

Instruction Manual of Electric Stretcher Trolley

Introduction • Use • Maintenance • Warranty



Nanjing Kangni Smart Technology Co., Ltd.

Preface

Dear users, thank you for choosing the Kangni intelligent electric stretcher trolley. We hope it can bring convenience and efficiency to your life and work.

Before using the Kangni intelligent electric stretcher trolley for the first time, please carefully read and abide by all the instructions and tips in this Instruction Manual, and keep the product in good condition to prolong its service life. To eliminate all types of injuries caused by failure to operate the product according to the instructions and prompts or warnings in the Manual, please be familiar with the functional characteristics and operation methods of the product before operation.

If you have any questions about these instructions, please contact the after-sales customer service.

Update information: last update of the Instruction Manual: April 07, 2022

- Please read this Manual carefully before using the product.
- Please follow the safety instructions to avoid injury and product damage.
- Please use the product correctly and safely under the guidance of after-sales customer service.
- Please keep this Manual properly for later reference.
- For any doubt or further questions about the instructions, please consult after-sales customer service.

Notes: Please pay special attention to the following information:

- Operators must use the product correctly according to the instructions under the guidance of authorized personnel.
- It should be noted that not all the options described in the Manual are available on this product.
- The product has been adjusted according to the user's needs before delivery, and only authorized personnel can change the product settings. (We recommend that you periodically check your product settings to ensure that the product is in the optimal condition over time, and that setting corrections should be made every six months for growing children and adolescents.)
- The manufacturer reserves the right to make technical changes to the functions described in these instructions.

Production record certificate number: S.N.S.Y.J.X.S.C.B. No.20200001

Medical device registration document number:

Product technical requirement No.:

This product has been covered by the product liability insurance of the PICC Property and Casualty Company Limited.

Complaints

If you find any problems in relation to product safety or reliability or have other suggestions during use, please let us know and we will continue to improve them. Our contact information is as follows:

Registrant/manufacturer: Nanjing Kangni Smart Technology Co., Ltd.

Production address: No.11 Hengjing Road, Economic and Technological Development Zone, Qixia District, Nanjing, Jiangsu Province Zip code: 210046

Product model:

Date of production:

Service life: 3 years

Email: info@kangnismart.com

Website: www.kangnismart.com

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Cautions Please pay special attention to the following information:
<ul style="list-style-type: none">• Operators should receive training and professional guidance on safe use of the product.• Operators must use the product correctly according to the instructions under the guidance of authorized personnel.• It should be noted that not all the options described in the Manual are available on this product.• The manufacturer reserves the right to make technical changes to the functions described in these instructions.• The photos used in the function introduction are cases of randomly selected models.• Keep away from mobile devices with electromagnetic radiation.
Warning
<ul style="list-style-type: none">• Epilepsy patients shall not use the product.• Overloading is not allowed.• No person or article shall be under the anti-tilt module area.• Do not use the trolley in the charging state.• During use, the stretcher trolley shall not climb slopes greater than 10° or cross obstacles larger than 20mm (height) × 80mm (width).• Do not retrofit the stretcher trolley, which will affect the safety of the stretcher trolley and lead to injury and failure.• While the stretcher trolley is in service, the patient shall not sit up, turn over or make other actions to change his/her posture, so as to prevent the stretcher trolley from toppling.• Do not use the stretcher trolley when the battery level is less than 1 bar and charge it as soon as possible. If this condition is not complied with, there will be potential safety hazards.• Do not apply external force to the trolley during use, which may cause the stretcher trolley to roll over.• Pay attention to the distance between the stretcher trolley and the bed to prevent collision when the transfer platform rises and falls.• In anti-tilt mode, please reserve space for anti-tilt module in advance.• When the stretcher trolley moves laterally, please lift the electric booster wheel. <p>* Please strictly abide by the Instruction Manual. If there is any potential risk, stop operation immediately and consult relevant professionals.</p>

Chapter I About Electric Stretcher Trolley

The electric stretcher trolley developed and produced by Kangni Smart Technology is an intelligent mechanical and electrical product. Patients often need to be transferred to another place in the process of treatment, examination and operation in hospitals. However, at present, patients in hospitals have to be manually lifted and placed down, which will not only make the operation of medical workers laborious, but also easily cause secondary injury and severe pain to patients. Therefore, for the benefit of patients, Kangni Smart Technology developed a convenient, safe, painless and injury-free patient transfer solution. During the whole process, the operator does not need to touch or move the patient.

The mechanism of the electric stretcher trolley can be lifted vertically and moved horizontally. The patient lying on the operating table can be lifted and moved to the stretcher trolley in a lying position or other positions, and sent to the ward, then lifted from the stretcher trolley and transferred to the bed.

Contraindication: N/A.

