





Scan the QR code for more information

# Luna IPx4

# Ceiling hoist

## User manual

### Important information

Please read this user manual carefully before using the product!

This user manual is intended as a guide for caregivers and other users, as well as technical personnel during servicing and maintenance of the product.

Dato: 04-05-2017

Version: 7

## CONTENTS

1 Pl	URPOSE, SAFETY AND USE	4
1.1	Purpose	4
1.2	Safety instructions	4
1.3	Before use	4
1.4	Terminology	
1.5	Unpacking	6
1.6	Transport	6
2 IN	ISTALLATION AND OPERATION	
2.1	Mounting and detaching Luna ceiling hoist	7
2.2	Mounting and detaching of the spreader bar	8
2.3	Pictograms and functions	10
2.4	Operating	11
2.5	Operating safety functions	11
2.6	Charging	
3 U	SING LUNA	
3.1	Using lifting slings	14
3.2	Room to room transfer	15
3.3	Using Luna in a shower or bathing environment	17
4 M		17
4.1	Cleaning	
4.2	Storage	17
5 Cł	HECK, WARRANTY AND TROUBLESHOOTING	18
5.1	Annual check and warranty	18
5.2	Troubleshooting	18
6 TE	ECHNICAL DATA AND DIMENSIONS	19
6.1	Technical specifications	19
6.2	Dimensions	20
7 El	NVIRONMENT AND QUALITY	21
7.1	Disposal	21
7.2	Battery	21
7.3	Quality	21
7.4	Symbols and abbreviations	22
8 A	CCESSORIES	23

## 1 PURPOSE, SAFETY AND USE

## 1.1 Purpose

The Luna IPx4, referred to in this manual as Luna, is available in different models. If not specified, this manual is valid for all models.

The Luna ceiling hoist is designed for making easy user/patient transfers from ex. bed to wheelchair, to toilet etc. in institutions such as nursing homes, hospitals, care centres and in home care. The Luna ceiling hoist can be used as a ceiling mounted hoist or as a mobile hoist in fixed or movable track systems.

The product is not bound to one person only, but can easily be passed on to a new user after thorough cleaning (see 4.1)

## 1.2 Safety instructions



### Important – Warning!

This user guide must be read thoroughly before Luna is taken into service.

- All parts must be mounted correctly and according to this user manual.
- There must be no indication of wear and tear on the Luna ceiling hoist, track system or lifting sling.
- NEVER begin lifting if there is suspicion of any defect (abnormal sound, loose brackets etc.) In such cases the hoist must be taken out of service immediately and you must contact the dealer or Winncare Nordic ApS.
- Depending on the model the lifting capacity is 200 kg or 275 kg and this must never be exceeded. When using Luna along with other items such as slings, spreader bars or transportable track systems it is always the item with the LOWEST weight capacity that decides the maximum lifting capacity.
- Make sure that the Luna or the spreader bar cannot come into contact/hit the user/patient while mounting the sling on the spreader bar.
- Make sure that neither caregiver nor patient can be injured when carrying out lifts and transfers. Always check surroundings and move obstacles out of the way.
- Never lift higher than necessary.

## 1.3 Before use

The caregiver or user is responsible for making the following checks before use:

- Personnel must have received qualified instructions in how to use the Luna ceiling hoist.
- Luna is being used in track systems produced or approved by Winncare Nordic ApS.
- Installation of track system for Luna ceiling hoist is carried out by qualified installers approved by dealer or Winncare Nordic ApS.
- Luna can only be fitted with spreader bars supplied by Winncare Nordic ApS.
- The Luna has been developed for use with ErgoSlings and other sling products approved by Winncare Nordic ApS. See brochure for ErgoSlings.
- Luna is intended for use under normal temperatures (+2 to +40°C) and relative humidity (40 – 90%).

