

Instructions for Use and Technical Description



ELEGANZA 2

A smart acute bed

D9U001GRA-0101

Version: 14

Publication Date: 2023-01



Manufacturer:

LINET spol. s r.o. Želevčice 5 274 01 Slaný

Tel.: +420 312 576 111 Fax: +420 312 522 668

E-mail: info@linet.cz http://www.linet.com Service department: service@linetgroup.com

Authorized Representative in Great Britain:

LINET UK Ltd 11 Brunel Way Segensworth East Fareham Hampshire PO15 5TX United Kingdom

Authorized Representative in Switzerland:

Bigla Care AG Bernstrasse 3 CH-3421 Lyssach Switzerland

Authorized Representative in Malaysia:

Emergo Malaysia Sdn. Bhd. Level 16, 1 Sentral, Jalan Stesen Sentral 5 KL Sentral 50470 Kuala Lumpur Malaysia

Authorized Representative in Peru:

Drogería Emergo Peru S.R.L. Calle Las Orquídeas Nro. 585, Int. 1301 San Isidro, Lima Director Técnico Renato Delgado Rivera RUC: 205 52 75 65 35 Peru

Authorized Representative in Philippines:

Biomedica Healthcare Inc. Unit 2103 City land 10, Tower 1 Ayala Corner, Dela Costa Street Makati City, Metro Manila Philippines



Eleganza 2 A smart acute bed

Author: L I N E T, s.r.o. Related links: www.linet.cz

D9U001GRA-0101 Version: 14 Publication Date: 2023-01

Copyright © L I N E T, s.r.o., 2023 Translation © L I N E T, 2023

All rights reserved. All trademarks and brands are the property of the appropriate owners. The manufacturer reserves the right to changes in the contents of the instructions for use that relate to the product's technical regulations. It is for this reason that the contents of the instructions for use may indicate differences from the current manufacture of the product. Reproduction, also excerpts, only with prior permission of the publisher. Subject to changes due to technical developments. All technical data are rated data and are subject to construction and manufacturing tolerances.

Table of Contents

1 Symbols and Definitions	5
1.1 Warning Notices	5
1.1.1 Types of Warning Notices	
1.1.2 Structure of Warning Notices	
1.2 Instructions	
1.3 Lists	
1.4 Symbols on the Package 1.5 Symbols and Labels on the Bed	0 7
1.6Acoustic signalisation (Eleganza 2 with PB43 control	/ unit)
1.7 Acoustic signalisation (Eleganza 2 with PB11 control	
1.8 Visual signalisation	10
1.8.1 Mains Power LED (Attendant Control Panel)	
1.8.2 Accumulator Indicator (Attendant Control Panel)	10
1.8.3 Lock LED (Attendant Control Panel)	10
1.8.4 Illumination	
1.9 Definitions	
1.10Abbreviations	
3 Intended use (Eleganza 2)	
3.1 User population	
3.2 Contraindications	17
3.3 Operator	
4 Intended use (Eleganza 2 with Junior Kit)	17
4.1 User population	
4.2 Contraindications	17
4.3 Operator	18
5 Incorrect Use	
6 Product Description	
6.1 Eleganza 2 (1GR) – Split Plastic Siderails	
6.2 Eleganza 2 (1GR) – Single Collapsible Siderails	
7 Technical Specification	
7.1 Applied parts type B	
7.2 Mechanical Specification (standard version)7.3 Mechanical Specification (shortened version)	21
7.4 Environment Conditions	22
7.5 Electrical Specifications (Eleganza 2)	
7.6 Electromagnetic compatibility	23
7.6.1 Manufacturer instructions - electromagnetic emission	ons
	24
7.6.2 Manufacturer instructions - electromagnetic suscep	
8 Use and Storage Conditions	
9 Scope of Delivery and Bed Variants 9.1 Scope of Delivery	
9.2 Bed Variants	
10 Putting into Service	
10.1 Accumulator Activation	
10.1.1 Placement of Control Section	
10.1.2 Removing Isolating Foil	28
10.1.3 Isolating Foil	28
10.2 Head Board and Foot Board	
10.3 Mattress Platform	
10.4 Potential Equalisation	
10.5 Before Use	
10.6 Transport	
11 Power Supply Cord (Mains Power Cable)	
12Accumulator	
12.1 Status Faulty Accumulator	34
12.2 Status Discharged Accumulator	34
12.3 Removing the Bed from Service	
12.4 Deactivating the Accumulator	
13 Manipulation	35
13.1 Siderails	

13.1.1 Collapsible siderail (3/4 siderail)	
13.1.2 Split plastic siderails	.37
13.1.3 Split plastic siderails with Junior Kit	
13.2 Castor Control and Bed Transport	
13.3 CPR backrest release	
13.4 Mattress Platform	
13.4.1Auto-Regression	
13.4.2 Mechanical Calfrest Adjustment	.42
13.4.3 Mattress Platform Extension	
13.4.4 Shortened Bed	
13.5 Control Elements 13.5.1 ACP – Attendant Control Panel	.46
13.5.2 Attendant Control Panel with SafeSense® 3 Cont	
12 E 2 Uppdoot	
13.5.3 Handset 13.5.4 Satellite Control Panel (optional)	
13.5.5 Foot Control	
13.5.6 Control Element Integrated in Siderail (optional)	
14 Equipment	
14.1Accessory Rails	
14.2 Urinary bottle holder	
14.3 Redon bottle holder	
14.4 Mobi-Lift®	
14.5Angle indicators	
14.6 X-Ray Backrest	
14.7 SafeSense® 3 ready bed	
14.8 USB charger	
15 Mattress	
16Accessories	. 67
16.1 Lifting Pole	.68
16.2 Infusion Stands	
16.3 External holder for infusion stand/pump	
16.4 Oxygen Bottle Holder	
16.5 Handy box – storage pocket for siderails	.70
16.6 Head Board and Foot Board Holder	
16.7 Name holder	
16.8 Chart Holder	
16.9 Handset Holder	
16.10 Monitor Shelf	
16.11 Compressor Holder	
16.12 Towel holder 16.13 Extension Holder	
16.14 Soft Guards for Siderails	
16.15 Protector®	
16.16 Siderail extension – "Extender®" (SR55)	
16.17 SafeSense	
16.18 SafeSense® 3	
17 Cleaning/Disinfection	
17.1 Safety Instructions for Cleaning and Disinfection of	the Bed
17.2 General Instructions for Cleaning and Disinfection	. 80
17.2.1 Daily Cleaning	
17.2.2 Cleaning before Changing Patients	
17.2.3 Complete Cleaning / Cleaning before First Use	
17.2.4 Cleaning of Spilled Fluids	
17.2.5 Damaged Foam Mattress	
17.3 Mode of Cleaning and Disinfection	
17.4 Steam Cleaning	
18 Troubleshooting	.83
19 Maintenance	
19.1 Regular maintenance	
19.2 Spare Parts	
19.3 Safety Technical Checks	
20 Disposal	
20.2 Disposal	
20.2.1 Within Europe	
20.2.2 Outside Europe	
21 Warranty	



22 Standards and Regulations	86
22.1AFSSAPS Declaration	87

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 -** risk of material damage.
- WARNING- risk of physical injury.
- **DANGER** 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)
PAP	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	
	THERMAL PROTECTION OF TRANSFORMER	
	ONLY SUITABLE FOR INDOOR USE	
Ŕ	PROTECTION AGAINST ACCIDENTS DUE TO ELECTRICAL CURRENT – TYPE B APPLIED PARTS	
\bigcirc	SAFETY ISOLATING TRANSFORMER, GENERAL	
CE	CE MARK OF CONFORMITY WITH EU REGULATION	
	JACK FOR ATTACHMENT OF CONDUCTOR FOR POTENTIAL EQUALISATION	
<u></u> = kg	SAFE WORKING LOAD	
	WARNING AGAINST CRUSHING OR TRAPPING	
<u>∘⊡</u> ⊒ = kg	MAXIMUM WEIGHT OF PATIENT	
	USE MATTRESS RECOMMENDED BY MANUFACTURER	



📥 = kg	WEIGHT OF BED	
	DO NOT PUT ANY OBJECTS HERE	
+ + + + + + + + + + + + + + + + + + +	DESIGNATION OF HOSPITAL BED FOR ADULTS	
EHC	EAC MARKING	
	WEEE SYMBOL (RECYCLE AS ELECTRONIC WASTE, DO NOT PUT INTO THE HOUSEHOLD WASTE)	
MD	MEDICAL DEVICE (COMPATIBLE WITH MEDICAL DEVICE REGULATION)	
22 S	RECYCLING SYMBOL	
	DO NOT POLLUTE THE ENVIRONMENT	
	MASS OF MOBILE HOSPITAL BED (MASS OF EMPTY BED + SAFE WORKING LOAD)	
UK REP	AUTHORIZED REPRESENTATIVE IN GREAT BRITAIN	
CH REP	AUTHORIZED REPRESENTATIVE IN SWITZERLAND	



U	Κ
C	A

1.6 Acoustic signalisation (Eleganza 2 with PB43 control unit)

SOUND	MEANING		
CONTINUOUS SOUND	overheating		
	accumulator overcurrent		
	actuator overload		
REPEATED BEEP: 0,6s sound / 2,6s silence	STOP error (all STOP buttons are disabled)		
REPEATED BEEP: 0,1s sound / 3s silence	switching of the transformer winding error (Brazil)		
BEEP lasting 0,3s	confirmation		
	stopping or locked function		
	optionally: transition from tilt (Trendelenburg, Antitrendelen- burg) 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 silen- ce	Brake Signal (only version with Brake Signal)		

1.7 Acoustic signalisation (Eleganza 2 with PB11 control unit)

There are no acoustic signals in the case of Eleganza 2 bed with PB11 control unit.

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 Accumulator Indicator (Attendant Control Panel)

	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

1.8.3 Lock LED (Attendant Control Panel)

VISUAL SIGNALISATION LOCK LED	lit	0,6	flashing: s lit / 0,6s r		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, Trendelenburg and An- titrendelenburg Tilt Lock LED	locked	lock error	keyboard error	motion blocked	unlocked
Foot Control Lock LED	locked	lock error	keyboard error	motion blocked	unlocked



1.8.4 Illumination

The 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 turned on.

After pressing the GO button:

The controllers in siderails, handset, angle indicator and bed illumination will light up at full intensity.

After elapsing the GO period:

The illumination intensity of handset, siderail controller and angle indicator 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 (supervisor, handset or siderail) 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 handset, siderail controller and angle indicator will light up at full intensity for 7 seconds. After that the illumination will be lowered.

After activating the bed via the foot controller (mini GO function):

The full intensity of bed illumination will be activated for 9 minutes and 40 seconds.

In case of pressing the foot controller once outside the active "mini GO" period:

- All the controllers (handset, siderail controllers and angle indicator) will light up at full intensity for 7 seconds and after the illumination will be lowered.
- The full intensity of bed illumination will be activated for 10 minutes and after the illumination will be lowered.

Turning off all illumination:

Press button (20) and all illumination on the bed (handset, siderail controllers, angle indicator and bed illumination) will be turned off. This function is not blocked by the activation GO button.

Illuminated angle indicator:

- ▶ The bed in the lowest (safe) position is indicated by green illumination of the angle indicator.
- The bed in all other positions, except lowest position, is indicated by white illumination of the angle indicator.

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 (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 lowest height of the patient surface with regard to the floor 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).
Mass of mobile hospital bed	Sum of empty bed mass and Safe Working Load.



1.10 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! Eleganza 2 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 Eleganza 2 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 Eleganza 2 bed avoid squeezing those between parts of the Eleganza 2 bed!



WARNING! Eleganza 2 bed should not be used with bed hoists and bed lifts!



WARNING! The Eleganza 2 bed is intended for adults. ▶ Follow chapter Correct 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 medical electrical equipment may occur.



WARNING! Length adjustment of the bed must be proportional to the height of patient!



WARNING! Risk of trapping or squeezing because of patient's body constitution disproportionate to the size of mattress support platform!



WARNING!

Risk of injury or death due using of incorrect equipment!
 Always conduct the risk assessments required for the selection of suitable equipment.



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!



- It is necessary to read the instructions for use before operating the bed.
- Follow the instructions carefully.
- Use the bed exclusively in its original condition.
- ▶ If necessary, check the bed functions daily or at each staff rotation.
- Use the bed exclusively with the correct mains supply.
- Ensure that the bed is operated by qualified personnel only 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.

- Ensure the bed is only moved or positioned upon even, hard floor surfaces.
- Replace any damaged parts immediately with original spare parts.

Ensure maintenance and installations are performed only by qualified personnel who have been trained by the manufacturer.

- Do not apply excess weight or load to the bed according to SWL (safe working load).
- Only one adult patient can use the bed at any time.
- Take care to avoid injuries or squeezing when operating moving parts.
- When using lifting poles or infusion stands, ensure nothing will be damaged when you move or adjust the bed.
- Ensure castors are braked when the bed is not being moved, regardless of whether the bed is occupied or empty.

