motioncare®

SYSTEMS FOR LIFE

liana

USER MANUAL

WARNING

Before starting up and using the medical product, the user must become thoroughly familiar with this manual.

CE MD

1. IMPRINT

Many thanks
Dear customer, We would like to thank you for the trust you have placed in us by purchasing this motioncare® product. Our products are produced and tested according to the highest quality standards.

Adress
We will be happy to advise you if you have any questions about our products and assist you with any problems. To do so, contact:

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ASP is certified by TÜV Rheinland according to:

- DIN EN ISO 9001:2008
- DIN EN ISO 13485:2016
- DIN EN ISO 18001:2007

ASP is certified by DVS ZERT according to:

- DIN EN ISO 3834-2:2005

ATTENTION

Before each use, check that all visible parts are undamaged. If any parts are damaged, do NOT use the product! Before each use of the device and its accessories, the user must be convinced that they are functionally safe and in their proper condition (visual inspection, function).

The battery charge level must also be checked..

2. INTRODUCTION

2.1. Foreword

Correct use of the device is essential for operation. Therefore, read the supplied operating instructions carefully and pay particular attention to the safety instructions.

Maintenance, testing, assembly, installations and all other technical interventions on the product may only be carried out by motioncare or specialist companies authorised by motioncare. The operation of the product as well as technical interventions on the product may only be carried out by instructed personnel.

ATTENTION

The operation of the product as well as technical interventions on the product may only be carried out by instructed personnel.

The patient sitting/standing stabilisation aid LIANA is a medical device class 1 according to DIN EN 60601-1/IEC 60601-1 and DIN EN 60601-1-2/IEC 60601-1-2 as well as MDR Medical Device Regulation (EU) 2017/745. The product is used to stabilise the patient at the edge of the bed as well as to stabilise the patient while they are standing directly in front of the bed. LIANA is not suitable for patient transport.

If a serious incident occurs with a patient or user in connection with the use of the product or its accessories, contact your dealer or the manufacturer. In the European Union, you are obliged to report serious incidents to the competent authority of the respective member state. Other regulations may apply in other regions..

2.2. Liability and warranty

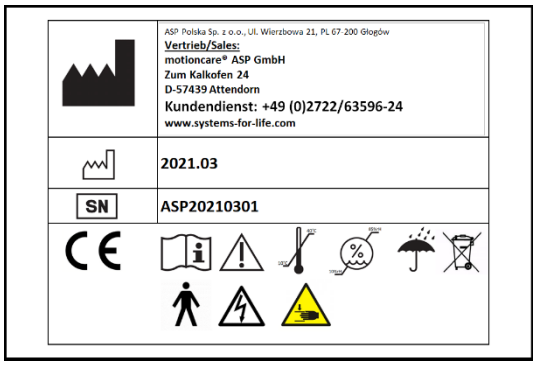
- Through the information in this manual, the manufacturer does not assume any liability for damage resulting from improper use of the product. The product may only be operated by persons who are familiar with the instructions, the product and the national laws, ordinances and regulations concerning work, safety and accident prevention.
- The manufacturer of the product is only responsible for the safety and reliability of the product if regular functional tests are carried out. Only operate the product with original accessories, otherwise any liability on the part of the manufacturer will expire.
- In the event of technical interventions such as attachments or modifications to our products which are not carried out by motioncare or a specialist company authorised by motioncare, any warranty for the modifications and for the device or device function associated with the modification will expire.
- Any further liability of the manufacturer is excluded for damage resulting from the use of spare parts and accessories not approved by the manufacturer.
- Slight deviations in the illustrations and explanations shown here from the actually delivered device are possible for development reasons. Subject to technical changes and errors.
- The product is designed with type B applied parts. Here, all contactable, conductive parts are considered applied parts.

3. OPERATING INSTRUCTIONS

3.1. Validity

These instructions contain information required to operate the product. In addition to the description of the equipment, the instructions also include some abstractions and example illustrations. The features of the product may therefore differ in part from the descriptions and illustrations. In addition, observe the instructions for cleaning and disinfection as well as disassembly and assembly of individual parts of the product.
Read the operating instructions and the safety instructions before operating the product. Please keep the operating instructions in a safe and easily accessible place so that you can refer to it at any time.

3.2. Nameplate



This illustration shows the nameplate.
The nameplate is located on the inside of the door/battery of the LIANA patient sitting/standing stabilisation aid.

The serial number (SN) shown here is an example. If you have any queries, please always quote the serial number of your unit on the nameplate.

Note: For legal reasons, the serial number may also have to be computer-readable and is therefore additionally fixed to the nameplate as a barcode.

3.3. Designation

The instructions also refer to the product as LIANA or sitting and standing stabilisation aid. These always refer to the same product.

3.4. Variants of the LIANA3 sitting and standing stabilisation aid

Designation	Description	Art.-no.:
LIANA sitting stabilisation aid	Chassis with electrically adjustable lifting columns (vertical + horizontal) – adjustable headrest, adjustable armrests, body strap	L-1000L1, L-1000R1, L-1000A1, L-1000LE1, L-1000H1, L-1000F1, L-1000G2
LIANA sitting stabilisation aid with table for holding food	Chassis with electrically adjustable lifting columns (vertical + horizontal) – adjustable headrest, adjustable armrests, body strap, removable table	L-1000L1, L-1000R1, L-1000A1, L-1000LE1, L-1000H1, L1000G1, L-1000K1, L-1000TE1, L-1000T1
LIANA standing stabilisation aid	Chassis with electrically adjustable lifting columns (vertical + horizontal) – adjustable armrests, detachable – adjustable footrests, waist strap	L-1000L1, L-1000R1, L-1000A1, L-1000LE1, L-1000H1, L-1000F1, L-1000G2
LIANA sitting and standing stabilisation aid	Chassis with electrically adjustable lifting columns (vertical + horizontal) – adjustable headrest, adjustable armrests, body strap, detachable – adjustable footrests, waist strap	L-1000L1, L-1000R1, L-1000A1, L-1000LE1, L-1000H1, L1000G1, L-1000K1, L-1000TE1, L-1000F1, L-1000G2
LIANA sitting and standing stabilisation aid with table for holding food	Chassis with electrically adjustable lifting columns (vertical + horizontal) – adjustable headrest, adjustable armrests, body strap, detachable – adjustable footrests, waist strap, removable table	L-1000L1, L-1000R1, L-1000A1, L-1000LE1, L-1000H1, L1000G1, L-1000K1, L-1000TE1, L-1000F1, L-1000G2, L-1000F1

4. SAFETY

4.1. Intended purpose

The LIANA patient sitting/standing stabilisation aid is a medical device and has been specially developed for use in medical technology. It is used to stabilise the patient at the edge of the bed as well as to stabilise the patient while in a standing position directly in front of the bed.

The LIANA patient sitting/standing stabilisation aid is intended for use in short-term and long-term care facilities, hospitals, hospices, rehabilitation centres and in domestic care. The product is intended for professional use by trained medical personnel. LIANA is used to support the rehabilitation process so that the patient maintains a stable position during mobilisation, feeding and basic care at the edge of the bed or while standing. LIANA is not suitable for patient transport.

LIANA is intended for short-term use and must not come into contact with injured skin.

The LIANA patient sitting/standing stabilisation aid is an electrical device which is powered by a battery/rechargeable battery. The rechargeable battery is charged in an external charger/docking station (included). Please note that the product is not protected against the effects of major mechanical forces and only has limited protection against the penetration of splashing water into the housing, motor, control unit and battery.

The product may only be used for the specified purpose. Please also observe the general warnings and safety instructions in Section 4.5.

ATTENTION

The product is intended for professional use by instructed medical personnel. The use of the device with patients should be discussed with a doctor regarding the contraindications listed below.
The decision to use the device is always the responsibility of the attending physician.

ATTENTION

Contraindications to use:

- Post-operative
- Unstable fractures
- Other serious injuries (e.g. brain and skull injuries)
- Circulatory instability
- Sedated patients
- Lack of patient compliance

4.2. Electrical safety

The product complies with the current VDE regulations 0100 "Construction of low-voltage installations" and 0100-710 "Requirements for special types of premises, rooms and installations – Areas used for medical purposes". Nevertheless, before commissioning, have your electrical installation checked by a specialist company in accordance with the applicable regulations. This regulation only applies to Germany. Other countries may have different regulations. Have the charging station installed by a qualified electrician in accordance with the regulations in force in your country.

4.3. Follow/observe the operating instructions

Please read the following safety instructions before commissioning the product. If you have any questions or require clarification on this, please call Customer Service on 02722-63596-0. All instructions and warnings on the device and in these instructions for use must be observed.
The manufacturer ASP GmbH does not accept any liability for faults or damage caused by improper operation or handling.

4.4. List of warning and safety signs used

	Follow operating instructions/observe the instructions		General recycling symbol
	Medical device		Fuse
	CE marking according to MDR		Air pressure limits (Lowest air pressure/Highest air humidity)
	Name and address of the manufacturer		Air humidity limits (Lowest air pressure/Highest air humidity)
	Date of manufacture		Temperature limits (Lowest air pressure/Highest air humidity)
	Warning about a danger zone		Risk of crushing
	ATTENTION		Washing temperature max. 60°C. Normal process
IPX4	Protection against harmful penetration of water or solid substances: Protected against splashing water		Do not bleach
	Applied part "Type B" according to DIN EN 60601-1		Dry on the clothes line
	Protection class II		Do not tumble dry
	Only for indoor use		Do not iron
	Not to be disposed of with household waste. Do not put the treatment system and packaging materials into the household waste		Professional wet cleaning. Gentle process

4.5. General warning and safety instructions

General

- The product may only be used for the purpose specified in Chapter 4.a Intended purpose.
- The product may only be installed, commissioned and maintained by persons authorised by the manufacturer who fulfil the requirements of Section 2 Para. 2 of the Medical Devices Operator Ordinance (MPBetreibV).
- The company reserves the right to make modifications to the unit without prior notice.
- When using the device, observe all regulations of the German Medical Devices Implementation Act (MPDG) and all related ordinances as well as occupational health and safety regulations, accident prevention regulations (UVV) and the generally recognised rules of technology. For use outside Germany, please observe the respective national legislation.
- This product is a medical device according to Medical Device Regulation (EU) 2017/745 (MDR) and DIN EN 60601-1. The Medical Devices Operator Ordinance is binding for operators in Germany. In other countries, the relevant national laws apply. The insulation sections present in the product meet the requirements of the standard: DIN EN 60601-1 (IEC 60601-1) Medical electrical equipment, Part 1: General requirements for basic safety.

