings on the corner posts are locked, especially when moving the bed.

WARNING!
Risk of injury when removing the head board and foot board!
► Before removing the head board and foot board, make sure that the siderails are folded down and that there are no accessories attached to the head board and foot board.
► If a patient is lying in a bed with the head board and/or foot board removed, supervise the bed at all times.

WARNING!
Damage to property due to excess load!
► Ensure that nobody sits on the head board and foot board.

Fig. Unlocked head board or foot board

Fig. Locked head board or foot board

Install the head board and foot board as follows:
► Unlock the safety lever on the corner posts.
► Slide the head board and foot board into the slots on the corner posts.
► Lock the safety lever on the corner posts.

9.2.1 Latera Thema Head Board and Foot Board

You can adjust the calfrest mechanically. A special locking mechanism allows the position to be adjusted.

To remove the head board and foot board:

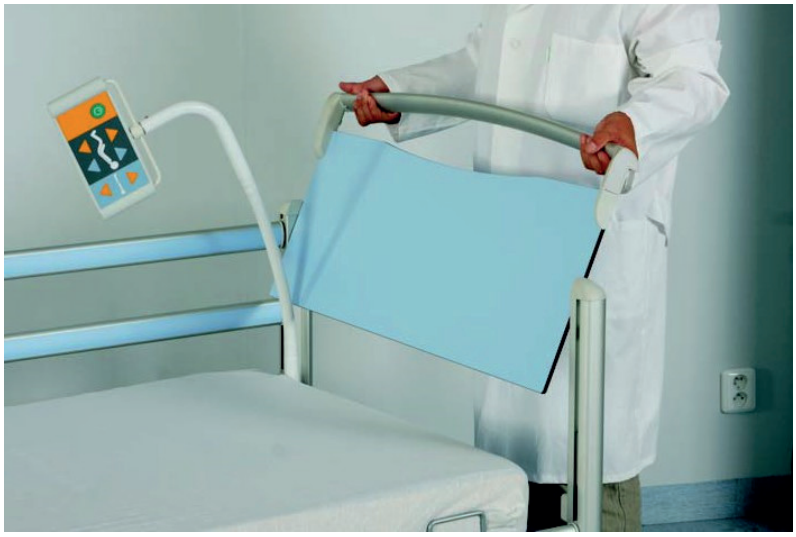


Fig. Removing head board and foot board

► Hold the head board and foot board on the bar and pull it up and out of the plastic elements on the side columns.

To insert the head board and foot board:

Fig. Inserting head board and foot board

► Insert the head board and foot board in the plastic elements on the side columns.

9.3 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 shocks.

Fig. Potential equalisation connector – male

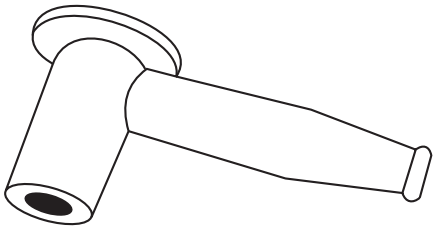


Fig. Potential equalisation connector - female

Use equalisation connector if:

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

Before connecting the patient to an intravascular/intra-cardiac 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.
- ► Make sure the connectors match.
- ► Make sure there is no possibility of accidental disconnection.

Before moving the bed:

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

9.4 Before Use

Prepare the bed for service as follows:

- ► Connect the bed to the mains.
  - Bed is optionally equipped with automatized power source selection (110V/127V/220V)
- ► Charge the accumulator.
- ► Raise and tilt the mattress platform to the highest position.
- ► Lower and tilt the mattress 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 the head and foot boards can be removed.
- ► Check all of the functions on the control elements (Attendant Control Panel, etc.).
- ► Check that the siderails function properly.
- ► Dispose of all packaging (see Disposal).

NOTE If there is a substantial temperature difference between the bed (due to transport/storage) and the installation site, allow 24 hours for the difference to balance itself before connecting the bed to the mains.

9.5 Transport

To avoid damage during transport, please observe the following guidelines:

► 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 Undercarriage).
► Move the bed on suitable floor surfaces only.

■ 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

► For longer distances, ensure that the castor steering function is activated.
► Ensure that the brakes are released while moving the bed.

9.6 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.

10 Power Cable

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

Attachment plug is means of connecting and disconnecting bed from the mains.
Power supply cable (mains power cable) must be attached with a hook at the head end of the bed during transport.

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

11 Accumulator

The accumulator supplied with the bed is delivered uncharged. The accumulator serves as a backup during power failures or while transporting the patient.

NOTE Accumulators will remain in fully functional condition only for a certain period of time which is dictated by the laws of physics and chemistry used in this type of Dry Lead Acid accumulator technology and their frequency and method of use.

► The user is obliged to monitor accumulator functionality and to change the accumulators in accordance with the user & service manuals.
► Accumulators must be checked according to the instructions for use at least once per month.

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

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

NOTE Manufacturer provides 6 months warranty for full function of accumulators.

The manufacturer takes no responsibility for any damage to the bed or accumulator caused by:
■ Not following instructions in the manufacturer´s instructions for use
■ Fitting accumulators which are not approved by LINET®
■ Accumulators fitted by an unqualified service organisation.

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

NOTE Some bed adjustments cannot be carried out without a accumulator, for example, height adjustment under a load of above 200 kg.

The LED indicates the accumulator charge status:

Yellow LED	Accumulator charge status
Not lit	Accumulator capacity is sufficient (charging completed)
Short flashing (short, intermittent illumination) (circa 1.8 sec.)	Accumulator is charging - continue charging until the LED is extinguished. In emergency cases, the accumulator can be used as a backup power source for a short period. If LED is still flashing after 12 hours of charging or stops flashing, but you cannot position with bed, accumulator is defective or broken. Contact manufacturer.
Long flashing (long illumination) (circa 0.2 sec.)	Low accumulator voltage - accumulator cannot be used as a backup power supply even for a short period; accumulator is completely discharged or defective (if this type of signalisation persists, it is necessary to replace the accumulator - service action)
Long, intermittent illumination for several hours (circa 10 hours), when bed is connected to the mains.	Accumulator absence or failure condition (accumulator is connected incorrectly, line between the power supply and accumulator is broken or accumulator fuses are faulty); contact service department of the manufacturer in case of such signalisation.

11.1 Replacing the accumulator

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

WARNING!
Risk of damage or destruction of accumulator!
► If accumulator is faulty degassing can occur. In rare cases this can cause deformation of the accumulator pack housing and mains control box.
► If this occurs the bed must be immediately taken out of service and taken to an adequately ventilated room without sparks (electricity or fire)!
► Immediately inform service department of the manufacturer!

WARNING!
Danger of reducing accumulator durability due to wrong 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

► Accumulator must be replaced with new accumulator approved by the manufacturer.
► Bed must only be fitted with accumulators approved by the manufacturer. To get more information on how to change accumulator please refer to the Service manual (contact service department of the manufacturer).

11.2 Removing the Bed from Service

Remove the bed from service 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.