• 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 sustaining injuries.

- Ensure that siderails are operated by healthcare personnel only.
- Never use the bed in areas where there is a hazard or risk 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.
- Unplug the mains cable by pulling on the plug only.
- Position the mains cable so there are no loops or bends in the cable; protect the cable from mechani- cal wear and tear.
- Incorrect handling of the mains cable can cause an electric shock hazard, other serious injuries or damage to the bed.
- Ensure the specified duty cycle (on-time) is not exceeded (see INT. on product label).
- Ensure moving parts of the bed are not blocked.
- ▶ To prevent failures, use exclusively the manufacturer's original accessories and mattresses.
- Ensure the safe working load is not exceeded.
- Adjust bed height to approx. 20 cm below maximum height when transporting the bed in order to facilitate overcoming possible obstacles.
- Do not exceed the 75 kg safe working load of the mattress platform extension.
- Ensure the bed and its components are exclusively modified with the manufacturer's approval.
- Any non-observance of this manual may lead to injuries or material damage.

Ensure there is no risk of crushing or otherwise injuring the patient's limbs (e.g. between siderails and mattress platform, between movable parts etc.) before positioning the bed or folding down the siderails.

Close linen shelf before using the Reverse Trendelenburg or Cardiac chair position.

► Do not put any objects (e.g. accessories, infusions, cables) between or on siderails and movable parts. Or between mattress platform and undercarriage of the bed.

Ensure that nobody can get injured while folding the siderails.

Ensure no injuries will occur when folding the siderails.

Use exclusively split plastic or split telescopic siderails for confused or disoriented patients or add Protector to the single collapsible siderails.

Ensure there is no risk of damaging the cables of the Attendant Control Panel or handset when they are stored on siderails or head board and foot board.

▶ To prevent collisions, do not put oxygen bottle holders directly under the mattress platform.

If the patient is left without supervision of hospital personnel during sleep, adjust the mattress platform to its lowest positi on with straight sleeping surface in order to prevent the patient from falling or sustaining injuries.

▶ If the patient is left without supervision of hospital personnel during day, adjust the mattress platform to recommended daily position (Fowler's position) with mattress platform in lowest position and backrest adjusted to the angle of 30° in order to prevent the patient from falling or sustaining injuries.

► The hospital personnel must consider locking all positioning functions of the bed in case the patient is left without supervision depending on health and mental status of the patient.

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.



3 Intended use (Eleganza 2)

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 Intended use (Eleganza 2 with Junior Kit)

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.

4.1 User population

> Patients with length more than 125 cm in the standard care units (based on individual patient status assessment by caregiver the patient can utilize dedicated device functions)

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

4.2 Contraindications

The medical device is not intended for the pediatric patients shorter than 125 cm.

Limited patient handling leads to development of pressure injury.

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.

4.3 Operator

Caregiver

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

5 Incorrect Use

Eleganza 2 is not suitable for:

- Patients
 - Not fulfilling conditions stated in chapter "Intended use"
- Use
 - Home care
 - $\hfill\square$ Other than described in the instructions for 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 ensure 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).

6 Product Description

6.1 Eleganza 2 (1GR) – Split Plastic Siderails

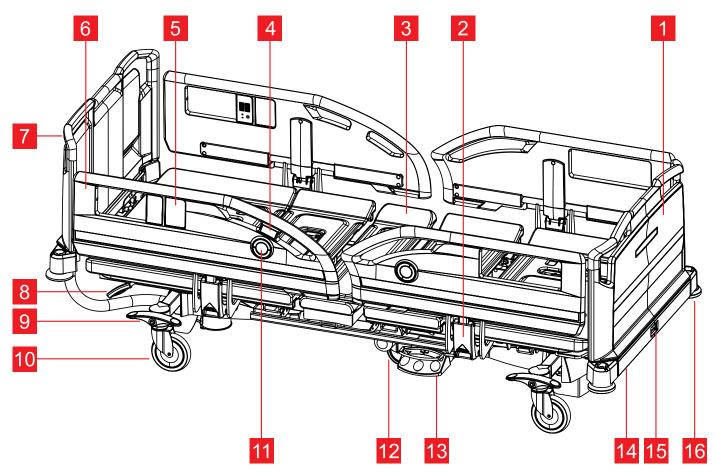


Fig. Overview Eleganza 2 – Split Plastic Siderails

- 1. Foot Board
- 2. Siderail release mechanism with SoftDrop function
- 3. Mattress platform with removable plastic sections
- 4. Integrated MobiLift controller in siderails
- 5. Integrated control panel in siderails
- 6. Split plastic siderails
- 7. Head Board
- 8. CPR control lever backrest release
- 9. Castor control lever
- 10. Castor 150 mm (Tente Motion with plastic cover)
- 11. Angle indicator
- 12. Fifth castor
- 13. Foot control
- 14. Linen/Attendant Control Panel holder
- 15. Foot board unlocking mechanism
- 16. Protective bumber

6.2 Eleganza 2 (1GR) – Single Collapsible Siderails

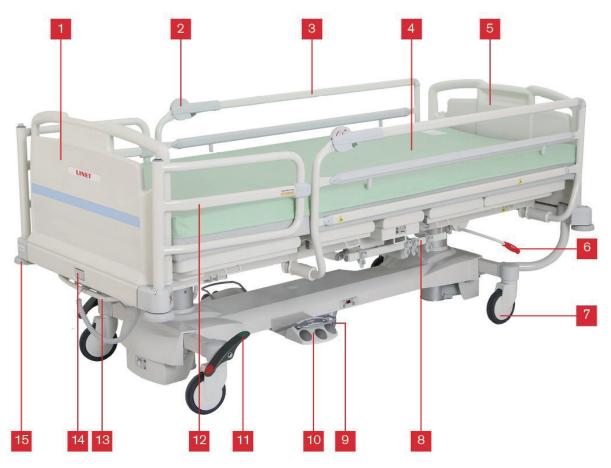


Fig. Overview Eleganza 2 – Single Collapsible Siderails

- 1. Foot Board
- 2. Siderail release mechanism
- 3. Single collapsible siderails
- 4. Mattress platform with mattress
- 5. Head Board
- 6. CPR control lever backrest release
- 7. Castor 150 mm (Tente Motion with plastic cover)
- 8. Accessory rail
- 9. Fifth castor
- 10. Foot control
- 11. Castor control lever
- 12. Protector®
- 13. Linen/Attendant Control Panel holder
- 14. Foot board unlocking mechanism
- 15. Protective bumper

7 Technical Specification

7.1 Applied parts type B

All the accesories the patient can reach are type B applied parts.

List of type B applied parts:

- ACP Attendant Control Panel
- Handset
- Satellite controller
- Siderails
- Integrated siderail controllers
- Head board and Foot board
- Mattress platform

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

7.2 Mechanical Specification (standard version)

Parameter	Value	
External dimensions		
With split plastic siderails and standard bumpers (10 cm)	223,3 cm x 99,5 cm	
Mattress dimensions	200 cm x 90 cm	
Maximum Height of Mattress	18 cm (depending on configuration)	
Siderail length		
Split plastic head siderail	104,2 cm	
Split plastic foot siderail	95,5 cm	
Maximal clearance underneath the bed	15 cm	
Siderail Height above Mattress Platform (without Mattress)	9 cm (minimum), 40 cm (maximum)	
Bed Extension	0 cm / 15 cm / 32 cm	
Mattress Platform Height Adjustment	39,5 cm – 77,5 cm	
Castor (diameter)	15 cm	
Maximum Backrest Angle	64°	
Maximum Calfrest Angle	15°	
Maximum Thighrest Angle	32°	
Auto-regression	11 cm	
Trendelenburg Position	16°	
Reverse Trendelenburg Position	16°	
Weight (Depending on Equipment)	156 kg	
Safe Working Load (including Mattress and Accessories)	250 kg	
Mass Of Mobile Hospital Bed (Mass Of Empty Bed + Safe Working Load)	412 kg	
Maximum Patient Weight		
Application environment 1, 2	185 kg	
Application environment 3, 5	215 kg	
Maximum Lifting Pole Load	75 kg	



7.3 Mechanical Specification (shortened version)

Parameter	Value	
External dimensions		
With split plastic siderails and small bumpers (8,5 cm)	222 cm (212 cm) x 99,5 cm	
Mattress dimensions	190 cm x 90 cm	
Maximum Height of Mattress	18 cm (depending on configuration)	
Siderail length Split plastic head siderail Split plastic foot siderail	104,2 cm 95,5 cm	
Maximal clearance underneath the bed	15 cm	
Siderail Height above Mattress Platform (without Mattress)	9 cm (minimum), 40 cm (maximum)	
Bed Shortening	0 cm / -10 cm	
Mattress Platform Height Adjustment	39,5 cm – 77,5 cm	
Castor (diameter)	15 cm	
Maximum Backrest Angle	64°	
Maximum Calfrest Angle	15°	
Maximum Thighrest Angle	32°	
Auto-regression	11 cm	
Trendelenburg Position	16°	
Reverse Trendelenburg Position	16°	
Weight (Depending on Equipment)	156 kg	
Safe Working Load (including Mattress and Accessories)	250 kg	
Mass Of Mobile Hospital Bed (Mass Of Empty Bed + Safe Working Load)	412 kg	
Maximum Patient Weight Application environment 1, 2 Application environment 3, 5	185 kg 215 kg	
Maximum Lifting Pole Load	75 kg	

7.4 Environment Conditions

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



7.5 Electrical Specifications (Eleganza 2)



DANGER! Danger to life due to electric shock!

Ensure that maintenance and service of electrical parts are performed only by qualified personnel if the bed is connected.

Parameter	Value
Input Voltage	
Version 1	230 V~, 50/60 Hz
Version 2	100 V~, 50/60 Hz
Version 3	110 V~, 50/60 Hz
Version 4	120 V~, 50/60 Hz
Version 5	127 V~, 50/60 Hz
Version 6	110 - 127 V~, 50/60 Hz or 220 V~, 50/60 Hz
Maximum Power Input	370 VA
Ingress Protection	IPX4
Safety Class	Class I (with type B applied parts)
Electrical Motor Duty Cycle	max. 2 min ON / 18 min OFF
Accumulator	Pb ACCU 2 x 12 V / 1,2 Ah / Fuse 15 A
Fuse	
Version 1	2x T1.6A L 250 V for 230 V, 110-127 V or 220 V version
Version 2	2x T3.15A L 250 V for 100 V, 110 V, 120 V, 127 V, 110-127 V or 220 V version

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

Electrical system of Eleganza 2 is characterized by overcurrent protection against overload of each actuator.

7.6 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!

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!

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 Eleganza 2, including cables specified by manufacturer. Otherwise this could lead to deterioration of functionality of this bed.

Do not overload the bed (SWL), respect the duty cycle (INT.) and consider chapter 14 Maintenance in order to

maintain the basic safety with regard to electromagnetic disturbances for the expected service life.



D9U001GRA-0101 14



7.6.1 Manufacturer instructions - electromagnetic emissions

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

7.6.2 Manufacturer instructions - electromagnetic susceptibility

Immunity Tests	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV for contact discharge ± 15 kV for contact discharge
Radiated RF IEC 61000-4-3 Proximity fields from RF wireless communications equipment	3 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz
IEC 61000-4-3	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



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

Table 1 - IMMUNITY to RF wireless communications equipment

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).

8 Use and Storage Conditions

The bed may not be used and stored in indoor environments:

- 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 stan-dards laying down the necessary conditions for electrical installations.

Disconnect the bed from the mains in exceptional cases (i.e. earthquake, lightning).

9 Scope of Delivery and Bed Variants

9.1 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.
- The bed is delivered with deactivated accumulator. To activate accumulator see chapter "Accumulator activation".