Operating environment

- The product is only permitted for indoor use.
- The product is not protected against the effects of major mechanical forces and only has limited protection against the penetration of splashing water into the housing, motor, control unit and battery. However, if liquids get over/into the control box, operate the safety switch on the unit or open the door to the battery. Dry the wet spots on the unit manually.
- In the event of excessive overheating, disconnect the battery from the unit/charging device immediately and notify the device manufacturer.
- After disconnecting the battery from the charging unit, make sure that the battery contacts do not come into contact with conductive elements. This can result in damage to the battery and cause a fire.
- Hazardous substances are included in the battery. To avoid the risk of fire and explosion and leakage of these substances, do not open the batteries or handle them mechanically in any way! Never expose the batteries to open fire, excessive heat (e.g. through heaters) or solar radiation!
- Make sure that the battery is charged in a well-ventilated place.
- Route the mains and connection cable in such a way that it cannot be damaged.
- Damaged mains cables can cause fire or a life-threatening electric shock and must not be used.
- The device is not approved for operation in potentially explosive atmospheres or in atmospheres with flammable mixtures or an increased oxygen content.
- Only use the device if there is no mechanical damage to the device or to the electrical wiring.
- Electromagnetic or other interferences between the product and other equipment cannot be excluded. If there is a risk of mutual interference, disconnect the product or charger from the mains. The simultaneous use of short-wave or microwave treatment devices in the immediate vicinity is not permitted. Mobile radio can also result in interference.
- The device must not be used for patient transport!
- Protect the product from direct sunlight and heat.
- Only use the stabilisation aid on flat surfaces if all four wheels are touching the ground.

Functional safety

- When transporting the device to the patient's bed, make sure that it does not collide with other equipment.
- The product may only be used or operated by instructed personnel.
- Only use under supervision. The patient must never be left unattended.
- The patient must not be the user/operator!
- When using stabilisation straps, the safety T-piece (T-element) (see page 12, item 6) must always be attached -> Risk of strangulation/falling.
- The device should be kept under supervision at all times to prevent the stabilising mechanisms from accidentally crushing the patient.
- Manual emergency function: If the column is no longer able to be moved in the vertical direction in the event of a power failure or problems with the control system, it is possible for 2 people to lift it using the arms of the arm supports. The weight of the front frame is approx. 34 kg.
- Before each use of the product, the user/operator must be convinced that the product is functionally safe and that it and its accessories are in their proper condition (visual inspection, functional test, etc.). Before use, check that the electrical functions are working properly.
- Furthermore, check the stabilisation straps used for visible damage. In the event of damage or malfunctions, do not continue to use the product or accessories. There is a risk of injury!
- This medical device should only be used with original accessories according to Chapter 24.
- Plan each transfer carefully; only then can you adequately protect yourself and the patient.
- Avoid slippery surfaces and doorsteps and do not move the product on sloping or uneven floors.
- Fix the castors of the hospital bed, stretcher, etc. in order to ensure that the patient can be mobilised safely.
- Do not stand between the LIANA and an obstacle during the transfer.
- Make sure that the power supply is always switched on during use.
- Never cover, tape over or change slots and openings on the device.
- The housing of the medical device must not be opened! The product does not have any parts to be serviced by the user. Never insert a foreign object into the product.
- Do not perform any repairs or modifications on the product! Otherwise, the correct functioning of the product and safety may be jeopardised. This will also invalidate your warranty claims! Repairs may only be carried out by trained specialist personnel authorised by the manufacturer. Be sure to contact motioncare's customer service or that of its authorised distributors.
- The product must be disinfected after each use.
- Cleaning and disinfection are only permitted if the patient is not present!
- Caregivers must protect the skin and eyes from concentrated disinfectant and detergent. Gloves should be worn to protect the skin. A mouth covering should be worn as protection against aerosols. Safety goggles should be worn to protect the eyes.

Maintenance

- To ensure hazard-free operation, the product must undergo an annual inspection, safety inspection and maintenance by persons authorised by the manufacturer who meet the requirements of the Medical Devices Operator Ordinance! In case of doubt, contact your supplier or manufacturer. Failure to do so may result in injury or an unsafe product.
- Installation, maintenance, servicing and testing activities are only permitted if the patient is not present!
- The product contains removable parts. Follow Chapter 9 on how to correctly identify parts to avoid the risk of confusion and malfunction.
- The product contains non-removable parts. If necessary, these may only be replaced by personnel authorised by the manufacturer. Please observe the assembly instructions.

Environmental protection/waste disposal

- The manufacturer is aware of its responsibility towards the environment. The product is not to be disposed of with household waste!
- In accordance with WEEE, the manufacturer will take back all equipment placed on the market by him for the purpose of proper disposal. Please contact us in this regard if required and inform your customers in case of resale.

- When using the device together with other medical devices, take care not to trap or crush the patient's body or parts of the patient's body! You should also watch out for instability/tipping over while the patient is being transferred!

CAUTION

If any unusual noises, damage or malfunctions occur, operation of the product must be discontinued.

NOTE

Repairs to parts of the product may only be carried out by trained specialist personnel authorised by the manufacturer. Be sure to contact your customer service.
Opening the device or accessories will void the warranty and any liability claims.

WARNING

Any unauthorised repairs, conversions and modifications are prohibited for safety reasons and exclude the manufacturer's liability for any resulting damage.
Any further liability of the manufacturer for damage resulting from the use of spare parts or accessories not approved by the manufacturer is excluded.

CAUTION

The patient must not be left unattended at any time, in order to prevent injuries and falls or similar.

CAUTION

This device may contain small parts that could be inhaled or swallowed, posing a choking hazard to young children. Keep children and pets away from the device.
The wired remote control poses a strangulation risk. Take all the necessary precautions to prevent this.

CAUTION

The stabilisation straps pose a strangulation risk. Take all the necessary precautions to prevent this.

CAUTION

When attaching the T-element, always make sure that the latching elements engage on both sides and that the gap between the mattress and the T-element is not too large to allow the patient to slip through -> Strangulation risk/risk of falling.

5. TRANSPORT AND STORAGE

For safe transport, storage and operation, observe the permissible ambient conditions in Chapter 13.1 Technical description.
Use a pallet truck or similar for transport.

5.1. Unpack the product

You will need a cutter knife to remove the packaging.

NOTE

Take care not to damage the product when using tools.
Do not cut into the cardboard with the cutter knife.

5.1.1. Remove the cardboard

To remove the cardboard, proceed as follows:

- Cut the tension strap with the cutter knife.
- Remove the tension strap.
- Lift the box upwards and set it aside.

5.1.2. Remove the product from the pallet

The product is secured to the pallet on both sides with tension straps.

To remove the product from the pallet, proceed as follows:

- Loosen the screws which are fixing the tension straps.
- Remove the tension straps and cardboard pads (if present).
- Make sure that the brakes on the wheels are released.
- Once all fasteners have been loosened, the product can be moved off the pallet.
- Remove the bubble wrap and the stretch film.

The accessories for the product are in the box provided.

6. INSTALLATION

The product is delivered in a ready-to-use condition.

6.1. Electrical connection

Before commissioning our devices, you should check your electrical installation in accordance with the applicable VDE regulations 0100 and 0100-710. This regulation only applies in Germany. Other countries may have different regulations.
Have the charging station installed by a qualified electrician in accordance with the regulations in force in your country.
The socket outlet must comply with the regulations of VDE 0100 and 0100-710.

6.2. Initial commissioning

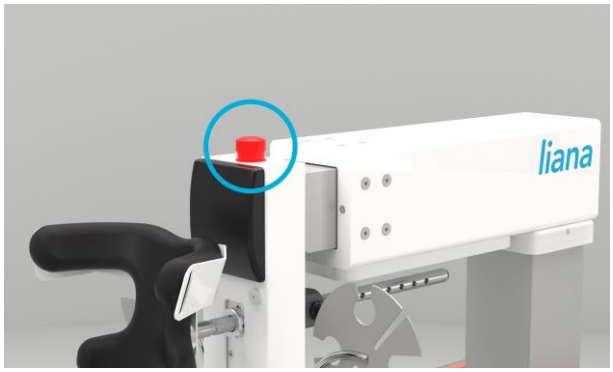
WARNING

The device may only be used in accordance with the accompanying documents.
The manufacturer will only assume responsibility for the impact on the safety, reliability and performance of the device under these conditions.
If the product is newly connected, the technical information must be observed.

NOTE

Before initial commissioning, the battery must be fully charged (charging time before initial operation min. 12 hours).
To move the lift arm, please check that the emergency stop switch has been unlocked.

The LIANA sitting and standing stabilisation aid is equipped with two electric motors. These motors are self-locking and thus secured against the lift arm being lowered in the event of a fault. The battery of the LIANA must be fully charged before commissioning.
Please check whether the emergency stop switch is unlocked. To unlock, please turn the knob of the emergency stop switch clockwise (to the right) until it unlocks.



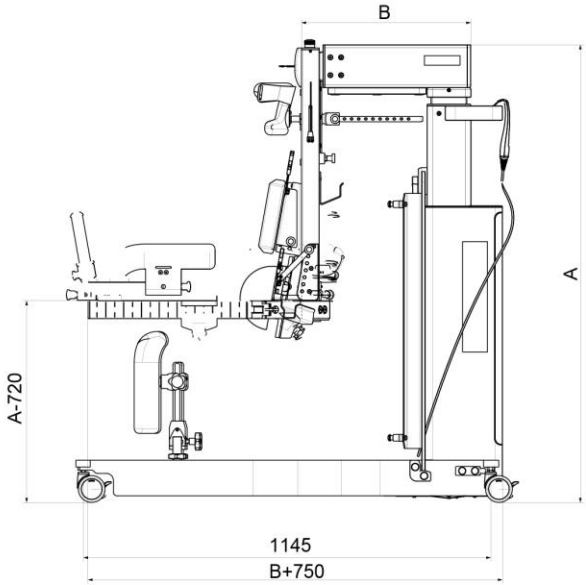
NOTE

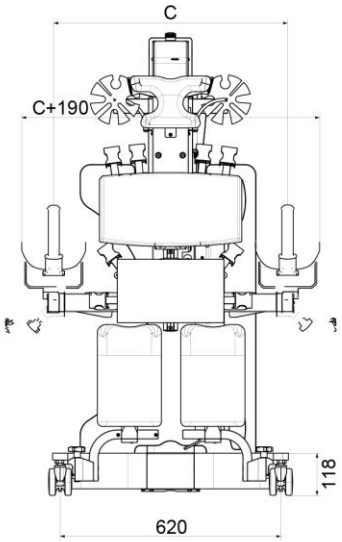
Also for safety reasons, the power supply has been disconnected if the door (battery- and powersupply) is open.