11.3 Deactivating the Accumulator

To avoid damaging the bed and the environment during storage:
► Deactivate the accumulator on the Attendant Control Panel.

To deactivate the accumulator on the Attendant Control Panel:
► Disconnect the bed from the mains.
► Disconnect the ground wire.
► Activate the keypad by pressing the GO button on the Attendant Control Panel.
► Press the Thighrest Up + Thighrest Down + Trendelenburg Position buttons at the same time and hold them for three seconds.

The accumulator is deactivated.

To activate the accumulator again:
► Connect Power Cable to the mains.

12 Manipulation

WARNING!
Risk of injury when adjusting the bed!
► Ensure that there are no body parts between the mattress platform elements and the mattress platform frame when adjusting the bed.
► Ensure that there are no body parts below the mattress platform frame before adjusting the bed.
► Secure or remove any items on the bed.

WARNING!
Risk of injury due to moving parts!
► Ensure that no body parts are trapped between moving parts of bed and mattress platform.
► Ensure that no persons or body parts are close to the bed or the accessories (e.g. infusion stand, lifting pole) when the mattress platform is moving.

CAUTION!
Damage to property due to moving parts!
► Ensure that no objects (e g. cables) are trapped between moving parts of bed and mattress platform.
► Ensure that no objects are close to the bed or the accessories (e. g. infusion stand, lifting pole) when the mattress platform is moving.

The bed is operated by different control elements.

Control elements depending on the model:
► Attendant Control Panel
► Handset
► Control Satellite (optional)
► Foot Control for Lateral Tilt (optional)
► Foot Control for Height Adjustment and Examination Position (optional)

Disabling individual functions on the Attendant Control Panel affects all of the control elements (Attendant Control Panel, handset, foot control, satellite panel).

If the bed does not react to individual position settings:
► Check whether the function is disabled on the Attendant Control Panel.

12.1 Attendant Control Panel

The Attendant Control Panel is the main control element. The Attendant Control Panel can be hung from the foot board if required.
► When not in use, store the Attendant Control Panel in the built-in linen holder below the foot board.

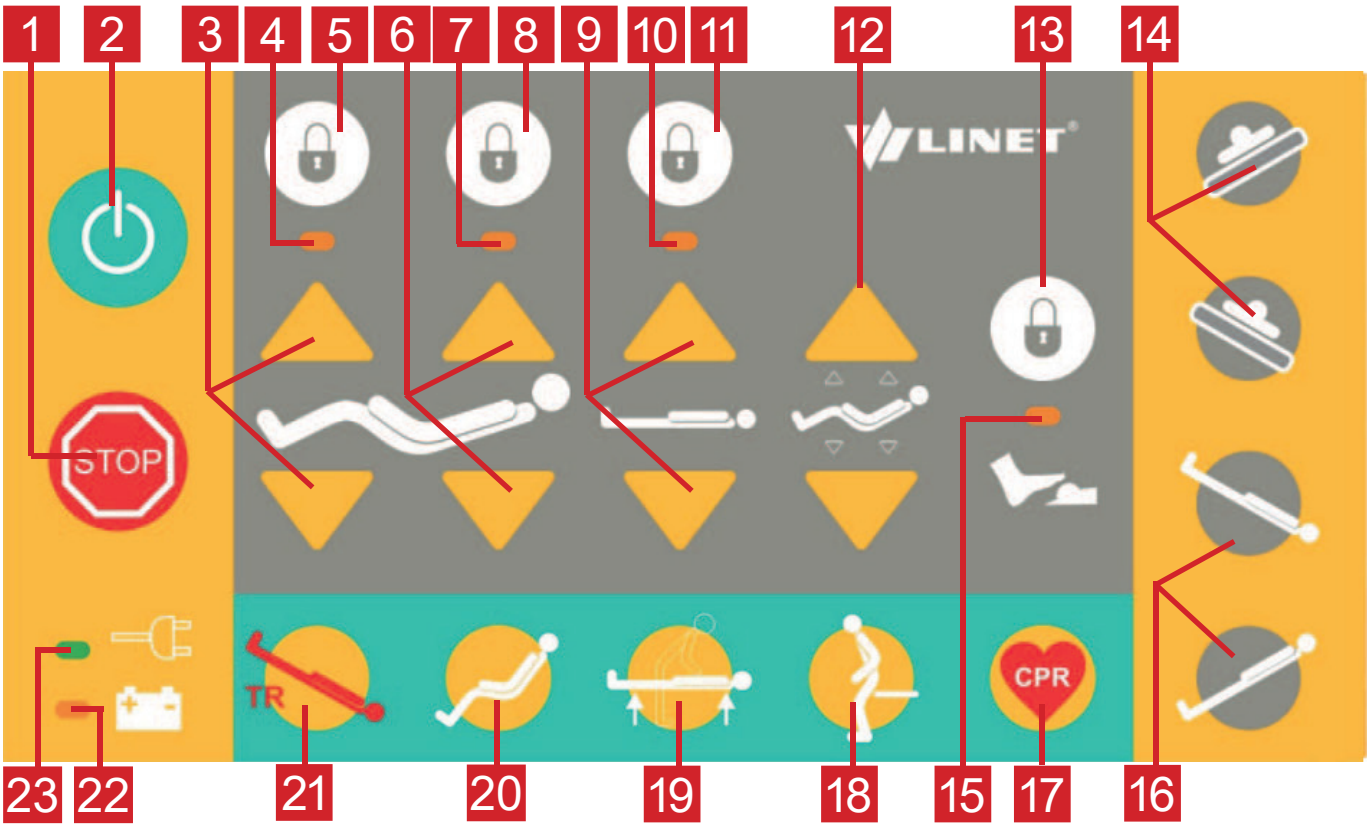


Fig. Overview of the Attendant Control Panel

1. **Central STOP Button**
2. **Activating GO Button**
3. **Thighrest Position Buttons**
4. **Thighrest Lock LED**
5. **Thighrest Lock Button**
6. **Backrest Position Buttons**
7. **Backrest Lock LED**
8. **Backrest Lock Button**
9. **Height Adjustment Buttons**
10. **Height Lock LED**
11. **Height Adjustment Lock Button**
12. **Auto-Contour Buttons**
13. **Foot Control Lock Button**
14. **Lateral Tilt Buttons**
15. **Foot Control Lock LED**
16. **Trendelenburg and Antitrendelenburg Tilt Buttons**
17. **CPR (Resuscitation) Position Button**
18. **Mobilisation Position Button**
19. **Examination Position Button**
20. **Cardiac Chair Position Button**
21. **Trendelenburg Position Button**
22. **Accumulator Charge Status LED**
23. **Mains Power LED**

12.1.1 Central STOP Button

The central STOP button immediately interrupts all bed movements.
Pressing central STOP button for at least 0.3 seconds immediately stops all electronic bed movements.

NOTE: The bed can be stopped by pressing two different buttons even on two different controllers. If the press of the buttons is longer than 0,5 second the bed will stop all the movements immediately.