9.2 Bed Variants

Features - Eleganza 2 Model 1GR (for model number see serial label):

- s = standard
- o = optional
- Mattress Platform
- mattress platform consisting of removable plastic segments (s)
- nattress platform with bed shortening (-10 cm) and with HPL on calfrest (o)
- Siderails
 - Without siderails (s)
- □ Split plastic siderails, with integrated controllers (o)
- □ Split plastic siderails, without integrated illuminated controllers (o)
- □ Single collapsible siderails, powder coated (o)
- $\hfill\square$ Split plastic siderails with Junior Kit (o)
- Head board and foot board
- Design Eleganza 2 plastic panels with coloured inserts (s)
- Castors
- 150 mm Tente Motion, with central braking sytem (o)
- □ 150 mm Tente Motion + fifth castor (o)
- □ 150 mm Tente Motion, with plastic cover (o)
- □ 150 mm Tente Motion, with plastic cover + fifth wheel (o)
- □ 150 mm Tente Integral, double castors (o)
- □ 150 mm Tente Integral, double castors + fifth wheel (o)
- Control Elements
- □ ACP Attendant Control Panel (s)
- □ Handset with illuminated keyboard (s)
- □ Handset without illuminated keyboard (o)
- □ Foot control (o)
- □ Satellite control panel (o)
- □ Integrated in siderails (o)
- □ Mobi-Lift in head siderail (o)
- Other
- Mattress platform extension (s)
- □ Linen shelf (o)
- □ One pair of universal accessory holders (o)
- □ Urinary bag holder integrated in siderails (s)
- □ Universal box (o)
- □ Segufix holders (o)
- Universal handset holder (o)
- Powder Coating Colors
- □ RAL 9002 (grey) (s)
- Powder-coated metal parts, RAL 9006 (light grey) + RAL 7043 (dark grey) (o)
- SafeSense® 3 ready bed



10 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:

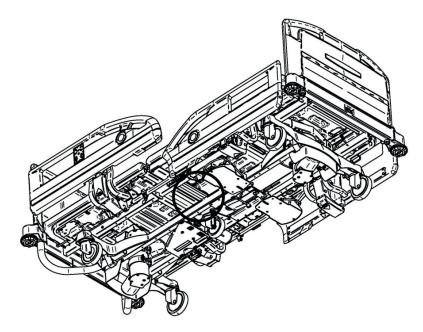
- Unpack the bed.
- Check the delivery (see Scope of Delivery and Bed Variants).
- Remove isolating foil from mains control box (see Removing Isolating Foil).
- Install equipment and accessories.

► In case of delivery with dismounted head board and foot board, mount the head board and foot board (see Head Board and Foot Board).

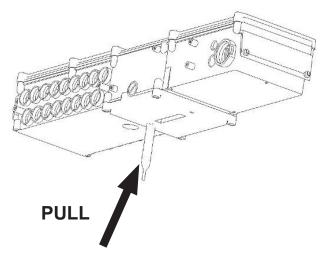
- Set-up the bed only on a suitable floor surface (see Transport).
- Ensure the mains cable does not collide or get stretched when adjusting the bed. Check the plug is inserted correctly.
- Do not leave any extension cords or power strips loose on the floor.
- Ensure all the required mechanical and electrical 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 the mains cable is always accessible.
- ► The plug on the mains cable should only be changed and maintained by qualified and trained service technicians authorised by the manufacturer.

10.1 Accumulator Activation

10.1.1 Placement of Control Section

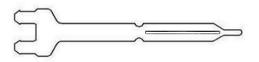


10.1.2 Removing Isolating Foil



10.1.3 Isolating Foil

Check if isolating foil is complete and undamaged as shown:



If isolating foil is damaged, contact the manufacturer's service department immediately.

NOTE: It is recommended to wear gloves when removing the isolating foil.

10.2 Head Board and Foot Board



WARNING!

Risk of injury when inserting the head board and foot board!

- To insert head board and foot board into corner posts, hold them by the corner handles on top with both hands.
- Install head board and foot board before the first use.



WARNING!

Risk of injury due to incorrectly installed head board and foot board!

- Ensure head board and foot board are correctly inserted, especially when moving the bed.
- Ensure head board and foot board locks are locked, especially when moving the bed.



WARNING!

Risk of injury when removing the head board and foot board!

▶ Before removing head board and foot board, ensure siderails are folded down and there are no accessories attached to the head board and foot board.

If a patient is lying in a bed with the head and/or foot board removed, supervise the bed at all times.

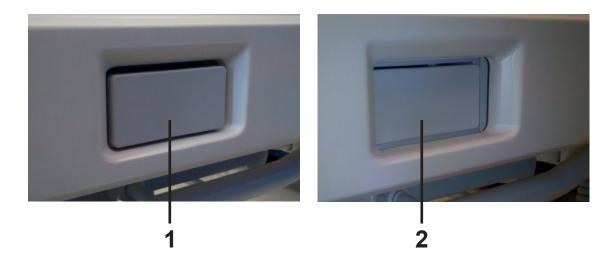


WARNING!

Material damage due to excess load!

Ensure nobody sits on the head board and foot board.

NOTE: The head board and foot board may be delivered in several decor colour variants.



Locked Unlocked

1.

2.

To remove head board or foot board:

- Press head board lock or foot board lock. The lock will stay unlocked (2).
- Release the lock button and take finger out of locking mechanism.
- Remove the head board or foot board.

To install head board or foot board:

- Insert head board or foot board to the bushings.
- Press lock button to lock head board or foot board. The lock will stay locked (1)

NOTE: It is possible to install head board and foot board to the bushings with locked lock.

10.3 Mattress Platform

The mattress platform consists of removable plastic sections.



Fig. Correct placement of mattress platform sections

- A. Back section / Calf section
- B. Loins section / Thigh section
- C. Seat section

NOTE Sections A and B are replaceable. It is possible to change back section A for calf section A. Same applies for B sections. Section C is not replaceable.

To remove/install sections of the mattress platform:

- Pull out mattress platform sections.
- Install mattress platform section.
- ► The correct fitting of section is signalized by hearable "click".
- Ensure that mattress platform sections are fitted correctly by trying pull the section up with little manpower.



10.4 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



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.

10.5 Before Use



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 to allow the temperature to equalise.

Prepare the bed for service as follows:

- Dispose of all packaging (see Disposal).
- Connect the bed to the mains.
- ► Charge the accumulator.
- Raise the mattress platform to the highest position.
- Remove the isolating foil from control section.
- Lower and tilt the mattress platform to the lowest position.
- Check the castors and main brake work correctly.
- Check the bed extension works correctly.
- Check it is possible to remove the head and foot boards.
- Check all of the functions on the control elements (Attendant Control Panel etc.). ►
- Check the siderails function properly.

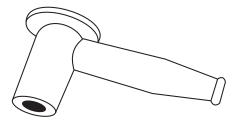


Fig. Potential equalisation connector female

10.6 Transport

For safe transport, observe the following:

- Ensure no cables are run over when moving a bed.
- Ensure the mains cable is attached with a hook (at the head end of the bed).
- Ensure the castors are unlocked before moving the bed during the loading/unloading process
- (see Castor Control and Bed Transport).
- Ensure the siderails are lifted and locked during transport of the bed.
- Move the bed only on suitable floor surfaces.

Suitable surfaces:

- Tile
- Hard linoleum
- Hard flooring

Unsuitable surfaces:

- Soft, unsealed or defective flooring
- Soft wooden flooring
- Soft and porous stone floors
- Carpeted floors with underlay
- Soft linoleum
 - □ For longer distances, ensure the castor steering function is activated.
 - □ Ensure the brakes are released while moving the bed.

10.7 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.

11 Power Supply Cord (Mains 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.



12 Accumulator



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).



CAUTION!

Risk of damage or destruction of accumulator!

- ► If the accumulator is faulty, degassing may occur. In rare cases this might cause deformations of the accumulator case, control panel housing or cable.
- If this occurs stop using the bed immediately (see Removing the Bed from Service).
- Inform the manufacturer's service department immediately.
- Charging and accumulator capacity is indicated by the yellow LED placed on the ACP control panel.

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

- Use only accumulators approved by the manufacturer.
- The manufacturer provides a 6-month warranty for the full function of accumulators.

• Check the accumulator functionality at least once a month in accordance with the user and service manuals 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 accumulators not approved by the manufacturer.
- Accumulator replacement non-qualified service organisation.

To charge the accumulator:

Connect the bed to the mains and check the yellow LED on the Attendant Control Panel according to the following table.

NOTE: Some bed adjustment options are not available without a accumulator, for example, height adjustment under a load of above 200 kg.

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



The LED indicates the accumulator charge status (Attendant Control Panel):

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 signa- lisation.

To maintain maximum functionality of the accumulator:

Unplug the bed from the mains as least as possible.

In case the accumulator cover or control section is deformated by heat

- Unplug the bed from the mains.
- Do not use the bed (see. Removing the Bed from Service).
- Contact service of the manufacturer.

12.1 Status 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

Status "faulty accumulator" is indicated:

- By the accumulator status indicator being constantly lit.
- A fault accumulator status can be cancelled by pressing the STOP button.
- Accumulator status data is saved to the Linis system and written to the "Blackbox".

12.2 Status Discharged Accumulator

The accumulator is regarded as discharged if the following condition is met:

Defined decrease of voltage depending on discharging current

Status "discharged accumulator" is:

- Status is indicated by the accumulator status indicator flashing quickly.
- ► The electric CPR position is the only possible position.
- This status will be cancelled automatically when the bed switches to sleep mode.

12.3 Removing the Bed from Service

How to remove the bed from service:

- Disconnect the bed from the mains.
- Disconnect the ground wire.
- Deactivate the accumulator (see Deactivating the Accumulator).
- Remove accessories.

To prevent damage during storage:

- Pack or cover the bed and accessories.
- Ensure storage conditions are the same as the operating conditions.

12.4 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.

NOTE: Try some functions to ensure the accumulator is deactivated.

To activate the accumulator again:

Connect Power Cable to the mains.

13 Manipulation



WARNING!

Risk of injury when adjusting the bed!

- Ensure there are no body parts between the mattress platform elements and the mattress platform frame when adjusting the bed.
- Ensure there are no body parts below the mattress platform frame before adjusting the bed.
- Secure or remove any items on the bed.

13.1 Siderails



WARNING!

Risk of injury due to crushing!

• Ensure that there are no objects or body parts between siderail and mattress platform when folding the siderail up or down.

Ensure that no body part or object are under the siderail when folding the siderail down.

▶ It is necessary to take extra care and attention when locking the siderails in the top position. Hospital staff must ensure the siderail is locked in its highest position by pushing the siderail to head end and foot end of the bed. The risk of spontaneous folding of the siderail may occur when the siderail is not properly locked and it can injure the patient, staff or the third parties.

Model variants:

- Without siderails
- With single collapsible siderails
- With split plastic siderails



13.1.1 Collapsible siderail (3/4 siderail)



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.

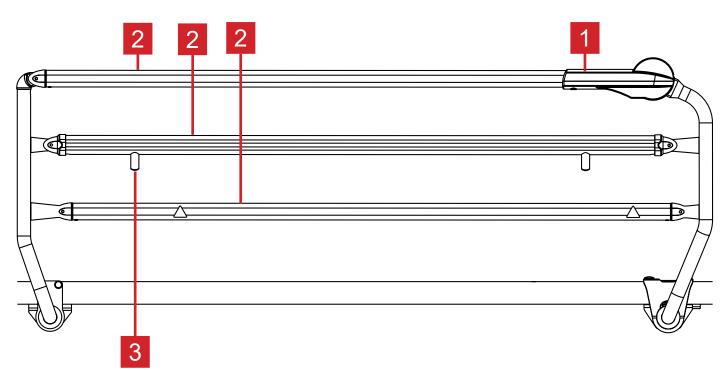


Fig. Collapsible Siderail (3/4 Siderail)

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

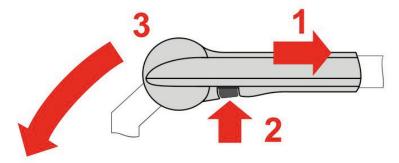


Fig. Releasing mechanism of the Single Collapsible Siderails

To fold siderails down:

- Take hold of release mechanism and push siderail towards head end to unlock locking system 1.
- Press button 2 to unlock.
- Fold siderail down as required 3.
- To fold the siderail up push the siderail up. Siderail will click into place and lock automatically.



13.1.2 Split plastic siderails



WARNING! Risk of injury due to crushing!

- Ensure that there are no objects or body parts between siderail and mattress platform when folding the siderail up or down.
 - Ensure that no body part or object are under the siderail when folding the siderail down.



WARNING!

Risk of injury due to patient falling out of bed!

- Ensure that folded-up siderails are securely anchored.
- Press against siderails from inside in order to check stability.
- Hospital personnel are responsible for ensuring siderails are folded-up when the bed is occupied.

The split plastic siderails are components of the bed, the siderails cannot be removed. The SoftDrop function enables smooth and quiet folding of the siderails.



Fig. Eleganza 2 with split plastic siderails.



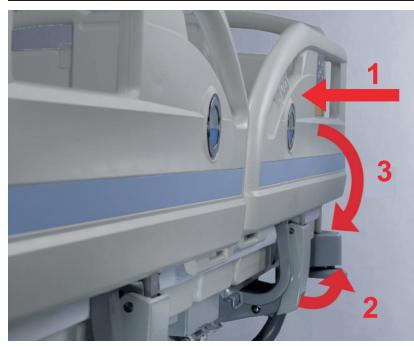


Fig. Folding down the split plastic siderail.

To fold siderails down:

- Push the siderail towards the mattress support platform (1).
- Unlock siderails by pulling the release handle (2).
- The siderail will fold down smoothly due to Soft Drop function (3).

