CHS Healthcare
We're Here For You

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INSTALLATION AND OPERATIONAL MANUAL

FOLDSMART

ELEVAND
elevating patient handling

TABLE OF CONTENTS

1. INTRODUCTION

Please follow the Operating Instructions' recommendations and use the information provided to operate the lift safely and effectively. Kindly send any comments or observations about the lift's implementation or this instruction to the following address:

CHS Healthcare
1 Technology Circuit
Hallam VIC 3803
TEL. 1300 789 420
sales@chshealthcare.com.au
service@chshealthcare.com.au

GENERAL REMARKS:

1. The product should only be operated by qualified, trained personnel who have read these instructions.
2. Using, operating, or servicing the product inconsistently with these instructions is prohibited. Such action may cause damages that create a financial burden for the user, for which the Producer is not responsible.
3. The device manufacturer does not allow any modifications to be made to the product.
4. If the operation and parameters are incompatible with the description in the instructions, the product must not be used. This issue must be reported immediately to the manufacturer or distributor.
5. The warranty covers all material and manufacturing defects.
6. Any serious Elevand FoldSmart incident must be reported immediately to the distributor.
7. Each product repair should be conducted by an authorised service centre or the factory and documented in the repair list that comes with the warranty card. Please adhere to this requirement to ensure the product warranty remains valid.

Please Note the following:

Warranty terms will be honoured only if the product is used according to its intended purpose and in compliance with the terms stated in this manual.

The manufacturer is not responsible for any consequences resulting from improper use of the Elevand FoldSmart, which includes any use that does not comply with the conditions outlined in this manual.

CAUTION!

Activities indicated in this manner, if performed inconsistently with the instruction manual may cause deterioration of conditions or safety hazard to the user and / or personnel operating the device.

Such marking is applied on the device where it is essential to read the Operation Manual and follow its instructions.

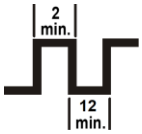
Type B applied part

Manufacturer

Appliance class II

Direct current

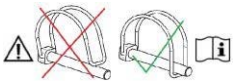
Alternating current



Actuator operation type

Safe load of the device (160 kg) when lifting or lowering the arm

Raising / lowering the patient



Safe security mounting

Medical device

Elevand FoldSmart is manufactured in accordance with Medical Device Regulation 2017/745 (class I, 13 rule) and has a CE marking, according to the manufacturer's declaration.

All electrical and electronic equipment waste must be disposed of properly at recycling facilities according to the European Union's WEEE directive or equivalent regulations. It is essential that all devices containing substances harmful to the environment or humans are recycled properly in relevant facilities and not disposed of with general or household waste. These regulations ensure the reduction of electronic waste and proper recycling of electronic devices. Proper recycling is crucial as electronic waste may contain substances harmful to the environment and human health.

2. ELEVAND FOLDSMART CHARACTERISTIC

2.1. Purpose

CAUTION!

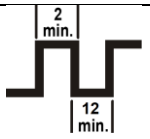
The device is designed to move people over short distances within a room or within a patient's activity area, such as to the toilet for daily activities. Movement is allowed only on horizontal flat surfaces and within a single-floor building. If transportation on flat surfaces inclined up to 5° is needed, a second person must be present to provide assistance. The lift can only be used for individuals whose weight does not exceed the maximum lifting capacity of either the lift or the lifting belt, whichever is lower. The device should only be used after a careful assessment of the patient by the attending physician.

CAUTION!

People with conditions such as congenital bone fragility, osteoporosis, spinal cord injury, or epilepsy must not use the device.

The Elevand FoldSmart is designed to help lift and transport indoors and change the position of people with reduced mobility due to illness or dysfunction. The Elevand FoldSmart allows a patient to be lifted from a rehabilitation bed, bathtub, or shower tray and even directly from the floor, owing to the appropriate suspension. The device is intended to help move within the living zone, e.g., getting up and out of bed, using chairs, using the toilet, shower tray, etc. The device is intended for use in hospitals, sanatoriums, nursing homes, rehabilitation centres and at home, where rooms meet the space requirements specified in point 5, and the patient can be transported on the Elevand FoldSmart only on horizontal flat surfaces, located on the one floor.

2.2. Technical characteristics

Length		1280 mm
Width		630 mm
Height		1340 mm
Raising height (min.)		720 mm
Raising height (max.)		1930 mm
Minimum legs width (max.)		430 / 630 mm
Maximum legs width (min.)		780 / 940 mm
Height of device legs		95 mm
Turning diameter of the product (min)		1380 mm
Turning diameter of the product (max)		1460 mm
Lifting speed (raising)		55 s
Lifting speed (lowering)		55 s
Diameter of castors with brake		100 mm
Diameter of castors without brake		75 mm
Type of work		 Discontinuous, short-term load (15%) max 2 min. work (ON), min. 12 minutes pause (OFF); max 5 cycles/min
Control box	Input voltage	24 V ~ / 31 V ⎓
	Output voltage	24 V ⎓
	Consumed current	Max. 4 A
Charger	Voltage	230V~
	Frequency	50 Hz
	Consumed current	Max. 830 mA
Battery capacitance		4,5 Ah
Protection class against electric shock		II, ⧈
Applied part		typ B,
Protection level of the control box		IPX4
Protection level of the battery		IPX4
Protection level of the main actuator		IPX4
Protection level of the remote control		IPX4
Safe working load		 160 kg (Symbol indicates the maximum safe load of the device when lifting – lowering the arm)
Lift mass		39 kg
Max. sound level		52 dB