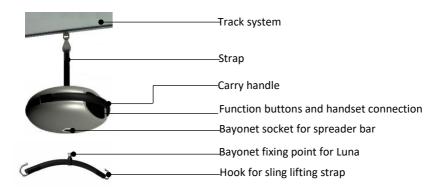
- If the Luna is used near shower system or bath, make sure that the Luna or hand control is not submerged (see section 3.3).
- Luna should never be used in an environment containing chlorine or in other aggressive environments.

### Safety checks

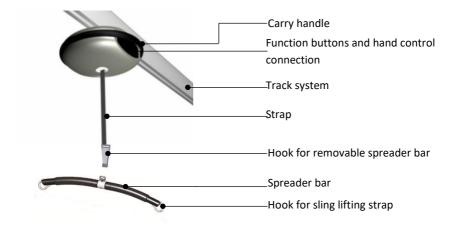
- Check lifting strap for tear, wear or damage. If there is any sign of a defects, the Luna must be taken out of use immediately.
- Check the up/down function, if any abnormal sound is heard the Luna must not be used before a service check has been performed by a qualified technician.
- Make sure that the strap can move freely into the Luna without twisting.
- Check lifting sling for any damage especially with regards to lifting straps. The sling must not be used if damage or defects are detected.
- If in doubt on how to use the Luna, please contact the dealer or Winncare Nordic ApS for advice and guidance.

## 1.4 Terminology

### Luna mounted in strap



### Luna mounted on the track



### 1.5 Unpacking

Check that all the parts are present and undamaged. Any suspicion of damage or shortage should be reported immediately to the dealer or Winncare Nordic ApS.

We recommend to keep and store original packaging for later transport to other sites or for return shipment to Winncare Nordic ApS in case of repair or annual check.

### Contents of the box:

- Luna cassette
- User manual
- Hand control (accessories)
- Spreader bar (accessories)
- Charger (accessories)



### 1.6 Transport

Luna ceiling hoist is most safely transported using the original packaging.

Symbols are printed on the packaging to ensure the best information for transport companies.

## 2 INSTALLATION AND OPERATION

## 2.1 Mounting and detaching Luna ceiling hoist

The Luna can be mounted in two different ways to meet specific needs. By choice from the buyer the Luna ceiling hoist is prepared, delivered and ready to be mounted in one of the following, A or B.

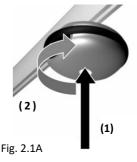


Be aware that the Luna weighs 6,7 kg.

### A) Luna mounted directly on the cart

The Luna is mounted directly on a cart in the track system. (Fig. 2.1A).

- Lift up the Luna and connect the bayonet on the cart into the Luna socket (when connecting you will feel easy resistance from spring).
- 2) Now turn the Luna clockwise 90° and await a little click this indicates correct mounting.





If the Luna is not mounted correctly an electronic safety device prevents operation of the ceiling hoist.

### Detaching the Luna from the cart

- 1) Push the Luna upwards toward the cart (feel easy resistance from the spring).
- 2) Turn the Luna 90° counter clockwise for detachment.

### B) Luna mounted by the strap

Use the hook on the strap for mounting directly onto the cart (Fig. 2.1B)

- Lift up the Luna and attach the hook to the cart by connecting the strap hook directly to the cart in the track.
- Await click for correct attachment. Safety springplate on the hook must be locked to prevent the Luna from detachment.



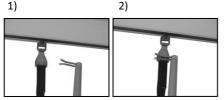


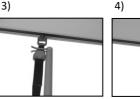


Always check that the hook is locked before using the Luna.

#### Detaching the Luna strap from cart

- 1) The hook can be released by using an extension arm
- 2) The extension arm is placed at the lower part of the hook.
- 3) Push up the extension arm to release the spring-plate on the hook and unhook the Luna strap from the cart.
- 4) Lower the Luna in to the cradle on the trolley and leave the strap slightly slackened.