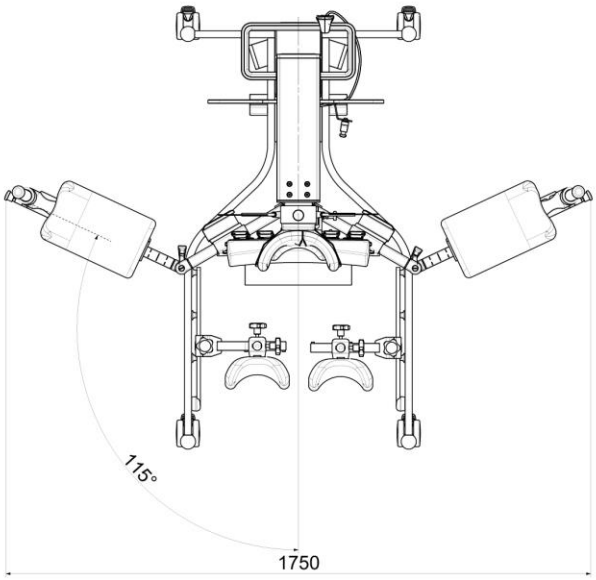
7. SPECIFICATION

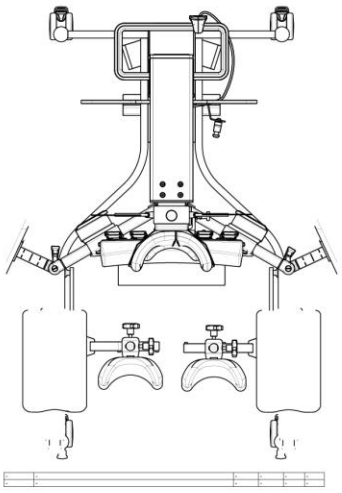
PARAMETER	CODE MARKING	VALUE	UNIT
Medical device class	1		
Total height	A	1870	[mm]
Min. height	A	1270	[mm]
Total width	n/a	1750	[mm]
Nominal width	C	555-755	[mm]
Total length	B+750	1420	[mm]
Height of elevation	n/a	600	[mm]
Extension length	B	470-670	[mm]
Turning circle	n/a	3000	[mm]
Minimum/ maximum backrest position	n/a	555 - 1750	[mm]
Total weight	n/a	120	kg
Chassis weight with steering column	n/a	approx. 86	kg
Weight of backrest system	n/a	approx. 34	kg
Battery weight	n/a	2,9	kg
Max. load (column stroke)	n/a	250	kg
Voltage of charging station	n/a	100-240 (37-53)	V(VA)
Voltage output	n/a	24 (maks 250)	V(VA)
Max. consumption	n/a	400	VA
Labour productivity	n/a	40	Elevation
Regular work	n/a	10% or 2 min. continuous operation/18 min. break	n/a
Battery capacity	n/a	2,9	Ah
Noise level	n/a	<50	dB
Horizontal linear motor	n/a	LA 24 (900N)	n/a
Vertical linear motor	n/a	LA 34 (7500N)	n/a
Control box	n/a	CBJ2	n/a
Battery	n/a	BAJ1	n/a
Protection class of control box	n/a	IPX4	n/a
Working temperature	n/a	+5 ~ + 40	°C
Air humidity	n/a	20 - 90	%rH
Safety switch	n/a	JA	1

7.1. Product dimensions









8. FIELDS OF APPLICATION

- Stabilisation of the patient in a sitting position at the edge of the bed during early mobilisation, feeding, for neurological assessment, basic care or in an upright, standing position.
- Strengthening the muscles of the musculoskeletal system
- Cardiovascular exercise
- Breathing exercise
- Pneumonia prophylaxis
- Delirium prophylaxis
- Changing the visual environment
- Training the sitting/standing position
- Therapeutic measures: bronchoscopy / puncture of the pleura / FEES (fibroendoscopic/videoendoscopic swallow examination)

8.1. Sitting mobilisation/sitting stabilisation

Mobilisation at the edge of the bed *„Sitting on the edge of the bed"*

1. CHECK THE BED

Before mobilising the patient, check the technical condition of the bed on/at which the mobilisation process is to take place.

2. CHECK LIANA

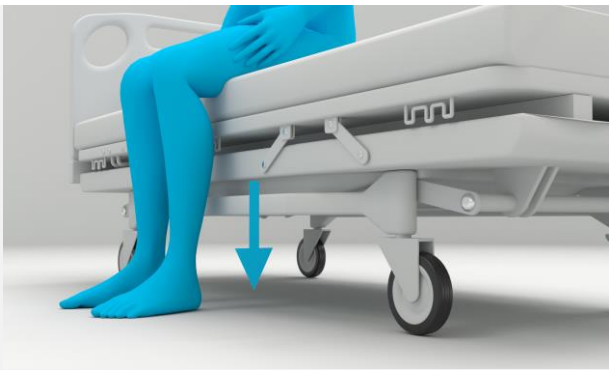
Before mobilising the patient, check the technical condition of the device with which the mobilisation process is to take place.

3. SET THE PATIENT UPRIGHT

The patient is mobilised and held at the edge of the bed by qualified medical personnel. The "sitting at the edge of the bed" mobilisation process is carried out involving two qualified medical professionals/therapists.
The patient sits as far as possible inside the bed.

4. LOWER THE BED

The bed is then lowered until the patient's feet are planted firmly on the floor.

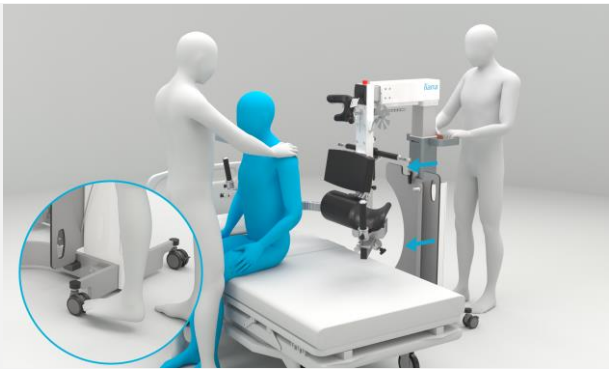


5. OPEN ARMS/STRUTS

LIANA's arms are now opened.

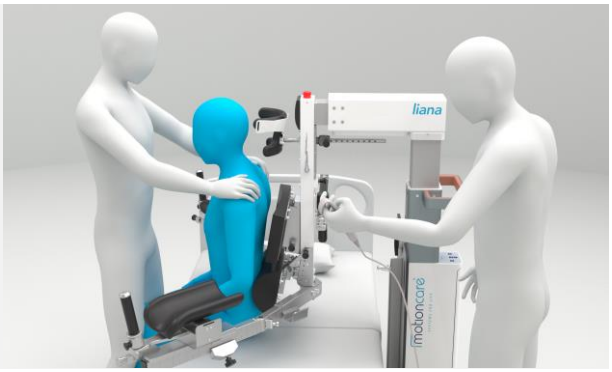
6. APPROACH/BRAKE LIANA

During mobilisation, LIANA is placed against the edge of the bed behind
the patient. Once the correct position has been found, the parking brakes on all 4 wheels can be operated.



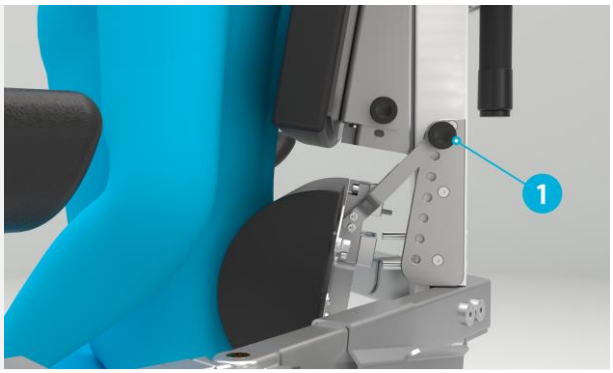
7. SET THE CORRECT HEIGHT

The height of the backrest and arm structure is adjusted using the column keyboard and/or the manual switch. The column keyboard/manual switch can be used to extend the horizontal back structure forwards/backwards. This enables an optimal position of the lumbar support/backrest on the patient to be achieved.



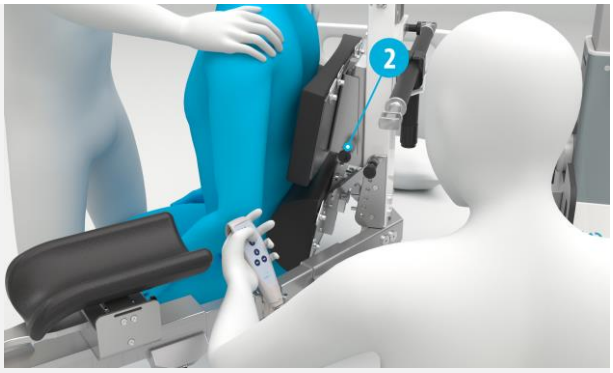
8. LUMBAR SUPPORT

Adjust the lumbar support to a comfortable position. To do this, pull out the latching element **(1)**.
Make sure that the latching element re-engages correctly when released to guarantee a secure hold.



9. BACK SECTION

Adjust the backrest to a comfortable position. To change the height of the back section, pull out the latching element **(2)**.
Make sure that the latching element re-engages correctly when released to guarantee a secure hold.
Recommended position of the backrest:
Top edge of backrest => Height of collarbone.

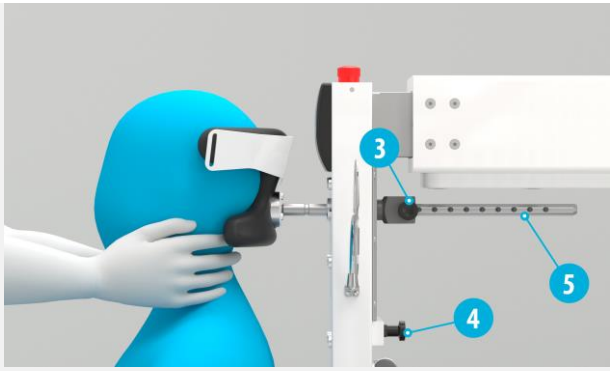


ATTENTION

When lowering the lumbar support and backrest, there is a risk of pinching! Please exercise due care when lowering.

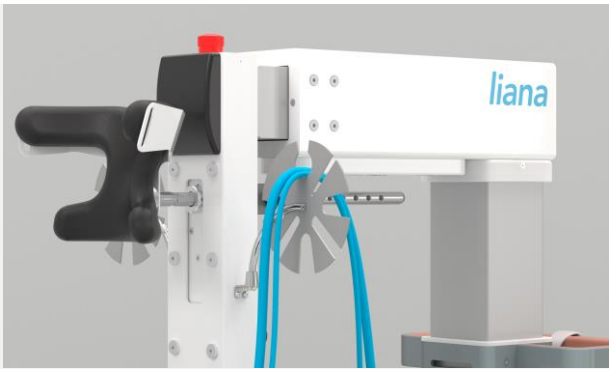
10. HEADREST

Adjust the headrest to suit the patient and fix it in place.
To change the position of the longitudinal adjustment, pull back the latching element **(3)** and adjust the desired position of the headrest individually. After reaching the desired position, release the latching element **(3)** again and make sure that it engages securely.
To adjust the height of the headrest, pull the latching element **(4)** and adjust the height via the linkage **(5)**. After you have set the desired height, release the latching element so that it re-engages. Make sure that all latching elements are engaged securely. The head can additionally be stabilised using a strap. There are fastening eyes on the side of the headrest.