2.3. Elevated FoldSmart

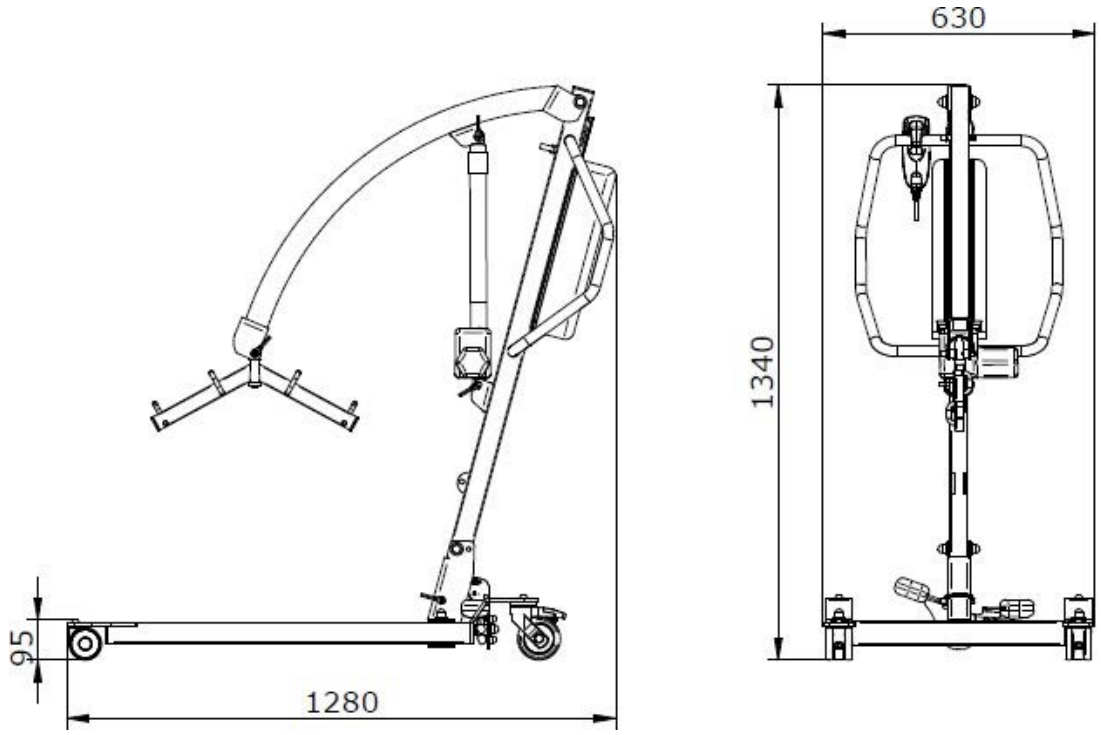


Figure 1a – The main dimensions of the Elevand FoldSmart

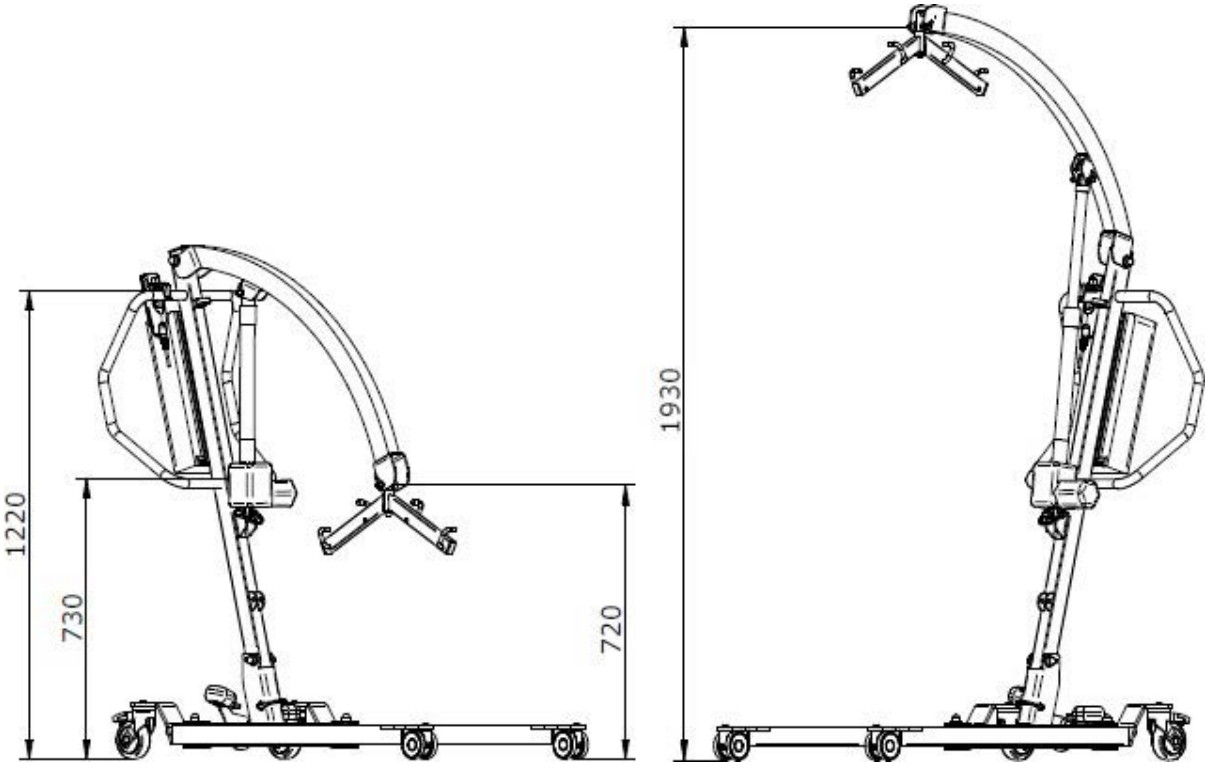


Figure 1b – Lifting range and height of the Elevand FoldSmart

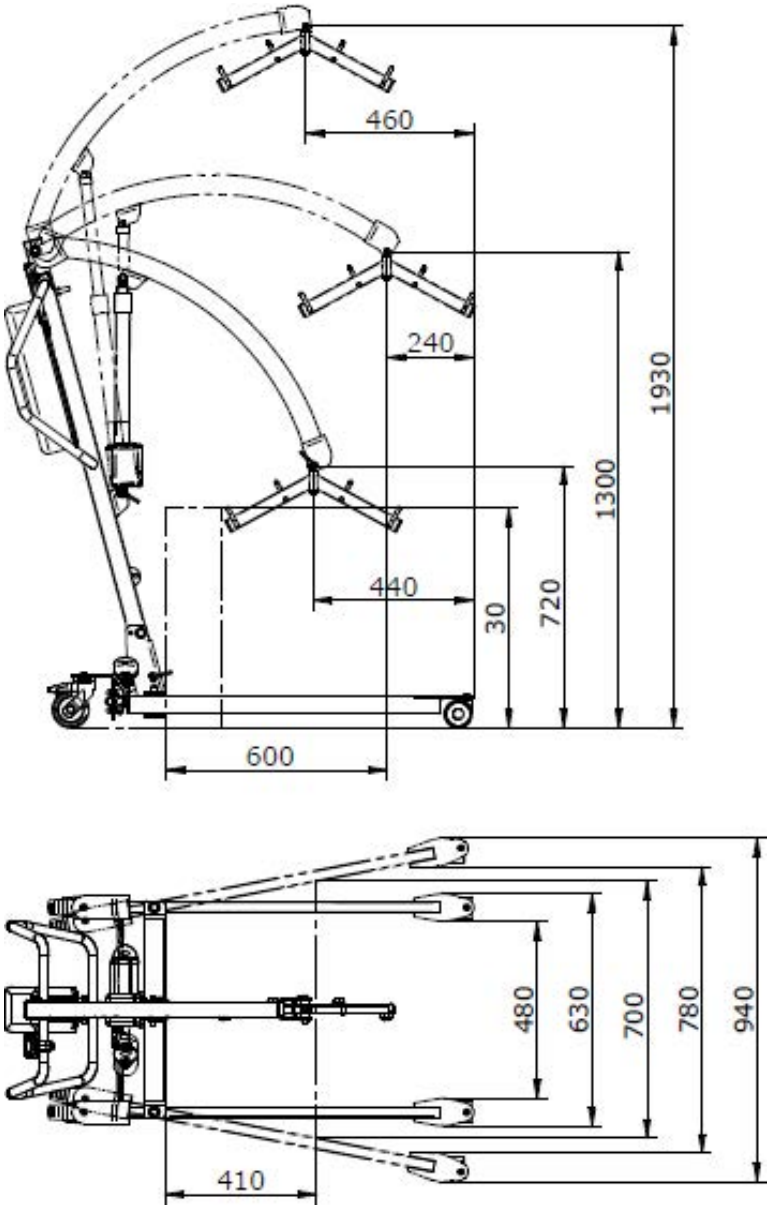


Figure 1c – Additional dimensions of the Elevand FoldSmart

3. CONSTRUCTION AND OPERATION OF ELEVAND FOLDSMART

3.1. Construction components

The Elevand FoldSmart is constructed from welded, powder-coated steel sections and consists of the following components:

Figure 2 - Elevand FoldSmart construction components

1 **Remote control**
enables control of the Patient lifting

2 **Lifting arm**
Allows for raising and lowering the sling.

3 **Main actuator**
electric actuator for raising the lifting arm

4 **Hanger bar**
For sling mounting

5 **Spreading legs of the base**
Allows positioning under chairs, wheelchairs, etc.

6 **Foot lever to spreading of the device's legs of the base**
Foot levers allow for spreading the legs of the base.

7 **Push bar**
A handle used by the operator to control the device.

8 **Control box + battery**
Manages the operation of the actuator.

3.2. Accessories and additional equipment

CAUTION!

To use the device, it is necessary to choose a sling according to ISO 10535:2012.

Choose the appropriate sling (available in the online store) to use the device.

3.3. Device set

Elevand FoldSmart	1 pc.
User Manual	1 pc.