1.1 Outline of electric stretcher trolley

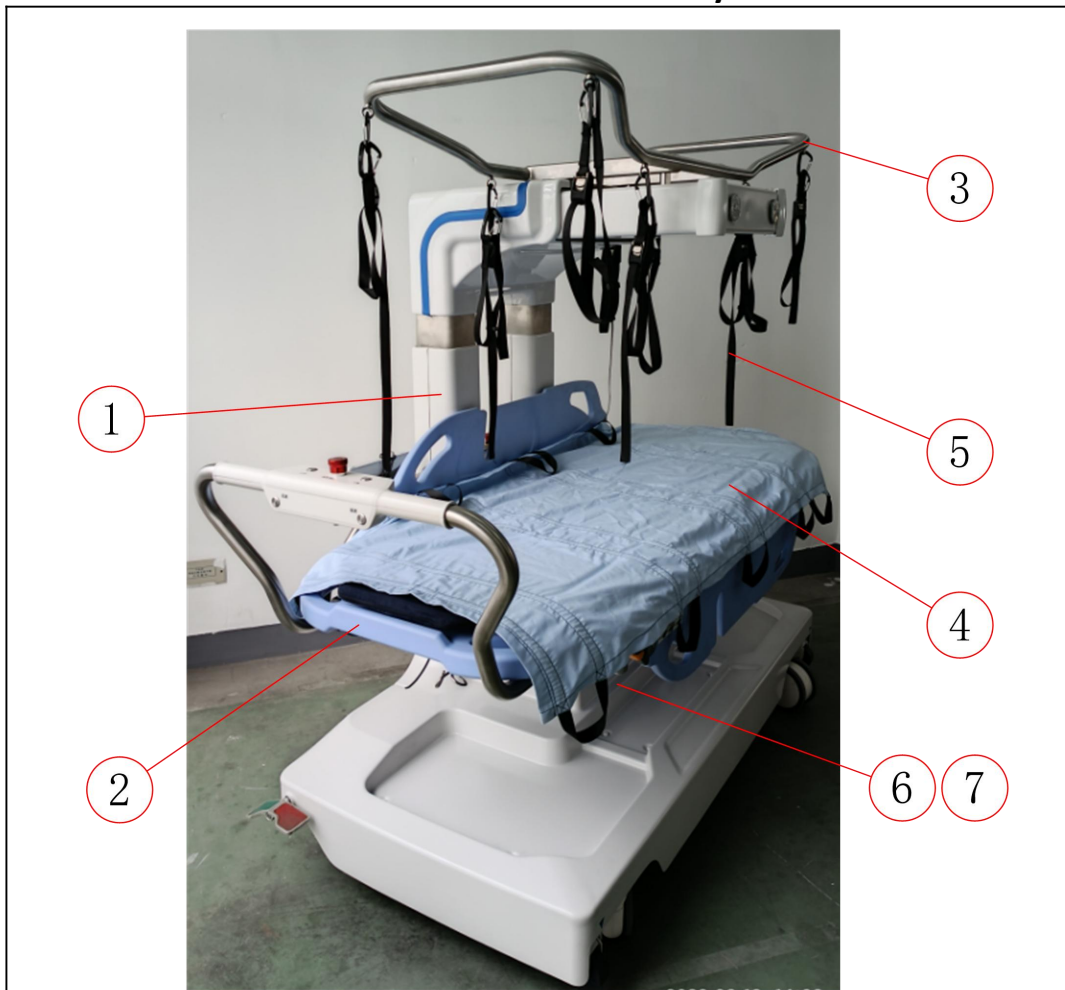


Outline of electric stretcher trolley

This product has passed the inspection before delivery, and has undergone comprehensive commissioning run test.

KY3 electric stretcher trolley (hereinafter referred to as stretcher trolley) is composed of frame, translational suspension device, transfer trolley, sling bag accessories, lifting ropes, battery module and controller components.

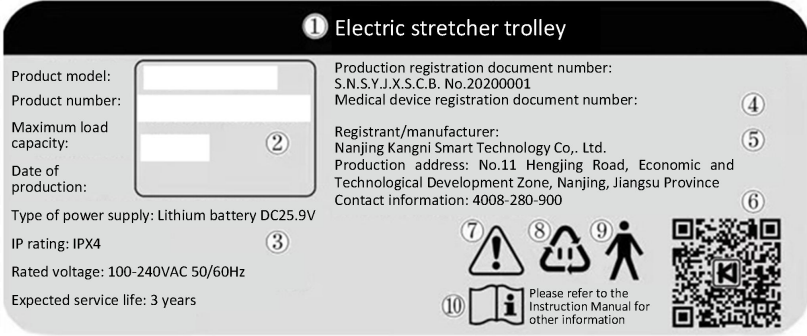
1.2 Structure overview of KY3 electric stretcher trolley



1	Frame	2	Translational suspension device
3	Transfer trolley	4	Sling bag accessories
5	Lifting rope	6	Battery module (installed under the bottom enclosure)
7	Battery module of controller assembly (installed under the bottom enclosure)		