Extension arm or Luna Trolley with extension arm can be purchased from Winncare Nordic ApS or dealer. See order number in section 8, Accessories

### 2.2 Mounting and detaching of the spreader bar

Depending on how the Luna is mounted, the spreader bar can be attached as follows.

### A) Luna mounted directly on the cart

### Mounting the spreader bar (Fig. 2.2A)

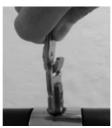
- 1) Lift the spreader bar. Hold the strap and press the safety spring-plate on the hook.
- Attach the hook onto the attachment point on the spreader bar and release the safety springplate.
- Ensure that the hook is safely locked onto the spreader bar attachment point.

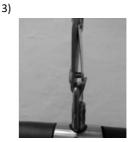


1)









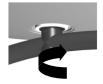
#### Detaching the spreader bar

- 1) Press in the spring-plate on the hook.
- 2) Tilt the hook to detach the spreader bar.

### B) Luna mounted in strap

### Mounting the spreader bar directly into the Luna

- Fit the spreader bar bayonet into the socket on the Luna (when connecting you will feel a light resistance from spring).
- Now turn the Luna clockwise 90° and await a little click Fig. 2.2B this indicates correct mounting (see fig. 2.2B).



 $\triangle$ 

If the spreader bar is not mounted correctly an electronic safety device prevents operation of the ceiling hoist.

#### Detaching the spreader bar

- 1) Push the spreader bar upwards into the Luna (feel light resistance from the spring).
- 2) Turn the Luna 90° counter clockwise for detaching.

## 2.3 Pictograms and functions

(1) ON – If LED light is off, the Luna is in "sleep" mode. The LED light will turn on when the up (4) or down (3) button on the hand control is pressed.

(2) BATT. - Indicates battery level (see 2.6).

(3)+(4) Up/Down – Press and hold the Luna will move in the desired direction. Release the button to stop the movement.

**Note**: Works only with hand control **(5)** plugged in and LED light **(1)** must be on.

(5) Plug – Insert the hand control plug.

(6) Data display – Information about the Luna model, serial number and symbols information.

(7) Emergency Lowering – ONLY used in situations where it is necessary to lower a patient safely in case of a lift failure. This button must be held constantly to lower the unit.

(See section 2.5)

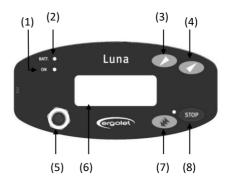
**Note**: Works only with hand control **(5)** plugged in and LED light **(1)** must be on.

(8) STOP – Press the emergency stop button to stop the Luna immediately. This function can be reset by pressing the reset button on the hand control for 5 seconds.

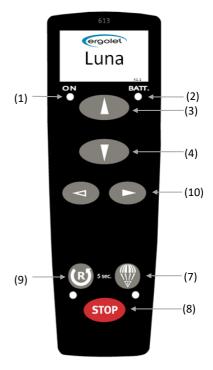
9) Reset – Used to reset the Luna after the use of the emergency stop - or lock function. Reset by holding the reset button for 5 seconds, the Luna will then be reactivated. Reset can also be used to lock all functions to avoid unintended use by e.g. the patient. When the reset button is held, the LED light will show red and all functions will be locked.

(10) Option – This option is not available on a standard hand control. The extra output can be e.g. the Luna Mover or an electrical spreader bar.

### Side foil:



### Hand control:



## 2.4 Operating

The Luna is ready for use, when the Luna cassette and the spreader bar are correctly mounted. Connect the hand control to the plug inlet on the front panel and test the up/down functions before using the Luna.

The Luna will move faster when not loaded in order to reach the user quickly. When the user is lifted, the speed will automatically reduce to increase the comfort and safety for the user.

## 2.5 Operating safety functions

### Emergency stop

This function is only to be used in an emergency e.g. if the Luna does not react or does not stop after releasing button on the hand control. The Emergency stop is placed on the hand control and on the side foil on the Luna. If the emergency stop has been activated all functions will stop immediately and the LED light will show red on the hand control.