Charging cable	1 pc.
Accessories and additional equipment	as per order

3.4. Transport

The device is transported in a cardboard box on a pallet. Up to three cartons with devices on one pallet are allowed, and the pallet is secured by wrapping it with stretch tape and straps according to the packing instructions. Stacking pallets with devices is not permitted. The device is protected by polyurethane profiles, bubble wrap, and stretch wrap. The carton is reinforced with a secondary carton, providing space for the battery and charger.

When moving the elevator indoors, prevent its outer edges from being exposed to impacts and abrasions.

3.5. Storage

The device should be stored in a cool, dry room. The room's climatic conditions should be within the following ranges:

- ambient temperature: 10 ÷ 40ºC (recommended 20 ºC or less),
- air humidity: 30 ÷ 75%,
- air pressure: 700 ÷ 1060 hPa.

3.6. Folding the device

CAUTION!

When folding the unit, press the brakes!

The lift can be folded for easy storage. To assemble the device, follow these steps

- Remove the upper pin of the actuator (Fig. 3).

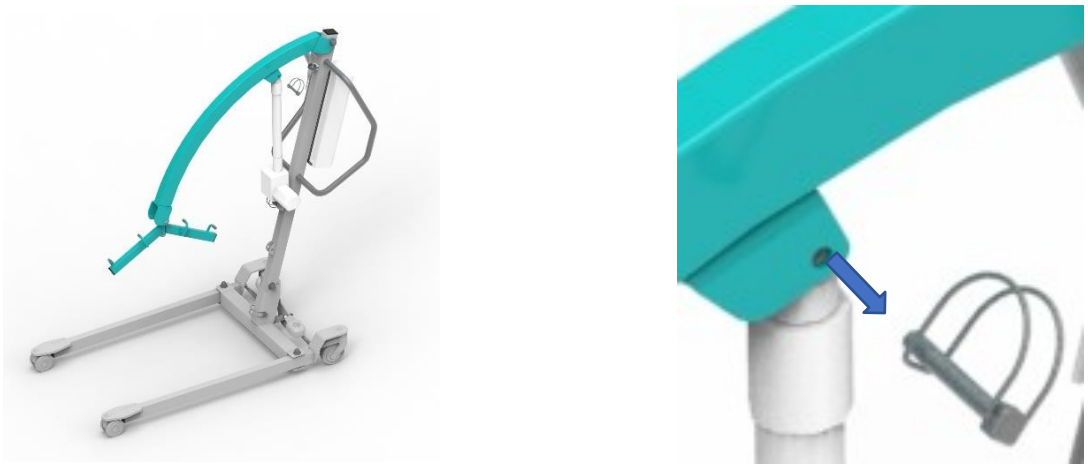


Figure 3 – Pinning out the pin

- While keeping the elevator arm up, secure the actuator with a Velcro strap and turn the sling across the device (Fig. 4).

Figure 4 – Fixing the actuator

- Connect the axis of rotation of the sling to the frame with a pin (Fig. 5).