NOTE: If pressure is placed on the siderail from inside the bed (by either the mattress or patient) and it is not possible to fold down the siderail, grip the siderail by the upper section and push the siderail towards the middle of the bed and then repeat steps 2 and 3.

To fold siderails up:

- Grip the siderail by the upper part. Pull siderail up until it latches.
- The locking of each siderail is indicated by an audible 'click' when locked in place.
- Ensure that the siderail is locked properly.

13.1.3 Split plastic siderails with Junior Kit



CAUTION!

Risk of damaging the bed due to incorrect use!

Do not hang anything on the prop in siderail if the bed is equipped with Junior Kit.

Eleganza 2 with Junior Kit is intended for patients with length more than 125 cm. Split plastic siderail with Junior Kit can be recognized according to a prop in the opening of the head siderail.

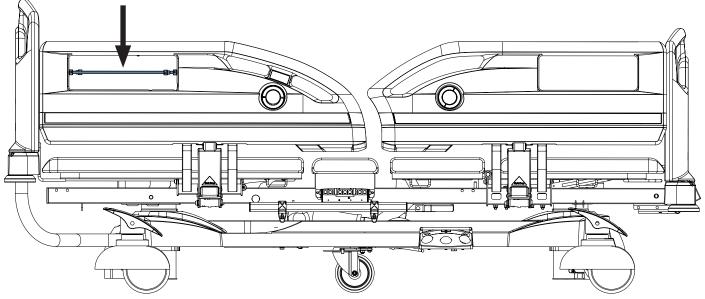


Fig. Eleganza 2 with Junior Kit



13.2 Castor Control and Bed Transport



CAUTION!

Material damage due to incorrect transport or involuntary movement!

- Prior to assembly, disassembly and maintenance, ensure the castors are locked.
- Ensure the castors are locked while the bed is occupied and/or not being transported.
- Prior to transport, ensure that bed is disconnected from mains.
- Put mains cable on hook provided for transport.
- Have the bed transported only by nursing or trained personnel.



CAUTION!

Objects on undercarriage can damage the bed!

Do not place any objects on the undercarriage or in the space under the mattress platform.

Castor Control Levers:

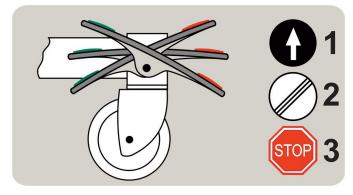


Fig. Central braking system lever

The central braking system facilitates movement of the bed by a single person. The bed has a main lock control lever for the four castors. The brakes are at the foot end of the undercarriage.

Castor control:

- 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 of the castors are unlocked.
- 3. Braked: All of the castors are locked.

To move the bed:

- Adjust the bed height to at least 20 cm below maximum height.
- Push the bed using handles on head board or foot board.



13.3 CPR backrest release



WARNING!

- Risk of injury due to lowering the backrest too quickly!
- Ensure single collapsible siderails are in their lowest position.
 - Ensure split plastic siderails are in their highest position.
 - Ensure there are no body parts between siderails and backrest.
 - Press the backrest down only by the mattress guard handle or the siderail.

The bed permits quick mechanical lowering of the backrest for emergency resuscitation (CPR) procedures.

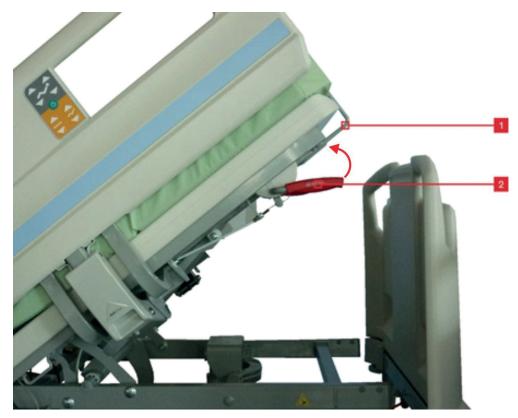


Fig. CPR backrest release

- 1. Mattress guard handle
- 2. CPR mechanical handle

Set the position as follows:

- Grab and hold backrest using:
 - Mattress guard handle (1).
 - Upper part of the siderails (in case the split siderails are in upper position)
- Pull and hold release handle 2.
 - Press the backrest down using:
 - Mattress guard handle (1)
 - Upper part of the siderails (in case the split siderails are in upper position)

13.4 Mattress Platform

13.4.1 Auto-Regression

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.

Benefits of auto-regression:

- Prevents decubitus.
- Increases the sitting area by 11 cm in the maximum upright position.

13.4.2 Mechanical Calfrest Adjustment

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

To raise the calfrest:

Pull on calfrest handle until the desired position is reached.

To lower the calfrest:

Hold handle and pull the calfrest to the upper most position.

13.4.3 Mattress Platform Extension

WARNING! Risk of crus ► If the ► The p

Risk of crushing the patient due to incorrect extension/shortening!

- If the bed is equipped with split siderails, lower the foot siderail before extending the mattress platform by 15 cm.
- The patient should not be left unattended by healtcare personnel when the 15 cm bed extension is used.



WARNING!

Damage to property due to excess load!

Ensure nobody sits on the extended bed end.



Fig. Bed extension by 15 cm.



Fig. Bed extension by 32 cm.





Fig. Mattress Platform Extension Safety Lock

- 1. Locked
- 2. Unlocked (it is possible to set up bed extension)

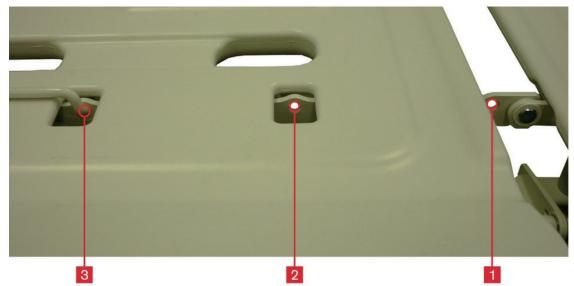


Fig. Mattress retainer positions during bed extensions.

- 1. 0 cm
- 2. +15 cm
- 3. + 32 cm

To lengthen/shorten the bed:

- Pull out the safety catches 1 at the foot end of both sides of the frame.
- ► Turn the safety catches 1 by 90° (2).

The safety lock is released.

- Pull the foot board out as far as it will go.
- Adjust wire mattress retainer located under the mattress to bed extension position.
- Turn the safety lock by 90° and push them in.
- Ensure that both of the safety locks are locked properly.

NOTE: In the event of incorrect closure of the safety lock, move the foot end of the bed until the locking point is reached.



Positions of the mattress retainer:



Fig. Mattress retainer in the position without bed extension (default postion)

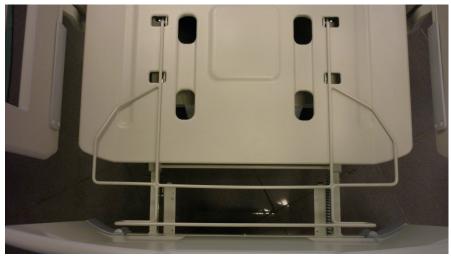


Fig. Mattress retainer in the position with bed extension by 15 cm



Fig. Mattress retainer in the position with bed extension by 32 cm



13.4.4 Shortened Bed



WARNING!

Use the bed shortening carefully when a patient is on the bed to avoid risk of crushing, trapping or squeezing.

Eleganza 2 medical bed can be delivered in the version with bed shortening. Purpose of this shortened version is to facilitate bed transport. It is recommended to use mattress (with length of 190 cm) with foam extension (with length of 10 cm).

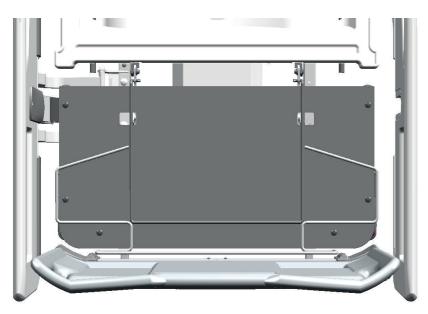


Fig. Shortened bed with length of 212 cm

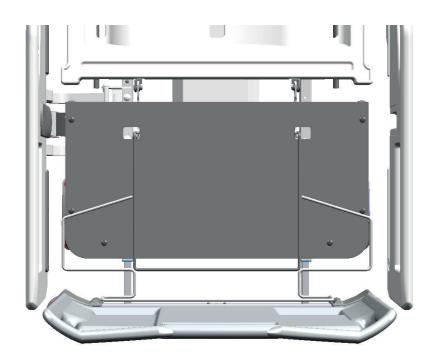


Fig. Standard mattress platform of the Shortened version of Eleganza 2

13.5 Control Elements

The bed is operated by different control elements.

Control elements:

- ACP Attendant Control Panel
- Attendant Control Panel with SafeSense® 3 Control
- Handset
- Foot control
- Satellite control panel
- Controls integrated in siderails
- Mobi-Lift®

Disabling individual functions on the Attendant Control Panel affects all of the control elements.

If the bed does not react to individual position settings:

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

NOTE: If the bed is equipped with "Automatic Stop of Backrest at 30°" then this function works on every control element which allows backrest adjustment.

NOTE: To detect if the bed is equipped with function "Automatic Stop of Backrest at 30°" see Attendant Control Panel where the "30° STOP" symbol on the backrest adjustment button is located. In case the bed is not equipped with this function, the buttons do not contain those symbols.



13.5.1 ACP – Attendant Control Panel

ACP Attendant Control Panel is main control panel of the bed. Nurse controller can be placed in the shelf. We recommend placing this control panel on the head board or foot board or hold it in the hands while controlling the bed.

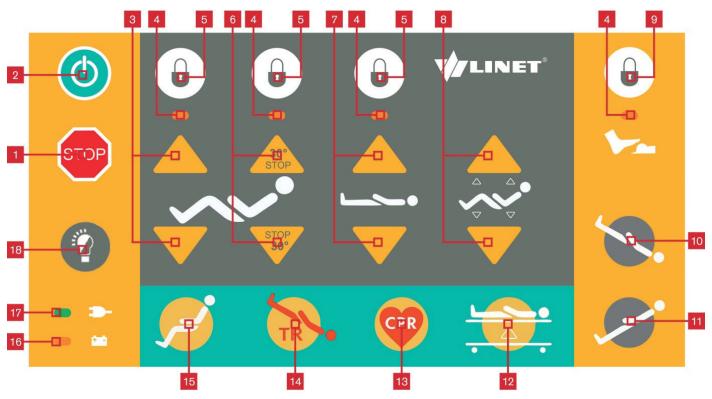


Fig. ACP - Attendant Control Panel

- 1. Central "STOP" Button
- 2. Central "GO" Button
- 3. Thighrest Positioning Buttons
- 4. Lock Indicators
- 5. Lock Buttons for Respective Functions
- 6. Backrest Positioning Buttons (symbol "30° STOP" indetifies equipment of the bed with this function)
- 7. Height Adjustment Buttons
- 8. Auto-Contour Buttons (simultaneous setting of backrest and thighrest)
- 9. Foot Control Lock Button
- 10. Button Anti Trendelenburg (mattress platform tilt only)
- 11. Button Trendelenburg (mattress platform tilt only)
- 12. Button Examination Position
- 13. Button CPR (Resuscitation) Position
- 14. Emergency Trendelenburg Button
- 15. Button Cardiac Chair Position
- 16. LED Accumulator charge status
- 17. LED Mains power
- 18. Bed Lights Control Button (ON/OFF)

To set positions:

- Activate the keypad by pressing the GO button.
- Press and hold corresponding button until required position is reached.

Central STOP Button

The central STOP button 1 immediately interrupts all bed movements. Pressing central STOP button 1 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.

Activating GO Button

The GO button 2 activates the keypads on all control elements except the foot control.

A 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 GO button 2, the keypad will remain active for 3 minutes. It is possible to control every function on the bed except the locked functions.

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

It is necessary to activate the keypad again if the 3 minute period without pressing any function is passed.

Function Buttons

Function buttons 3, 6, 7 and 8 allow the setting of different positions, for example the height and tilt of the mattress platform, adjust individual mattress platform elements, etc.

To set a position:

- Activate the keypad by pressing the GO button.
- Press and hold the respective button until required position is reached.
- If the bed is equipped with "Automatic Stop of Backrest at 30°" function the backrest will stop automatically. To continue with positioning simply press and hold button until the desired position is reached.

NOTE: If the bed is equipped with "Automatic Stop of Backrest at 30°" then this function works on every control element which allows backrest adjustment.

Lock Buttons

Lock button 5 allows disabling individual functions on the Attendant Control Panel.

To disable functions:

- Activate the keypad by pressing the GO button 2.
- Press respective lock button 5.

The respective LED flashes 4 to indicate the lock.

NOTE: The individual functions are locked in the central control panel, the satellite control, the handset, and the siderail control. The foot controllers are locked separately.

To enable disabled functions:

- Activate the keypad by pressing the GO button 2.
- Press the respective lock button 5.

