



## MOBILE SURGICAL CHAIR

SC 5010 HS / ES



## INSTRUCTIONS FOR USE

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#### CHANGES TO THE INSTRUCTIONS FOR USE

We reserve the right to make changes in the interests of further technical development; the instructions for use are not subject to revisions.

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We hereby declare that the device listed herein complies with medical device Regulation (EU) 2017/745 and Machinery Regulation (EU) 2023/1230.

Users must observe statutory national provisions on accident prevention, Directive 89/391/EEC and Directive 2009/104/EC.



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## 1. GENERAL INFORMATION

A thorough understanding of this IFU is essential for use of the SC 5010 HS / ES surgical chair. Please familiarise yourself fully with its contents, paying special attention to all guidance and instructions on how to use the device safely. Keep these instructions for use near the product so that they are accessible to all users.




### 1.1. EXCLUSION OF LIABILITY

Any improper or unauthorised use or maintenance of the product excludes any liability on the part of the manufacturer.



### 1.2. EXPLANATION OF SYMBOLS USED

#### 1.2.1. SAFETY PRECAUTIONS

Please take particular care to read and comply with all of the safety precautions and information in the instructions for use.

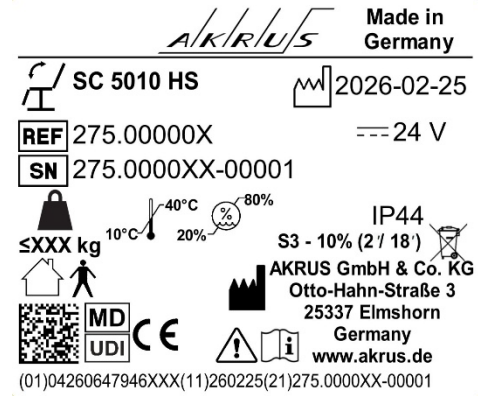
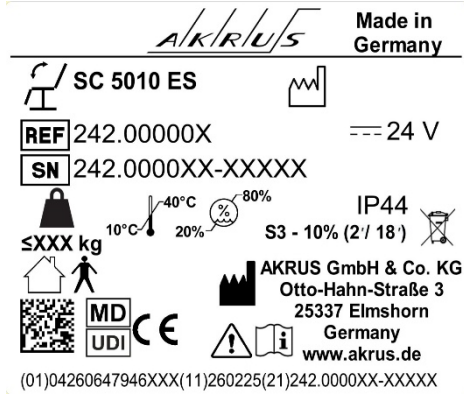
	<b>CAUTION</b>
	<b>WARNING</b> Indicates a potentially hazardous situation. Unless avoided, it may result in minor or moderate injury. May also be used as a warning against unsafe practices or possible damage to the equipment.
	<b>HAZARD</b> Indicates an imminent hazardous situation. Unless avoided, it will result in death or serious injury.

#### 1.2.2. OTHER INFORMATION

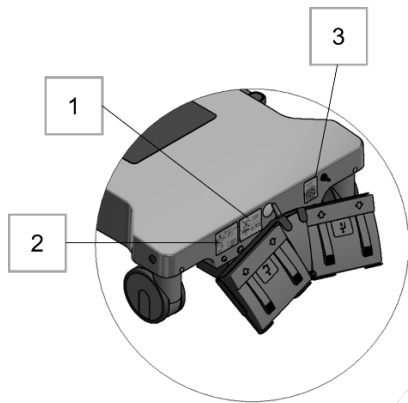
	<b>IMPORTANT</b> Indicates possible damage to the product.
	Indicates a required action.

### 1.3. SYMBOLS USED

The following symbols may be used on products, signs and packaging:















### Nameplates











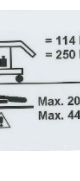





1. Name/rating plates
2. Weight label
3. Service label
4. "Do not sit" prohibition sign
5. "Do not load" prohibition sign



SYMBOL	MEANING
	Manufacturer
	Catalogue number
 <small>(01)04260647946000(11)210301 (21)279.012100-000000</small>	Device identification (data matrix and plain text)
	Indicates the maximum permitted weight the product can support.
	Indicates that the product can only be used indoors

SYMBOL	MEANING
	Date of manufacture (YYYY-MM-DD)
	Serial number
	Label identifying the device as a medical device
	General warning sign
	Applied part type B, in accordance with IEC 60601-1

SYMBOL	MEANING
	Indicates that the product can only be operated by direct current from the battery supplied
	Warning: crushing hazard
	CE marking – symbol indicates compliance with Machinery Regulation (EU) 2023/1230 and the medical device Regulation (EU) 2017/745
	Indicates permissible minimum and maximum relative humidity levels during use
	Protect from rain
	Indicates minimum and maximum temperatures to which the product can be safely exposed
	Indicates permissible minimum and maximum atmospheric pressure during transport and storage
	This way up
	Do not open with a sharp blade
	Do not sit
	Service label
	Ingress Protection classification of housing: IPX4 → protected against splashing of water; IP4X → protected against touching and solid particles with a diameter greater or equal 1

SYMBOL	MEANING
	Disposal in the EU: do not dispose of with household waste
	Consult instructions for use.
	Specifying the nominal operating time S3 10% means that in any 20-minutes period, the lifting column can only be operated for 2 minutes and must then cool down for the remaining 18 minutes.
	Indicates minimum and maximum temperatures to which the product can be safely exposed
	Protect from sunlight
	Indicates permissible minimum and maximum relative humidity levels during transport and storage
	Fragile: handle with care
	Do not stack
	Electric shock
	Do not load
	Weight label
	Swiss authorized representative

SYMBOL	MEANING
	mm
	UN 3480 label to indicate only lithium-ion battery in package.
	UN 3481 label to indicate lithium-ion battery packed with medical device.


SYMBOL	MEANING
	Label on configuration parts to indicate the legal manufacturer
	Hazard label 9 to indicate more than 100 Wh of battery capacity packed within the package


## 2. REPORTING INCIDENTS


Any complaints about the product's safety, efficacy or performance must be reported to AKRUS GmbH & Co. KG ([service@akrus.com](mailto:service@akrus.com)) or to their local distributor. If necessary, the local competent authority must also be informed.


## 3. REQUIREMENTS FOR SAFE OPERATION


Please familiarise yourself with contents of this IFU before putting into service the device for the first time. Users require no training to operate the product.


	<b>WARNING</b>
	<p><b>Risk of death and injury due to defective product.</b></p> <ul style="list-style-type: none"> <li>Please check that the product is working correctly before every use.</li> <li>A defective product must not be used.</li> </ul>


	<b>WARNING</b>
	<p><b>Risk of injury due to use in an unsuitable environment.</b></p> <ul style="list-style-type: none"> <li>The product must not be used in potentially explosive atmospheres.</li> <li>The product must not be used or stored in damp rooms, and under no circumstances in rooms with dripping, splashing or spraying water.</li> <li>The product must not be used with volatile anaesthetics or volatile anaesthetics with oxidants.</li> <li>This product must only be operated in compliance with the specifications for intended use and the environmental conditions described in Section 18.</li> </ul>


	<b>WARNING</b>
	<p><b>Risk of injury due to unauthorised modifications to the product.</b></p> <ul style="list-style-type: none"> <li>▪ Unauthorised modification of the product is prohibited.</li> <li>▪ Modifications authorised by the manufacturer may only be carried out by personnel authorised by the manufacturer.</li> <li>▪ Servicing and repairs to this product may only be carried out by personnel authorised by the manufacturer.</li> <li>▪ Please also refer to the national qualification guidelines which apply in your country.</li> </ul>

	<b>WARNING</b>
	<p><b>Risk of death and injury due to improper patient positioning</b></p> <ul style="list-style-type: none"> <li>▪ Only place patients in the positions intended to be used with the product and do not leave patients unattended.</li> <li>▪ Fasten the patient with a suitable accessory if necessary.</li> <li>▪ Never change the settings of the product during an active surgical procedure.</li> <li>▪ Comply with the weight restrictions specified by the manufacturer. Never exceed the specified weight limit of the chair.</li> </ul>

	<b>CAUTION</b>
	<p><b>The surgical chair can move away on its own</b></p> <ul style="list-style-type: none"> <li>▪ Always lock the foot brake except during transportation.</li> <li>▪ Always check the position of the foot brake before moving the patient.</li> </ul>

	<b>CAUTION</b>
	<p><b>Risk of burns due to insufficient protective earth conduction using HF-surgical instruments, heart defibrillators and monitors of defibrillators combined with the surgical chair</b></p> <ul style="list-style-type: none"> <li>▪ Always connect the protective earth conductor before usage of HF-surgical instruments, heart defibrillators and monitors of defibrillators to prevent from burns, electric shock or explosions, which could harm the patient or user.</li> <li>▪ Always follow the instructions for use of the heart defibrillator and HF-surgical instruments in especially its safety information.</li> </ul>

	<b>CAUTION</b>
	<p><b>Risk of delay in case of an emergency</b></p> <ul style="list-style-type: none"> <li>▪ Always have a spare battery at hand in order to bring the surgical chair into an emergency position for CPR or Trendelenburg, meanwhile the primary battery pack fails or is discharged at the same time.</li> <li>▪ Always have another place for reclined positioning available in case no spare battery being available.</li> </ul>

	<b>IMPORTANT</b>
	<p><b>Damage to the equipment due to incorrect handling.</b></p> <ul style="list-style-type: none"> <li>▪ When cleaning, make sure that no water or liquid enters the electrical or electronic components.</li> <li>▪ The product must not be used as a holder for surgical equipment (e.g. surgical instruments, clothing, IV bags or other items).</li> <li>▪ Do not place any sharp or pointed objects on the product upholstery.</li> <li>▪ Do not store or transport any objects or devices on the product.</li> </ul>

#### 4. PRODUCT SERVICE LIFE AND WARRANTY CONDITIONS

The expected lifetime of the product is **8 years**. Product lifetime and the manufacturer's warranty are subject to compliance with all conditions and regulations stated in these Instructions for use.