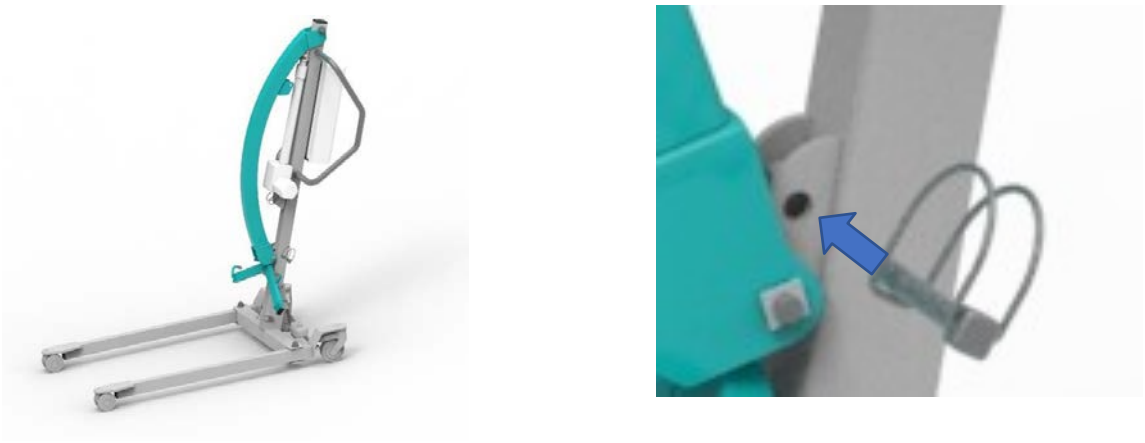


Figure 5 – Joining the sling axis

- Remove the vertical lock pin (Fig. 6);

Figure 6 – Pinning out the pin

- Tilt the top of the device forward until the pin can be inserted and locked (Fig. 7).

Figure 7 – Locking the pin

3.7. Locking pins

The Elevand FoldSmart is equipped with universal locking pins that allow quick and safe installation and removal of the device without needing tools. This feature is important for transporting or servicing the device.

To unlock the pin, pull the safety catch and lift (Fig. 8a). To lock the pin, pull the safety catch and place it over it (Fig. 8b).

a)

b)

Figure 8 – Unlocking and locking the pin

4. GENERAL WARNINGS AND SAFETY MEANS

CAUTION!

Any modification of the device without the written authorization of the Producer is prohibited.

CAUTION!

The Producer reserves the right to make changes to the design that do not violate the basic requirements of functionality and security.

While using the Elevand FoldSmart, the following points must be adhered to:

1. The device should only be used for its intended purpose.
2. Keep a safe distance from the lifting mechanisms during operation, as moving parts pose a crushing risk.
3. The lift should only be operated by medical personnel who have been properly instructed and have the appropriate expertise.
4. Before using the device, read the entire instruction manual to avoid damage from incorrect operation and to understand all necessary instructions and important information.
5. Ensure the lift is in good condition before each use.
6. Repairs should be performed by authorised service personnel.
7. Before using the lift, assess whether the patient can safely use the device (e.g., consider the risk of swooning).
8. If the maximum load capacities of the lift and sling differ, always adhere to the lower maximum load.
9. Ensure no moisture enters the electrical system. IPX4 protection is only valid when the battery is connected (see section 6.7).
10. Charge the battery in a well-ventilated area.
11. Do not leave children unattended near the device. If necessary, remove the battery. The lift is not a toy.
12. Do not leave a patient using the device unattended, as an unconscious patient may fall out.
13. If you hear unusual noises, stop using the device, remove the battery, and contact an authorised dealer.

5. PREPARATION FOR USE

CAUTION!

Do not stand on the device's base legs when using the device. Injuries could occur during their movement. Additionally, maintain adequate distances to accommodate the device's leg deflection system..

CAUTION!

The arm (hanger) assembly should only be raised by the actuator. Manually lifting the arm assembly may damage the actuator. Maintain proper distance when using the device's leg spread system.

CAUTION!

Do not use the lift in an environment with other devices that emit radio frequency energy. The lift control system, like any electronic device, generates, uses, and can emit radio frequency energy. If not used according to the instructions, it may interfere with nearby equipment. The manufacturer does not guarantee that interference will not occur in a particular location. To check for interference, change the lift's position or disconnect the battery. You can try to correct the interference by changing the usage area, increasing the distance from the affected equipment, or consulting service.

CAUTION!

The device can be used in wet rooms, such as bathrooms, but it must not be used in the shower. Ensure the environmental conditions are within the following limits:

- Temperature: 10 to 40ºC
- Air humidity: 30 to 75%
- Air pressure: 700 to 1060 hPa
-

CAUTION!

Avoid exposing the lift to strong sunlight.

The operation area should provide ample space on all sides of the lifts to ensure unobstructed operation. Please refer to Figure 9 for the turning diameter.

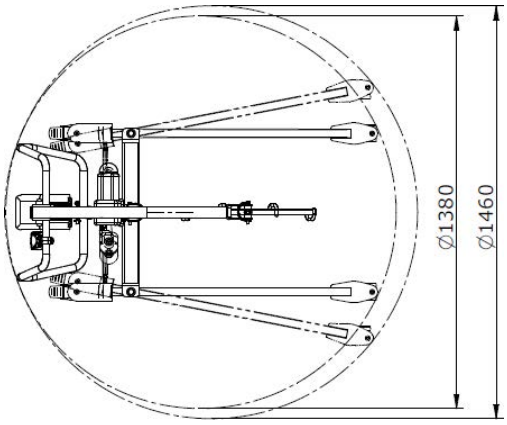


Figure 9 – The turning diameter of the device

Upon unpacking the Elevand FoldSmart, fold the device into the WORK position. To unfold the device, follow these steps:

- Remove the locking pin while holding the upper part of the device (Fig. 10).

Figure 10 – Removing locking pin

- Lift the upper part of the device and secure it with a pin (Fig. 11).