The Emergency stop can be deactivated by pressing the "Reset" button on the handset for 5 seconds.

### **Emergency lowering button**

This is only to be used in an emergency where it is necessary to safely lower a patient. The emergency lowering button is placed on the hand control, illustrated as a parachute and on the side foil with 3 arrows pointing down.

To activate the emergency lowering, hold the button on the hand control or on the side foil for 5 seconds until you hear a beep from the Luna. This is a hold-to-lower-button.



**Warning!** The emergency lowering does not work if the hand control has a defect.

**Note!** If the Luna is in "sleep"-mode press either the up or down button for the emergency lowering to work.

If using emergency lowering, the normal stop will not be active!

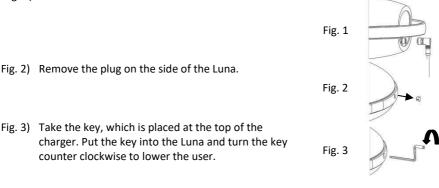
Release the emergency lowering button, when the strap is in its full length.

#### Manual emergency lowering:

The manual emergency is used to lower the client, when the powered emergency lowering does not work or if the hand control is defective.

Follow the instructions on the charger or follow the description below:

Fig. 1) Remove the hand control.



Note: Scan the QR-code and see the instructions on video.

If one of the emergency stop functions has been activated due to an emergency, the Luna must not be used again before a check has been made and any defect repaired.

If in doubt, contact your dealer or Winncare Nordic ApS.



## 2.6 Charging

The Luna can be charged either from the handset charger holder mounted on the wall or through the charger unit on the Luna Trolley. The charger unit is connected to the mains.

Move the Luna to the charging station and place the hand control into the charger after which the charging starts automatically.

**Note:** The Luna is fitted with batteries that require regular charging. Winncare Nordic ApS recommends that the Luna is charged every night or when the unit is not in use.

The Luna is fitted with a diode (marked BATT.), which gives the following information concerning battery condition during use:

Diode colour	Description	
Green	<ul> <li>The LED on the hand control will flash during charging.</li> <li>The LED lights constantly on the hand control, when the batteries are fully charged.</li> <li>The LED lights constantly on the Luna cassette, when the batteries are fully charged.</li> </ul>	
Yellow	<ul> <li>The LED on the Luna cassette lights, and indicates that the batteries are approx. 50% discharged.</li> <li>Recommend charging to avoid low battery.</li> </ul>	
Red	<ul> <li>The LED on the Luna cassette lights and indicates that the batteries have reached a critical point.</li> <li>The LED starts flashing and an acoustic ("beep" signal) will be heard.</li> <li>Luna must IMMEDIATELY be put on charge in this situation and remain on charge for 5 hours.</li> </ul>	

Note: Luna cannot be overcharged.

## **3 USING LUNA**

Luna is ready for use if all the assembly instructions have been followed correctly.

### 3.1 Using lifting slings

Luna spreader bars are designed for use with Winncare Nordic ApS lifting slings. Winncare Nordic ApS lifting slings have 2-6 lifting straps and are designed for lifting hooks with a minimum diameter of 8 mm.

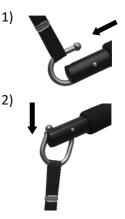
Use of non-approved slings will make Winncare Nordic ApS's responsibility for faults and accidents null and void.

Winncare Nordic ApS can assist in choosing slings and the correct use of slings.

### Attaching slings to the Winncare Nordic spreader bar

Winncare Nordic ApS accepts no responsibility if slings are placed incorrectly. The caregiver/helper are responsible for ensuring that a sling is mounted correctly and fit for the situation.

- 1) The sling strap is placed over the hook in its open position.
- 2) The strap is pulled down to close the hook.