<b>i</b>	<b>IMPORTANT</b>
	<ul style="list-style-type: none"> <li>▪ In consideration of the potential associated risks, the medical device has been developed, produced and maintained with the assumption that the product will have a useful life of 8 years and be maintained at the prescribed intervals.</li> <li>▪ Modifications to the product, or failure to comply with the manufacturer's specifications may significantly reduce the product's expected lifetime or significantly increase the risks of using the product.</li> <li>▪ It is the responsibility of the operator (institution) to follow the manufacturer's instructions and to assess the risk/benefit ratio taking into account the product lifetime that has elapsed or maintenance and inspection intervals in accordance with the manufacturer's instructions.</li> </ul>

#### 5. CONTENTS AT DELIVERY

The delivery of the SC 5010 HS / ES includes the following items:

ITEM	NUMBER
SC 5010 HS / ES	1
Keypad	1
Charging station and power cable	1
Battery	1
Quality test report	1
Instructions for use (IFU)	1

#### 6. INTENDED USE

The SC 5010 HS / ES surgical chair is a medical device for use in human medicine. The surgical chair may only be operated by qualified personnel.

##### 6.1. INTENDED PURPOSE AND INDICATIONS

The mobile, electrically operated SC 5010 HS / ES surgical chair is designed for placement and positioning of patients in the required posture during diagnostic and therapeutic procedures as well as during surgical interventions on humans. The product enables optimal access to the patient's head in its various positions and is intended for use in the following medical fields:

- Ophthalmology
- ENT (ear, nose and throat)
- Oral and maxillofacial surgery
- Plastic, reconstructive and aesthetic surgery, primarily in the head area
- Dentistry
- Dermatology
- Nerve stimulation
- Blood donation

Due to its design, functionality and accessories, the surgical chair only allows the following positioning of patients:

- Supine position
- Sitting position
- Beach chair position
- Prone position
- Shock position: Zero position and Trendelenburg position.

The surgical chair is designed for patients weighing a maximum of 200 kg or 300 kg, depending on the variant. The headrest is designed to support a maximum weight of 20 kg.

The surgical chair is only intended for positioning patients immediately before, during and after a procedure/surgical intervention and for short-distance transportation for transfer purposes along with a safety rail or patient fixation band. Positioning may only be carried out by appropriately trained specialist personnel.

The product is suitable for use in the immediate controlled patient environment.

The essential performance of the product is given by no movement during first error situations.

## 6.2. CONTRAINDICATIONS AND ADVERSE EFFECTS

The surgical chair must **not** be used:


- for patients weighing > 200 kg or greater than 300 kg depending on its variant.
- for neurosurgical procedures or for medical fields and procedures not listed above
- to place patients in positions for which the surgical chair is not intended
- for prolonged patient transport
- with or in the same room as an X-ray machine or MRI machine
- with a third-party accessory that could affect the safety of patients


The product has **no** known adverse effects.

Any use other than the stated intended purpose is prohibited.

## 7. PUTTING INTO SERVICE


<b>i</b>	<b>IMPORTANT</b>
The product may only be opened by persons authorised by the manufacturer.	

	<p>The product is supplied in non-sterile condition.</p> <p>Before using the product for the first time, it must be prepared as described in Section 12.</p>
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	<p>The product and battery are delivered in separate packaging.</p> <p>Before using the device for the first time, the battery must be inserted as described in Section 10.4.</p>
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No further assembly or calibration is required to operate this medical device.

## 8. ELECTRICAL CONNECTIONS

	<p><b>CAUTION</b></p> <p><b>Risk of temporary inconvenience due to electric shock.</b></p> <ul style="list-style-type: none"> <li>▪ The medical device is only free from electric current when the battery is disconnected.</li> <li>▪ The exact position of the battery or the charging station is described in the relevant sections of this IFU (see Section 10.4).</li> <li>▪ Only the power cable supplied or specified by the manufacturer can be used to connect the charging station to mains electricity.</li> <li>▪ Only use the battery and charging station when they are in good condition.</li> </ul>
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## 9. ACCESSORIES

The SC 5010 HS / ES surgical chair is equipped with rails along the backrest and lying surface for attaching accessories such as infusion stands, anaesthesia screens, etc. To attach these accessories, check that the clamp is secure.

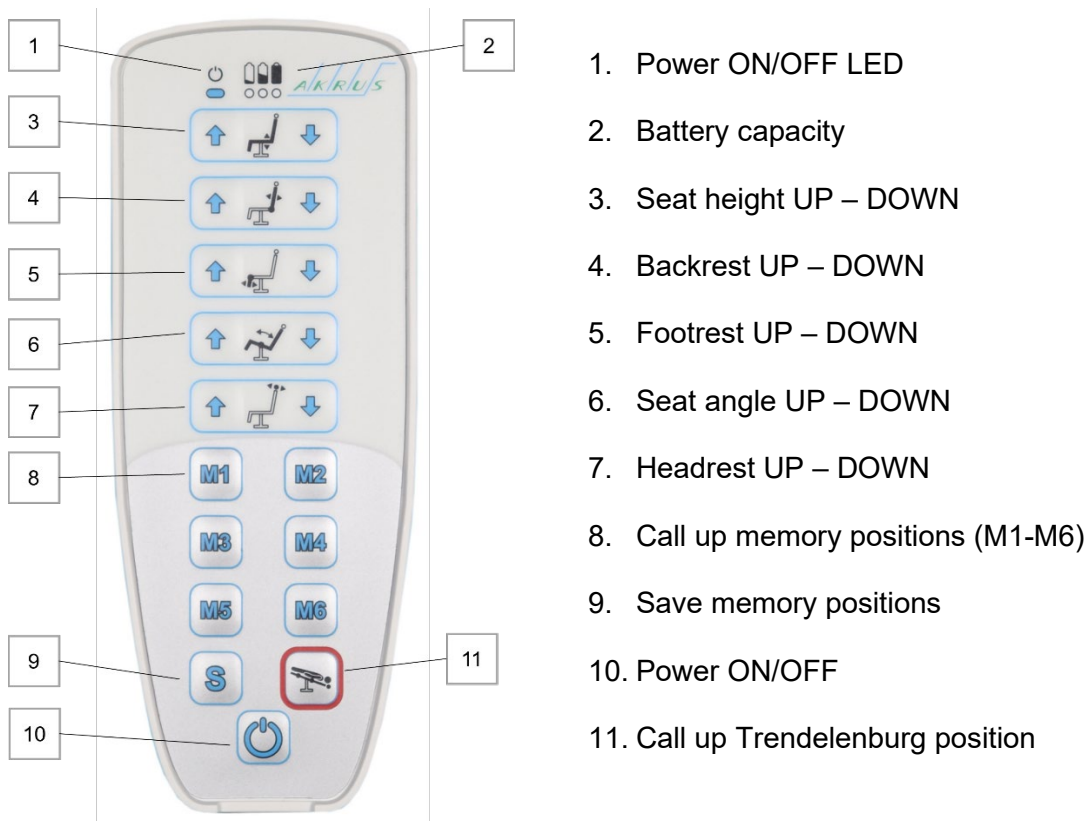
OPTIONAL COMPONENTS	NAME	AKRUS ITEM No.
	<p><b>Foot-controlled switch</b></p>	<p>275.012800</p>
	<p><b>Foot joystick</b></p>	<p>275.012900</p>

OPTIONAL COMPONENTS	NAME	AKRUS ITEM NO.
	<p><b>Max. 20 kg</b> <b>Ankylosing spondylitis extension</b></p>	<p>240.030670</p>
	<p><b>Multi-articulated armrest (max. 10 kg)</b> <i>Please ensure that the front edges of the armrests cannot come into contact with the rail of the seat when the backrest is upright</i></p>	<p>241.030250</p>
	<p><b>Example for “IV stands”</b></p>	<p>Various, matching clamping block needed</p>
	<p><b>Anaesthesia screen, rigid, stainless steel</b></p>	<p>240.030500</p>
	<p><b>Safety rail</b> <i>Please, use the safety rail for short-distance transportation for transfer purposes or if a sedation or narcosis is induced to the patient.</i></p>	<p>240.020200</p>

## 10. DEVICE DESCRIPTION AND OPERATING CONTROLS


### 10.1. KEYPAD CONTROLS


The keypad is connected to the control unit under the cover on the lower frame with a spiral cable. The keypad can be hung in any position using the hook on the back. Always ensure that the spiral cable cannot be crushed between or cut off by moving parts of the chair.



### 10.2. BATTERY


All electric motors of the SC 5010 HS / ES are powered by a rechargeable battery. The battery has a capacity of approx. 40 operations per charging cycle when used with a typical load profile.