12.1.2 Activating GO Button

The GO button activates the keypads on all control panels.
The GO button is included on a number of different control elements. The function of the GO button is identical on all control elements. After pressing the GO button, the keypad remains active for 3 minutes.

During this time you can:
► Adjust individual mattress platform elements by pressing the corresponding function buttons.
► Disable individual functions with the lock buttons.
Each time you press a function button, the keypad will remain active for another three minutes.

12.1.3 Function Buttons

You can set different positions, for example the height and tilt of the mattress platform, adjust individual mattress platform elements, etc., with function keys 3, 6, 9, 12, 14 and 16.

NOTE If you press two function buttons at the same time, the controller will recognise this as an error. The controller immediately interrupts all bed movements.

Set the position as follows:
► Activate the keypad by pressing the GO button.
► Press and hold the function button until the desired position is reached.

12.1.4 Lock Buttons

Disable individual functions with the lock keys 5, 8, 11 and 13 on the Attendant Control Panel.

To disable functions:
► Activate the keypad by pressing the GO button.
► Press the lock button.

The respective LED 4, 7, 10 or 15 indicates the lock.

NOTE You cannot disable the CPR and Trendelenburg Position buttons.

To enabled disabled functions:
► Activate the keypad by pressing the GO button.
► Press the lock button.

12.1.5 Position Buttons

You can set the pre-programmed therapeutic and safety-related positions with the following position buttons:
■ CPR (Resuscitation) Position 17
■ Cardiac Chair Position 20
■ Trendelenburg Position 21
■ Examination Position 19

Set the position as follows:
► Activate the keypad by pressing the GO button.
► Press and hold the function button until the desired position is reached.

CPR (Resuscitation) Position

The CPR position is for resuscitating the patient in an emergency.

Settings after pressing position button 17:
■ All mattress platform elements are retracted to their lowest position.
■ The mattress platform is moved to the horizontal position.
The bed moves into the CPR position within 30 seconds from any mattress platform position. You cannot disable this function.

NOTE For rapid mechanical positioning see CPR Backrest Release.

Cardiac Chair Position

The cardiac chair position is for patients with cardiac arrhythmia and breathing difficulties.

Settings after pressing position button 20:
■ The foot of the mattress platform is tilted to the lowest position.
■ The backrest and thighrest are moved to the upright position.
You can disable this function. If individual functions (for example, thighrest adjustment) are disabled, they are not performed.

Trendelenburg Position

The Trendelenburg Position helps create anti-shock conditions for the patient.

Settings after pressing position button 21:
- All mattress platform elements are retracted to their lowest position.
- The mattress platform is inclined by up to 16° (head lower than feet).

The bed moves into the Trendelenburg position within 30 seconds from any mattress platform position. You cannot disable this function.

Examination Position

The examination position is suitable for:
- ► Examining the patient
- ► Performing a procedure on the patient
- ► Moving the patient to another bed

Settings after pressing position button 19:
- The backrest and thighrest are moved to the horizontal position.
- The mattress platform is moved to its highest position.

You can disable this function. If individual functions (for example, thighrest adjustment) are disabled, they are not performed.

12.2 Handset

A handset is included with the bed. The position of the handset depends on the patient's condition.

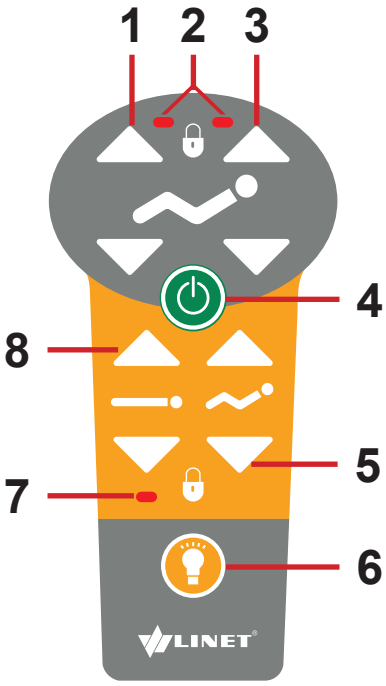


Fig. Handset

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

To switch on the flashlight:

► Press flashlight button 6.

Set the positions as follows:

► Activate the keypad by pressing the GO button.

► Press and hold the function button until the desired position is reached.

NOTE: The nursing staff must decide whether the patient can adjust the bed.

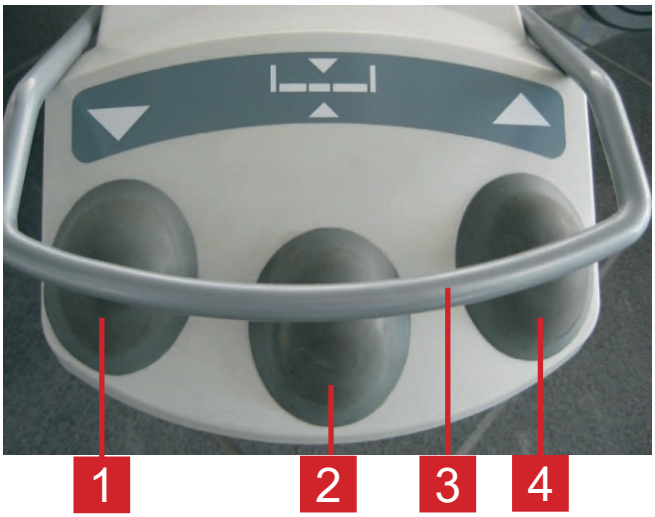
If the patient's condition requires it, preventing the patient from adjusting the bed is possible by:

► Disabling functions.

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

12.3 Foot Control Height Adjustment, Examination Position

The foot control is optional and allows you to set up the height of the bed with your feet.



1. Foot Control Lower Mattress Platform
2. Foot Control Examination Position
3. Protection Frame against Unwanted Activation
4. Foot Control Raise Mattress Platform

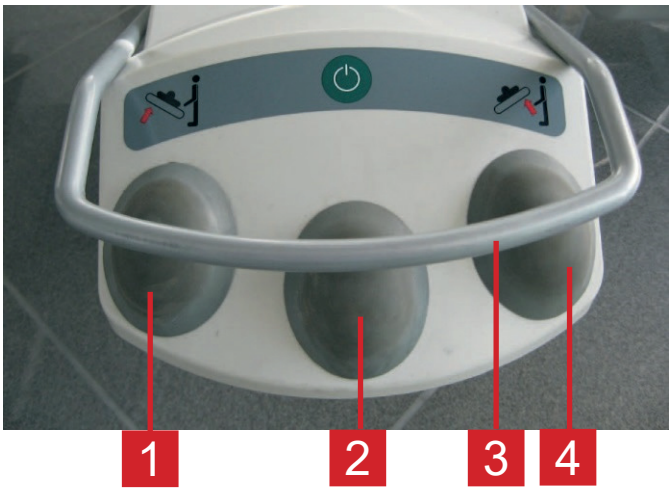
Fig. Foot Control Height Adjustment, Examination Position

Set the position as follows:

► Activate the keypad by pressing the GO button.
► Press and hold the foot switch until the desired position is reached.