Figure 11 – Lifting the top frame

- Remove the locking pin securing the elevator arm (Fig. 12);

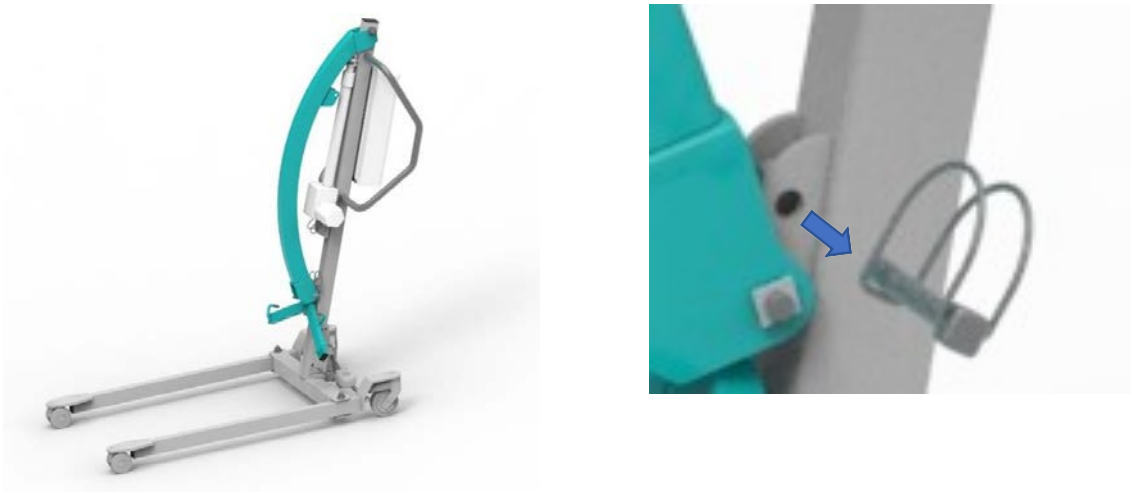


Figure 12 – Unlocking the locking pin from the elevator arm

- Lift the elevator arm and detach the Velcro tape from the actuator (Fig. 13);

Figure 13 – Lifting arm attachment

- Tilt the actuator to its fixed position and lock it with a pin (Fig. 14).

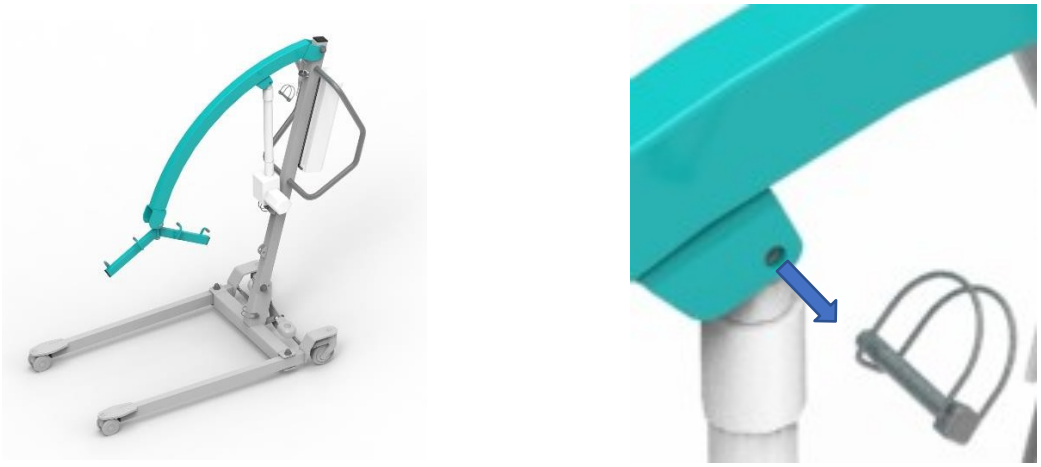


Figure 14 – Lifting arm attachment

Once these steps are completed, the Elevand FoldSmart is ready for use.

6. PREPARING THE UNIT FOR USE

6.1. Patient Lifting and transport

To assist a person who requires lifting, follow the steps below:

- If the patient is lying down, gently turn them onto their side with their back towards the caregiver.
- Fold the sling in half and place the lower edge of the back panel under the patient's coccyx, ensuring the upper edge reaches the shoulders.
- Turn the patient onto their side and pull the folded half of the sling through.
- Turn the patient onto their back, ensuring their entire backrest is on the sling.
- Confirm the back loops are positioned on the upper back, and the thigh loops are on the patient's thighs.
- Raise the bed's headboard to a seated position for the patient.
- Position the lift so the hanger bar is at eye level but not too close to the patient's face.
- Before attaching the sling to the hanger bar, ensure the loops at the arms and legs are the same height.
- Attach the shoulder loops to the outer hooks of the hanger bar.
- Attach the thigh loops.
- Raise the lifting arm until the sling loops are taut. Verify that the sling is correctly positioned and that the patient is comfortable.
- Once confirmed, proceed to lift the patient.
- Upon reaching the desired height, engage the stop levers (if necessary, spread the base legs before lifting).
- Press and hold the appropriate button to lower the patient until seated and the sling loops are loose.
- Unfasten all loops securely.
- Release the stop levers.
- Move the device away.

6.2. Base leg spreading.

CAUTION!

Only use the lever with the brake not applied.

Use the foot lever (item 6 in Fig. 1) to spread the device's legs. Pressing the right part of the lever expands the legs. To narrow the legs, press on the left side of the lever.

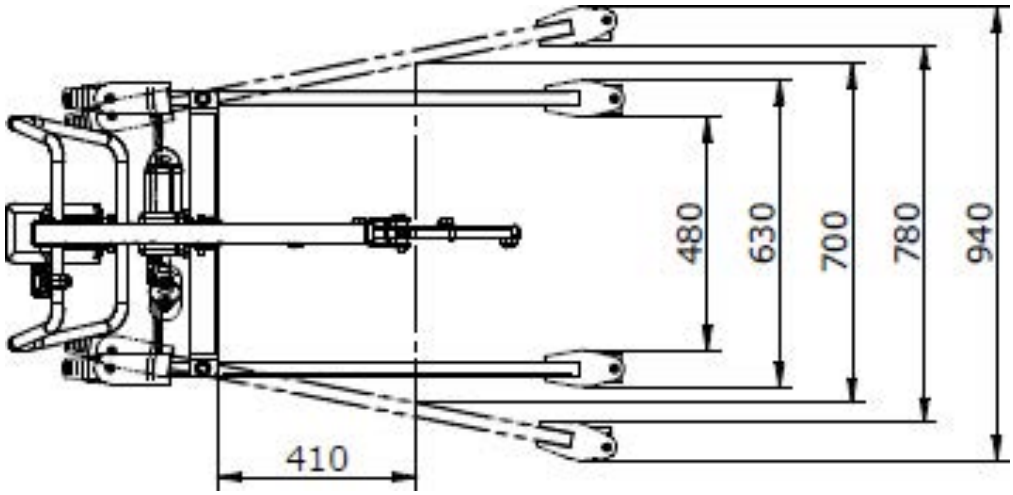


Figure 15 – Spreading range of the device's legs of the base

6.3. Using the stop lever

CAUTION!