	<b>CAUTION</b>
	<p><b>The battery must be charged regularly.</b></p> <ul style="list-style-type: none"> <li>▪ Keeping a spare, charged battery is recommended.</li> </ul>

	<b>IMPORTANT</b>
	<p>Please handle the battery with care and caution. Incorrect handling, as described below, can significantly damage or even destroy the battery:</p> <ul style="list-style-type: none"> <li>▪ Total discharge</li> <li>▪ Drops (even from low heights)</li> </ul>

- Short-circuiting the terminals

<b>i</b>	<b>IMPORTANT</b>
	<p>In the cases below, the battery may be faulty if the ON LED is lit and:</p> <ul style="list-style-type: none"> <li>▪ the CHARGE LED does not come on</li> <li>▪ the CHARGE LED flickers</li> <li>▪ the battery is empty soon after charging</li> <li>▪ the battery is not fully charged after even a long charging time (&gt; 4h).</li> </ul> <p>If any of the above occur, please replace the old battery with a new battery. Please contact your local AKRUS authorised distributor.</p>

	<p>The battery should be charged approximately every 3 days by the user or maintenance staff, or daily if used intensively (&gt; 30 uses/day). It can be charged overnight or at weekends: the battery cannot be damaged by over-charging, so does not need to be removed from the charging unit once fully charged.</p>
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### 10.3. BATTERY CHARGING STATION

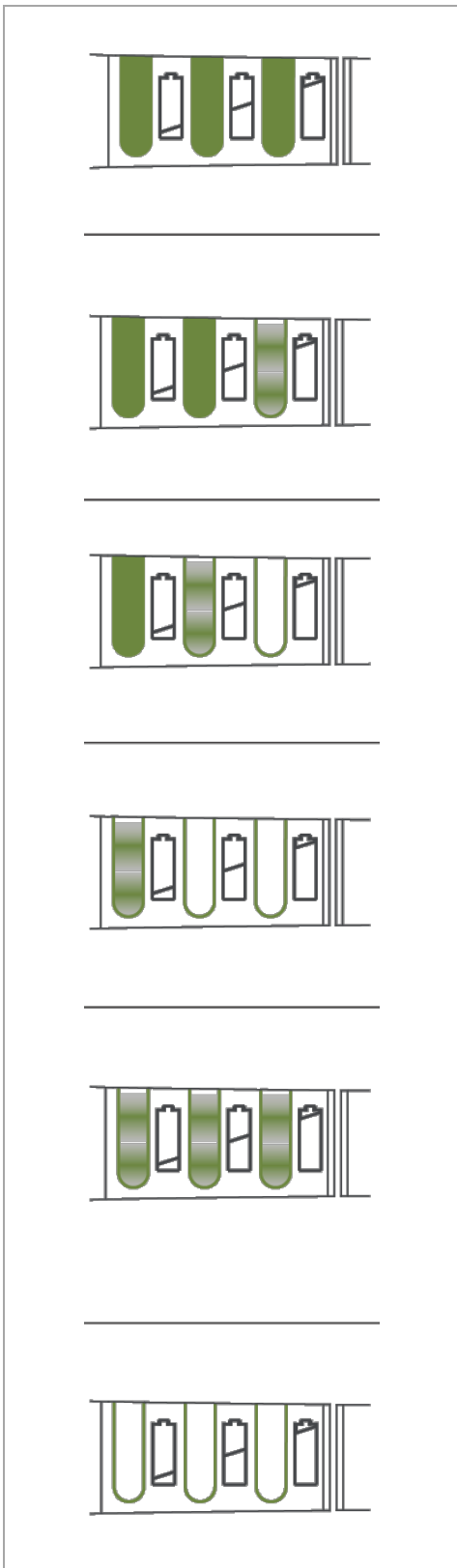


*Fig. 1 Charging station with power cable*

The charging station can detect the power supply level. It is suitable for voltages from 100 volts to 240 volts at 50 Hz to 60 Hz.



Charging can take up to 4 hours.



3 LEDs continuous green indicate the battery status 90-100% or charger ready, if no battery plugged in.

2 LEDs continuous green and one slowly blinking: 65-90% charged and charging in progress.

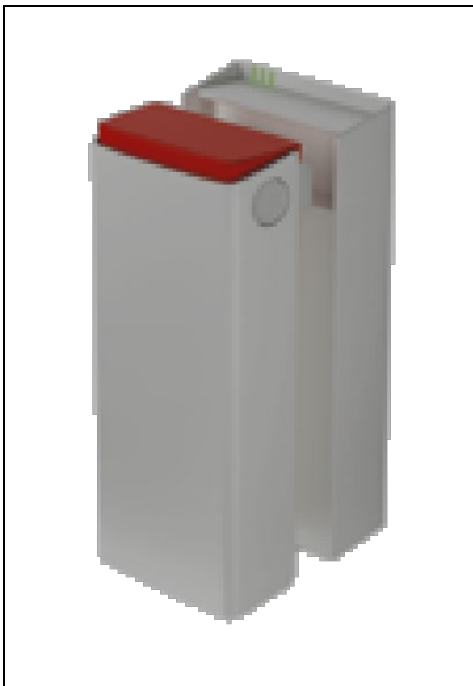
1 LED continuous green and one slowly blinking: 40-65% charged and charging in progress.

1 LED blinking slowly green: 0-40% charged and charging in progress.

3 LEDs blinking slowly in green: not charging, due to too high or low battery temperature or indistinct fault in battery, but electronic in battery is still working.

3 LEDs off: Charger has no electricity or the connection between the battery and charger is faulty.

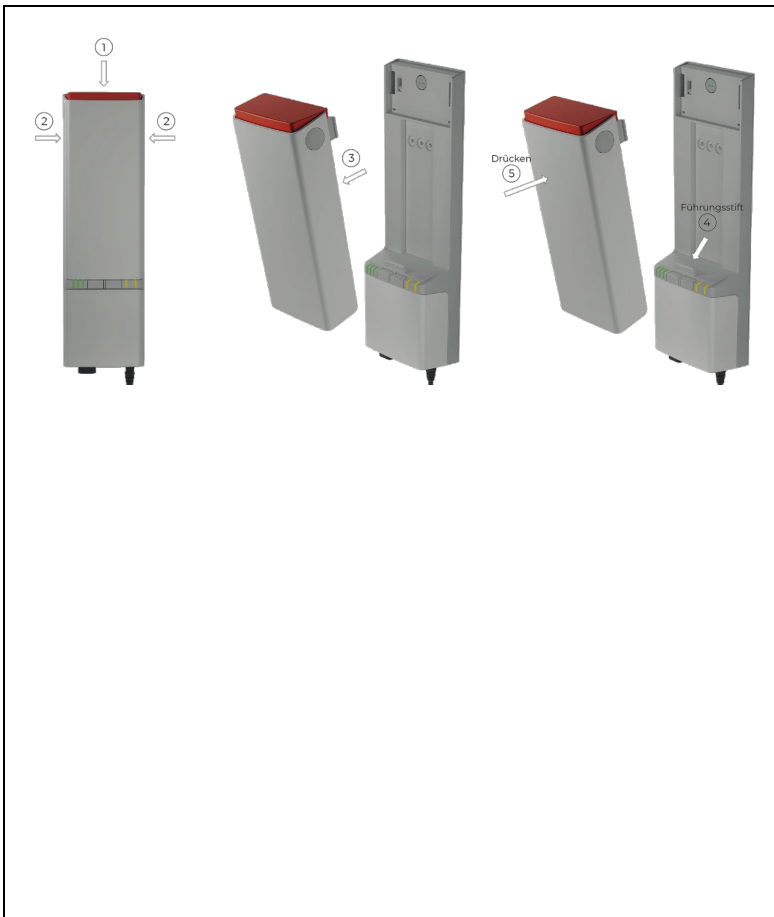
**Fig. 2** Indicator light Battery, Service and System Status



The charging station is wall-mounted with screws, see annex. It is important to mount the charging station vertically so that gravity holds the battery contacts securely in place on the charger's connectors and to ensure the ingress protection class IPX4. See annex for mounting instructions.

**Fig. 3** Vertical configuration of the charging station

#### 10.4. BATTERY HOLDER ON THE SC 5010 HS / ES SURGICAL CHAIR



Activating/deactivating the emergency stop:

The emergency stop switch is located on top of the battery in red.

Operation for activating the emergency stop:

1) Press the button on the top of the battery.