**Note:** The hook is designed so the weight of the patient/user will help close the hook.

To release the strap after lifting, simply pull the strap upwards to open the hook.



**WARNING:** Risk of finger entrapment - ensure that the patients fingers cannot get trapped.

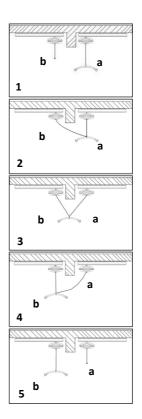
### 3.2 Room to room transfer

It is possible to move a patient from room to room in 2 different ways. To ensure that the transfer is done correctly without any risk for the client, follow description **A**) Transfer with two Luna ceiling hoist or **B**) Transfer with one Luna ceiling hoist.

#### A) Transfer with two Luna ceiling hoists

*Note:* only possible when using a special spreader bar.

- 1) In this lifting situation, the two Lunas (a and b) are placed as close together as possible.
- 2) The lifting strap from Luna (b) is extended and attached to the extra suspension point on the spreader bar.
- Now both Lunas are connected to the spreader bar. Check that the hook from the receiving Luna (b) is fitted correctly. Lower the strap on Luna (a) and raise the strap on Luna (b) as seen on picture 3.
- Lower the lifting strap on Luna (a) until the strap is hanging loose. Now all weight is on Luna (b)
- On the spreader bar, unhook the strap from the Luna (a) by releasing the safety springplate on the strap hook.
- 6) The transfer can now continue with the Luna (b).



### B) Transfer with one Luna ceiling hoist

Note: only possible when using a room to room Luna.

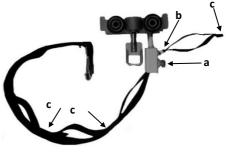
- 1) In this lifting situation Luna (a) is moved, as close as it is possible to the carts.
- Luna (a) with user is moved to the door and the transfer strap (b) from the other room is fitted to the vacant ring bracket on Luna (a).
- 3) Now both straps (a and b) are fitted to the Luna cassette. Check the hook is fitted correctly.
- 4) The strap on Luna (a) is slowly released until the transfer strap (b) carries weight of the user.
- 5) The strap on Luna (a) can now be removed and fitted on the cart next to the transfer strap. The lifting strap is best removed by bringing the bracket up, press the spring and remove.

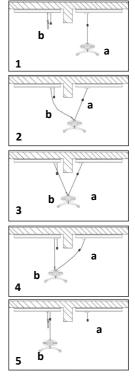
Note: It may be necessary to adjust the length of the strap (see below).

### Adjusting the length of the strap

The length of the strap can be adjusted to fit the distance between the tracks in the two rooms.

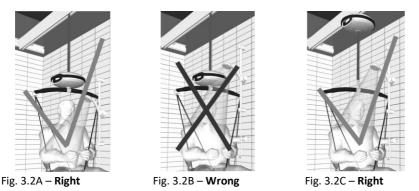
- 1) The screw (a) is released.
- 2) The strap is placed in the correct position and the bolt (b) is placed in the corresponding loop (c).
- Ensure that the screw (a) and the bolt (b) are tightened before the Luna is mounted on the cart.





## 3.3 Using Luna in a shower or bathing environment

The Luna<sub>IPx4</sub> and the hand control are water resistant and can tolerate being sprayed with water. Winncare Nordic ApS recommends that the Luna is used as shown in fig. 3.2A and 3.2C. It may be an advantage to use Luna mounted directly on the track as fig. 3.2C.



**Note:** IPx4 hand control cannot withstand being immersed in water. As an accessory, it is possible to buy a waterproof IPx7 hand control, which withstands to be immersed in water.

## **4 MAINTENANCE**

### 4.1 Cleaning

The Luna may be cleaned using a slightly damp cloth with a small quantity of standard household cleaning agents. Strong chemicals or abrasive agents must not be used.

## 4.2 Storage

The Luna must be stored in a dry environment with relative humidity under 70 %.