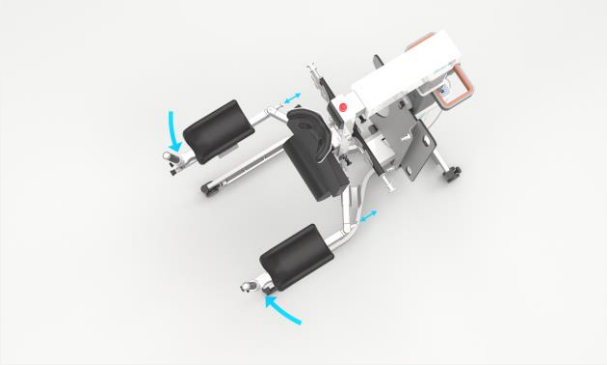
11. ANAESTHETIC TUBE HOLDER

Tubes and cables can be attached to 2 tube holders (Ulmer anaesthetic tube holder) to the right and left of the headrest.



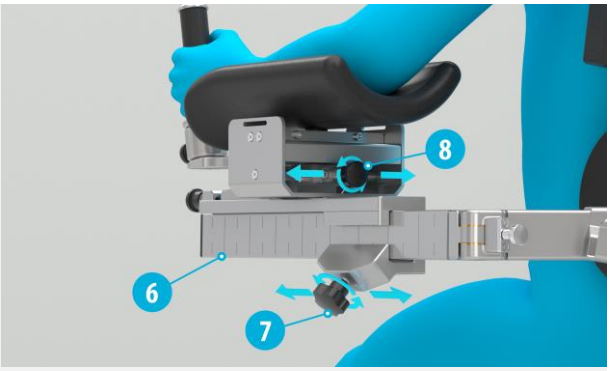
12. CLOSE ARMS/STRUTS

Now close the arms by re-engaging them.



13. ARMRESTS

Position the armrests to ensure a comfortable position for the patient's arms. The positioning lines **(6)** on the strut act as a guide for positioning. Fix the armrests using the corresponding star grip screw. The armrests can be individually adjusted both sideways and in length.



To adjust the armrests to the correct length, loosen the lower star grip **(7)** and move the armrest forwards or backwards until the desired position is reached. Repeat the process on the other side. The positioning lines on the arms/struts make it easier to position the armrest at the same distance.

To adjust the armrests inwards and/or outwards (sideways), pull back the locking lever **(8)** and move the armrest to the right or left. Make sure that the locking lever/latching element re-engages accordingly once the desired position has been reached. Repeat the process on the other side. After setting the desired position, make sure that all components have been fixed or engaged.

14. STABILISATION STRAPS

If the patient is not able to maintain a sitting position independently, use the stabilisation straps; these can be attached to the backrest/lumbar support.

15. T-ELEMENT

When using the stabilisation straps, the safety T-piece (T-element) also has to be fitted. This minimises the risk of strangulation/falling. We recommend using the T-element with every sitting mobilisation process. The T-element **(9)** is attached to the openings provided in the arm structure on the right and left. Pull out the latching elements **(10)** Then insert the T-element from the front. Then lock the element accordingly.

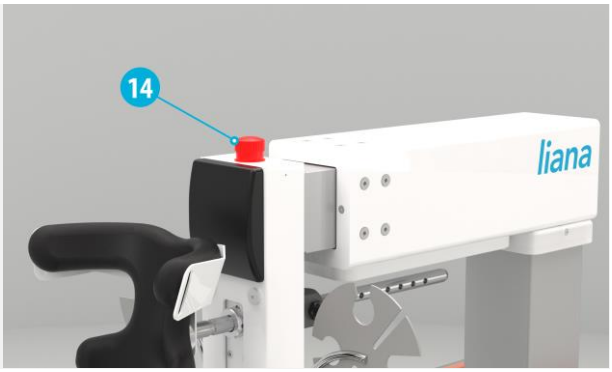
When mounting the T-element, always make sure that the latching elements engage on the right and left. Make sure that the gap between the mattress and the T-element is not so large that the patient could slip through -> Risk of strangulation.

16. TABLE

A Table **(11)** can optionally be attached for holding food and/or drinks. For this purpose, the table is fixed in the mounts (handles). To attach the table, remove it from the parking position on the device. Remove the handles **(12)** and insert the table in their place. After inserting the table, the two latching elements **(13)** must engage in order to prevent unintentional removal.
Dismantle in the reverse order.

17. SAFETY SWITCH

When everything is adjusted and the patient is sitting comfortably, please operate the safety switch **(14)**.



18. END THE MOBILISATION PROCESS

After completion of the "sitting at the edge of the bed" mobilisation process, the patient is held from the front by a specialist.
The patient can be returned directly to the lying position.

ATTENTION

Constant supervision of the patient is mandatory in the case of:

- Mobilisation of an intubated patient.
- Mobilisation of a patient who cannot draw attention to himself.
- Mobilisation of a patient who is being supplied through a tracheal cannula.

8.2. Standing mobilisation/standing stabilisation

Initial standing directly in front of the bed "*Standing stabilisation on 1m² “*

1. CHECK THE BED

Before mobilising the patient, check the technical condition of the bed on/at which the mobilisation process is to take place.

2. CHECK LIANA

Before mobilising the patient, check the technical condition of the device with which the mobilisation process is to take place.

3. ARMRESTS

For the standing mobilisation/standing stabilisation process, the arm supports must be rotated by 180°. Loosen the star grip (1) and slide the armrest completely off the arm/strut. Note: Make sure that the "safety T-element" is not mounted. Then slide the rotated armrest back onto the arm/strut. Tighten the star grip (1) in the selected position.
Repeat this process on the other armrest.

To adjust the armrests inwards and/or outwards (sideways), pull back the locking lever (2) and move the armrest to the right or left. Make sure that the locking lever/latching element re-engages accordingly once the desired position has been reached. Repeat the process on the other side.

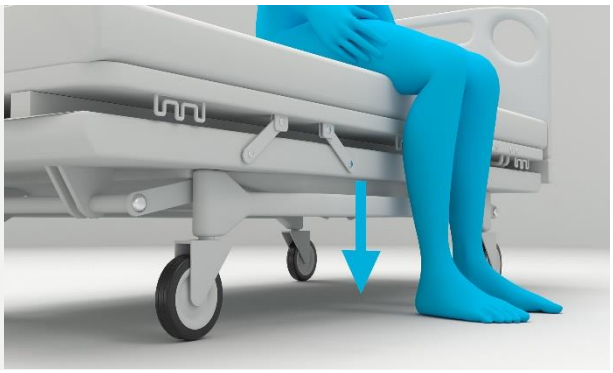
After setting the desired position, make sure that all components have been fixed or engaged.

4. SET THE PATIENT UPRIGHT

The patient is mobilised and held at the edge of the bed by qualified medical personnel. The "sitting at the edge of the bed" mobilisation process is carried out involving two qualified medical professionals/therapists.
The patient sits as far as possible on the edge of the bed (middle of the thigh).

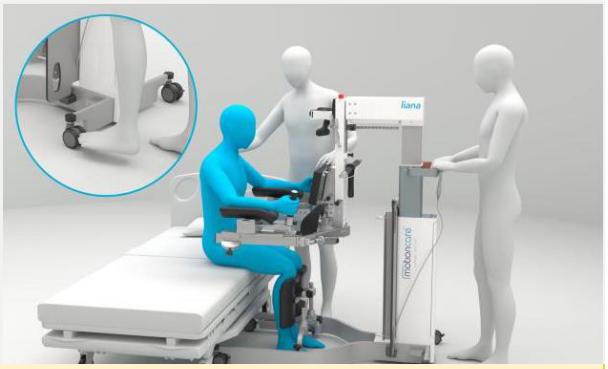
5. LOWER THE BED

The bed is then lowered until the patient's feet are planted firmly on the floor.
Please make sure that the patient has sturdy footwear or non-slip socks.



6. APPROACH/BRAKE LIANA

LIANA is pushed towards the patient from the front during the "STANDING DIRECTLY IN FRONT OF THE BED" mobilisation process. Once the correct position has been found, the parking brakes on all 4 wheels must be applied.

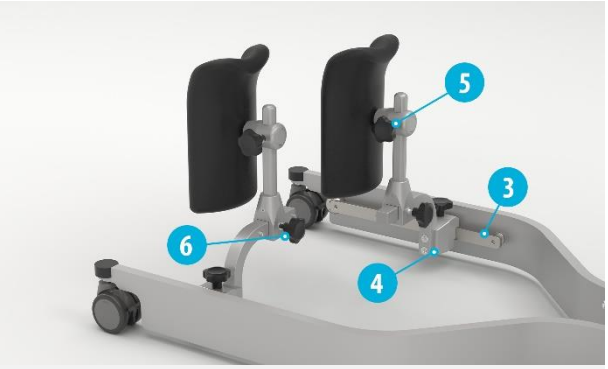


NOTE

Please make sure that the ground don´t reduce the braking effect of the brakes (smooth or slippery ground).
It is recommended to place a second nurse behind the device to prevent a possible movement of the device.

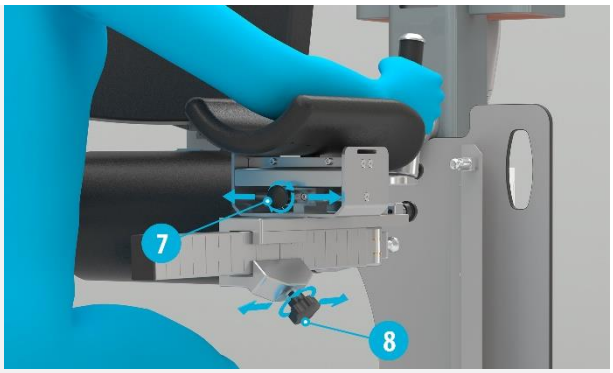
7. LEG SUPPORTS

Remove the leg supports from the parking position at the rear right and left of the device. Inside the chassis, there are guide rails **(3)** for attaching the leg supports. Slide the leg support retaining clamp **(4)** onto the guide rail and secure it by tightening the star grip. Make sure that the clamp is properly gripping after tightening and that the leg rest/leg support is sitting firmly. Repeat the process for the other side.