Deactivate the emergency stop:

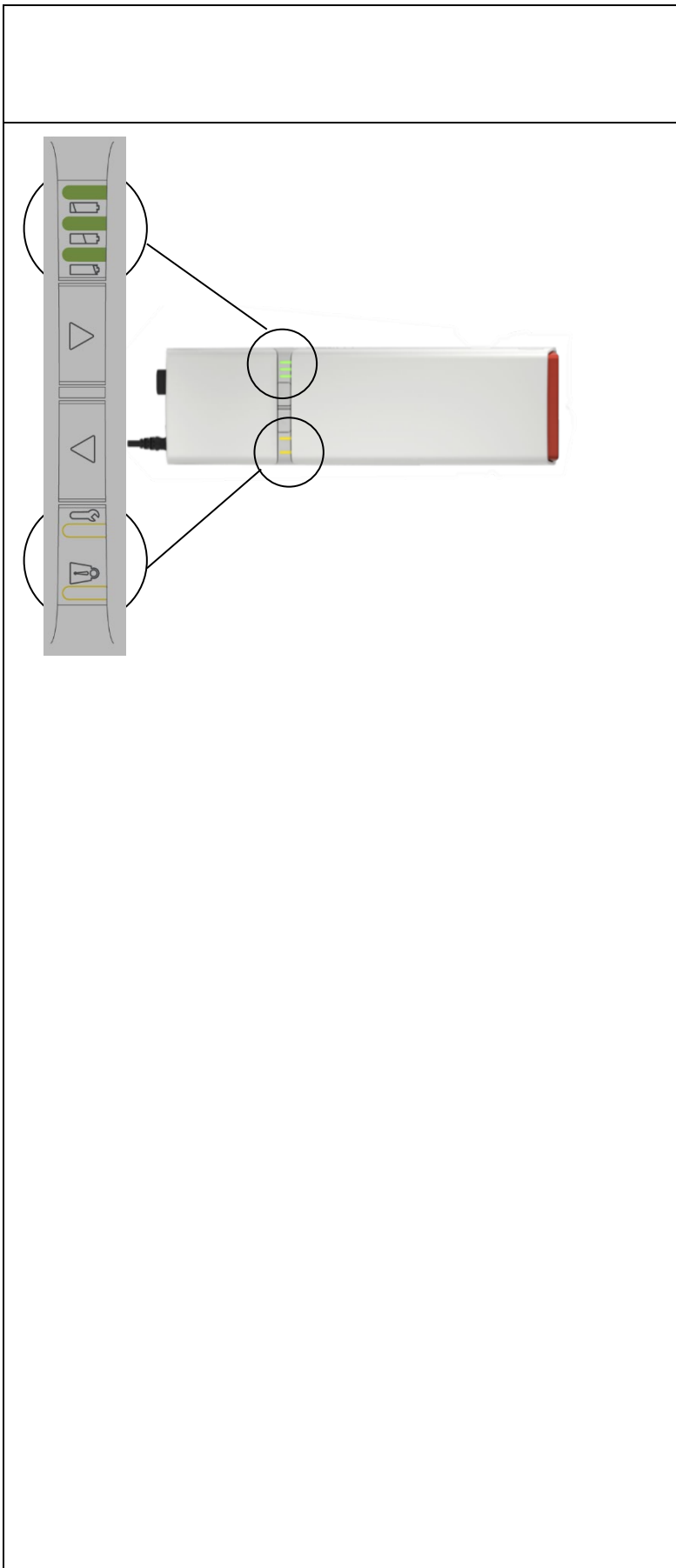
Remove the battery:

2) Use your thumb and index/middle finger to press the buttons on the sides of the battery.

3) Pull out the battery.

And replace the battery again:

4) Grasp the battery on the sides and place the battery base on the guide pin.



5) Insert.

This will release the emergency stop.

Three green LEDs indicate the battery status.

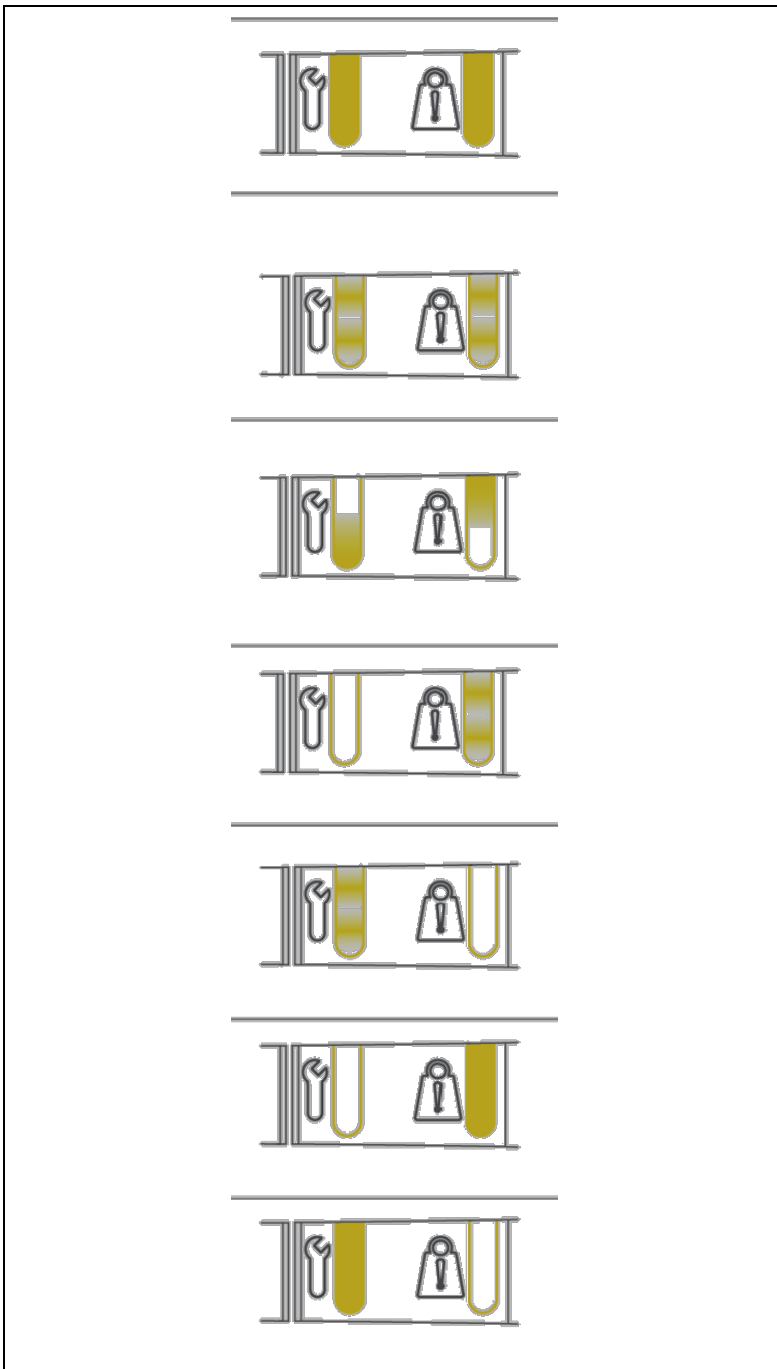
Third LED down in green: 75-100% charged → green light on.

Second LED down in green: 50-75% charged → green light on.

First LED in green: < 50% charged → orange light on.

When the battery is almost empty <25%, the first LED in green blinks slowly for 3 seconds in orange and a beep tone occurs for 1 second when a button on the control is pressed. Recharging is compulsory then because only one-time short emergency usage possible.

The two LEDs on the right indicate system and service status. When they are off system is ready for use.



Continuous orange: Emergency stop activated  
(not ready for use)

Fast synchronous blinking orange: FATAL ERROR – reset necessary (no movement)

Slow asynchronous blinking orange: Not configured – reset necessary (not ready for use)

Right LED blinking slowly orange: Overload - reduce load (no lift)

Left LED blinking slowly orange: Continuous use caused protection to overheat – wait until off (no movement)

Right LED continuous orange: position lost – move motor into maximum position (movement possible)

Left LED continuous orange: Service necessary – call service (movement possible)



#### Removing the battery

1) Use your thumb and index/middle finger to press the buttons on the sides of the battery.

2) Pull out the battery.

#### Installing the battery

3) and 4) Hold the battery by the sides, place the battery socket over the guide pin,



and press it in.

The battery holder is easily accessible under the seat.

There are two white buttons on the sides of the battery. To remove the battery from the holder, press these two buttons and pull a bit up and out the battery. To insert the battery, push it gently into the holder until you hear a click. It is now locked into place.

**Fig. 4** Location of the battery holder

#### 10.5. ELECTRIC DRIVES AND CONTROL UNIT

The SC 5010 HS / ES chair is powered by low voltage motors. The control unit is located in the seat frame under the seat cushion.

#### 10.6. OPERATING CONTROLS - FOOT-CONTROLLED SWITCH (275.012800 OPTIONAL)

The foot-controlled switch is firmly attached to the chair with a retaining plate. However, it can be removed from the retaining plate so that it can be placed on the floor as required.



1. Backrest UP
2. Backrest DOWN
3. Bed height UP
4. Bed height DOWN

**Fig. 5** Foot-controlled switch

#### 10.7. OPERATING CONTROLS - FOOT JOYSTICK (275.012900 OPTIONAL)

The foot joystick is fixed and should be operated with the feet.



1. Back UP / DOWN (left, right)  
Seat height UP / DOWN (up, down)
2. Headrest UP / DOWN (up, down)
3. Lying position UP / DOWN (up, down) / Footrest UP / DOWN (left, right)

**Fig. 6** Foot joystick

#### 10.8. WHEEL BASE LEVER



**Fig. 7** Position of the foot lever on the surgical chair

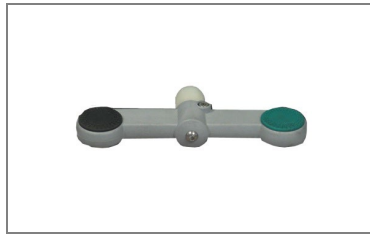
The surgical chair has 4 smooth-running castors. The castors can be locked in three positions using the central foot lever.