Always use both brakes.

The stop lever (Fig. 16) is a crucial component of the device. Located on the rear casters, it prevents movement while the lift operates. To immobilise the lift, press the locking lever with your foot. To release the brakes, lift the lever.

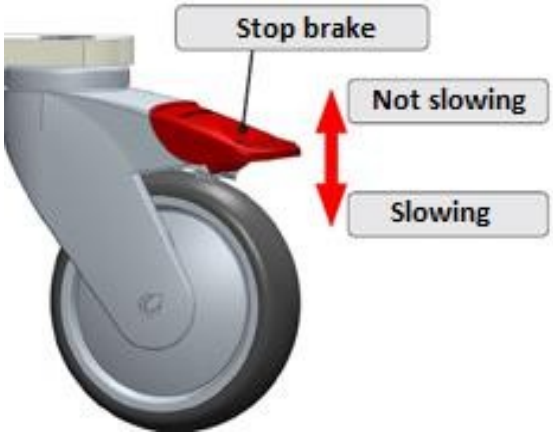


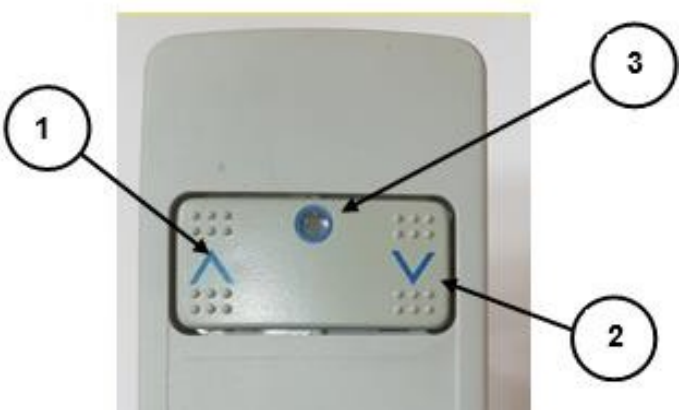
Figure 16 – Stop lever

6.4. Hand control

UWAGA

If lifting system components are not working, contact Service to repair/eliminate the fault.

The Elevand FoldSmart has a remote control (Fig. 17) for lifting and lowering the patient. An LED between the buttons indicates when the lift actuator is operational and displays the battery charge status. The LED changes from green to red if the battery charge falls below the minimum level.



1 – lifting the patient

2 – lowering the patient

3 – actuator operation LED

Figure 17 – Remote control

6.5. Emergency switch

In emergencies, press the emergency stop button (Fig. 18) immediately. To release the button lock, turn the button counterclockwise.

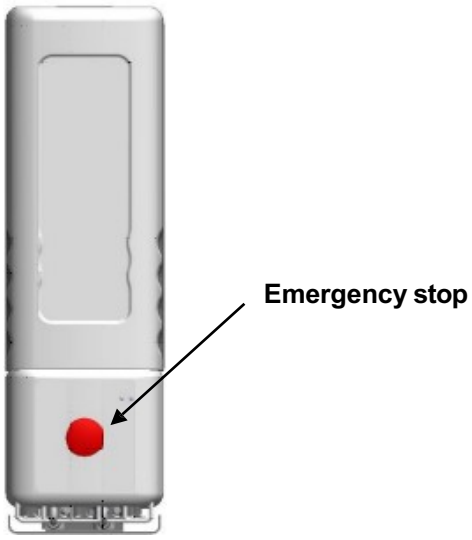


Figure 18 – Emergency stop

6.6. Patient emergency lower

If the remote control's lifting or lowering buttons do not respond, you can use manual emergency lowering or lifting by lifting the lever and rotating the actuator piston (Fig. 19).

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Figure 19 – Main actuator

6.7. Installation and removing the battery

To install the battery, follow these steps.

- Ensure the device is not used for at least one hour before changing the battery.
- Align the bottom of the battery with the top of the controller (Fig. 20a).
- Push the battery's top forward until it clicks into place, securing it to the rail (Fig. 20b).
- Gently push the top of the battery to ensure it is securely attached.

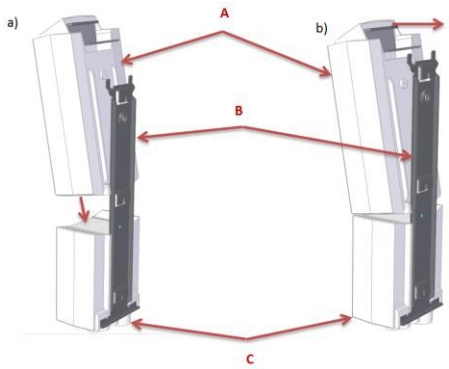

Figure 20 – Battery mounting (A – battery, B – mounting rail, C – control box)

To remove the battery, follow these steps:

- Place the lift in the starting position.
- Press the emergency stop button (refer to point 6.5).
- Hold handle A of the battery and press the release lever (Fig. 21a).
- Fold back and pull out the battery (Fig. 21b, 21c).

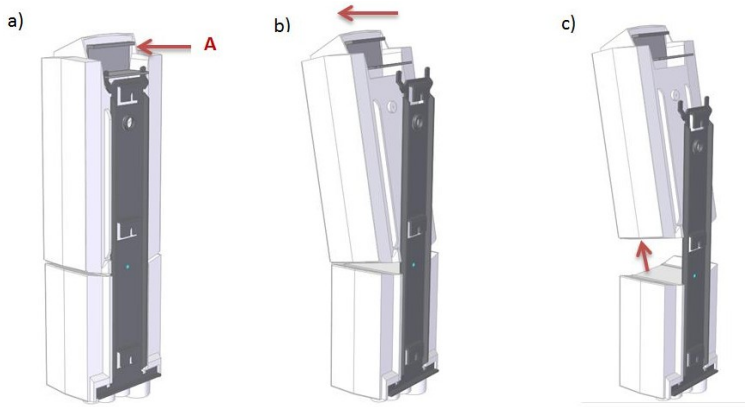

Figure 21 – Battery removing (A – release lever)

6.8. Battery level status and charging

CAUTION !