NOTE: Standing mobilisation/standing stabilisation is also possible for patients with one leg. In this case, only 1 leg rest/leg support is needed.
Adjust the desired height **(5)** and the distance between the leg supports **(6)** by loosening the star grips **(5+6)** accordingly. Set the leg supports so that the position is directly below the knee of the patient.
Tighten the star grips **(5+6)** again after reaching the desired position. Make sure that the leg supports are fixed firmly in place.

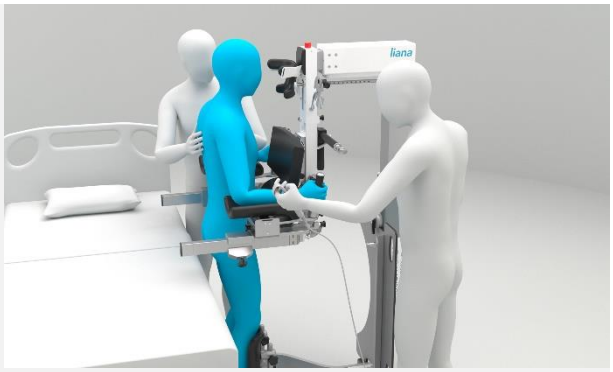
8. FINE ADJUSTMENT OF ARMRESTS



To adjust the armrests to the correct length, loosen the lower star grip (7) and move the armrest forwards or backwards until the desired position is reached. Repeat the process on the other side. The positioning lines on the arms/struts make it easier to position the armrest at the same distance.
To adjust the armrests inwards and/or outwards (sideways), pull back the locking lever (8) and move the armrest to the right or left. Make sure that the locking lever/latching element re-engages accordingly once the desired position has been reached. Repeat the process on the other side.
After setting the desired position, make sure that all components have been fixed or engaged.

Adjust the height position of the armrests using the manual switch and/or the column keypad. Patient places arms on the armrests and grasps the handles. The patient then assumes a "ski jumper" position by bending forward slightly.

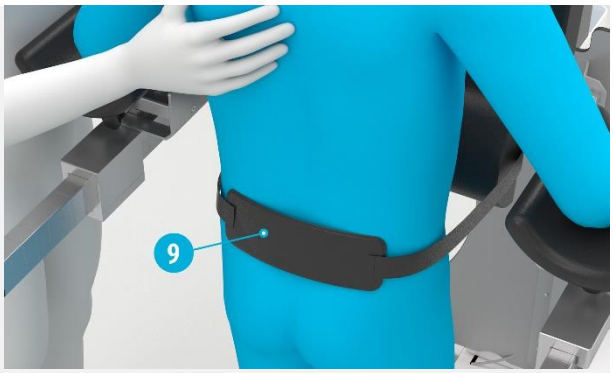
9. STANDING UP



The patient is assisted by a medical specialist/therapist when standing up. The second therapist raises the height of LIANA and the patient bed in parallel using the manual switches until the patient has reached an upright position. The specialist/therapist makes sure that the patient's feet are always in contact with the floor and that their shins are stably supported by the leg supports.

If this is not the case, the "standing" mobilisation process must be interrupted and performed elsewhere.

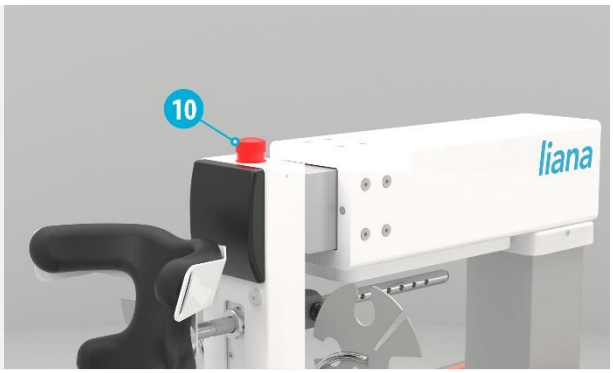
10. LUMBAR STRAP



To ensure maximum possible safety, we recommend attaching the lumbar strap **(9)** for additional stability. The lumbar strap **(9)** is attached to the mounts in the rear area of the lumbar support and closed using the two Velcro mounts behind the patient's buttocks area. To prevent the Velcro from opening, this area should be lightly held in place by a medical specialist/therapist.

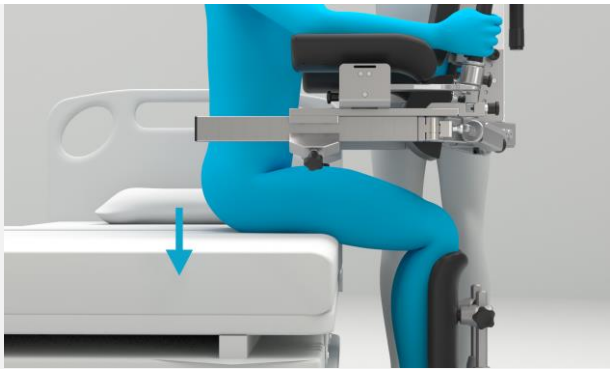
11. SAFETY SWITCH

When everything is adjusted, and the patient is sitting comfortably, please operate the safety switch **(10)**.



12. AFTER STANDING

After completing the initial standing with LIANA, the bed is lowered below buttock level. This allows the patient to quickly sit back down on the bed after use.

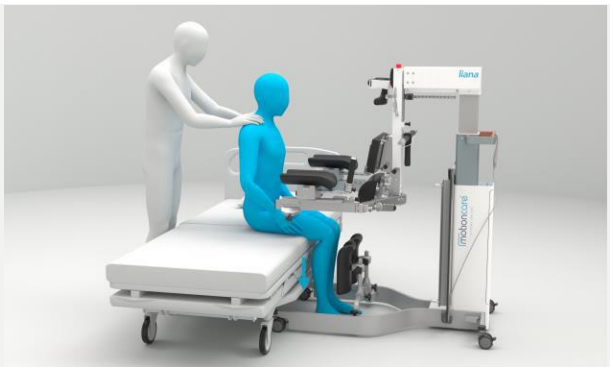


13. END THE "STANDING" PROCESS

After the "standing" mobilisation process is finished, LIANA and the bed can be lowered again.

A specialist/therapist stabilises the patient manually.

To use the electrical functions of LIANA, unlock the emergency button.



14. BRAKES

The four brakes can now be released.

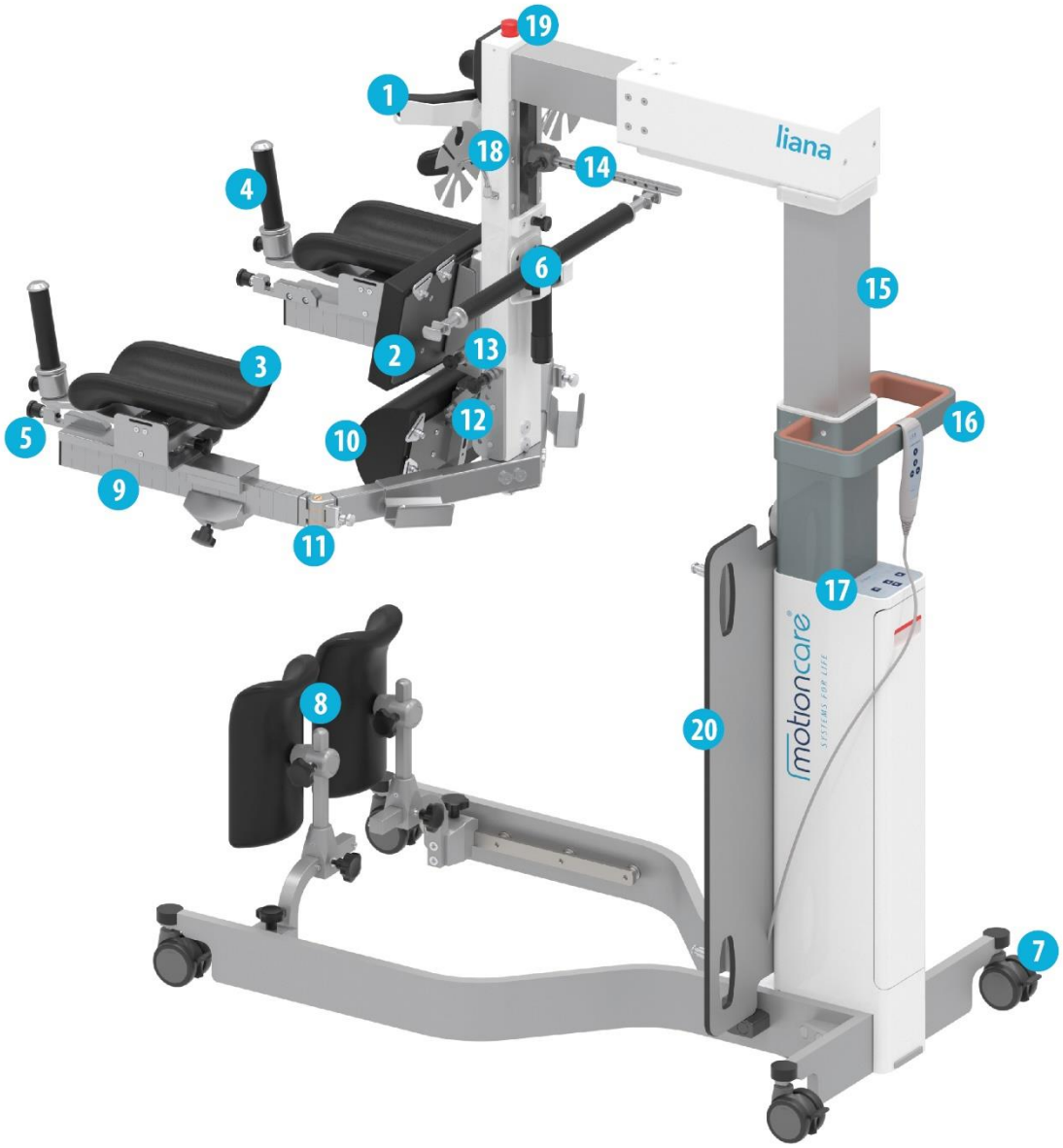
15. REMOVE LIANA

Move the LIANA system away from the patient.

16. RETURN THE PATIENT

Lay the patient back into bed.

9. 9. CONSTRUCTIVE ASSEMBLY



1. Headrest
2. Backrest
3. Armrest
4. Handle
5. T-piece locking
6. Safety T-piece (T-element)
7. Braked castor
8. Leg supports
9. Arm
10. Lumbar support
11. Arm adjustment
12. Adjustment of lumbar support
13. Backrest adjustment
14. Headrest adjustment
15. Device column
16. Personnel handle
17. Electric box with control panel
18. Ullmer anaesthetic tube holder
19. Safety switch
20. Table

10. HANDSWITCH AND COLUMN KEYPAD

A wired remote control and an integrated column keypad. The column keypad and the manual switch can be used to control height **(1)** and reach settings **(2)**. The manual switch also has a battery charge indicator **(3)**.