The respective LED goes out (4). The function is enabled.



Position Buttons



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 bed or accessories (e.g. infusion stand, lifting pole) when 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 bed or accessories (e.g. infusion stand, lifting pole) when mattress platform is moving.

The therapeutic and safety-related positions are pre-programmed. When a position is set, several parts of the bed and mattress platform will move simultaneously.

Programmed positions:

- Cardiac chair position 15
- Trendelenburg position 14
- CPR (resuscitation) position 13
- Examination Position 12

To set the programmed positions:

- Activate the keypad by pressing the GO button.
- Press and hold corresponding function button until the desired position is reached.

Cardiac chair position (15)

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

Settings after pressing and holding the Cardiac chair button (15):

- Calfrest tilts into lowest position, thighrest moves into the upright position (34°).
- ▶ 6 second after positioning calfrest and thighrest the backrest will move into an upright position (62°).

Trendelenburg position (14)

The Trendelenburg position serves as an anti-shock position. All parts of the mattress platform are flattened. Mattress platform tilts head down.

CPR (Resuscitation) Position (13)

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

Settings after pressing and holding the CPR button (13):

Mattress platform moves into a horizontal position.

NOTE: For quick mechanical positioning, see CPR Backrest Release.

Examination Position (12)

Examination position is designed for personnel and allows comfortable patient examination.

Settings after pressing and holding the Examination Position button (12):

The mattress platform will move into the most appropriate position for patient examination and the mattress platform will flatten.



13.5.2 Attendant Control Panel with SafeSense® 3 Control

The Attendant Control Panel with SafeSense® 3 Control is a control element for Eleganza 2 medical bed. The Attendant Control Panel with SafeSense® 3 Control indicates Bed Exit Monitoring, Motion Monitoring, Decubitus/Movement Notification and Wetness Monitoring. This Attendant Control Panel can be hung on the foot board or on the siderails if required or it can be stored in the Linen Shelf. It is possible to hold this Attendant Control Panel in the hand while operating.

Ensure that exclusively trained nursing staff operates the Attendant Control Panel with SafeSense® 3 Control.

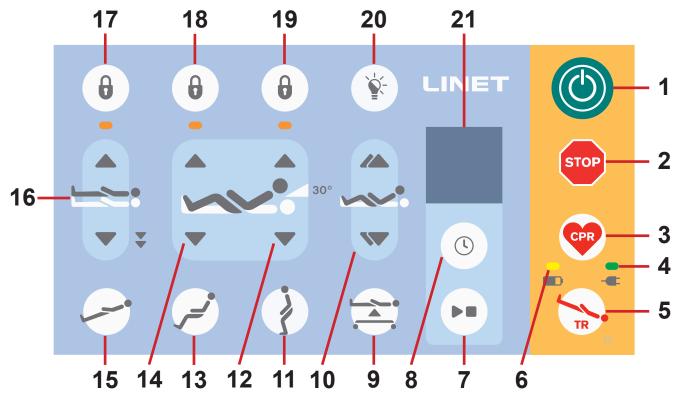


Fig. Attendant Control Panel with SafeSense® 3 Control for Eleganza 2 medical bed

- 1. Activating GO Button
- 2. Central STOP Button
- 3. CPR (Resuscitation) Position Button
- 4. Mains Power LED
- 5. Emergency Trendelenburg Position Button
- 6. Accumulator Charge Status LED
- 7. PLAY and STOP Button (SafeSense® 3 Monitoring System)
- 8. SELECT and TIME Button (SafeSense® 3 Monitoring System)
- 9. Examination Position Button
- 10. Autocontour Buttons (simultaneous adjustment of Backrest and Thighrest)
- 11. Mobilisation Position Button
- 12. Backrest Adjustment Buttons
- 13. Cardiac Chair Position Button
- 14. Thighrest Adjustment Buttons
- 15. Antitrendelenburg Tilt Button
- 16. Height Adjustment Buttons (UP or DOWN or EXTRA LOW)
- 17. Lock Button for Bed Height Adjustment with respective LED indicator
- 18. Lock Button for Thighrest Adjustment with respective LED indicator
- 19. Lock Button for Backrest Adjustment with respective LED indicator
- 20. Bed Lights Control Button (ON/OFF)
- 21. SafeSense® 3 Display (SafeSense® 3 Monitoring System)



To set positions:

- Activate the keypad by pressing the GO button (1).
- Press and hold corresponding button until required position is reached.

Central STOP Button

The central STOP button 2 immediately interrupts all bed movements. Pressing central STOP button 2 for at least 0.3 seconds immediately stops all electronic bed movements.

Activating GO Button

The GO button 1 activates the keypads on all control elements except the foot control. A 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 GO button 1, the keypad will remain active for 3 minutes. It is possible to control every function on the bed except the locked functions. Pressing a function button will keep the keypad active for another 3 minutes. It is necessary to activate the keypad again if the 3 minute period without pressing any function is passed.

Function Buttons

Function buttons 5, 9, 10, 11, 12, 13, 14, 15 and 16 allow the setting of different positions, for example the height and tilt of the mattress platform, adjust individual mattress support platform elements, etc.

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.

To set a position:

- Activate the keypad by pressing the GO button.
- Press and hold the respective button until required position is reached.

Backrest Adjustment (12)

During continuous positioning Backrest stops automatically in 30 degrees. To continue in positioning release the button, then press and hold button until the desired position is reached.

Antitrendelenburg Tilt (15)

During positioning from Trendelenburg Position to Antitrendelenburg Tilt (or vice versa) the bed stops in the horizontal position (0°). To continue tilting, press the Antitrendelenburg Tilt Button once more.

Lock Buttons (17, 18 and 19)

Lock buttons allow disabling individual functions on the Attendant Control Panel.

To disable functions:

- Activate the keypad by pressing the GO button 1.
- Press respective lock button.

The respective LED flashes to indicate the lock.

NOTE: The individual functions are locked in the central control panel, the satellite control and the handset.

To enable disabled functions:

- Activate the keypad by pressing the GO button.
- Press the respective lock button.

The respective LED goes out. The function is enabled.



Mains Power LED Signalisation (4)

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

Accumulator Charge Status LED Signalisation (6)

	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

Position Buttons



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 bed or accessories (e.g. infusion stand, lifting pole) when mattress platform is moving



CAUTION! Material damage due to moving parts!

- Ensure that no objects (e.g. cables) are trapped between moving parts of bed and mattress support platform.
- Ensure that no objects are close to bed or accessories (e.g. infusion stand, lifting pole) when mattress support platform is moving.

The therapeutic and safety-related positions are pre-programmed. When a position is set, several parts of the bed and mattress support platform will move simultaneously.

Programmed positions:

- Cardiac Chair Position
- Emergency Trendelenburg Position
- CPR (resuscitation) Position
- Examination Position
- Mobilisation Position
- Extra Low Position

To set the programmed positions:

- Activate the keypad by pressing the GO button.
- Press and hold corresponding function button until the desired position is reached.



Cardiac chair position (13)

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

Settings after pressing and holding the Cardiac chair button (13):

- Calfrest tilts into lowest position, thighrest moves into the upright position (34°).
- ▶ 6 second after positioning calfrest and thighrest the backrest will move into an upright position (62°).

Emergency Trendelenburg Position (5)

The Emergency Trendelenburg Position serves as an anti-shock position. All parts of the mattress support platform are flattened. Mattress support platform tilts head down.

CPR (Resuscitation) Position (3)

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

Settings after pressing and holding the CPR button (3):

Mattress support platform moves into a horizontal position.

NOTE: For quick mechanical positioning, see CPR Backrest Release.

Examination Position (9)

Examination Position is designed for personnel and allows comfortable patient examination.

Settings after pressing and holding the Examination Position button:

The mattress support platform will move into the most appropriate position for patient examination and the mattress support platform will flatten.

Mobilisation Position (11)

The Mobilisation Position makes it easier for the patient to get out of the bed. Mattress support platform is in the lowest position and backrest is upright.

Extra Low Position (16)

The bed height adjustment stops above Extra Low Position during lowering, mattress support platform is adjusted to flat position and beep is performed. After this adjustment the lowering continues to Extra Low Position.

INET

SafeSense® 3 Display (21)

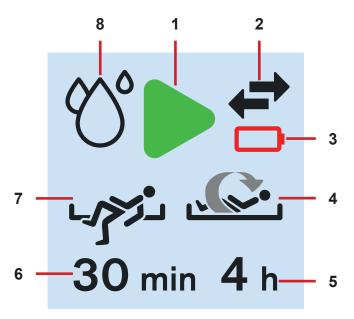


Fig. SafeSense® 3 Display - monitoring ON

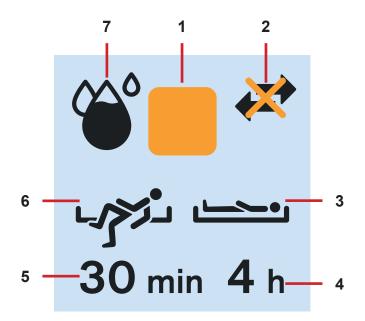


Fig. SafeSense® 3 Display - monitoring OFF

1. Activation Symbol (selected type (or types) of monitoring is (are) activated)

Indicator of communication between Hub and 2. Attendant Control Panel (black arrows - communication works, orange cross over black arrows - communication does not work) 3.

Indicator of discharged Hub battery

4. Indicator of activated Motion Monitoring

5. Period during which the absence of patient movement on the bed is tolerated. Countdown to the selected time (e.g. 4 hours) starts again from the beginning after patient movement on the mattress.

Period during which the Bed Exit alerts are 6. not triggered unless patient is on the bed (e.g. no alert during 30 minutes)

Indicator of activated Bed Exit Monitoring (pati-7. ent presence on the mattress is monitored)

8. Indicator of Wetness Monitoring (Wetness Monitoring is activated)

Deactivation Symbol 1.

2. Indicator of communication between Hub and Attendant Control Panel (black arrows - communication works, orange cross over black arrows - communication does not work)

3. Indicator of activated Decubitus/Movement Notification

Period after which nursing staff is notified to 4. check position of the patient

Period during which the Bed Exit alerts are 5. not triggered unless patient is on the bed (e.g. no alert during 30 minutes)

6. Indicator of activated Bed Exit Monitoring (patient presence on the mattress is monitored)

Indicator of Wetness Monitoring (Wetness Mo-7. nitoring is activated - The more black symbol of drop, the higher degree of the wetness is monitored.)

Orange square symbol is displayed instead of the green activation symbol when no monitoring is activated.

Indicator of Wetness Monitoring is not displayed when Wetness Monitoring is not activated.

Indicator of Wetness Monitoring changes according to the degree of monitored wetness. The more black symbol of drop, the higher degree of the wetness is monitored.





Fig. Bed Exit Alert (monitored patient is not present on the mattress)



Fig. Motion Monitoring Alert (expired period during which the absence of patient movement on the mattress was tolerated)

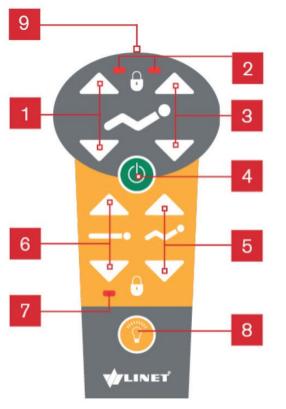


Fig. Decubitus/Movement Notification Alert (nursing staff is notified to check position of the patient)



13.5.3 Handset

The handset is included as a standard feature. The handset is available with and without button illumination. The button illumination of the illuminated handset is active when the bed is connected to the mains. The functions of both handsets are identical. Where the handset is to be stored on the bed depends on the patient's condition.



- 1. Thighrest Adjustment Button
- 2. Thighrest/Backrest Lock LED
- 3. Backrest Adjustment Button
- 4. Activating GO Button
- 5. Auto-Contour Button
- 6. Height Adjustment Button
- 7. Height Lock LED
- 8. Flashlight Button
- 9. Flashlight

Fig. Handset

To switch on the flashlight:

Press and hold flashlight button 8 and flashlight 9 on the top of the handset will light up.

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: 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.
- Unplug handset (if the bed is equipped with Plug and Play).

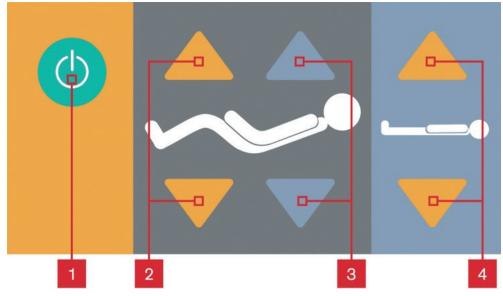
NOTE: The handset can be plugged into another LINET® hospital bed with the Plug and Play slot.

NOTE: If the bed is equipped with "Automatic Stop of Backrest at 30°" then this function works on every control element which allows backrest adjustment.