12.4 Foot Control Lateral Tilt

The foot control is optional and allows you to set up the lateral tilt of the bed with your feet.



1. Foot Control Lateral Tilt
2. GO Button
3. Protection Frame against Unwanted Activation
4. Foot Control Lateral Tilt

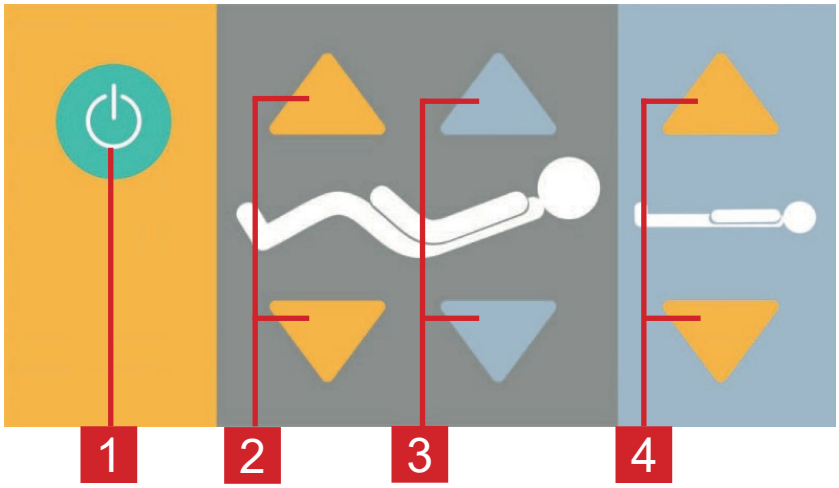
Fig. Foot Control Lateral Tilt

Set the position as follows:

► Press and hold the foot switch until the desired position is reached.

12.5 Satellite Panel

The satellite panel is optional. The satellite panel is fastened to the mattress platform frame behind the backrest.



1. GO Button
2. Thighrest Adjustment Button
3. Backrest Adjustment Button
4. Height adjustment buttons

Fig. Satellite Panel

Set the position as follows:
► Activate the keypad by pressing the GO button.
► Press and hold the function button until the desired position is reached.

NOTE The nursing staff must decide whether the patient can adjust the bed.

If the patient's condition requires it, you can prevent the patient from adjusting the bed by:
► Moving the satellite panel out of the patient's reach.
Or
► Disabling functions.

12.6 Lateral Tilt of Bed

WARNING!
Risk of injury when tilting the bed!
► Ensure that exclusively qualified personnel use the lateral tilt function.
► Tilt the bed exclusively when the siderails are latched in the raised position.
► Lateral tilting is only possible without difficulty if the patient's weight does not exceed 135 kg.
► To prevent the trapping of extremities, use safety pillows to position the patient.
► If the weight limit is exceeded, use the CPR memory function to put the patient in a safe position.

Latera Acute is equipped with the lateral tilt function.

The lateral tilt is intended for:
- preventive positioning of patients (prevention of pressure sores)
- turning the patient in order to perform routine nursing activities. Prevents excessive effort for the nursing staff (e. g. patient hygiene, making the bed, etc.)

Lateral tilt of bed with the following control elements:
- Attendant Control Panel
- Foot Switch of Respective Foot Control

12.7 CPR Backrest Release

WARNING!
Lowering the backrest too quickly can injure the patient!
► Ensure that the siderails are in the lowest position.
► Ensure that there are no body parts between the siderails and the backrest.
► Press the backrest down using the mattress guard handle only.

The bed permits fast, mechanical lowering of the backrest for emergency resuscitation (CPR) procedures

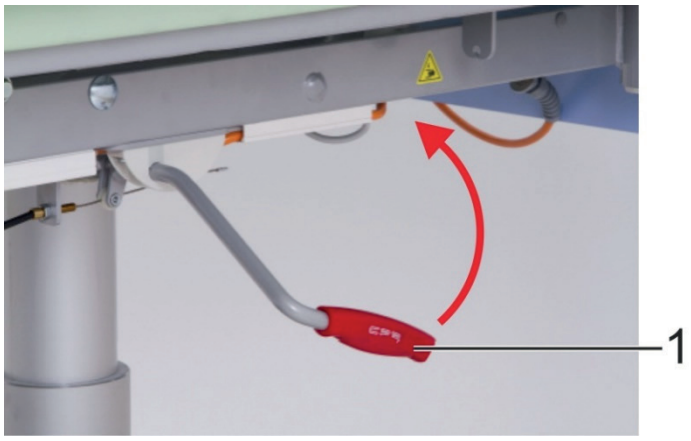


Fig. Releasing the Backrest

1. Emergency Backrest Release

Set the position as follows:
► Pull up and hold release handle 1.
► Press the backrest down using the mattress guard handle.

12.8 Collapsible Siderails (3/4 siderails)

WARNING!
The hospital personnel is responsible for locking the siderails in the highest position when the patient is on the bed or when the bed is transported.

WARNING!
Ensure that there are no objects or body parts between the bars of siderail when folding the siderail up or down.

Collapsible siderails are situated on both sides of the bed. Both collapsible siderails are integral parts of the bed in contact with patient and cannot be removed.