The device cannot be used while charging.

CAUTION !

During charging, the lifting function is blocked.

CAUTION !

• After fully charging, do not use the device for 1 hour, this will extend the life of the battery!

• The battery should be charged continuously for at least 24 hours in the following cases:

- ✓ Before using the lift for the first time,
- ✓ Before storage period (up to 3 months) without power supply connected,
- ✓ As the first activity after the storage period.

When a beep indicates a low battery, promptly connect it for charging by plugging the charger into a power outlet after connecting the cable to the charger (Fig. 22a) and the control box (Fig. 22b).

a) **b)**

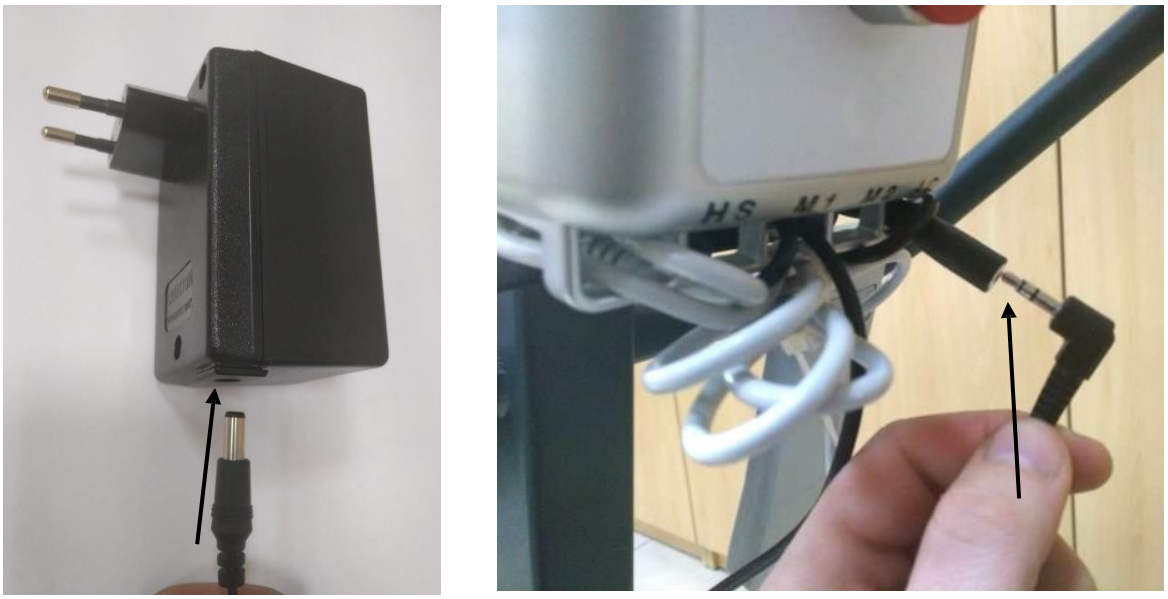

Figure 22 – Connecting the charging cable

When the charging battery is connected, the control box's information LEDs (yellow and green) illuminate (Fig. 23).

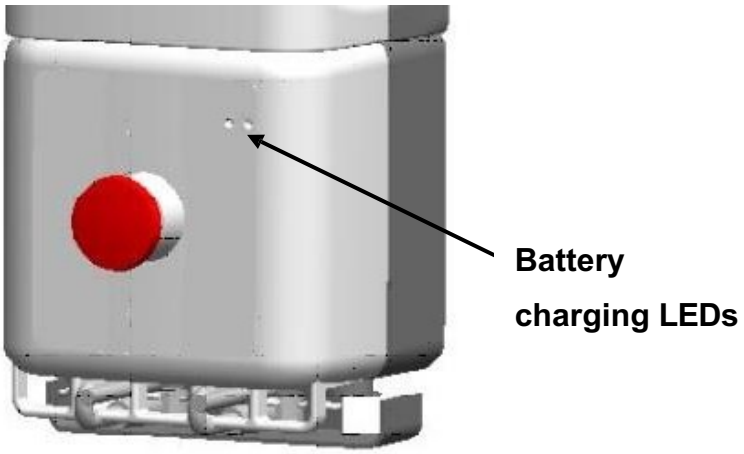

Figure 23 – LEDs - location on the control box

The green LED confirms the correct connection of the battery charger to the control unit. Meanwhile, the yellow LED indicates the ongoing charging process and remains lit when the main charger is connected. As the battery approaches full capacity, the yellow LED may briefly flash, which is normal and does not signify a lift malfunction. Once fully charged, the yellow LED will turn off, indicating the battery is fully charged.

7. CLEANING AND DISINFECTION

CAUTION!

Each time the patient changes, the Elevand FoldSmart lift must be cleaned and disinfected before being used again.

CAUTION!

Before cleaning, make sure that:

- All plugs are properly connected.
- No electrical components indicate external damage. Failure to do so may result in the ingress of water or cleaning agents and cause interference with the device or damage to electrical components.

Electrical parts must not be washed with a water jet or pressure washer, etc. They can only be cleaned with a damp cloth.
If there is a suspicion that water or liquid agents flew into the electrical parts, stop the lift and immediately report the event to the service centre.
If the above rules are not observed, serious damage to the device and further unforeseen consequences may occur.

Cleaning is essential for effective chemical disinfection. Routine cleaning suffices when the lift is used consistently by the same patient. Disinfection becomes necessary only when the material is visibly contaminated or exposed to potentially infectious substances (such as blood, stool, and pus) or when caring for infected patients, as a doctor advises.

7.1. Cleaning Patient Contact Surfaces

1. Clean the handle surfaces:
   - Remove all straps and detach any non-lift components
   - Clean the surfaces using mild and environmentally friendly cleaning agents (e.g., Icodin Foam). This also applies to cleaning the manual switch.
   - Follow the manufacturer's instructions for cleaning the ING strap.
2. Avoid wetting the patient’s lifting strap.
3. Use Icodin Foam to disinfect accessible areas of handles and construction components.
4. Disinfect casters only if they come into visible contact with infected or potentially infected material.
5. Do not use:
   - Pastes, waxes, or sprays.
   - Strong detergents, solvents, or cleaning agents containing solvents, alcohol, or leather cleaners.