13.5.4 Satellite Control Panel (optional)

The satellite control panel is an optional control element. The satellite control panel is attached to the backrest with a flexible arm.



- 1. Activating GO Button
- 2. Thighrest Adjustment Buttons
- 3. Backrest Adjustment Buttons
- 4. Height Adjustment Buttons

Fig. Satellite control panel

To set positions:

- Activate the keypad by pressing the GO button.
- Press and hold corresponding button until required position is reached.

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:

- Move the satellite panel out of the patient's reach.
- -or
 - or-
- Disable functions.

NOTE: The satellite control panel can be fixed on the right or left side of the bed.

NOTE: If the bed is equipped with "Automatic Stop of Backrest at 30°" then this function works on every control element which allows backrest adjustment



13.5.5 Foot Control



WARNING! Risk of injury due to moving parts!

- Ensure no body parts are trapped between moving parts of bed and mattress platform.
- Ensure no persons or body parts are close to bed or accessories (e.g. infusion stand, lifting pole) when the mattress platform is moving.

It is possible to equip the bed with a foot control. The foot controllers enable the adjustment of the bed height or pre-programmed examination positions.



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

Fig. Foot control

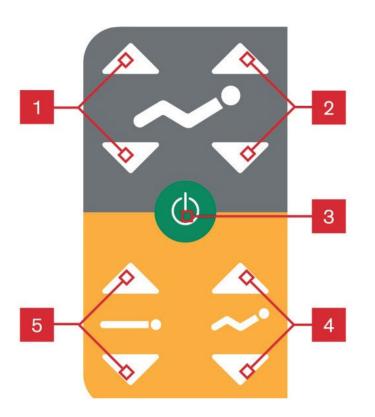
Set the position as follows:

- Press foot switch for activation (mini GO function).
- Press and hold foot switch until desired position is reached.



13.5.6 Control Element Integrated in Siderail (optional)

It is possible to equip the Eleganza 2 bed with integrated illuminated controllers in the siderails. The optional control element is attached to the siderail. The controllers are positioned on both sides of the bed.



1. Thighrest Adjustment Buttons

- 2. Backrest Adjustment Buttons
- 3. Activating GO Button
- 4. Auto-Contour Buttons
- 5. Height Adjustment Buttons

Fig. Control Element Integrated in the Siderail

To set positions:

- Activate the keypad by pressing the GO button.
- Press and hold corresponding button until required position is reached.

NOTE: Depending on the patient's condition, the nursing staff decide whether the patient is allowed to adjust the bed's position.

NOTE: If the bed is equipped with "Automatic Stop of Backrest at 30°" then this function works on every control element which allows backrest adjustment.

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

Disable functions in siderails by locking the functions with ACP Attendant Control panel.

14 Equipment

Product equipment depends on product configuration.

14.1 Accessory Rails



WARNING!

Risk of injuring the personnel, patients or risk of damaging the bed due to incorrect placement of the accessories!

- Always ensure the accessory placed on the accessory rail is not in collision with bed or with patient.
- Never place holders directly above the foot controllers.



Load capacity:

- Maximum load per hook is 5 kg.
- Maximum load per rail is 10 kg.

Accessories suitable for hanging on the accessory rail:

- Urine bag holder
- Urine bottle holder
- Cannula holder
- Redon bottle holder
- DIN rail for accessories

Fig. Accessory rail

14.2 Urinary bottle holder



Fig. Urinary bottle holder

Urinary bottle holder is designed for placing urinary bottle into wire basket.

Placement:

On the accessory rail

Load capacity:

Maximum load of holder is 10 kg.



14.3 Redon bottle holder



WARNING!

Risk of damaging the bed or injuring the personnel or patient due to incorrect use! Ensure the length of the tube is long enough to prevent tearing the drain when manipulating the patient.



Fig. Redon bottle holder

14.4 Mobi-Lift®

It is possible to equip the Eleganza 2 with integrated Mob-iLift® controllers. Controllers are integrated in both head siderails. Mobi--Lift® helps the patient with standing up from the bed.



Fig. Mobi-Lift® in head siderail

When standing up from the bed:

- Press GO button on any bed controller for activation.
- Grip the head siderail where Mobi-Lift® controller is placed.
- Press and hold the up button 1 to adjust the height of the bed when standing up from the bed.



14.5 Angle indicators

It is possible to equip the Eleganza 2 with integrated angle indicators. The angle indicators are integrated in all siderails. The angle indicator in foot siderails is not illuminated and is used for angle measurement when the bed is positioned in the Trendelenburg and Reverse Trendelenburg positions.

The angle indicator in the head siderails are illuminated and are equipped with lowest (safe) position indication. A green light indicates the lowest (safe) position of the bed. A white light indicates all other positions.

The angle of tilt is indicated on the outer circuit of the angle indicator.

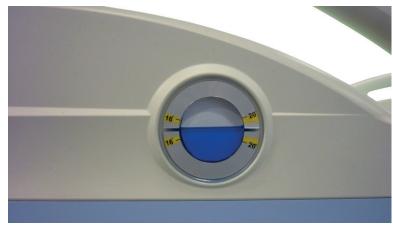




Fig. Angle indicator in foot siderail

Fig. Angle indicator in head siderail



14.6X-Ray Backrest



WARNING! Respect maximum dimensions of x-ray cassettes!

Maximum dimensions of any x-ray cassette for X-Ray Cassette Holder are 67 cm x 46 cm x 1,7 cm!



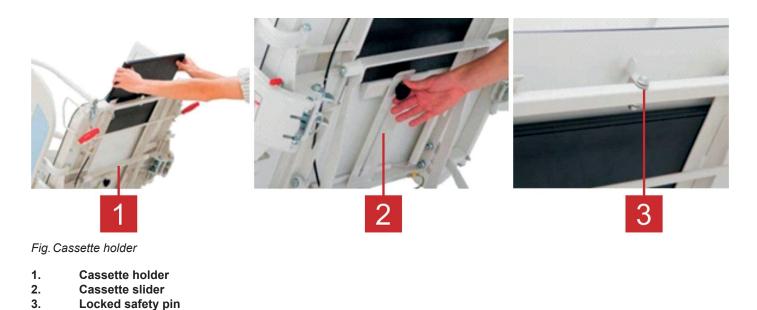
Fig. Backrest X-ray option

Upon request it is possible to equip Eleganza 2 with x-ray translucent backrest which consists of HPL. The bed is equipped with x-ray cassette holder located under the backrest. This design allows taking x-ray images of the patient's lungs and upper body parts without moving the patient.

Necessary steps before the examination:

- Ensure the patient is in the centre of the bed.
- Adjust backrest up using one of the bed positioning functions.
- Insert x-ray cassette by wider side 1.
- Position cassette to desired position using slider 2.
- Lock slider 2.
- Lock safety pin 3.

NOTE: The bed with backrest x-ray cannot be equipped with Junior Kit.





14.7 SafeSense® 3 ready bed



WARNING!

Before use of the SafeSense® 3 Monitoring System with Eleganza 2 medical bed read the instructions for use for SafeSense® 3 Monitoring System!



CAUTION!

Risk of material damage due to steam cleaning of the SafeSense 3 Monitoring System!
 Always remove the components of the SafeSense® 3 Monitoring System (Hub Box, Air Pad, Wetness Pad and cables) from the Eleganza 2 medical bed on which the system has been installed!

Specific configuration of the Eleganza 2 medical bed is compatible with SafeSense® 3 Monitoring system. SafeSense® 3 ready Eleganza 2 medical bed includes Attendant Control Panel with SafeSense® 3 Control, accessory rail with Power Supply/Data cable in safety position, holder of the interconnecting elements for Nurse Call cable and LAN cable behind the accessory rail on the right side of the Eleganza 2 bed and holder of the interconnecting elements for Nurse Call cable and LAN cable at head end of the Eleganza 2 bed.

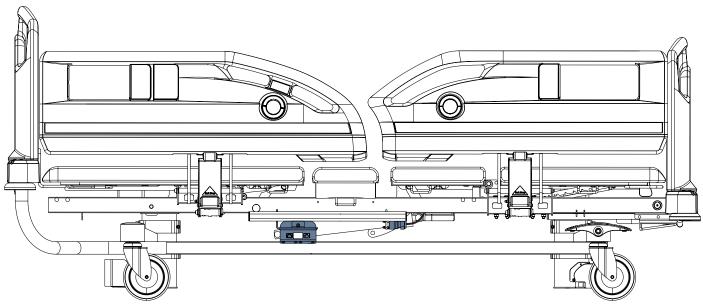


Fig. SafeSense 3 ready Eleganza 2 bed



14.8 USB charger



WARNING! Risk of injury due to incorrect use!

► Patient is allowed to use the USB charger only if hospital personnel had assessed that the patient's physical and psychological state is in accordance with use of it and only if the hospital personnel had trained the patient in accordance with the instructions for use!

Hospital personnel is responsible for meeting this requirement.



WARNING! Risk of injury due to incorrect use!

• Ensure that accessory plugged in USB connector is in pristine condition! User of the bed is responsible for meeting this requirement.



WARNING!

Risk of injury due to incorrect use!
 Only use the USB charger when the Eleganza 2 bed is connected into the mains!
 User of the bed is responsible for meeting this requirement.



WARNING!

Risk of injury due to squeezed cable!

Ensure that cable of a plugged accessory is not squeezed by the head siderail or by parts of the mattress support platform!

User of the bed is responsible for meeting 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 this requirement.



CAUTION!

Risk of material damage due to incorrect use!

Do not plug any heating element into USB connector!

User of the bed is responsible for meeting this requirement.



CAUTION!

Risk of material damage due to incorrect use!

Protect USB connector from water!

- Ensure the USB connector will not be harmed during cleaning!
- Do not perform steam cleaning in proximity to the USB connector!

USB connector situated under the backrest is intended for charging mobile phones and tablets.

NOTE: Maximum electric current for this device is 2 A.



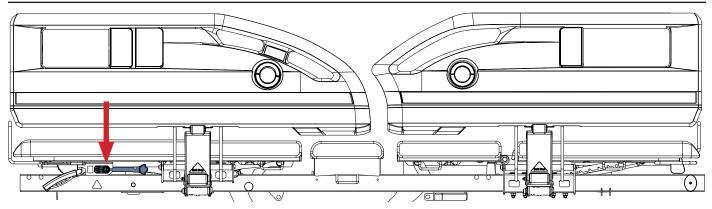


Fig. USB connector under the backrest

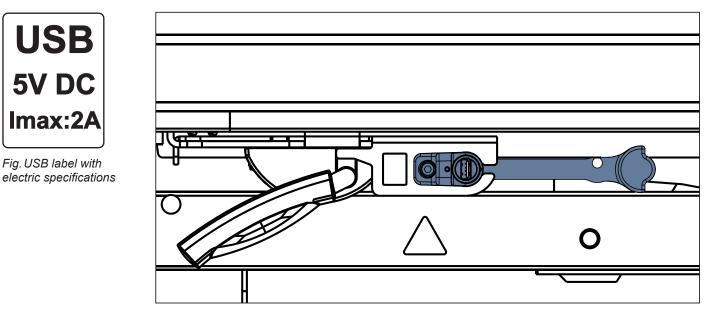


Fig. USB connector (detail)

15 Mattress

The manufacturer recommends the use of the following mattress systems on the Eleganza 2 bed: ► EffectaCare 10, EffectaCare 20, PrimaCare 10, PrimaCare 20, CliniCare 10, CliniCare 20, CliniCare 30

16 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 assumes no responsibility for the use of accessories not approved by the manufacturer.
- NOTE: All accessories conform to IEC 60601-2-52.

The following accessories are suitable for the Eleganza 2:

- Lifting pole
- Triangular holder for lifting pole
- Pole for devices and accessories
- IV holder
- External IV holder
- Urinary bag holder
- Urinary bottle holder
- Redon bottle holder
- Head Board and Foot Board Holder
- Oxygen bottle holder
- Compressor holder
- Cannula holder
- Name holder
- Chart holder
- Extension holder
- Towel holder
- Monitor shelf
- Writing shelf
- Handset holder
- Handy box storage pocket on the siderails
- Protector
- Extender
- Soft guards for siderails
- SafeSense®
- SafeSense® 3

NOTE: Detailed information on SafeSense® is available in the instructions for use for this product. Detailed information on SafeSense® 3 is available in the instructions for use for this product.

16.1 Lifting Pole



WARNING!

- Risk of patient's injury or damage to the bed due to incorrect use!
- Never exceed the maximum load of lifting pole 75 kg.
 - Never use the lifting pole for rehabilitation exercises.
 - To prevent the bed from tipping over, ensure the lifting pole does not project out from the bed.
 - Replace plastic handle every 4 years.
- ▶ The lifting pole is not designed for hanging any kind of accessories, controllers etc. except triangular holder.



Fig. Bushing for lifting pole or infusion stand

Placement:

In the bushings for lifting pole and infusion stands in the corners of the head end.