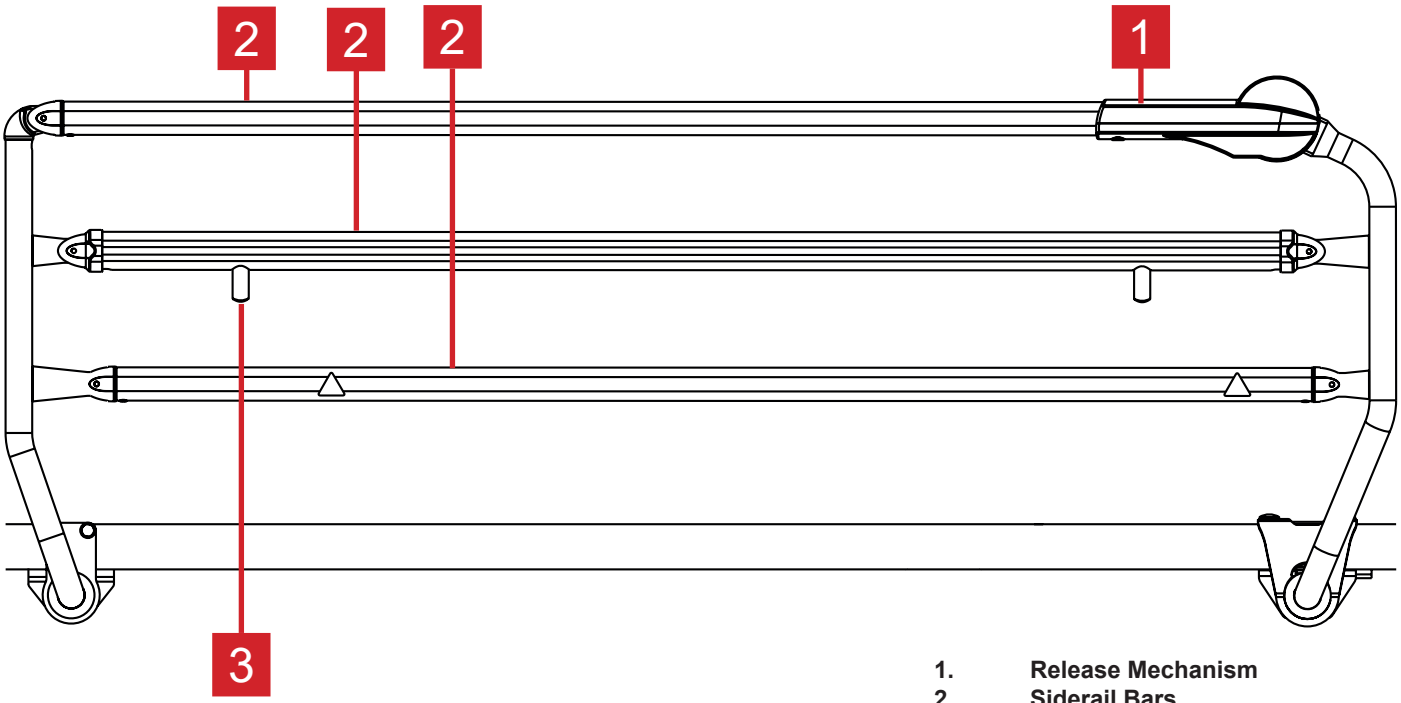


Fig. Collapsible Siderail (3/4 Siderail)

1. **Release Mechanism**
2. **Siderail Bars**
3. **Siderail Stop**

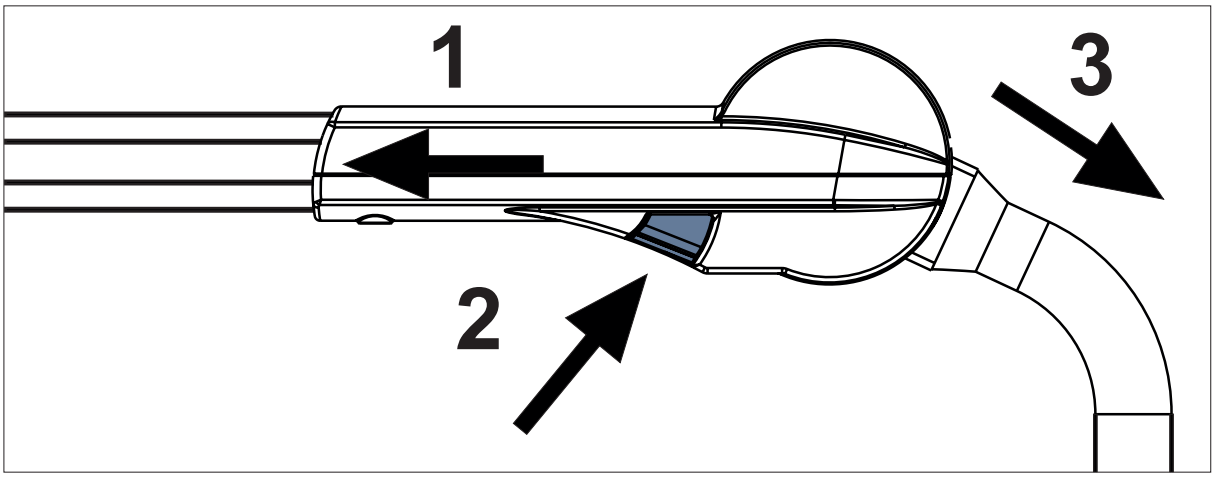


Fig. Release Mechanism (inner side of collapsible siderail)

To fold siderail down:
► Take release mechanism and push siderail towards head end (1).
► Press button placed on the inner side of the siderail (2) to unlock the siderail.
► Fold siderail down as required (3).

Do not let the siderail fall down when it is unblocked!

To fold siderail up:
► Take an upper edge of the siderail and push the siderail up.

Siderail will click into place and lock automatically.
► Check if the siderail is fixed in place.

12.9 Full-length Siderail Latera Thema

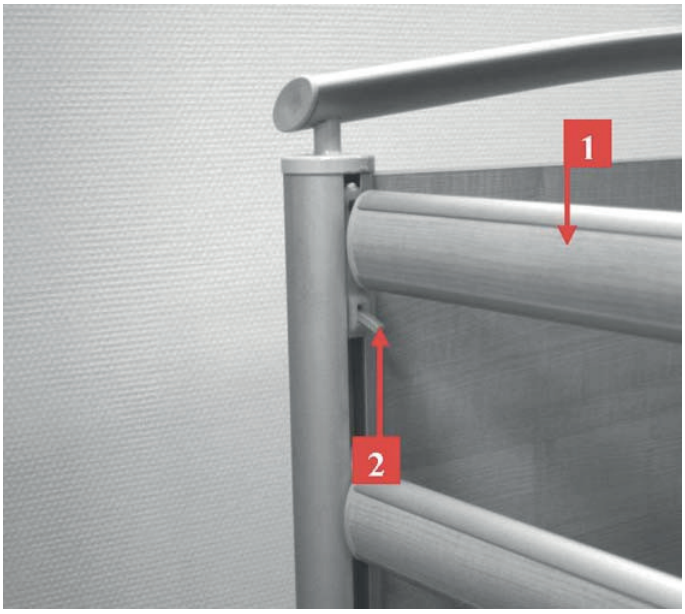


Fig. Collapsing the siderails

To adjust the siderails:
► Adjust the siderails by pulling on the top rail. The siderail will lock itself automatically.

To lower the siderails:

WARNING!
Risk of injury due to crushed body parts!
► Ensure that there are no body parts or other objects between the rails before you lower the siderails.

► Lift the top rail of the siderail slightly in position 1.
► Push down locking handle 2.
► Lower the siderail to the desired position.

12.10 Mattress support platform

12.10.1 Mechanical Calfrest Adjustment

WARNING!
Incorrect lowering can injure the patient!
► Hold the calfrest by both handles at all times when lowering the calfrest.
► Lower the calfrest carefully to prevent it from falling suddenly.

You can adjust the calfrest mechanically. A special locking mechanism allows the position to be adjusted.

To raise the calfrest:
► Pull on both calfrest handles until the desired position is reached.

To lower the calfrest:
► Hold both handles and pull the calfrest to the topmost position.
This releases the locking mechanism.
► Lower the calfrest to the desired position.