The LED indicators provide information about the charge level and indicate when maintenance is due or if the safe working load has been exceeded.

- 3 bars: Battery is full, no charging required (remaining capacity >75%).
- 2 bars: Battery is at least half full and can be charged (remaining capacity >55%).
- 1 bar: Battery will soon be empty and must be charged (remaining capacity >25%).
- No bar: Battery is almost empty and needs to be charged urgently (remaining capacity <25%)! In addition, an acoustic signal sounds when the button is pressed.

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11. OPERATION

11.1. Switching the device on and off

After inserting the battery and closing the battery compartment, the device is ready for operation. Check the battery charge beforehand -> Charge level indicator on the manual switch. After exiting the product's idle mode, the product remains in standby mode. The drive is only activated after the function keys have been pressed.
Note: Pressing the safety switch and opening the door to the battery interrupts all electrical functions.

11.2. Battery / rechargeable battery

If the battery charge is low after checking, charge the battery using the charging station supplied. To remove the battery, press the levers on the back/top of the battery. Then connect the battery to the charger by pushing the battery into the charging station until it engages.

ATTENTION

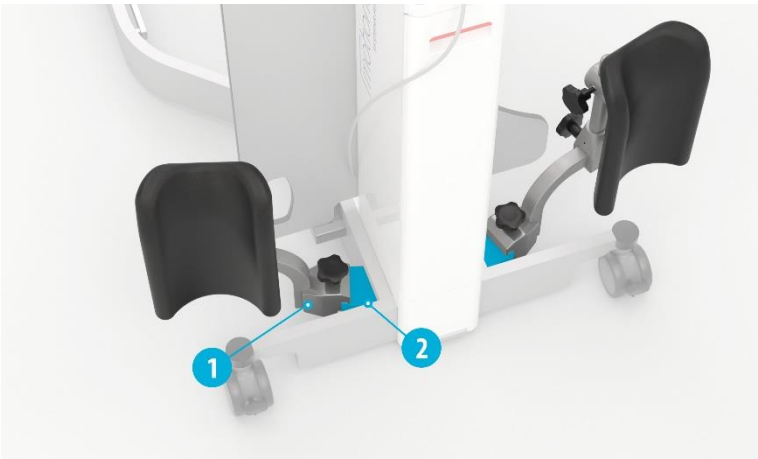
After disconnecting the battery for charging, make sure that the battery contacts do not come into contact with conductive elements. This could damage the battery and cause a fire!

12. PARKING POSITION

All accessory components can be safely positioned – "parked" – directly on the device.

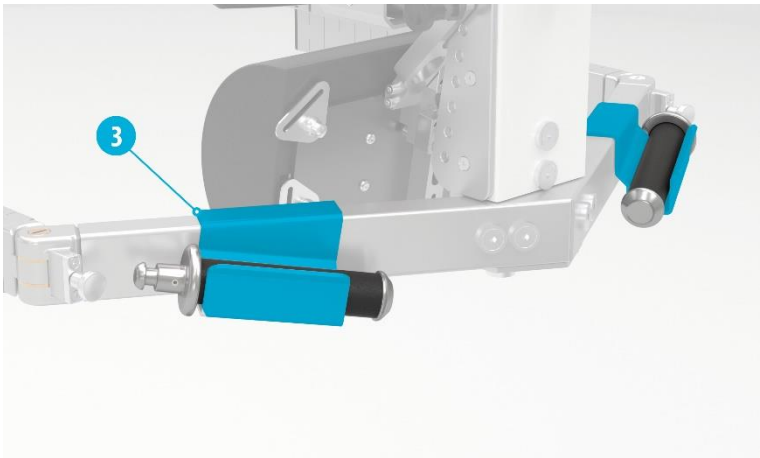
12.1. Parking position of leg rests

No footrests are required as part of sitting mobilisation/sitting stabilisation. These can be parked safely at the rear of the chassis on the right and left. To do this, push the fixing clamps **(1)** of the leg rests onto the corresponding guide rail **(2)**. Secure the clamp via the star grip. Make sure that the star grip is properly tightened.



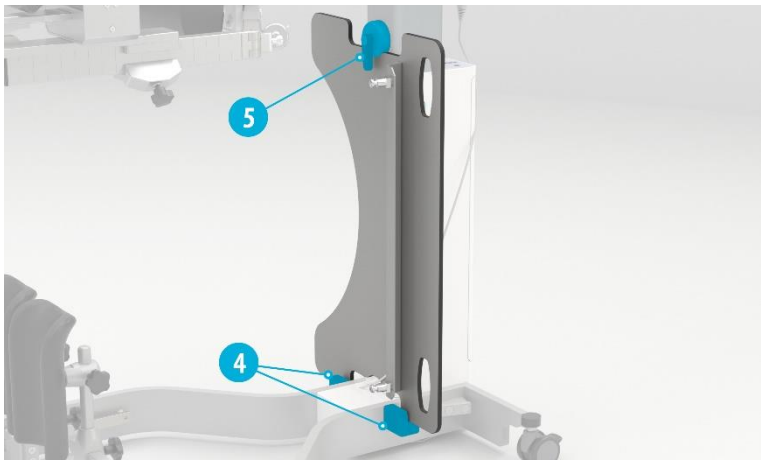
12.2.b. Parking position of handles

If you are using the table for eating, the handles are not needed. This can be securely stored/parked in the mounts provided **(3)** on the rear part of the arm/column structure.



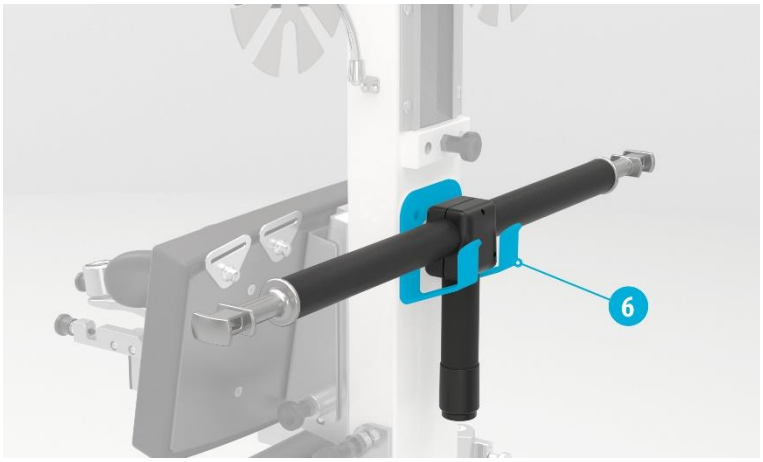
12.3. Parking position of table

No table is required for standing mobilisation/standing stabilisation. The table is only needed for sitting stabilisation in combination with feeding. In all other cases, you can conveniently park the table by the device. To do this, place the table in the parking elements provided **(4)** and turn the lever **(5)** to the middle position until it engages.



12.4. Parking position of T-element

The T-element can be easily and conveniently stored/parked at the rear area of the back structure in the mount **(6)**.



13. CLEANING AND DISINFECTION

ATTENTION

Cleaning and disinfection are only permitted if the patient is not present!
Make sure that the system is not in operation during cleaning.

After each use, the product must be completely disinfected using disinfectant. This prevents cross-contamination.

Only use the disinfectant after the patient has vacated the product.
Follow the manufacturer's instructions for the disinfectant to be used.
Avoid direct contact with the concentrated product. If necessary, protect the skin and eyes using gloves and protective goggles.

ATTENTION

There is a risk of electric shock if the power supply is not disconnected while cleaning the device.
Please disconnect the power supply by pressing the safety switch and/or opening the door of the controller box.

13.1. Cleaning instructions

Clean the device and upholstery with a soft, lint-free cloth moistened with soapy water or a commercially available plastic cleaner. To remove grease stains, skin residues and hair, use a sponge and soap.

NOTE

Ensure that you disconnect the equipment from the power supply/battery before starting cleaning and disinfection.

Do not use alcohol-based agents to clean the upholstery or the stabilisation straps.

Do not use abrasive substances or substances containing free chlorine or oxygen, scouring agents or other aggressive cleaning and disinfecting agents!

Never use abrasives to clean the LIANA patient sitting/standing stabilisation aid!

To avoid damage, do not use aerosol cleaners, sprays, abrasives or solvents to clean the control unit. If aggressive cleaning agents are used anyway, all warranty claims regarding surface damage will be void.

Make sure that no liquids get into the housing, motor, control unit or battery of the device when cleaning and disinfecting!

13.2. Disinfection instructions

With regard to transmission risks, we recommend that the LIANA patient sitting/standing stabilisation aid is carefully disinfected between each use. For manual surface disinfection, disinfectants for medical devices or a disinfectant aerosol (spray) commonly used in the industry can be used.

Recommended surface disinfectants:

- Schülke Mikrozid Sensitive Wipes
- "Mikrobac® Tissues Disinfectant Wipes

13.3. Sterilisation instructions

The LIANA sitting and standing stabilisation aid is **not** suitable for sterilisation.

14. MAINTENANCE, STK AND SERVICING

For safe use of the LIANA patient sitting/standing stabilisation aid and for the protection of users and patients, the product must undergo regular inspections and maintenance as well as an annual safety inspection. This includes, among other things, visual inspection for external damage (housing, mains connections, legible labelling, contamination, etc.) as well as availability and completeness of the documents.
The performance of the safety inspections and maintenance must be documented and proven upon request. Use your inventory to do this.
Inspections, maintenance and checks may only be carried out by trained, qualified specialists authorised by the manufacturer who meet the requirements of the MPBetreibV (Medical Devices Operator Ordinance). Outside Germany, please observe the respective national legislation. Failure to do so may result in injury or an unsafe product.
In case of doubt, please contact your supplier or the manufacturer.

NOTE

According to the accident prevention regulations (UVV) of the Employer's Liability Insurance Association, the DGUV Regulation 3 (DGUV V3) test must be carried out annually on the product for portable devices used in operating sites, rooms and systems of a special nature (DIN VDE 0100 Group 700).

This DGUV test is only mandatory for Germany. Other countries may have different regulations that must be observed.

WARNING

Do not perform any cleaning, maintenance or testing activities when the product is in use. This may result in a hazard for the user and the patient.
Installation, maintenance, servicing and testing activities are only permitted if the patient is not present.

Clean and disinfect the product daily.
Perform a visual inspection of all components, power cables and connections weekly. In addition, perform a function test and clean the castors if necessary.
Carry out maintenance, a safety inspection and testing in accordance with DGUV Regulation 3 annually.