Load capacity:

Maximum load of lifting pole is 75 kg.

Lifting pole variants:

- Lifting pole for beds with fixed head board and foot board powder coated
- Lifting pole for beds with fixed head board and foot board chrome plated

Lifting pole positions:

- Over the backrest (working position).
- Parallel to the head board (when not in use).

To install the lifting pole:

- Insert lifting pole into corresponding bushings at the head end of the bed (corners).
- Ensure the safety pin locks are in place.
- ► Hang the grab handle on the lifting pole.
- NOTE: The lifting pole is not a part of the delivery and needs to be ordered separately.
- **NOTE:** The date of manufacture is marked on the grab handle. LINET® recommends replacing the plastic grab handle every four years.



Fig. Lifting pole



16.2 Infusion Stands



WARNING!

Risk of injury or collision due using 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.

- In case of failure to comply those instructions there is a risk of collision of accessories with movable parts of the bed or injury of the patient.
- Do not use the infusion stand as driving/pushing device during the bed transport.

It is possible to insert infusion stands into the bushings at the head and foot ends of the bed.

- Use exclusively infusion stands with 4 hooks for hanging IV bags or baskets for intravenous solutions.
- Ensure that the weight-bearing capacity of the 4 hooks is not exceeded.
- Capacity per hook: 5 kg
- Ensure that the infusion stand's weight-bearing capacity is not exceeded.



Placement:

In the bushings for lifting pole and infusion stands in the corners of the head end.

Use:

 Use exclusively infusion stands with 4 hooks for hanging IV bags or baskets for intravenous solutions.

Load capacity:

- Maximum load per hook is 2 kg.
- Ensure the capacity of infusion stand and per hook is not exceeded.

Fig. Infusion stand

16.3 External holder for infusion stand/pump



WARNING!

Risk of patient's injury or damaging the holder due to incorrect use!

Never place lifting pole into external holder for infusion stands/pumps.

External holder is designed for placing infusion stands or pumps on the bar under the head board.



Fig. External infusion stand/pump holder

Placement:

On the head bar under the head board.

Load capacity:

Maximum load of holder is 25 kg.

16.4 Oxygen Bottle Holder



WARNING!

- Risk of injury by the oxygen bottle holder or due to incorrect use or due to careless transport!
 - Ensure the oxygen bottle holder is correctly fitted in the correct position.
 - Be aware of persons or objects in close proximity when moving or manipulating the bed equipped with oxygen bottle holder.
 - Ensure the oxygen bottle valve is not damaged by careless or incorrect manipulation or by placement.

Oxygen bottle holder is designed for placement and transport of oxygen bottles. It is possible to use oxygen bottles with weight of 15 kg and a volume of 5 litres.

Variants and correct placement of oxygen bottle holders:

- Horizontal oxygen bottle holder
- Vertical oxygen bottle holder

Placement:

On the head bar under the head board.

Load capacity:

Maximum load of holder is 15 kg.



Fig. Horizontal holder

Fig. Vertical holder

16.5 Handy box – storage pocket for siderails



Fig. Handy box

Storage pocket "Handy box" is designed for storing small personal items of the patient (e.g. glasses, cell phone, keys etc.)

Placement:

On the upper edge of the siderail

Load capacity:

Maximum load capacity of the box is 2 kg.



16.6 Head Board and Foot Board Holder



Head Board and Foot Board Holder is designed for hanging deferred head board or foot board to the holder.

Placement:

On the upper edge of the head board or foot board

Fig. Head Board and Foot Board Holder

16.7 Name holder



Name holder is designed for placing patient's name in the holder.

Placement:

In the middle of upper edge of the head board or foot board

Fig. Name holder

16.8 Chart Holder



Chart holder is designed for placing charts, which are registering the development of health condition of the patient.

Placement:

In the middle of upper edge of the head board or foot board

Fig. Chart holder

16.9 Handset Holder



WARNING!

Risk of injuring the patient or damaging the bed due to incorrect placement!

- Never place handset holder on the skewed edge of head board and foot board.
 - Never place handset holder to the handles near the Mobilift controller.
- Handset holder must be placed on the siderails.
 - Ensure there is no collision between handset holder and movable parts of the bed or with the patient.

Placement:

On the upper edge of the siderail

Put the handset on the siderail handle.

Install holder on the bed as follows:

Place handset in the holder.

Holder is designed for placing handset to the holder on the siderails.



Fig. Correct placement of the handset holder

16.10 Monitor Shelf



WARNING!

Risk of injury by shelf due to incorrect use!

- Never place infusion pumps on the shelf.
- Placement of the shelf on the bed with removed head board and foot board is forbidden.
- Shelf must only be placed to the foot board.

Monitor shelf is designed for placement to the foot board. The shelf must head into the bed after placement.



Fig. Monitor shelf in working position

Position:

- ► To the bushings on the foot end corners Load capacity:
- Maximum load of shelf is 35 kg.

Controlling the shelf:

Working position:

- Place the shelf to the bushings on the foot end. Longer
- part of the shelf is heading into the bed.
- Unlock the shelf by pulling the locking lever.
- Flip the shelf into the bed.

Storage position:

- Unlock the shelf by pulling the locking lever.
- Flip the shelf so it vertically copies the head board or foot board.



16.11 Compressor Holder



Compressor holder is designed for handing compressor on the foot board.

Placement:

On the foot board, between foot board handles

Load capacity:

Maximum load of the holder is 10 kg.

Fig. Compressor holder

16.12 Towel holder



Towel holder is designed for hanging the towel on the holder.

Placement:

On the head board or foot board to the head board or foot board handles

Load capacity:

Maximum load of the holder is 2 kg.

Fig. Towel holder

16.13 Extension Holder



WARNING! Risk of injuring the patient due to incorrect use!

Placement of the extension holder on the bed with removed head board and foot board is forbidden.



Fig. Extension holder

Holder is designed for placing extension on the holder.

Placement:

To the bushings on the foot/head end corners

Load capacity:

Maximum load of the holder is 75 kg.

Install extension holder as follows:

- Insert holder to the bushings on the foot/head end corners.
- o Horizontal tube is heading outside the bed.
- Ensure the safety pin is securely locked in the bushings.



16.14 Soft Guards for Siderails



WARNING!

Risk of damaging the guards due to incorrect use!

- Always take down the guards before transporting the bed.
- Always remove the foam insert from the guards before washing.
- Ensure the transparent nets are bears on the control elements of the bed. There is a risk of damaging the guards in case of their replacement.

Soft guards for siderails are designed for raising the patient safety while he is staying on the bed. Guards are protecting patient against bruising from siderails.

Install the guards as follows:

- Unzip the zip on the bottom of the guard.
 - Put the guard on the siderail so the transparent net is placed on the control or information element of the bed (angle indicators, Mobilift)
 - Head siderail 2 nets: one for Mobilift + angle indicator, second for siderail controller
 - Foot siderail 1 net: for angle indicator
- Zip the zip on the siderail guard.

Uninstall the guards as follows:

- Unzip the zip on the bottom of the guard.
- Carefully pull down the guard from the siderail so it will not get damaged.
- Zip the zip on the siderail guard.
- Store the guards on the suitable, dry place for storage of the medical devices.



Fig. Bed with installed siderail guards

16.15 Protector®



WARNING!

Risk of injury due to patient falling out of bed!

- Ensure that Protector® is securely anchored to the bushing.
- To check stability, pull the protector up without touching the release button.
- Always check that the siderail is properly locked.



WARNING!

Risk of damage to the bed or patient injury!

- Do not mount head board or foot board to accessory bushing (3).
- Do not mount lifting pole to accessory bushing (3) on the foot end.
- Do not use protector with bed extension.

Protector® is not a component of the bed. Protector® is optionally available



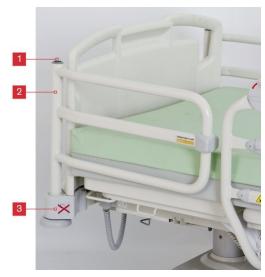




Fig. Closed Protector®

- 1. **Releasing button**
- Tube of Protector® 2.
- 3. **Bushing of Protector®**

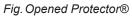




Fig. Safety pin anchored in bushing

Mount Protector® to closed position as follows:

- Insert the tube of protector (2) into bushing near foot end of the bed (3) so the protector is facing the siderail.
- Safety pin must be locked in place.

Mount Protector® to open position as follows:

Insert the tube of protector (2) into bushing near foot end of the bed (3), so the protector is facing out from bed.

- Dismount Protector® as follows: ► Press and hold the releasing button (1).
- Pull the protector up.



16.16 Siderail extension – "Extender®" (SR55)



WARNING!

Risk of injury or collision due to incorrect use!

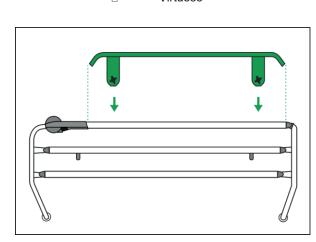
- The Extender® can be used with single collapsible siderails only. The manufacturer will not be held responsible for any consequences if the Extender® is used with other types of siderails.
- Movement of the bed must be considered if the Extender® is installed.
- Use of the Extender® in a manner other than stated in the instructions for use is on the responsibility of personnel.

The manufacturer shall not be held liable for incorrect use!

It is recommended to use Extender® (model number SR55) if a mattress higher than the recommended height was placed on the bed. The Extender® is used to raise the height of the siderails and helps to secure patients safety. The Extender® is designed for single collapsible siderails only.

It is recommended to use Extender® with the following mattresses:

- Passive mattress:
- with maximum height 22 cm with maximum height 22 cm
- Active mattress: with
 Uirtuoso



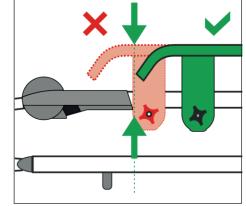
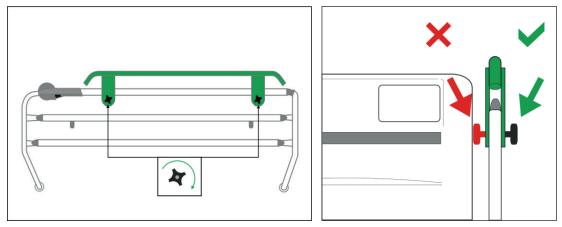
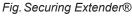


Fig. Installation of Extender®





Install the Extender® as follows:

- Place the Extender® (without securing screws) on the upper edge of the siderail. Siderails must be in upper position. Square hole is pointed into the mattress platform.
- Insert screws from the inside of the bed thru the securing holes in Extender®.
- Secure the screws with the plastic rosette nuts and tighten. The rosette nuts are pointed outside from the bed.
- Check if the Extender® is secured correctly by pushing it sideways.



16.17 SafeSense

Purpose:

SafeSense system is intended for informing nursing staff as soon as the resident/patient leaves the bed or does not return to the bed when expected.

Description:

SafeSense system consists of Sensor mat, Bed-Exit Box, Plug and Play adapter and connecting cables.

Placement:

Bed-Exit Box and Plug and Play adapter are located on accessory rail on the right side of the bed. Nurse Call connector is fixed on the crossbar of head end. Sensor mat should be fixed on the seat section of mattress platform. Follow instructions for use for SafeSense.



Fig. SafeSense (Sensor mat)

LINET

16.18 SafeSense® 3



CAUTION!

Eleganza 2 bed is compatible with Stand-alone version of the SafeSense® 3 Monitoring System and with SafeSense® 3 Monitoring System in Version for Eleganza 2. Eleganza 2 bed must be SafeSense® 3 ready for use with SafeSense® 3 in Version for Eleganza 2 so the compatilility depends on configuration of the bed.

Purpose:

The SafeSense® 3 Monitoring System is intended to use for the automated, contactless and unobtrusive continuous mobility detection of patients in bed, bed exit and continuous wetness detection in the context of healthcare and nursing facilities.

Description of the SafeSense® 3 Monitoring System in Version for Eleganza 2:

- SafeSense® 3 Hub
- Comb-like part securing connectors connected to the Hub
- Hub Holder
- SafeSense® 3 Air Pad
- Air Hose
- Cables (Nurse Call cable, LAN cable)
- Wetness Pad with Wetness Pad Cable (optionally)

Placement:

Hub Box must be safely placed on the accessory rail on the right side of the Eleganza 2 bed. Air Pad must be fixed on the Backrest of the Eleganza 2 bed and under the compatible mattress. Wetness Pad must be placed on the seat section of the compatible mattress and Air Hose and each cable must be safely installed according to the Instructions for use for SafeSense® 3 Monitoring System.