12.10.2 Mattress Platform Extension

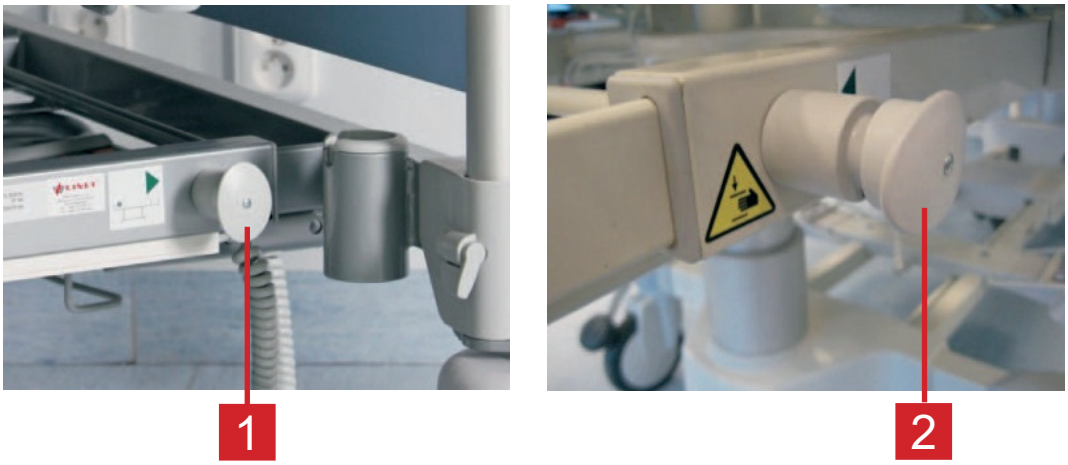


Fig. Mattress Platform Extension Safety Lock

To lengthen the bed:
► Pull out the safety catches at the foot end on both sides of the frame **1**.
► Turn the safety catches **2** by 90°.

The safety lock is released.

12.11 Undercarriage

CAUTION!
Incorrect transport can damage the bed!

- ► Disconnect the bed from the mains before moving it.
- ► Store the mains cable in a safe place (plastic hook) on the bed during transport.
- ► Ensure that the castors are locked while the bed is stationary and prior to assembly, disassembly and maintenance.

12.12 Castor Control Levers

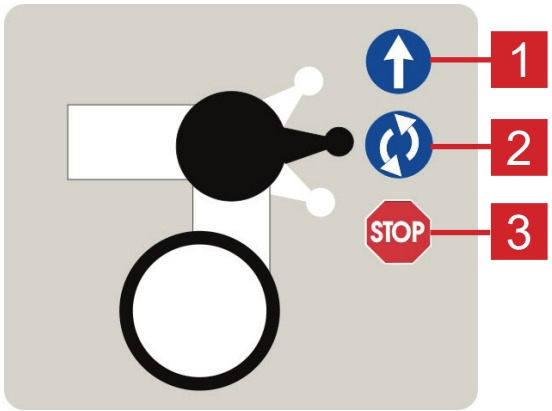
Fig. Castor Control Levers

The main control levers are located on the undercarriage on the foot end.

Functions:

- Braked castors (lowest lever position).
- Unbraked castors (medium lever position).
- Forward Movement. Bed moves straight ahead (upper lever position).

Castor control for bed with control levers



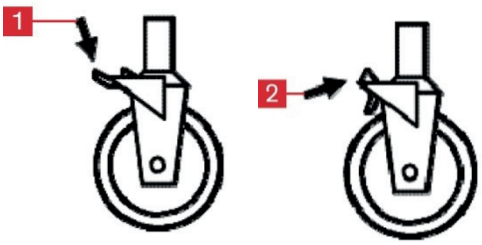
The control levers are located on both sides of the foot end.

Fig. Positions of Castor Control Lever

Castor control lever positions:

1. Forward Movement
   The front left castor is locked. The bed moves straight ahead. If the bed is equipped with a fifth castor, this castor determines the direction of movement.
2. Unrestricted Movement All castors are unlocked.
3. Braked
   All castors are braked.

12.12.1 Castor control for bed without control levers



Castor control with individual braking system:

- ► Brake all castors of the bed by pressing the lever 1 by your foot – castor is locked.
- ► Unbrake all castors of the bed by lifting up the lever 2 by your foot – castors are unlocked.

Transporting the bed:

- ► Adjust bed height to at least 20 cm below maximum height.
- ► Push bed by handles on head or foot end.

13 Equipment

13.1 Accessory Rails

The bed is equipped with two accessory rails with plastic hooks. The hinge mechanism allows the rail to adjust to meet the patient's needs. You can also fold the accessory rails away from the bed.

Load Capacity:

- ■ Maximum load of 5 kg without leverage
- ■ Maximum load of hook pair 10 kg

Accessories for Hanging on the Accessory Rail:

- ■ Cannula holder
- ■ Urine bag holder
- ■ Urine bottle basket

13.2 Safety Night Light

The night light is an optional accessory. It helps the nursing staff as well as the patient to orientate themselves at night.

Requirements for Operation:

- ■ The main room lights must be dimmed or off.
- ■ Ensure that the bed is connected to the mains.

NOTE The night light is turned off during accumulator operation.

13.3 Brake Alarm

The brake alarm is optional. The brake alarm indicates that the bed is connected to the mains and the brakes are not locked.

Take appropriate action:

- ■ If the bed is stationary, activate the brakes.

Or

- ■ Unplug the mains cord to move the bed.

14 Mattress

The manufacturer recommends the use of the following mattress systems on the Latera Acute bed and Latera Thema bed:

- ► EFFECTACARE 20
- ► PRIMACARE 10
- ► PRIMACARE 20
- ► CLINICARE 10

15 Accessories

WARNING!
Risk of injury due to incompatible accessories!
► **Only the manufacturer's original accessories can be used.**

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

NOTE The manufacturer is not responsible for the use of unapproved accessories.

NOTE All accessories meet the requirements of IEC 60601-2-52:2009.

15.1 Lifting Pole

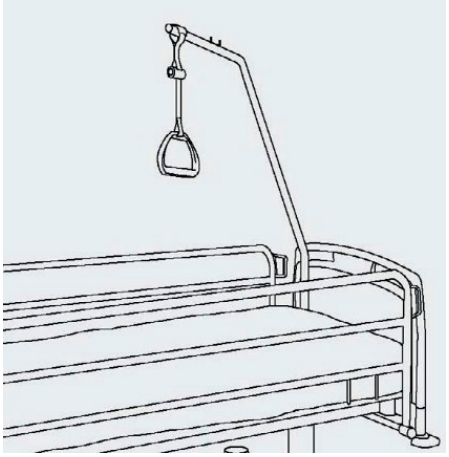


Fig. Lifting Pole

To ensure safe use of the lifting pole:
► Use the lifting pole only if the bed is positioned to the level position.
► Never exceed the maximum load of 75 kg.
► Never use the lifting pole for rehabilitation exercises.
► Never use the lifting pole in lateral tilt.
► To prevent the bed from tipping over, ensure that the lifting pole does not project out from the bed.

Lifting Pole Positions:
► Over the backrest (working position).
► Parallel to the head board.

Fig. Safety pin, locked in place

To install the lifting pole:
► Insert the lifting pole in the corresponding bushings at the head of the bed (corners).
► Ensure that the safety pin locks in place.

A plastic grab handle with an adjustable strap is attached to the lifting pole.

NOTE The date of manufacture is marked on the grab handle. LINET® recommends that you replace the plastic grab handle every four years.