14.1. Tests before each use

To ensure safe and trouble-free operation, the following checks must be carried out before each use:

- Visual inspection of the unit (external damage and wear).
- Check whether any screws are missing or loose on the device.
- Check the function of the device.
- Check the function of the horizontal extension/retraction.
- Check the function of the vertical extension/retraction.
- Check the function of the wired remote control (up/down/forwards/backwards).
- Check the function of the integrated column keypad (up/down/forwards/backwards).
- Check the safety switch.
- Check that the castors are running smoothly.
- Check the stabilisation straps for damage.
- Check the function of all detents.
- Check the charge level of the battery.

15. ENVIRONMENTAL PROTECTION/WASTE DISPOSAL

The manufacturer is aware of its responsibility towards the environment. The product is not to be disposed of with household waste!

16. DISPOSAL OF PACKAGING MATERIAL

Please recycle the packaging material supplied with the product in accordance with local regulations and laws. The metal parts as well as plastic and electronic components must be recycled in accordance with WEEE.

17. DISPOSAL OF THE PRODUCT

The expected service life of the LIANA patient sitting/standing stabilisation aid is approx. 10 years. At the end of the product's service life, contact your motioncare contractual partner, who will recycle the product in accordance with the locally applicable regulations and laws. The manufacturer asp GmbH can provide further information on eco-friendly disposal.
In accordance with WEEE, the manufacturer will take back all equipment placed on the market by him for the purpose of proper disposal. Please contact us in this regard if required and inform your customers in case of resale. Please also clean and disinfect the product before disposal.

18. HELP WITH TROUBLESHOOTING/CUSTOMER SERVICE

Problem description	Remedy
Height adjustment is not working	▪ Check whether the safety switch is unlocked or pressed ▪ Check whether the function is not working in both operating devices (manual switch + column keypad) ▪ Check the battery charge level ▪ Remove the battery and check the contacts for damage
Longitudinal adjustment of the horizontal column is not working	▪ Check whether the safety switch is unlocked or pressed ▪ Check whether the function is not working in both operating devices (manual switch + column keypad) ▪ Check the battery charge level ▪ Remove the battery and check the contacts for damage
Drive is stiff	▪ Low battery charge level. Charge battery ▪ The battery has reached the end of its life. Replace the battery
The control box emits a "beep" sound when operated	Low battery charge level. Charge battery
The manual switch is not working	▪ Check the cable of the wired remote control for damage ▪ Check battery charge level (replace with fully charged battery) ▪ Operation via the control box control panel
Castors make loud noises	Clean the rollers and replace if necessary
The device makes unusual noises	Please inform Customer Service
Damage to the unit	Please inform Customer Service
Charger not functioning	▪ Remove the battery and check the contacts for damage ▪ Check the mains plug
The power indicator on the charger does not light up	▪ Check that the charger is connected to a mains outlet ▪ Check that voltage is present at the mains outlet ▪ Checking the socket fuse ▪ Remove the battery and check for damage
Battery is inserted properly but the indicator light does not light up	Please inform Customer Service
Battery is inserted properly but the indicator light does not light up	Please inform Customer Service
The operating display on the charger does not go out after several hours of charging time	The battery must be replaced. Please inform Customer Service
The inserted battery indicates a full charge, but discharges quickly after a few uses	The battery must be replaced. Please inform Customer Service

Please contact your distributor's customer service department or the manufacturer if your product is not working properly and you are unable to remedy the fault using the remedies in Section 18.

19. WARRANTY

The warranty claim as well as the responsibility for personal injury and/or damage to the device will be void if:

- Operating and/or errors in use are present and/or the product has been used inappropriately.
- The device has been used by untrained and/or uninstructed persons.
- structural and/or technical modifications have been made to the product which affect or jeopardise conformity.
- Maintenance and/or repairs to the product have been carried out by persons not trained and authorised by the manufacturer.
- unoriginal spare parts have been used.
- expires in the event of negligence in any form.

To enforce your warranty claim, send the product with the warranty certificate and a copy of the purchase receipt to the manufacturer's address.

Any repairs under the manufacturer's warranty will be carried out exclusively on the basis of the warranty certificate and the purchase receipt.

The warranty period begins on the day the product is delivered and lasts for 24 months. The warranty does not apply to wear parts, paintwork and coatings. Within the warranty period, the manufacturer is obliged to remedy all defects arising as a result of proper use at his own expense.

20. MEDICAL INCIDENT

ATTENTION

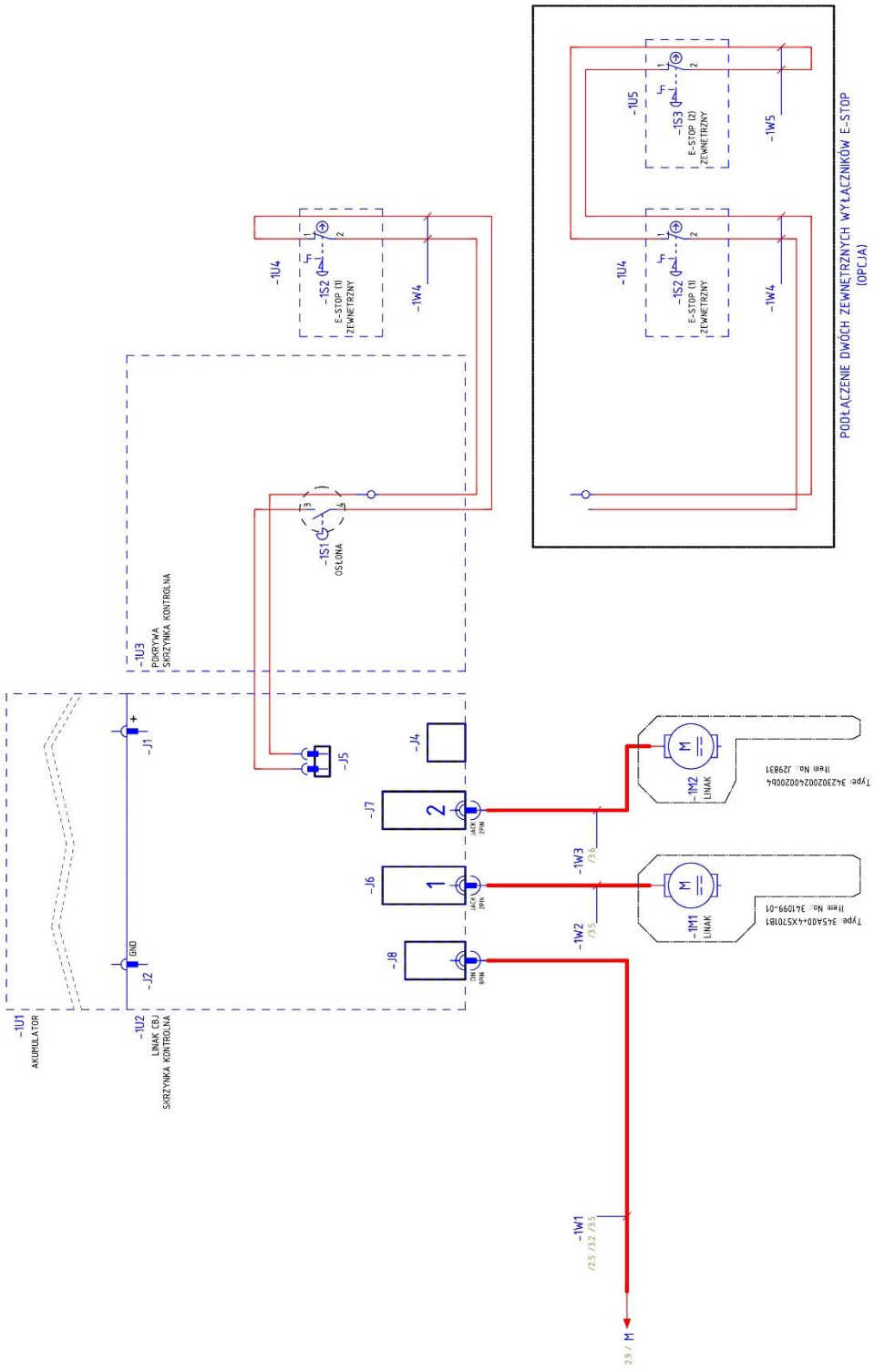
In case of a medical incident/accident, immediately inform

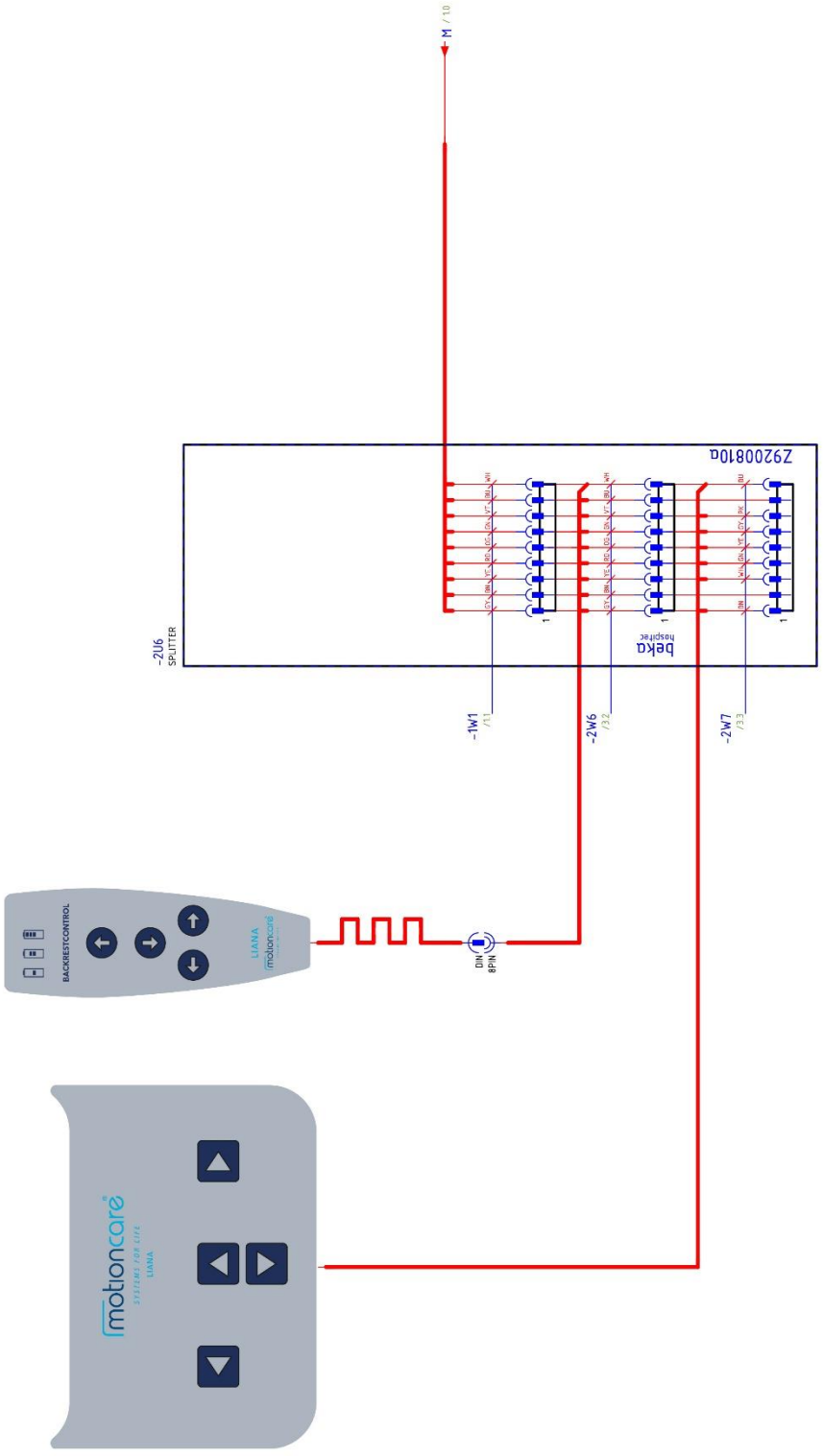
ASP GmbH
Zum Kalkofen 24
57439 Attendorn Deutschland
Telefon +49 (0) 2722-63596-0
E-Mail: info@asp-d.de

and the

Bundesinstitut for Arzneimittel und Medizinprodukte (Bfarm)
Kurt-Georg-Kiesinger-Allee 3
53175 Bonn
Tel.: +49 (0) 228/9930730
E-Mail: poststelle@bfarm.de