The following positions are available:

- All wheels move freely and rotate
- All wheels move freely, and 1 wheel is locked for steering
- All wheels are braked



**Fig. 8** Foot lever position "All wheels braked"



**Fig. 9** Foot lever position "All wheels free"



**Fig. 10** Foot lever position "One wheel locked for steering"

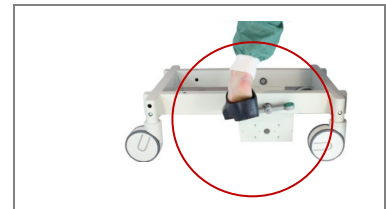
To operate the foot lever correctly, position your foot parallel to the base and push down firmly on the lever with your toes (see **Fig. 11**). It is incorrect to place the foot in the middle of the axle, or perpendicular to the lever from the side, as this makes it difficult to exert force on the lever (see **Fig. 12** and **Fig. 13**).



**Fig. 11** Correct operation



**Fig. 12** Incorrect operation



**Fig. 13** Incorrect vertical operation

## 11. OPERATING THE SURGICAL CHAIR

For the purposes of single fault safety, we offer a replacement battery to enable the shock positions (Trendelenburg position and zero position) to be reached.

### 11.1. CONTINUOUS OPERATION OF THE MOTORS

<b>i</b>	<b>IMPORTANT</b>
<p>The electric motors are designed for brief operation for a maximum of 6 minutes. A longer operating time can cause overheating and permanent damage to the transformer.</p>	

### 11.2. AUDIBLE SIGNAL, BATTERY CHARGE STATUS

A beep sounds when the battery reaches 80% discharge while the motors are running. The battery must then be recharged in the charging station. Continued operation can damage the battery if it is completely discharged.

The hand control also has a battery capacity indicator:



Battery status:

- Low battery status (red LED) >> 25%
- Medium battery status (yellow LED) >> 50%
- Full battery status (green LED) >> 100%

*Fig. 14 Battery status indicator*

### 11.3. POWER BUTTON (ON/OFF BUTTON)

The surgical chair has an automatic energy-saving mode. The hand control locks itself after 2 minutes. The system switches back on automatically. As soon as an axle is activated, the chair is ready for operation again after 0.5 seconds. It is also possible to switch the application off completely by pressing the power button for 2 seconds. In this state, no motor can move even if an axle is inadvertently activated.

The backlight of the hand control switches off automatically after 50 seconds.

### 11.4. ELECTRICAL ADJUSTMENT OPTIONS

The height, backrest, footrest, seat and headrest can be adjusted electrically by pressing the relevant button.

#### 11.4.1. ADJUSTING THE HEIGHT

By pressing the height adjustment button, the chair can be continuously adjusted between minimum and maximum height.



**Fig. 15** Maximum height of the surgical chair



**Fig. 16** Minimum height of the surgical chair

#### 11.4.2. BACKREST ADJUSTMENT

The backrest can be continuously adjusted from vertical to horizontal position by pressing the corresponding button.



**Fig. 17** Vertical backrest position



**Fig. 18** Horizontal backrest position

#### 11.4.3. ADJUSTMENT OF THE FOOTREST

The footrest can be moved to the desired position by pressing the corresponding buttons on the keypad.



**Fig. 19** Vertical footrest position



**Fig. 20** Horizontal seat position

#### 11.4.4. ADJUSTING THE SEAT

The seat can be moved to the desired position by pressing the corresponding buttons on the keypad.



**Fig. 21** Vertical seat position



**Fig. 22** Horizontal seat position

11.4.5. ADJUSTMENT OF ELECTRIC HEAD LIFTER



**Fig. 23** Positioning the headrest



11.4.6. TRENDLENBURG POSITION

The Trendelenburg position is set either by pressing the individual buttons for the seat and backrest or by pressing the button outlined in red. The shock position is already saved and can be called up here.

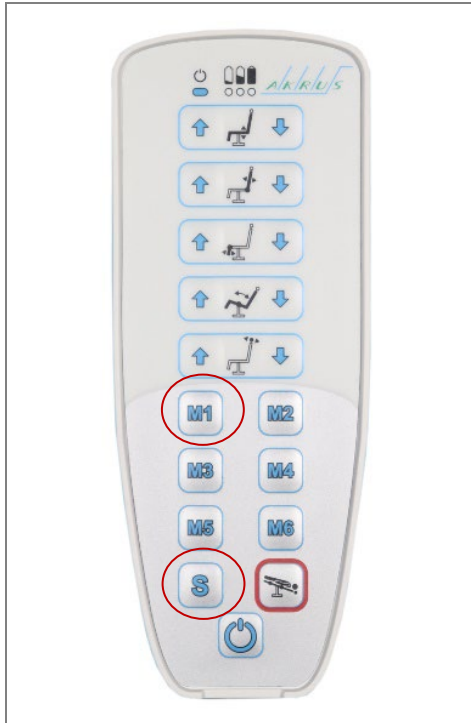


**Fig. 24** Trendelenburg position of the surgical chair



#### 11.4.7. PROGRAMMING THE MEMORY BUTTONS

To save a position, please proceed as follows:



1. Place the chair, including the headrest, in the desired position using the operating buttons.
2. Briefly press and release the "S" button at the bottom left - you should hear a triple beep.
3. Now hold down one of the memory buttons (**M1-M6**) to save this position for the duration of the beep (2 seconds).
4. A short continuous beep confirms that the position has been saved.
5. To call up the memorised positions, press and hold the desired memory button until the saved position is reached.

For safety and regulatory reasons, the buttons (M1 - M6) must be held down while the bed is in motion.

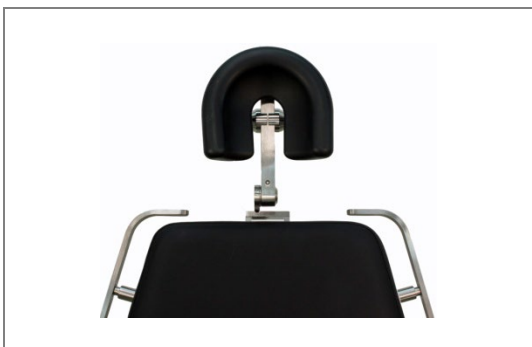
*Fig. 25 Position of the memory buttons*

## 11.5. ADJUSTING THE HEADREST

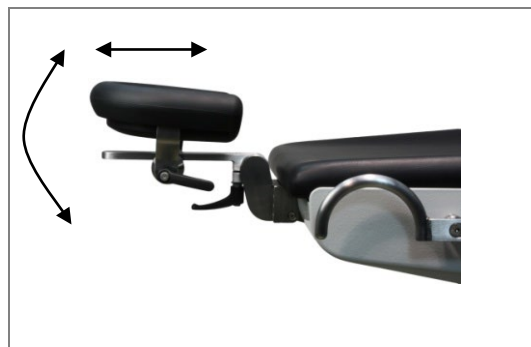
Various headrests are available for the SC 5010 HS / ES . With a universal adapter, all headrests can be replaced in just a few seconds without tools.

### 11.5.1. ADJUSTING THE STANDARD HEADREST (241.030690)

Both the length extension and the self-levelling tilt angle of the headrest (max. 20 kg) can be adjusted with a central locking mechanism.



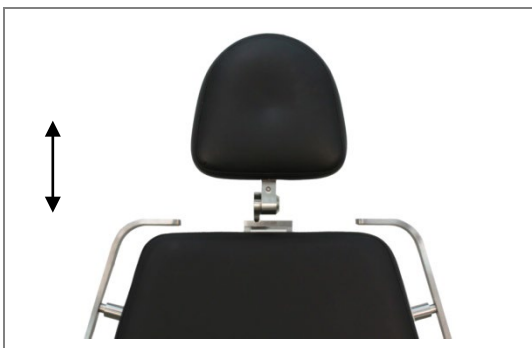
**Fig. 26** Horizontal seat position



**Fig. 27** Tilted seat position

### 11.5.2. ADJUSTMENT OF THE PADDED HEADREST (241.030660)

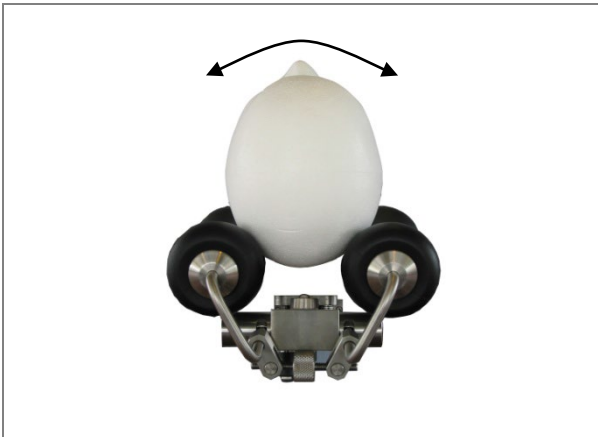
The padded headrest (max. 20 kg) can be adjusted lengthwise with a tommy screw.



**Fig. 28** Horizontal seat position

### 11.5.3. ADJUSTING THE MULTI-ARTICULATED HEADREST (241.030648)

This optional headrest (max. 20 kg) can be adjusted very precisely and individually to the patient via several joints. It can be moved approx. 10 cm away from the back section using mechanical clamp fasteners and tilted by +20° and - 20°.