15.2 IV Poles

WARNING!
Risk of injury due to use of unsuitable accessories!
► Use infusion stands exclusively for accessories listed in the instructions for use.
► Only mount an infusion pump to the lower (wider) telescopic section of an infusion stand above the head board / 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 use the infusion stand as driving/pushing device during the bed transport.

You can insert IV poles into the sleeve fittings at the head of the bed.
► Use only IV poles with four hooks for hanging IV bags or for hanging a basket for intravenous solutions.
► Ensure that the weight-bearing capacity of the IV pole and the four hooks is not exceeded.

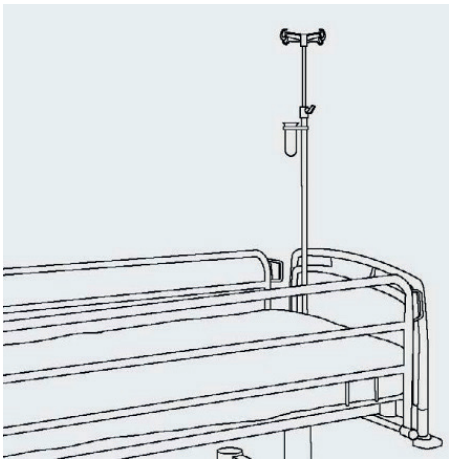


Fig. IV Pole

15.3 Holder for Active Mattress Compressor

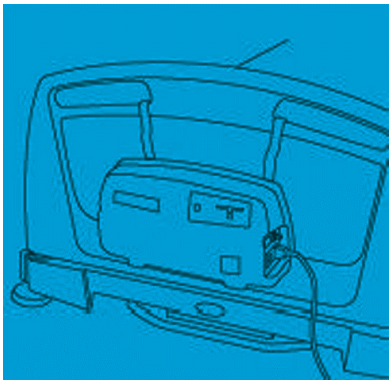


Fig. Holder for Active Mattress Compressor

The holder for the active mattress compressor is only suitable for plastic head board and foot board.
► Suspend the holder for the anti-decubitus mattress compressor from the foot board.

15.4 Plug and play adapter for the handset

Fig. Plug and play adapter for the handset

Adapter for simple connection and separation of the handset (e. g. when repairing, using the handset for other beds).

15.5 Writing Table

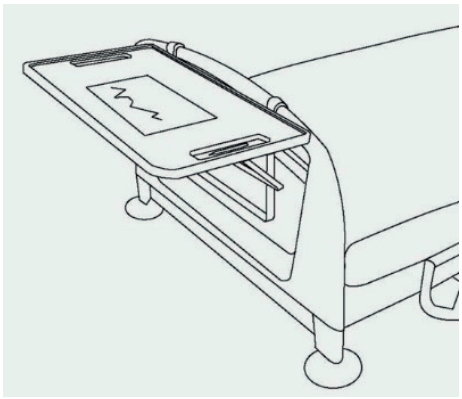


Fig. Writing Table

Writing table to be placed in the openings on the head board and foot board. The writing table is made of ABS. Maximum load 3 kg. If necessary, the writing table can be fixated vertically.

15.6 Towel Holder

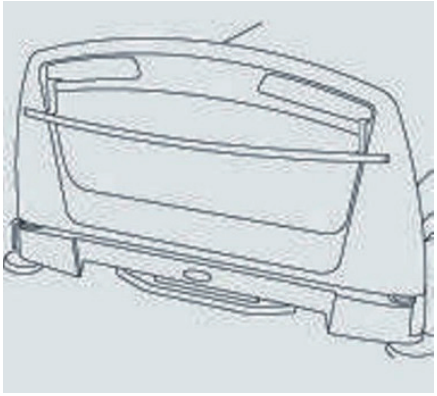


Fig. Towel Holder

The towel holder is only suitable for plastic head board and foot board.

15.7 Urinary bag holder

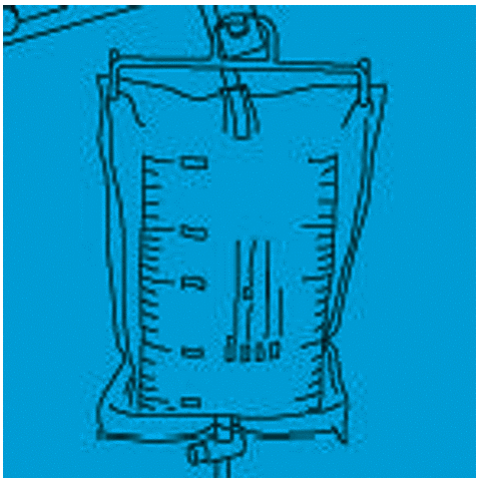


Fig. Urinary bag holder

Stainless steel holder for suspending urinary bags. The pivoting support piece allows the urinary bag to adjust to the bed position.

15.8 Urine bottle basket

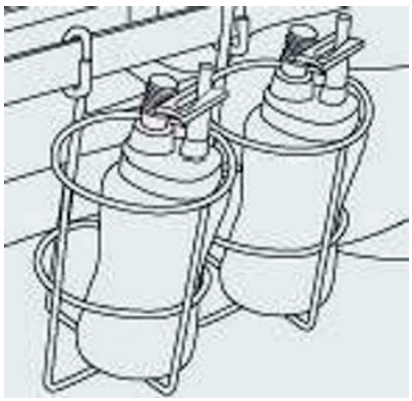


Fig. Urine bottle basket

Basket for attaching and removing urine bottles.

15.9 Cannula Holder

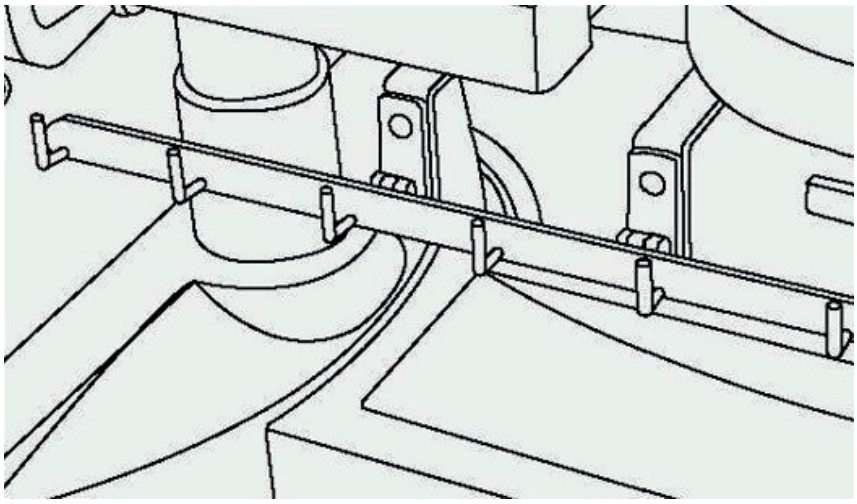


Fig. Cannula holder

Holder with 7 hooks for attaching drainage tubes and cannula.