If the Luna is not to be used for a long period, it is recommended to press the emergency stop button to save the battery.

**Note:** The Luna should be fully charged before storing. The batteries will slowly discharge, so it is recommended that the Luna is recharged every 3 months to prevent the battery from being destroyed.

## 5 CHECK, WARRANTY AND TROUBLESHOOTING

### 5.1 Annual check and warranty

The Luna ceiling hoist must always be repaired and maintained by qualified personnel, including the replacements of print card, batteries, lifting straps and other components.

The manufacturer Winncare Nordic ApS recommends that the ceiling hoist MUST be checked by a qualified person at least once a year in accordance with Winncare Nordic ApS service instructions. An annual check is also recommended to the European Standard (EN/ISO 10535) for patient lifters/hoists including ceiling hoist.

It is the legal owners' duty to ensure that these checks are carried out on the product.

If it is necessary to replace any parts due to wear or damage, Winncare Nordic ApS recommends for safety reasons to use original spare parts.

### Warranty

The Luna IPx4 has a 5-year warranty. See further warranty provisions on www.ergolet.dk.

## 5.2 Troubleshooting

Fault	Possible cause	Solution
Luna does not react	Luna is not on or	Turn on the Luna.
when the hand control	emergency stop is	Deactivate emergency stop (see
UP/DOWN are used.	activated.	section 2.5).
(no "beep" sound from	Defective hand control.	Check if up/down buttons on the
the Luna unit).		Luna unit. If it works, try another
		hand control or get a new one
		from the dealer or Winncare
		Nordic ApS
	Batteries are not fully	Charge batteries (see section 2.6)
	charged or defective.	If this does not help, the batteries
		must be replaced.
Fault	Possible cause	Solution
Luna does not react	Spreader bar not	Mount the spreader bar (see
when UP/DOWN buttons	mounted.	section 2.2).
on the hand control are	Luna unit is not mounted	Read the mounting instructions
used. (a "beep" sound is	correctly on the track/	and follow section 2.1 for correct
heard).	cart.	mounting of the Luna in track
		system.
	Batteries are not fully	Charge batteries (see section
	charged.	2.6).
	The strap is rolled	Request service technician from
	incorrectly.	dealer.

Fault:	Possible cause	Solution
The lift does not react when the hand control UP-button is used. (a "beep" sound from the Luna unit).	The lifting capacity has been exceeded – User too heavy or sling has been caught on furniture etc.	Charge batteries, if this does not help the batteries must be replaced.
Fault:	Possible cause	Solution
Does not charge.	Charger is not connected to the main supply.	Connect charger to main supply. (see section 2.6).
	Charger defect.	Try another charger or get a new one from the dealer or Winncare Nordic ApS.
	Connection to the hand control is defective.	Try another charger or get a new one from the dealer or Winncare Nordic ApS.

## 6 TECHNICAL DATA AND DIMENSIONS

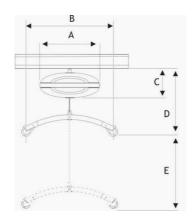
## 6.1 Technical specifications

Max capacity: Length of lifting strap: Weight: Measurements: Battery operation: Charging: Covering: Noise:	200 kg or 275 kg depending on model 2200 mm 6,7 kg without spreader bar 320 x 130 mm 36 V lead acid batteries 100 - 240 V, 0,5 amp. High impact, moulded ABS LwA during lifting/lowering without load is 49dB(A) LwA during lifting/lowering with 175 kg load is 53dB(A)
IP-class:	Cassette: IP24 Charger: IPx4 Hand control: IPx4

## 6.2 Dimensions

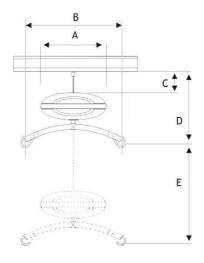
### Measurements ceiling mount:

A) Width of Luna cassette	320 mm
B) Spreader bar (see section 8, Accessories, for other sizes)	580 mm
C) Height of Luna cassette	170 mm
D) Min. height from hook to track	430 mm
E) Lifting range from min. height	1950 mm



### Measurements strap mounted:

A) Width of Luna cassette	320 mm
B) Spreader bar (see section 8, Accessories for other sizes)	580 mm
C) Height of Luna cassette	155 mm
D) Min. height from hook to track	465 mm
E) Lifting range from min. height	1950 mm



## 7 ENVIRONMENT AND QUALITY

The Luna has an expected life time of a minimum of 10 years under the assumption that all recommended service checks have been carried out and that the normal maintenance and care instructions have been followed.

## 7.1 Disposal

Disposal of this ceiling lift can be made through Winncare Nordic ApS. After Luna's useful lifetime Winncare Nordic ApS will receive the unit back and split the individual fractions in an environmentally friendly way either through reuse or recycling.

Fractions that contain aluminium, lead acid batteries, ABS plastic, steel may damage the environment if not handled in an environmentally responsible way.

## 7.2 Battery

The Luna is equipped with batteries which may be returned either to the local recycling station or to Winncare Nordic ApS at the end of their lifetime.

## 7.3 Quality

Winncare Nordic ApS is certified according to the quality standard ISO 9001 and ISO 13485.

These certifications mean that the products and the company complies with the international standards for quality management and standards for traceability of medical products.

Luna<sub>IPx4</sub>/200 and Luna<sub>IPx4</sub>/275 is classified as a Medical device class 1 product.

## 7.4 Symbols and abbreviations



Direct current



Double insulated



Type B, patient is not separated from the ground



The product should be recycled where possible



Refer to the user manual

**SWL** Safe working load = (user + sling)

## 8 ACCESSORIES

### Hand control

015-03101	Hand control, 1320 mm cable, 1 channel
015-03102	Hand control, 1620 mm cable, 1 channel
015-03103	Hand control, 1900 mm cable, 1 channel
015-03104	Hand control, waterproof, 1320 mm cable, 1 channel
015-03105	Hand control, 1320 mm cable, wire top, 1 channel
015-03106	Hand control, 1320 mm cable, 2 channel
015-03107	Hand control, 1620 mm cable, 2 channel
015-03108	Hand control, 1900 mm cable, 2 channel

1	1	1

### Standard spreader bar, Luna

015-02108	Spreader bar - Strap, 36 cm
015-02110	Spreader bar - Strap, 48 cm
015-01968	Spreader bar - Strap 58 cm
015-02122	Spreader bar - Bayonet, 36 cm
015-02124	Spreader bar - Bayonet, 48 cm
015-01974	Spreader bar - Bayonet, 58 cm

### Spreader bar with double hook for room to room

015-01966	Spreader bar with double hook, 58 cm
015-01988	Spreader bar with double hook, 48 cm

### Spreader bar - straight

015-02116	Spreader bar - Bayonet, 58 cm
015-02114	Spreader bar - Bayonet, 48 cm

### 3-point spreader bar

015-02104	3-point spreader bar/Strap
015-02106	3-point spreader bar/Bayonet

#### 4-point spreader bar

015-02100	4-point spreader bar/Strap
015-02102	4-point spreader/Bayonet

### Accessories

015-02017	Trolley
015-02013	Extension arm, 1500mm
015-02012	Extension arm, 1000mm
015-02010	Extension arm, 600mm

A complete list of spare parts is available. Please contact Winncare Nordic ApS for details

Manufactuerer: Winncare Nordic ApS Taarnborgvej 12 C 4220 Korsoer Denmark Phone: + 45 70 27 37 20 Fax: + 45 70 27 37 19 Email: <u>info@ergolet.dk</u> www.ergolet.com 93/42/EØF CLASS I EN/ISO 10535 EN 60601-1-2

UM-910-00766UK