**Fig. 29** Positioning the head on the support

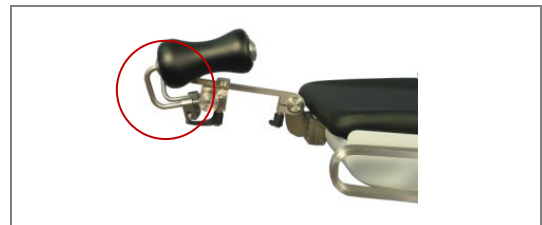
The head is always optimally supported thanks to the two-point mounting. The visco-elastic padding can be adjusted in width using an adjusting screw and thus individually adapted to any head size.

By briefly opening the locking screw, the headrest automatically falls into a comfortable position for the patient.

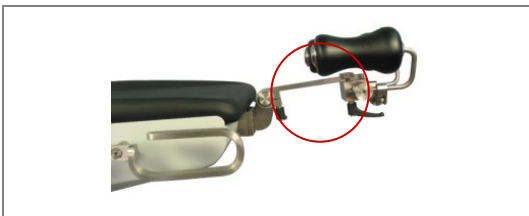
The headrest is also suitable for lateral head support without the need to replace accessories.



**Fig. 30** Max. retracted head support



**Fig. 31** Max. extended head support



**Fig. 32** Tilt angle  $-20^{\circ}$



**Fig. 33** Tilt angle  $+20^{\circ}$

#### 11.5.3.1. MANUAL ADJUSTMENT OF TILT ANGLE (275.030650)

For certain applications that require extreme ventral and dorsal tilt angles, an optional adjustment device 275.030650 (max. 20 kg) with an additional clamping lock is used. This clamp fastener is located under the headboard.



**Fig. 34** Tilt angle  $+40^{\circ}$  and position of the clamping lock for tilting mechanism.



**Fig. 35** Tilt angle  $-50^{\circ}$


## 12. DEVICE CARE AND REPROCESSING


The product is a **reusable** medical device. Repeated reprocessing of these products usually has little effect. The service life of the product is generally determined by normal wear and tear and damage caused by use.


The product should be cleaned and disinfected after each use. National legal regulations, national and international standards and guidelines, and the institution's own hygiene regulations for reprocessing must be complied with.


The product can be disinfected by wiping it and is considered a safe medical device for which no special reprocessing requirements apply.


### 12.1. GENERAL INFORMATION


	<b>WARNING</b>
	<p><b>Risk of infection due to incorrect cleaning and disinfection</b></p> <ul style="list-style-type: none"> <li>▪ Please follow the processing instructions to avoid the risk of contamination.</li> <li>▪ Device maintenance and reprocessing should only be carried out by suitably qualified personnel.</li> <li>▪ Always wear gloves and suitable work clothing when cleaning and reprocessing.</li> </ul>

	<b>WARNING</b>
	<p><b>Risk of infection due to incomplete cleaning</b></p> <ul style="list-style-type: none"> <li>▪ Heavy soiling can cause dirt residues to remain on the appliance surfaces, which can mean disinfection is not complete.</li> <li>▪ A weak alkaline cleaner can be used to remove heavy soiling. Apply to a damp cloth only; do not use too much water.</li> </ul>

	<b>WARNING</b>
	<p><b>Risk of infection due to the use of incorrect care products</b></p> <ul style="list-style-type: none"> <li>▪ Preparation is based on a validated procedure.</li> <li>▪ Cleaning and disinfection should only be done using ready-to-use "Cleanisept Wipes Maxi" from the manufacturer Dr. Schumacher GmbH.</li> <li>▪ It is essential that only the cleaning and disinfection methods recommended in the user manual be used. Any deviations from this require prior consultation with an authorised service technician to ensure that the proposed methods do not cause damage to the product.</li> </ul>

	<b>CAUTION</b>
	<p><b>Electric shock due to contact of the battery with moisture.</b></p> <ul style="list-style-type: none"> <li>▪ The battery must be removed before the chair is cleaned. The chair must be completely dry before the battery is reinserted.</li> <li>▪ The battery itself should only be cleaned with slightly damp cloths in exceptional cases and should only be reinserted in the device once it is completely dry.</li> </ul>


	<b>CAUTION</b>
	<p><b>Risk of injury due to the use of improper cleaning agents and disinfectants</b></p> <ul style="list-style-type: none"> <li>▪ Mixing different chemical substances in cleaning agents and disinfectants can lead to undesirable chemical reactions.</li> <li>▪ Comply with the processing instructions and use only specified agents.</li> <li>▪ Between cleaning steps, wipe the appliance thoroughly with clean water and a slightly damp cloth.</li> </ul>

	<b>IMPORTANT</b>
	<p><b>Damage to the product due to unsuitable cleaning and disinfection</b></p> <ul style="list-style-type: none"> <li>▪ It is strictly forbidden to clean the product or its accessories in autoclaves, sterilisers, automatic machine cleaners or other high-temperature systems, as such a procedure could damage the product.</li> <li>▪ Do not carry out any other mechanical cleaning (including high-pressure cleaners).</li> <li>▪ Do not apply water, cleaning agents or disinfectants directly to joints, seams or gaps in the upholstery or to connecting parts/joints.</li> <li>▪ Penetration of the liquid into the interior of the appliance can damage it. There is a risk of corrosion.</li> <li>▪ If the pad is damaged, do not use the appliance until the pad has been replaced.</li> <li>▪ If there is too much liquid in the joints, seams, gaps or other parts of the appliance, wipe them off thoroughly with a lint-free dry cloth.</li> </ul> <p><b>Do not use any substances that contain abrasives, alcohol, halides, acids, iron particles or solvents.</b></p>

12.2. REPROCESSING INSTRUCTIONS

12.2.1. CLEANING PROCEDURE


<b>Preparations before cleaning</b>	<p>Remove the battery from the medical device.</p> <p>Remove detachable accessories from the product before cleaning.</p>
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<p><b>Cleaning</b></p>	<p>For manual cleaning, use ready-to-use “Cleanisept Wipes Maxi” by manufacturer Dr. Schumacher GmbH. Please proceed as follows:</p> <ul style="list-style-type: none"> <li>▪ Follow the instructions from manufacturer Dr. Schumacher on using personal protective equipment.</li> <li>▪ Clean visibly contaminated surfaces with a CLEANISEPT WIPE and remove contamination. Dispose of used wipes.</li> <li>▪ Wipe surfaces with CLEANISEPT WIPES until fully wetted. Allow to dry for the full contact time. Dispose of used wipes.</li> <li>▪ According to VAH, the full contact time is 1 minute.</li> <li>▪ Discard the used wipe and begin disinfection.</li> </ul>
<p><b>Drying</b></p>	<p>Cleaning with "Cleanisept Wipes Maxi" from the manufacturer Dr. Schumacher GmbH does not require any extra drying time before subsequent disinfection with the same "Cleanisept Wipes Maxi" from the manufacturer Dr. Schumacher GmbH is carried out.</p>
	<p><b>When using other care products, it is essential to wipe with clean water and allow the product to dry completely.</b></p>

12.2.2. DISINFECTION PROCEDURE


<p><b>Preparations before disinfection</b></p>	<p>Ensure that the device can be disinfected with "Cleanisept Wipes Maxi" from the manufacturer Dr. Schumacher GmbH and that no dirt residue remains on the device.</p>
<p><b>Disinfection</b></p>	<p>For manual disinfection with wipes, use ready-to-use “Cleanisept Wipes Maxi” by manufacturer Dr. Schumacher GmbH. Please proceed as follows:</p> <ul style="list-style-type: none"> <li>▪ Follow the instructions from manufacturer Dr. Schumacher on using personal protective equipment.</li> <li>▪ To disinfect surfaces, wipe with CLEANISEPT WIPES until fully wetted. Allow to dry for the full contact time.</li> <li>▪ According to VAH, the full contact time is 1 minute.</li> </ul>
<p><b>Drying</b></p>	<p>Allow the device and accessories to dry.</p>
	<p>If the product or its accessories come into direct contact with the skin (without a surface in between), wipe off the disinfectant residue with clean water in accordance with the manufacturer's instructions.</p>

12.2.3. COMPLETION OF PROCESSING

	<p><b>Allow the chair to dry completely before use. Pay particular attention to drying areas that are difficult to access.</b></p>
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	<p><b>Do not replace the battery until the chair is completely dry!</b></p>
<p><b>Maintenance and checks before use</b></p>	<p>No maintenance is required. The product is maintenance free. See Section 14.</p> <p>After each cleaning, carry out a visual and functional inspection as described in Section 13.</p>
<p><b>Packaging</b></p>	<p>No final packaging is provided for the product. It is recommended to protect the device with a dust cover/drape between uses.</p>
<p><b>Storage</b></p>	<p>The product should always be stored in a clean, cool and dry place, protected from mechanical damage and handled with care. The accessories should be stored away from dust. Do not drop the accessories.</p>

### 13. CHECKS BEFORE USE

	<p><b>WARNING</b></p>
	<p><b>Risk of death and injury due to defective product.</b></p> <ul style="list-style-type: none"> <li>▪ A visual and functional inspection of the product must be carried out before each use.</li> <li>▪ Particular attention must be paid to ensuring that the accessories are adequately secured and stable.</li> <li>▪ If any wear and tear is visible on the medical device, it must be repaired before use. See Section 14.</li> </ul>

### 14. DEVICE MAINTENANCE AND REPAIR

The product does not need to be maintained by the user.