21. ELECTRICAL DIAGRAM

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Medical Devices Division

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A BRAND BY asp HAI-Group

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23. CE DECLARATION OF CONFORMITY PSS LIANA

date: 20.12.2020
rev.: 1

CE DECLARATION OF CONFORMITY FOR PSS LIANA

ASP Polska Sp. z o.o.
ul. Wierzbowa 21
67-200 Głogów

Herewith ASP Poland declares that the medical device product "PSS LIANA" range described below, conforms with essential requirements and provisions of MDR 2017/745 Concerning Medical Devices.

This CE declaration is issued only under the responsibility of the manufacturer, which is ASP Polska.

The Basic UDI-DI as referred to in Part C of Annex VI will be assigned by the manufacturer to the device in question, as soon as identification of this device becomes based on a UDI system, or otherwise a clear identification by means of product code, catalogue number or other unambiguous reference allowing traceability.

The device is categorized as risk class 1 as per Annex VIII, rule 12.
The device is not sterile, does not have a measuring function and is not invasive.

The declaration was issued on the basis of the following harmonized standards: PN-EN 12182; PN-EN 60601.

The declaration was issued on 20.12.2020 in Głogów at the seat of the ASP Poland.

Signature:

Managing Director Stefan Löcker

24. ARTICLE NUMBERS + ACCESSORIES

Art.-Nr.:	Bezeichnung
L-1000L1	LIANA sitting and standing stabilisation aid
L-1000A1	Armrest including substructure
L-1000H1	Handles
L-1000K1	Head calotte
L-1000R1	Backrest cushion
L-1000LE1	Lumbar support cushion
L-1000G1	Body strap
L-1000LE2	Lumbar strap
L-1000F1	Footrest
L-1000FS1	Standard rail (pair)
L-1000KL1	Fixing clamps
L-1000T1	Table
L-1000TE1	T-element
L-308-02	Handle cover, sterile (disposable material) 100 pcs.
L-03-KP 14	Sterile material cover for armrest including construction (disposable material) 20 pcs.
L-ND-15070	Sterile material cover for the entire arm structure (disposable material) 70x50cm - 240 pcs.
L-1000AK1	Battery
L-1000AK2	Charger for wall mounting
L-1000H1	Manual switch

25. ELECTROMAGNETIC COMPATIBILITY

Medical electrical equipment is subject to special precautions with regard to EMC and must be installed and commissioned in accordance with the EMC instructions contained in the accompanying documents.
No special measures are to be observed for devices and systems of ASP GmbH.
Portable and mobile HF communications equipment can affect medical electrical equipment.

Guidelines and manufacturer's declaration – Electromagnetic immunity (Table 201)		
The product is intended for operation in the ELECTROMAGNETIC ENVIRONMENT specified below. The customer or the user of the product should ensure that it is used in such an environment.		
Transmission measurement	**Agreement**	**Electromagnetic Environment - Guidelines**
High-frequency (RF) transmissions according to CISPR 11	Group 1	The product uses RF radiation exclusively for internal functions. For this reason, the RF radiation of the device is very low, and it is unlikely that neighboring electrical devices will be disturbed.
High-frequency (RF) transmissions according to CISPR 11	Class B	The product is intended for use in all facilities, including residential areas and those directly connected to a public utility network that also supplies buildings used for residential purposes.
Harmonics according to IEC 61000-3-2	Class A	
Voltage fluctuations / Flicker after IEC 61000-3-3	Jibes	

Guidelines and manufacturer's declaration – Electromagnetic immunity (Table 202)			
The product is intended for operation in the ELECTROMAGNETIC ENVIRONMENT specified below. The customer or the user of the product should ensure that it is used in such an environment.			
Immunity tests	IEC 60601- checking rule	Compliance Level	Electromagnetic Environmental Guidelines
Discharge of static electricity (ESD) according to IEC 61000-4-2	± 6kV contact discharge ± 8kV air discharge	± 6kV contact discharge ± 8kV air discharge	The floor should be made of wood, concrete or ceramic tiles. If the floor is provided with synthetic material, the relevant humidity must be at least 30% amount to.
Fast transient interference pulses/Burst IEC 61000-4-4	± 2 kV for power supply line ± 1 kV for Input/output lines	± 2 kV for power supply line Omitted for input/output lines	The quality of the supply voltage should be that of a typical business or Match hospital environment.
Overvoltage IEC 61000-4-5	±/1 kV Line against line ±/2 kV Line against grounding	±/1 kV Line against line ±/2 kV Line against grounding	The quality of the supply voltage should match that of a typical business or hospital environment.
Voltage drops, short interruptions and voltage fluctuations for the power supply input lines IEC 61000-4-11	<5 % UT (>95 % Collapse of the UT) for 0,5 Period 40 % UT (60 % Collapse of the UT) for 5 Period 70 % UT (30 % Collapse of the UT) for 25 Period <5 % UT (>95 % Collapse of the UT) for 5 s	<5 % UT (>95 % Collapse of the UT) for 0,5 Period 40 % UT (60 % Collapse of the UT) for 5 Period 70 % UT (30 % Collapse of the UT) for 25 Period <5 % UT (>95 % Collapse of the UT) for 5s	The quality of the Supply voltage should the one Correspond to typical business or hospital environment.
Current frequency (50/60 Hz) Magnetic field IEC 61000-4-8	3 A/m	3 A/m	Magnetic fields at the mains frequency should match the typical values found in the business or hospital environment, conform.

ATTENTION UT is the ac mains voltage before the application of the test stage.

Guidelines and manufacturer's declaration – Electromagnetic immunity (Table 204)			
The product is intended for operation in the electromagnetic environment specified below. The customer / user of the product must ensure that it is used in such an environment.			
Immunity tests	IEC 60601-checking rule	Compliance Level	Electromagnetic Environmental Guidelines
Realized HF IEC 61000-4-6	3 Vrms 150 kHz bis 80 MHz	10 Vrms	Portable and mobile RF Communication Devices should not be used at a distance from the product, including the cables, than the recommended protective distance according to the applicable for the transmission frequency Equation is calculated.
Radiation-HF IEC 61000-4-3	3 V/m 80 MHz bis 2,5 GHz	3 V/m	Recommended protective distance $d=0,35\sqrt{P}$ $d=1,2\sqrt{P}$ 80 MHz to 800 MHz $d=2,3\sqrt{P}$ 800 MHz to 2,5 GHz With P than the rated power of the transmitter in watts (W) according to the transmitter manufacturer and d as a recommended protective distance in meters (m). The field strength of stationary radio transmitters determined by electromagnetic location measurement, a – should be lower than the CONFORMITY LEVEL in all frequency ranges be. b In the environment of devices that have the following symbol, disturbances are possible: 

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2: This guide may not be applicable in all situations. The propagation of electromagnetic waves is determined by absorption and reflections by structures,
Objects and people influenced.

a The field strength of stationary transmitters, such as base stations of radio telephones and mobile land radios, amateur radio stations, AM and FM transmitters as well as radio and television stations cannot theoretically be precisely predetermined. In order to determine the electromagnetic environment due to the fixed RF transmitters, site-side electromagnetic monitoring is recommended. If the measured field strength in the environment in which the product is to be used exceeds the applicable RF compliance level, special care must be taken to ensure that normal operation of the product can be ensured. If abnormalities are detected, additional measures may be required, such as a different orientation or a change of location of the product.
b In the frequency range from 150 kHz to 80 MHz, the field strength should be less than 10 V/m.

Recommended distance between portable and mobile communication systems and the product (Table 206)

The product is intended for use in an electromagnetic environment where RF interference is controlled. The customer or user of the product can avoid electromagnetic interference by maintaining the minimum distance between portable and mobile RF telecommunications equipment (transmitters) and the product depending on the output power of the communication device, as specified below.

Nominal power of the transmitter W	Protective distance depending on the transmission frequency in m		
	150 kHz to 800 MHz d=0,35√P	80 MHz to 800 MHz d=1,2√P	800 MHz to 2,5 GHz d=2,3√P
0,01	0,04	0,12	0,23
0,1	0,11	0,38	0,73
1	0,35	1,2	2,3
10	1,1	3,8	7,3
100	3,5	12	23

For transmitters whose maximum rated power is not specified in the table above, the recommended protective distance d in meters (m) can be determined using the equation belonging to each column, where P is the maximum rated power of the transmitter in watts (W) as specified by the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the protective distance applies to the higher frequency range.

NOTE 2: These guidelines may not be applicable in all cases. The propagation of electromagnetic quantities is influenced by absorption and reflections of buildings, objects and people.

26. INVENTORY

Gem. Medizinproduktebetreiberverordnung sind Sie verpflichtet, for dieses Gerät ein Bestandsverzeichnis zu führen. Sie können dieses Verzeichnis als Kopiervorlage benutzen.

Inventory

Device: Sitz- und Stehstabilisator **LIANA**

Manufacturer: ASP GmbH, Zum Kalkofen 24, D-57439 Attendorn

Serial number: _____

Date of purchase: _____

Location: _____

Tests performed during initial commissioning: _____

Date: _____

Proof of instruction in functions and use of the product!

Instructor		**Person instructed**	
Name	Date	Name	Signature

27. REPEAT INSPECTION, REPAIR, DGUV-3, SAFETY INSPECTION, ETC.

Type of examination	Date	Result	Measure	Signature

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