16 Cleaning/Disinfection

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

CAUTION!
Incorrect cleaning/disinfection can damage the bed!
► Do not use washing machines.
► Do not use pressure or steam cleaners.
► Use the recommended cleaning agents only.
► Follow the instructions and observe the dosages recommended by the manufacturer.
► Ensure that disinfectants are selected and applied by qualified hygiene experts only.
► **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	Latera Acute: Polypropylene (PP) + Lacquered steel	Latera Thema: High Pressure Laminate (HPL) + Aluminium (Al)
Head siderails and foot siderails	single collapsible siderails (3/4 side-rails): Lacquered steel + Polyvinyl chloride (PVC)	telescopic siderails: Aluminium (Al) + Polypropy-lene (PP)
Mattress support platform covers (Backrest)	Acrylonitrile butadiene styrene (ABS)	
Mattress support platform covers (Thighrest, Calfrest)	Acrylonitrile butadiene styrene (ABS)	
Seat section	Lacquered steel	
Castors	Polyurethane (PUR) + Polypropylene (PP)	
Castor control levers	Polyamide (PA6) + Lacquered steel	
Frame of the mattress support plat-form	Polyamide (PA6) + Lacquered steel	
Columns	Oxidized aluminium alloy	
Undercarriage cover	Acrylonitrile butadiene styrene (ABS)	
Corner covers	only Latera Thema: High Pressure Laminate (HPL) + Oxidized aluminium alloy	
Corner bumpers	Polypropylene (PP)	
Keyboards (Attendant Control Panel, Handset, control elements integrated in the siderails)	Polyethylene terephthalate (PET)	
CPR levers	Polypropylene (PP) + Lacquered steel	
Labels	Polyethylene terephthalate (PET)	
Accessory rail	Polyoxymethylene (POM) + Lacquered steel	
Actuators	Polyamide (PA6) + Aluminium (Al)	

For safe and gentle cleaning:
► Disconnect the bed from the mains.
► Do not use any strong acids or bases (optimum pH range 6 - 8).
► Only use detergents that are suitable for cleaning medical equipment.
► Do not use abrasive powders, steel wool, or other material and cleaning agents that might damage the finish.
► 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 the bed with a well-wrung, moist cloth.
► Clean electrical components carefully and allow them to dry fully.

Cleaning agents

LINET® recommends the following cleaning agents:

Cleaning Agents	Manufacturer
Mikrozid, Terralin Protect, Thermosept	Schülke & Mayr
Bacillol AF, Bacillol Rasant, Dismozon Pur, Microbac Forte, Neodisher Dekonta	BODE Chemie
Lysoformin 3000, Lysoform Spezial	LYSOFORM
Incidin plus, Incidin rapid	Ecolab
Perform, TPH protect,	Schülke

16.1 Preparing for Cleaning

Prepare for cleaning as follows:

- ► Put the mattress platform in the highest position.
- ► Adjust the back and thighrests 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.

16.2 Cleaning

16.2.1 Daily Cleaning

Clean the following bed parts:

- ► All of the control elements for adjusting the bed
- ► All handles
- ► Back and calfrest handles
- ► CPR release handle
- ► Head and foot boards including aluminium columns and crossbars under the boards
- ► Siderails (in highest position)
- ► Freely accessible mattress surface
- ► Accessory rails

16.2.2 Cleaning before Changing Patients

Clean the following bed parts:

- ► All of the control elements for adjusting the bed
- ► All handles
- ► Back and calfrest handles
- ► CPR release handle
- ► Head and foot boards including aluminium columns and crossbars under the boards
- ► Siderails (in highest position)
- ► Freely accessible mattress surface
- ► Accessory rails
- ► All plastic mattress platform covers
- ► Plastic undercarriage covers
- ► Telescopic columns
- ► Mattress on all sides
- ► Freely accessible metal parts on the mattress platform
- ► Cable ducts
- ► Lifting pole sleeve fitting
- ► Infusion stand sleeve fitting
- ► Bumpers
- ► Castors
- ► Brakes

16.2.3 Complete Cleaning and Disinfection

Clean the following bed parts:

- ► All of the control elements for adjusting the bed
- ► All handles
- ► Back and calfrest handles
- ► CPR release handle
- ► Head and foot boards including aluminium columns and crossbars under the boards
- ► Siderails (in highest position)
- ► Freely accessible mattress surface
- ► Accessory rails
- ► All plastic mattress platform covers
- ► Plastic undercarriage covers
- ► Telescopic columns
- ► Mattress on all sides
- ► Freely accessible metal parts on the mattress platform
- ► Cable ducts
- ► Lifting pole sleeve fitting
- ► Infusion stand sleeve fitting
- ► Bumpers
- ► Castors
- ► Brakes
- ► Interior parts
  (remove the mattress platform covers for access)
- ► Telescopic bars

16.3 Cleaning the Telescopic Bars

Clean the telescopic siderail bars as follows:

- ► Ensure that the siderails are in the lowest position.
- ► Release the safety lock on the telescopic post.
- ► Remove the insert from the telescopic column.
- ► Clean the post and insert separately.

17 Troubleshooting

DANGER!
Risk of mortal injury due to electric shock!

- ► If a fault occurs, have the electric motor, power box or other electrical parts repai- red by qualified personnel exclusively.
- ► Do not open the protective covers of the electric motor or the power box.

Error/Fault	Cause	Solution
The bed cannot be adjusted with the positi-on buttons	GO button was not pressed	Press the GO button.
	Function disabled on Attendant Control Panel	Enable disabled function if required.
	Drive motors have no power, Defective accumulator	Check the mains connection. Notify the service department.
	Plug inserted incorrectly	Insert the mains plug correctly.
	Faulty power source.	Notify the service department of the manufacturer.
	Faulty control element	Notify the service department of the manufacturer.
Faulty mattress platform height/tilt adjus-tment	There is an object on the undercarriage cover	Remove the object.
	Function disabled on Attendant Control Panel	Enable disabled function if required.
	Drive motors have no power Defective accumulator	Check the mains connection. Notify the service department of the manufacturer.
	Plug inserted incorrectly	Insert the mains plug correctly.
	Faulty power source	Notify the service department of the manufacturer.
	Faulty control element	Notify the service department of the manufacturer.
Backrest cannot be lowered from the upright position	There is an object under the backrest or in the drive mechanism	Remove the object.
	Locking handle is defective	Notify the service department of the manufacturer.
The siderails cannot be adjusted	The siderail lock is dirty	Clean the locking mechanism.
	Locking handle is defective	Notify the service department of the manufacturer.
Faulty brakes	The brakes are blocked by dirt	Clean the brake system.
	The brake mechanism is defective	Notify the service department of the manufacturer.
The head and foot board cannot be inserted	The head or foot board is in the wrong position	Position the head or foot board correctly.
	Defective mechanism	Notify the service department of the manufacturer.

18 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.

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.

18.1 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.

18.2 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

18.3 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.

19 Disposal

19.1 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**).

19.2 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.

19.2.1 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.

19.2.2 Outside Europe

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

20 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.

This product is covered by a 24-month warranty from the date of purchase. 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.

21 Standards and Regulations

Apllied norms are stated on Declaration of Conformity.

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)**