The product is subject to the regular service intervals specified in the current product service report sheet.

**It is prohibited to use a defective product or to carry out repairs yourself.**


If device defects occur, please have the following information ready for AKRUS or the responsible distributor:

- Description of the defect
- Product number (see label)
- If available: Serial number (see label)
- Year of manufacture (see label)

### 15. SAFETY INSPECTIONS

A safety check of the bed is NOT prescribed by the manufacturer; however, the operator must observe any deviations from this in accordance with national regulations for Class I medical devices in their currently valid version.

## 16. DISPOSAL

	<p style="background-color: #c85130; color: white; padding: 2px;"><b>WARNING</b></p> <p><b>Risk of infection.</b></p> <ul style="list-style-type: none"> <li>▪ Used products or parts thereof may be contaminated.</li> <li>▪ Before disposing of the product, it must be reprocessed in accordance with Section 12.</li> </ul>
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The basis for disposing of waste in the European Union is the European Waste List. In some cases, countries and even municipalities issue their own waste regulations, which must be complied with. Outside the European Union, the relevant country-specific regulations for waste disposal must be complied with.



The battery and all electrical components (motors, control unit) must be disposed of properly as electronic waste or returned to the distributor. This product falls within the scope of Directive 2012/19/EU (Waste Electrical and Electronic Equipment Directive). The product is not registered for use in private households; disposal via municipal collection points for old electrical appliances is not permitted.

All other components are household waste.

## 17. TECHNICAL DATA

The device fulfils the requirements of IEC 60601-1-2/EN 60601-1-2 "Electromagnetic compatibility - Medical electrical equipment" without deviation or restriction.

Technische Daten	Technical Data	Value	Unit
<b>Maße und Gewicht</b>	<b>Dimensions and weight</b>		
Gesamtlänge Fahrwerk (R-Lehne senkrecht)	Wheel base length (backrest vertical)	760	mm
Gesamtbreite Fahrwerk	Wheel base width	580	mm
Gesamtbreite Stuhl mit Geräteschiene	Chair width incl. attachment rails	700	mm
Breite Sitzfläche	Chair cushion width	590	mm
Tiefe Sitzfläche	Chair cushion depth	450	mm
<b>SC 5010 ES (eye surgery)</b>			
max. Länge Rückenlehne waagrecht	Max. chair length, back rest horizontal	2050	mm
<b>SC 5010 HS (head surgery)</b>			
max. Länge Rückenlehne waagrecht	Max. chair length, back rest horizontal	2050	mm
Patientengewicht maximal	Max. patient weight	200/300	kg
Masse (abhängig von Optionen) ca.	Bed weight (depending on options) approx.	114	kg
<b>Verstellbereich Liege vertikal (Z)</b>	<b>Vertical bed range (Z axis)</b>		
<b>SC 5010 ES (eye surgery)</b>			
Einstieghöhe Liegenpolster min	Lowest entry height	520	mm
Hub	Lift	260	mm
<b>SC 5010 HS (head surgery)</b>			
Einstieghöhe Liegenpolster min	Lowest entry height	610	mm
Hub	Lift	350	mm
<b>Verstellbereich Rückenlehne</b>	<b>Back rest range</b>		
Waagrecht bis Senkrecht	Horizontal to vertical	0-85	°
Schocklagerung unter waagrecht	Shock position below horizontal	-20	°
<b>Fahrwerk</b>	<b>Wheel base</b>		
3 Pos. Bremssystem <ul style="list-style-type: none"> <li>• alle Räder frei</li> <li>• 1 Lenkrolle fixiert</li> <li>• alle Räder verriegelt</li> </ul>	3 brake system options <ul style="list-style-type: none"> <li>• all wheels pivoting</li> <li>• 1 wheel locked for steering</li> <li>• all wheels locked</li> </ul>		
Rollendurchmesser	Wheel diameter	125	mm
<b>Elektrische Angaben</b>	<b>Electrical data</b>		
Battery	Battery	24 (2.85)	Volt (Ah)
Mains electricity (charging station)	Power cable for recharging	100-240	Volt
Charging time approx.	Recharging time required	4	h
Nominal frequency	Nominal frequency	50 – 60	Hz
Nominal current	Nominal power	350	mA
Schutzart der Batterie	Ingress Protection code of battery	IP X6 washable (max. every 24h)	
Schutzart des Ladegerätes in vertikaler Position	Ingress Protection code of charger in vertical position	IP X4	
Schutzart des Operationstisches	Ingress Protection code of operating table	IP 44	

Technische Daten	Technical Data	Value	Unit
Dauerbetrieb Motoren (S3 – 10%) (innerhalb von 20 Minuten)	Continuous operation of electric motors (S3 – 10%) (within 20 Minutes)	2 (continuous operation) / 18 (cooling phase)	minutes
Klasse der elektrischen Sicherheit	Electrical safety class	II	
Emmissionsklasse	Emissions class	A	
Gruppe (RF Emission nach CISPR 11)	Group (RF emission according to CISPR 11)	1	

## 18. ENVIRONMENTAL CONDITIONS

ENVIRONMENTAL CONDITIONS FOR INTENDED USE	
Air temperature	+10°C to +40°C
Rel. humidity	20% to 80% non-condensing
Air pressure	700 – 1060 hPa
Max. altitude above sea level	3000 m
ENVIRONMENTAL CONDITIONS FOR STORAGE IN ORIGINAL PACKAGING	
Air temperature	-10°C to +50°C
Air temperature (for battery)	-10°C to +40°C (+10°C to +25°C is recommended), without direct sunlight
Rel. humidity	20% to 80% non-condensing
Air pressure	700 – 1060 hPa
Max. altitude above sea level	3000 m
ENVIRONMENTAL CONDITIONS FOR TRANSPORT IN ORIGINAL PACKAGING	
Air temperature	-40°C to +70°C
Air temperature (for battery)	-20°C to +40°C
Rel. humidity	10% to 95% non-condensing
Rel. humidity (for battery only)	20% to 80% non-condensing
Air pressure	700 – 1060 hPa

## 19. TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	CORRECTIVE ACTION
Does not work at all	Battery empty	Charge battery

	Battery seated incorrectly	Check battery seat (see also Section 10.4)
	Keypad cable not plugged in correctly	Check keypad cable (see also Section 10.1)
<b>Does not work at all, charge battery</b>	Battery faulty	Call customer service
<b>Individual functions not working.</b>	Cable connection of the motors to the control unit not correct	Check cable connection (see also Section 10.1)
<b>“ON” LED on charging unit does not come on</b>	Power cable not plugged in	Check power cable (see also Section 10.3)
	Charging unit faulty	Call customer service
<b>Charging LED on charging unit does not come on</b>	Charging unit faulty	Call customer service
<b>Mechanical damage</b>	External causes	Call customer service

## 20. ELECTROMAGNETIC COMPATIBILITY EMC



### Electromagnetic compatibility

#### CAUTION - RISK OF ELECTROMAGNETIC INTERFERENCE RADIATION

The following EMC precautions and operating requirements do apply.

The use of accessories, transducers and cables that are not specified in these instructions or sold by AKRUS GmbH & Co. KG as spare parts, may cause increased emissions or decreased immunity of the unit.

Do not use portable or mobile RF communications equipment, they may have a negative effect to the medical device. Do not use cell phones or other devices that do not comply with the EMC class B CISPR 11 in the near vicinity of the device. Maintain a separation distance of more than 30 cm (12 inches).

It cannot be excluded that an adverse electromagnetic interference radiation may cause an interruption or abort of the medical device's functions.


Specific electromagnetic compatibility (EMC) precautions apply to the medical device. To avoid any EMC problems, do only operate the medical device in accordance with this instructions for use. Use only original spare parts and components supplied by AKRUS GmbH & Co. KG. For installation, commissioning and service an authorized service technician must follow the service manual.

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

<b>Guidance and manufacturer's declaration - electromagnetic interference</b>		
<p>The medical device is intended for use in the electromagnetic environment specified below. The customer or the user of that medical device should ensure that it is used in such an environment.</p> <p>No hazards due to loss of essential performance can be expected due to no essential performance being given, but basic safety is always fulfilled. Meaning no movement after error of first degree. This represents essential performance under IEC 60601-2-46.</p>		
<b>Emitted interference measurements</b>	<b>accordance</b>	<b>Electromagnetic environment - guidance</b>
Emissions harmonics IEC 61000-3-2	class A	The Patient Support System LSCneo is suitable for use in all areas, including those in the residential area and those that are directly connected to the public supply network that supplies buildings used for residential purposes.
Emission of voltage fluctuation/flicker IEC 61000-3-3	Right match	

Contacted RF emissions CISPR 11	Group 1 class A	The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.
Radiated RF emissions CISPR 11	Group 1 class A	