Using such agents may lead to stiffness, materials cracking, or surface gloss changes, which are not covered under warranty.

8. MAINTENANCE

CAUTION!

If the device is not used for a longer period, it is recommended that all electrical and mechanical parts be checked once a month by performing a test lift without the patient. In addition, the charger cables after each mechanical load or after changing the location of the lift should be manually checked for possible damage.

8.1. Maintenance of support structure mechanism

1. Clean metal parts of the structure using a soft, damp cloth, ensuring surfaces are dried thoroughly afterwards. Avoid using cleaning products containing alcohol.
2. Lubricate all movable components every six months or when loud noises occur during operation. These components include casters, actuators, bearing sleeves, and joints of the base legs and lifting arm. Recommended lubricants include commercially available penetrating and lubricating preparations (e.g., Wurth HHS 2000). Any excess lubricant should be promptly removed with a dry cloth.
3. Periodically inspect threaded connections every six months. Address any detected looseness promptly. Report unresolved issues of unavoidable looseness to the manufacturer's Service and discontinue device use until resolved. Notify the manufacturer's service department of any irremovable backlash on connections and cease device operation until the issue is resolved. Periodic inspection

The lift requires inspection annually as per EN 10535:2012 recommendations or after 8000 cycles, whichever comes first (refer to section 6.3), and after any failure or repair. The inspection must be conducted by authorised service personnel and should include at least the following:

- Visual inspection focuses on the structure of the load-supporting device, the primary actuator and its mounting, the brakes, and the control devices.
- Verify the proper functioning of all device control functions.
- Maintenance of the support structure mechanism (refer to section 8.1).
- Test the load capacity with the maximum load for one lifting cycle.

Maintain a detailed repair register documenting all repair actions, defects, damages, remarks, and safety-related observations, along with the inspection date. Ensure slings are inspected according to the manufacturer's recommendations at least every six months.

8.3.Manufacturer's liability

CAUTION!

The expected service life of the device is 7 years. After 7 years from the date of manufacture of the device (and its equipment) manufacturer is no longer liable for defects of the device (and its accessories) and the resulting consequences.

After seven years from the date of production of the device and its accessories, the manufacturer bears no responsibility for defects in the device and its accessories, nor for any resulting consequences. The manufacturer also disclaims responsibility for any consequences arising from incorrect installation, incorrect diagnosis, improper use of the device and its accessories, misinterpretation of instructions, or repairs performed by unauthorised persons.

9. TROUBLESHOOTING

Symptoms of malfunction	Description of the procedure
The unit does not respond to the hand control function activated	1. Check if the emergency stop is activated 2. Check the status of the battery 3. Check if the hand control cable is connected 4. Check if the battery is properly connected 5. Check if the charging cable is connected 6. Check the connection of the other wires 7. Check if the Service led flashes 8. Check if the device reacts to the activation of the raise/lower function on the controller 9. Contact service
The device does not react to the controller function activated	1. Check if the emergency stop is activated 2. Check the status of the battery 3. Check if the battery is properly connected 4. Check if the charging cable is connected 5. Check the connection of the other wires 6. Check if the Service led flashes 7. Contact service
The device is not charging	1. Check if the emergency stop is activated 2. Check the status of the battery 3. Check if the battery is properly connected 4. Check if the charging cable is connected 5. Check if the Service led flashes 6. Contact service
Interruption of the device during ing	1. Check if the overload indicator flashes 2. Check the status of the battery 3. Check if the Service led flashes 4. Check if the device reacts to the activation of the raise/lower function on the controller 5. Lower the lift manually 6. Contact service
The device produces abnormal noises (cracking, cross-over, etc.).	1. Contact service
The device cannot be moved	1. Check if the brakes on the rear when are applied 2. Contact service

If the fault symptoms persist, cease using the lift immediately and contact the dealer for further instructions.

10. RECYCLING INFORMATION

Figure 24 – Elevand FoldSmart recycling

11. WARRANTY CARD

1. The seller (authorised representative, distributor) provides a 24-month warranty from the equipment purchase date, as evidenced by the proof of purchase.
2. The seller (authorised representative, distributor) assumes responsibility for any defects, whether in quality or quantity, detected immediately after unpacking the product from its original shipment packaging, provided they are reported in writing within two working days of delivery.
3. Warranty service will only be performed by the seller's authorised service team (authorised representative, distributor) or other manufacturer-authorised technicians.
4. If the repair takes more than three days, the warranty period will be extended by a duration equal to the device's total downtime.
5. If a faulty subassembly requires repair three times, the manufacturer must replace it with a new one.
6. To maintain warranty coverage, the user must ensure all maintenance services described in the manual.
7. Failure to observe installation and operation instructions releases the manufacturer from responsibility for user or patient safety during device use.
8. The warranty excludes parts and material faults resulting from natural wear and tear, distinct from material or workmanship defects, and issues arising from inadequate maintenance (e.g., valves, bearings, guides, fans, etc.).
9. The seller (authorised representative, distributor) is not liable for consequential or incidental losses, including loss of profits or costs incurred due to failure to follow installation and user manual instructions.
10. The seller (authorised representative, distributor) assumes no liability under this warranty for any consequential or incidental losses, including loss of profits or costs incurred due to equipment failure.
11. Faults occurring within the warranty period but not reported to authorised service are not covered.
12. Costs resulting from an unjustified claim are the responsibility of the user.
13. The warranty does not cover equipment:

- Damaged by fire, lightning, or force majeure
- With removed or damaged nameplates, serial numbers, or factory seals
- Damaged due to use outside the defined operation manual specifications
- Repaired or modified by unauthorised personnel
- Mechanically damaged due to improper handling or transportation

14. No new documentation will be issued if warranty-covered equipment is resold.
15. The warrantor will not provide a duplicate of the Warranty Card.
16. This warranty does not waive, restrict, or suspend your statutory rights as a consumer.

Elevand FoldSmart										Date, signature and stamp of the Guarantor
SN:						-	2	0			

Repair registry	User comments