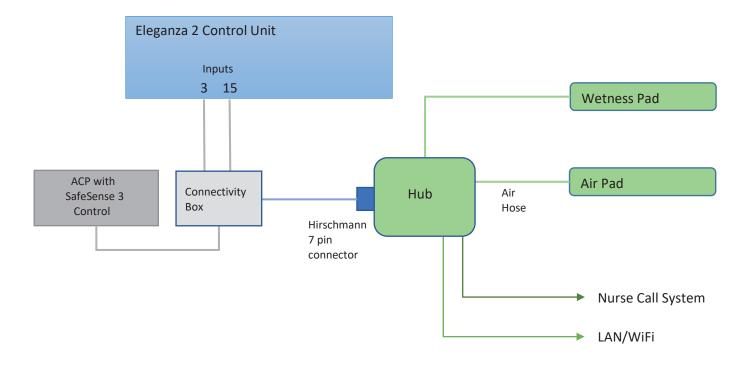


Fig. Diagram of the SafeSense® 3 Monitoring System with Eleganza 2 bed



17 Cleaning/Disinfection



WARNING!

Risk of injury when working on the bed!

- Prior to assembly, disassembly, cleaning and maintenance, ensure that all adjustment functions are locked.
 Ensure the bed is disconnected from the mains during cleaning process.
- Pay extra attention when cleaning any movable or controlling mechanisms of the bed to prevent involuntary activation, entrapping or crushing.
- Cleaning should be entrusted to the person who has been trained to control the bed.



WARNING!

Risk of damaging the bed due to use of incorrect cleaning detergents or cleaning processes!

- The bed is not designed for machine washing.
- The selection of cleaning detergents/disinfections and their correct concentration is responsibility of responsible person in charge of cleaning/disinfection in accordance with the informations provided in this manual.
- Never use germicidal or other radiants for disinfection of the bed, if those radiants act directly on the bed.
- ► Follow these instructions and follow the prescribed dosage by the manufacturer of cleaning detergents.
- Not following recommended processes may result in damaging or deterioration of the bed condition.
- 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	MATERIALS (SURFACES OF THE MENTIONED BED COMPONENTS)			
Do not clean what is not mentioned in this column!	Competent user is responsible for check if used cleaning agents and disinfectants are compatible with mentioned materials!			
Head board and foot board	Polypropylene (PP) + Lacquered steel			
Head siderails and foot siderails	Polypropylene (PP) + Acrylonitrile butadiene styrene (ABS) + Polyamide (PA6) + La- cquered steel			
Mattress support platform covers (Backrest)	blown plastic mattress support plat- form covers: Polypropylene (PP)	version with x-ray cassette holder: High Pressure Laminate (HPL)	plastic mattress supp- ort platform covers: Acrylonitrile butadiene styrene (ABS)	
Mattress support platform covers (Thighrest, Calfrest)	blown plastic mattress support plat- form covers: Polypropylene (PP)	plastic mattress support platform covers: Acrylo- nitrile butadiene styrene (ABS)		
Seat section	Polypropylene (PP)			
Castors	Polyurethane (PUR) + Polypropylene (PP)			
Castor control levers	standard: Polyamide (PA6) + Thermoplastic elastomer (TPE)			
Frame of the mattress support plat- form	Polyamide (PA6) + Lacquered steel			
Columns	Aluminium (AI) + Acrylonitrile butadiene styrene (ABS) + Polyoxymethylene (POM)			
Undercarriage cover	two-part undercarriage cover: Acry- lonitrile butadiene styrene (ABS) + Lacquered steel	one-part undercarriage cover: Acrylonitrile butadi- ene styrene (ABS)		
Corner covers	Acrylonitrile butadiene styrene (ABS)			
Corner bumpers	Polypropylene (PP)			
Keyboards (Attendant Control Panel, Handset, control elements integrated in the siderails)	Polyethylene terephthalate (PET)			
CPR levers	Polypropylene (PP)			
Labels	Polyethylene terephthalate (PET)			
Accessory rail	Polyoxymethylene (POM) + Lacquered steel			
Actuators	Polyamide (PA6) + Aluminium (Al)			

LINET

17.1 Safety Instructions for Cleaning and Disinfection of the Bed

Preparation for cleaning:

- Drive the bed on a place where the cleaning process will be performed and then brake the bed.
- Position the mattress platform to its highest positions and also position the backrest and thighrest parts so the back side of those parts are accessible for cleaning.
- Lock all adjustment functions of the bed to prevent involuntary adjustment of the bed or injuries during cleaning.
- Disconnect the bed from the mains.
- Check if all connectors are properly fixed (controllers, actuators and control unit).

Recommendations for cleaning:

- Only use detergents designed for cleaning the medical technologies.
- Dilute the detergents in accordance with instructions from manufacturer of detergents.
- Never use any strong acids or bases. Optimal pH range is 6-8.
- Never use abrasive powders, steel wool or other materials and detergents that may damage the surface of the bed.
- Never use detergents with solvents that may affect the structure and consistency of the plastic parts (benzene, toluene, acetone etc.).

Cleaning process:

- Clean by wiping the bed with damp, well-wrung textile material.
- The detergent can be applied by spraying on bed or on the textile material.
- Perform cleaning and disinfection of the bed in the appropriate range. The range of cleaning and disinfection should be distinguished according to the degree of contamination of the bed and the cleaning mode (daily, before changing patient or complete).
- Electronic parts that may be contaminated clean carefully and only their outer side. Never open those connectors due to cleaning or disinfection. Those components should not be exposed to prolonged or continuous exposure to moisture.
- Let the bed dry completely after cleaning or disinfection process.
- After drying the bed place the mattress back on the mattress platform.
- After drying the bed check functions of the bed.

17.2 General Instructions for Cleaning and Disinfection

17.2.1 Daily Cleaning

It is recommended to clean all parts of the bed which are touched by patient or personnel (e.g. siderails, head board and foot board, handset, lifting pole etc.) and all handles, all control elements and accessory rails.

17.2.2 Cleaning before Changing Patients

It is recommended to completely clean and disinfects all parts of the bed which are touched by patient or personnel (see Daily Cleaning), mattress platform, columns, undercarriage covers and mattress.

17.2.3 Complete Cleaning / Cleaning before First Use

It is recommended to clean the bed completely before the first use and then at least once in 4-8 weeks.

17.2.4 Cleaning of Spilled Fluids

Spilled fluids should be cleaned as soon as possible. Always disconnect the bed from mains before cleaning the spilled fluids. Some fluids used in health care may cause permanent stains.

17.2.5 Damaged Foam Mattress

Mattress should be periodically checked for cracks, holes or cracks that may affect the integrity, water resistance or resistance to infections of the cover. Contact the service department of the manufacturer according to scope of damage to cover.



17.3 Mode of Cleaning and Disinfection

Part of bed – Eleganza 2	Daily C&D	Changing patient C&D	Complete C&D
Stickers (Split plastic siderails)	\checkmark	\checkmark	\checkmark
Stickers (Single collapsible siderails)	V	\checkmark	\checkmark
Siderails mechanism	\checkmark	\checkmark	\checkmark
Head board and foot board (stickers)	V	\checkmark	\checkmark
Controllers (cables)	\checkmark	\checkmark	\checkmark
Mattress platform covers	X	\checkmark	\checkmark
Undercarriage cover	X	\checkmark	\checkmark
Telescopic columns	X	\checkmark	\checkmark
Corner bumpers	X	\checkmark	\checkmark
Mains cable	X	X	\checkmark
Undercarriage frame	X	X	\checkmark
Castors	X	X	\checkmark
Actuators	X	X	\checkmark



17.4 Steam Cleaning



WARNING! Observe the instructions from instructions for use of the bed before, during and after each steam cleaning!

The bed could be damaged and LINET withdraws from warranty of the bed if these instructions are not followed.

- Disconnect bed from the mains before each steam cleaning.
- ▶ Use just steam cleaners intended for medical devices for steam cleaning of the bed.
- Medical staff is allowed to perform the steam cleaning of the bed only in accordance with instructions for use of the bed and with instructions for use of the steam cleaner.
- Before each steam cleaning the bed must be tempered to ambient temperature of a room where the steam cleaning will be performed in order to prevent condensate from being produced redundantly on the bed surface.
- Do not use any chemicals with the steam cleaner.
- Speed of the steam cleaning (processing speed) must not be less than 10 cm per second. Temperature compensation of the cleaned surface and of the ambient environment must happen before hot steam will be applied to the same place again.
- Set and check the temperature parameter on control panel of the steam cleaner. The temperature of the hot steam must never exceed value 90 °C. Set pressure must not exceed value 5 bars.
- Clean the labels on the bed by steam with lower pressure and avoid mechanical contact with material of the labels during each steam cleaning. Do not use any brushes to clean the labels.
- Do not use any accessories like high-pressure hose with nozzle to clean non-metal parts of the bed and electrocomponents.
- Use the steam cleaner only with soft non-metal brushes and with soft cloth in order to reduce pressure of the steam cleaner.
- Do not leave open the connectors of electrocomponents during each steam cleaning in order to prevent steam and water from penetrating the connectors.
- During each steam cleaning of the bed be careful not to overheat and damage sensitive parts of the bed, e.g. keyboards of control elements, displays, control units, actuators, connectors, decors and labels.
- After each steam cleaning let the bed surface become dry during at least 60 minutes and do not use the bed unless ambient tempreture and bed temperature are compensated. Never connect plug of the power supply cord to the mains unless the plug is completely dry after the previous steam cleaning.
- After each steam cleaning it is necessary to check whether each control element of the bed works in accordance with user manual of the bed.



18 Troubleshooting



DANGER! Danger to life due to electric shock!

- If a fault occurs ensure the electric motor, power box and other electrical parts checked by qualified personnel only.
- Do not open protective covers of the electric motor or 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.
	Drive motors have no power Defective drive motors Defective accumulator	Check the mains connection. Notify the service department of the manufacturer.
	Plug inserted incorrectly	Insert the mains plug correctly.
	Faulty power box	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.
	Drive motors have no power Defective drive motors Defective accumulator	Check the mains connection. Notify the service department of the manufacturer.
	Plug inserted incorrectly	Insert the mains plug correctly.
	Faulty power box	Notify the service department of the manufacturer.
	Faulty control element	Notify the service department of the manufacturer.
Lowering backrest from the upright position not possible	Object under the backrest or in the drive me- chanism	Remove the object.
	Locking handle is defective	Notify the service department of the manufacturer.
Adjusting siderails not possible	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.



19 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.

19.1 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.

19.2 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

19.3 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 authori-

- sed 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.



20 Disposal

20.1 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**).

20.2 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 accumulator or accumulator are designed so that the used accumulators or batteries can be safely removed by LINET® qualified service technicians. There is an information about its type on the built-in accumulator.

20.2.1 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.

20.2.2 Outside Europe

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



21 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.

22 Standards and Regulations

Apllied norms are stated on Declaration of Conformity.

The bed equipped with Junior Kit complies with all requirements of AFSSAPS (Agence française de sécurité sanitaire des produits de santé). We declare that our product Eleganza 2 with universal twin plastic siderails equipped with Junior Kit is safe under condition of common use in compliance with instructions and that measures have been taken to ensure the conformity of recommendation by AFSSAPS described in letter dated 18.6.2014.

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)



22.1 AFSSAPS Declaration



Linet spol. s r.o., Želevčice 5, 274 01 Slaný, Czech Republic tel.: +420 312 576 111, fax: +420 312 522 668, e-mail: info@linet.cz, web: www.linet.cz ID: 00507814, VAT: CZ00507814, KB Slaný, Kynského 549, IBAN CZK: CZ07 0100 0000 0000 5824 2141 IBAN EUR: CZ80 0100 0000 1967 0969 0237, SWIFT: KOMBCZPP

> Linet France SAS 7 rue Augustin Fresnel, 37170 Chambray Lès Tours

> > SLANÝ 18.6.2014

DECLARATION

I declare that our product **Eleganza 2 equipped with "Universal" twin plastic side-rails** (model number 1GRA6728-XXX) is safe under the condition of common use in compliance with instructions and that measures have been taken to ensure the conformity of recommendation by AFSSAPS described in letter dated 26.4.2010 (reference number DM-RECO 10/05, following the December information referred to as DM-RECO 09/05).

Said product comply to part of standard EN 716-1 and EN 716-2 namely in the area between mattress, side rails and head and foot board ends.

Je certifie que notre produit **Eleganza 2 équipé de demi-barrières plastique « universelles »** (numéro de modèle 1GR6728-XXX) est sécuritaire dans des conditions normales d'utilisation et conformément aux instructions ; toutes les mesures nécessaires ont été apportées pour lui assurer la conformité aux exigences faites par l'AFSSAPS dans la Décision de Police Sanitaire du 26.4.2010 (n° de référence DM-RECO 10/05, faisant suite à l'information de décembre 2009 référencée DM-RECO 09/05).

Ledit produit est conforme à la norme EN 716-1 et EN 716-2 particulièrement pour les espaces entre le matelas, les barrières et les panneaux de tête et pied du lit.

Ing. Tomáš Kolář Managing Director