<b>Guidance and manufacturer's declaration - electromagnetic immunity</b>			
<p>The medical device is intended for use in the electromagnetic environment specified below. The user of the medical device should ensure that it is used in such an environment.</p> <p>No hazards due to loss of essential performance can be expected due to no essential performance being given, but basic safety is always fulfilled. Meaning no movement after error of first degree. This represents essential performance under IEC 60601-2-46.</p>			
<b>immunity tests</b>	<b>IEC 60601 test level</b>	<b>level Conformity level</b>	<b>Electromagnetic environment - guidance</b>
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact discharge ±15 kV air discharge	±8 kV contact discharge ±15 kV air discharge	Floors should be made of wood or concrete or ceramic tiles. If are floors with synthetic material, the relative humidity must be at least 30%.
Fast transient electrical interference sizes/burst to IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input / output lines	±2 kV for power supply lines ±1 kV for input / output lines	The quality of the supply voltage should be that of a typical commercial or hospital environment.  (for battery charger)
Surges / surging according to IEC 61000-4-5	±1 kV outer conductor outer conductor ±2 kV voltage phase conductor Earth	±1 kV outer conductor outer conductor ±2 kV voltage phase conductor Earth	The quality of the supply voltage should be that of a typical commercial or hospital environment.  (for battery charger)
Voltage-breaks, short-time interruptions and fluctuations of the supply voltage according to IEC 61000-4-11	< 5% UT (> 95% voltage drop in UT) for ½ period 40% UT (60% voltage drop in UT) for 5 periods 70% UT (30% voltage drop in UT) for 25 periods < 5% UT (> 95% voltage drop in	< 5% UT (> 95% voltage drop in UT) for ½ period 40% UT (60% voltage drop in UT) for 5 periods 70% UT (30% voltage drop in UT) for 25 periods < 5% UT (> 95% voltage drop in	The quality of the supply voltage should be that of a typical commercial or hospital environment.  (for battery charger)
The frequency of mains (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Magnetic fields at the mains frequency should comply with the typical values, as they are found in the commercial and hospital environment.
<p>Note: UT is the A.c. mains voltage prior to application of the test level.</p>			

Guidance and manufacturer's declaration - electromagnetic immunity				
<p>The patient reclining is intended for use in the electromagnetic environment specified below. The customer or the user of the patient couch should ensure that it is used in such an environment.</p> <p>No hazards due to loss of essential performance can be expected due to no essential performance being given, but basic safety is always fulfilled. Meaning no movement after error of first degree. This represents essential performance under IEC 60601-2-46.</p>				
immunity tests	IEC 60601 test level	level level	Conformity	Electromagnetic environment - guidance
<p>Conducted RF interference sizes according to IEC 61000-4-6</p> <p>Radiated HF disturbances according to IEC 61000-4-3</p> <p>+ Table 9</p>	<p>3 V RMS 150 kHz to 80 MHz</p> <p>6 V RMS at ISM frequencies</p> <p>3V / m 80 MHz to 2.7 GHz</p> <p>27 V/m (385 MHz / 18 Hz PM)</p> <p>28 V/m (450 MHz / 5 kHz Hub, 1 kHz Sin. FM)</p> <p>9 V/m (710/745/780 MHz / 217 Hz PM)</p> <p>28 V/m (810/870/930 MHz / 18 Hz PM)</p> <p>28 V/m</p>	<p>3 V</p> <p>6 V</p> <p>3 V/m</p> <p>27 V/m</p> <p>28 V/m</p> <p>9 V/m</p> <p>28 V/m</p> <p>28 V/m</p>	<p>Conformity</p>	<p>Portable and mobile radio equipment should be used in any lower distance to the medical device including cables than the recommended separation distance calculated from the equation applicable to the frequency.</p> <p><b>Recommended protective distance</b></p> <p><math>d = 1,2 \sqrt{P}</math></p> <p><math>d = 1,2 \sqrt{P}</math> for 80 MHz to 800 MHz</p> <p><math>d = 2,3 \sqrt{P}</math> for 800 MHz to 2.5 GHz</p> <p>where P is the power rating of the transmitter in Watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).</p> <p>The field strength of stationary radio transmitters should be in accordance with a site survey<sup>a</sup>, less than the compliance level in each frequency range. <sup>b</sup></p> <p>Errors are possible in the vicinity of devices that carry the following figurative sign.</p> 

	(1,72/1,845/1,97/2,45 GHz / 217 Hz PM)	9 V/m	
	9 V/m (5,24/5,5/5,78 5 GHz / 217 Hz PM)	9 V/m	
<p>Annotation 1: At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>Annotation 2: These guidelines may be applicable in all cases. Electromagnetic propagation is affected by absorption and reflection of from structures, objects and people.</p>			
<p>a. The Field strengths of from fixed transmitters, such as base stations for radio telephones and land mobile radios, amateur radio, AM and FM radio - and television, can be predicted theoretically with accuracy. To assess the electromagnetic environment due to the stationary transmitters, a study of electromagnetic phenomena of the site should be considered. If the measured field strength in the location at which the medical device is used, exceeds the compliance level, the patient lying should be observed to demonstrate the intended function. If abnormal performance is observed, additional measures may be required such as a modified alignment or relocating the medical device.</p> <p>b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V / m.</p>			
Immunity to proximity magnetic field in the frequency range 9kHz – 13.56kHz IEC 61000-4-39	30 kHz - Testlevel: 8 A/m - Modulation: CW 134.2 kHz - Testlevel: 65 A/m - Modulation: PM 2.1 kHz 13.56 MHz - Testlevel: 7.5 A/m - Modulation: PM 50 kHz	unchanged	Not applicable

**Recommended separation distances between portable and mobile RF communications equipment and the medical device**

The medical device is intended for use in an electromagnetic environment in which RF disturbances are controlled. The customer or the user of the medical device should establish that. This can help prevent electromagnetic interference by communications equipment (transmitters) and the medical device - depending on the output power of the communications equipment, as shown below specified - maintaining a minimum distance between portable and mobile HF devices.

Power of transmitter W	Protection distance, depending on the frequency of transmitter m		
	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.7 GHz
	$d = 1,2 \sqrt{P}$	$d = 1,2 \sqrt{P}$	$d = 2,3 \sqrt{P}$
0,01	0.12	0.12	0.23
0,1	0.37	0.37	0.74
1	1.2	1.2	2.3
10	3.7	3.7	7.4
100	12	12	23

For transmitters whose maximum power rating in the table above is not specified, the recommended separation distance can be determined d in meters (m) using the equation, which belongs to the respective column, where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer.

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

Annotation 2: These guidelines may be applicable in all cases. The spread electromagnetic-damn size is affected by absorption and reflection of structures, objects and people.

## 21. ANNEX: MOUNTING OF CHARGER

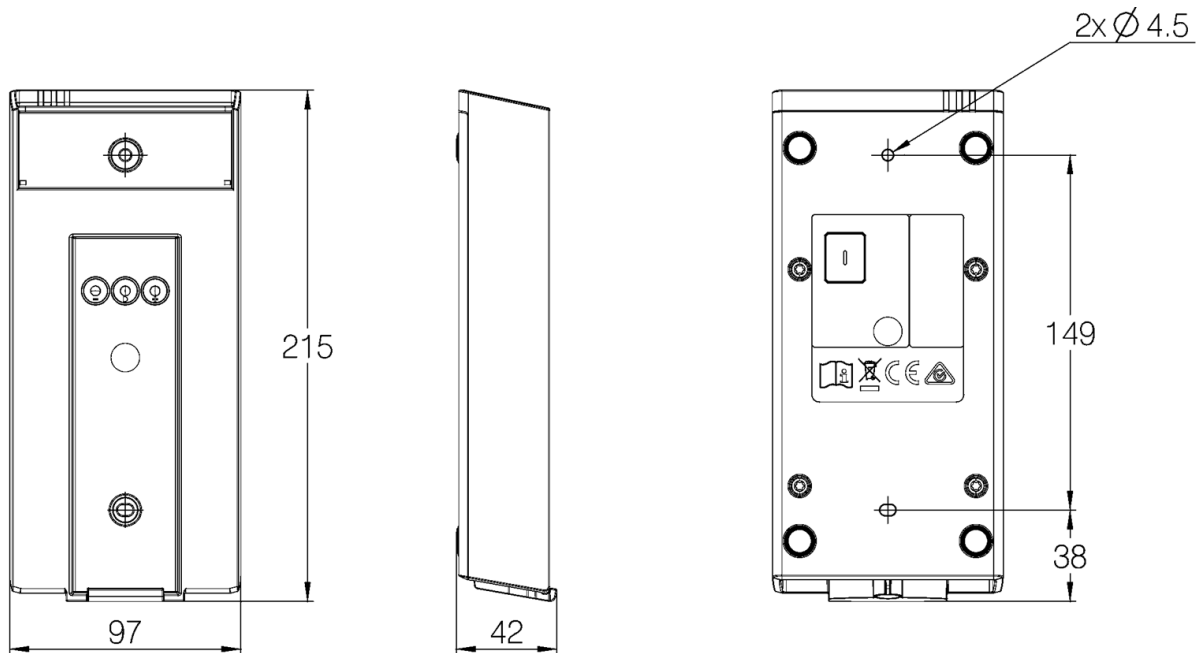


Figure 1: battery charger dimensions in mm

Mount charger to the wall to ensure IPX4 standard:

Screw type:

Diameter 4 mm/design: flat head or flat round head. Length and thread type depend on the wall material.

Washer type:

Optional 4 mm washer with max. 10 mm outer diameter.

The mounting screws for the control unit and charger must be tightened to a maximum torque of 1 Nm.

The weight of the charger and battery combination is approximately 1.45 kg.

Alternatively, place charger on a table: Four rubber nubs on the back provide additional stability and grip for the charger/battery combination.