Main parts of electric stretcher trolley

1.3 Nameplate of electric stretcher trolley


1	Product name	 <p>The nameplate for the electric stretcher trolley includes the following information:</p> <ul style="list-style-type: none"> 1 Product name: Electric stretcher trolley 2 Product model, number, maximum load-bearing capacity and production date: Product model, Product number, Maximum load capacity 3 Main technical parameters: Type of power supply: Lithium battery DC25.9V, IP rating: IPX4, Rated voltage: 100-240VAC 50/60Hz, Expected service life: 3 years 4 Production license number and registration certificate number: Production registration document number: S.N.S.Y.J.X.S.C.B. No.20200001, Medical device registration document number 5 Manufacturer information/address: Registrant/manufacturer: Nanjing Kangni Smart Technology Co., Ltd., Production address: No.11 Hengjing Road, Economic and Technological Development Zone, Nanjing, Jiangsu Province, Contact information: 4008-280-900 6 WeChat official account QR code 7 Warning sign 8 Battery recycling icon 9 Product classification 10 Please read the Instruction Manual before using this product
2	Product model, number, maximum load-bearing capacity and production date	
3	Main technical parameters	
4	Production license number and registration certificate number	
5	Manufacturer information/address	
6	WeChat official account QR code	
7	Warning sign	
8	Battery recycling icon	
9	Product classification	
10	Please read the Instruction Manual before using this product	

1.4 General safety instructions


1.4.1 Description of warning symbols in the Instruction Manual


<p>Warning symbols Warning! Before using or selling the electric stretcher trolley, users, dealers or sales personnel must carefully read this Instruction Manual and abide by the relevant regulations in it, especially "warning" and "prohibition".</p>	
	<p>Attention! ▪ General best operating method.</p>
	<p>Caution! ▪ Safety tips; Ignoring these tips lead to damage to the control system and machine.</p>
	<p>Warning! ▪ Safety tips; Ignoring these tips may lead to personal injury.</p>


1.4.2 Description of machine warning symbols


<p>Warning symbols If you find that the stretcher trolley is pasted with the following signs in different parts when using it, please pay attention to the following matters.</p>	
 <p>Warning</p>	<ul style="list-style-type: none"> • Do not insert conductive metal substances into the hole. • Please carefully check the plug interface and insert it correctly. • Do not contact with liquid to prevent electric shock.


1.4.3 Safety instructions before use


<p>Warning! Improper product operation: Overturn caused by wrong use.</p>	
	<ul style="list-style-type: none"> • The product can only be used by authorized users. • Operators should receive training and professional guidance on safe use of the product. • Operators must use the product correctly according to the instructions under the guidance of authorized personnel. • The seller must also use the product according to the Instruction Manual under the guidance of authorized personnel. • Read the instructions in the Instruction Manual thoroughly. • Do not apply external force to the patient or the machine during use to prevent overturning.


<p>Warning! Overload: If the electric stretcher trolley overturns due to overload, it will cause serious injury and product damage.</p>	
	<ul style="list-style-type: none"> • Do not exceed the maximum load-bearing capacity (see nameplate and "technical data"). • Note that some options and add-ons will change the load-bearing capacity of the product.

Warning! Improper handling of packaging materials: Risk of asphyxia due to neglect of supervision.	
	<ul style="list-style-type: none">• Keep the packaging materials out of reach of children.• Do not discard packaging materials carelessly.


Warning! Users modify settings by themselves: Unauthorized modification of product settings results in user injury.	
	<ul style="list-style-type: none">• Do not modify the product settings set by authorized personnel.• If there is a problem with the settings, please contact the after-sales customer service.

Caution! Screw not tightened: Damage, overturning and falling due to wrong assembly.	
	<ul style="list-style-type: none">• Check whether the anti-loose mark on the screw is misplaced.• Re-tighten the mounting screws and nuts after all adjustments or readjustments authorized by the manufacturer have been completed.

Caution! Uncontrolled movement of components during product adjustment: Damage, extrusion and deformation due to non-compliance with maintenance and repair instructions.	
	<ul style="list-style-type: none">• Make sure that body parts (such as hands or head) are never in dangerous areas.• Complete the adjustment with the assistance of others.

Attention! Used under incorrect environmental conditions: The product is damaged due to too high or too low temperature.	
	<ul style="list-style-type: none">• This product can only be used in the temperature range of -10°C to +50°C (+14°F to +122°F).

1.4.4 EMI description

Warning! Keep away from mobile devices with electromagnetic radiation: Interference with control signals may lead to product damage and collision with people or objects.	
	<ul style="list-style-type: none">• People with pacemakers should avoid approaching the magnetic field. This product is an electrical device with magnetic field inside. It is recommended that people with pacemakers should not use this electric stretcher trolley.• Turn off all mobile devices when operating the stretcher trolley, because the drive characteristics of the product will be affected by electromagnetic fields.• Turn off the control unit when it is not needed, because the product may generate electromagnetic fields that may cause interference to other devices.

	<p>The product has been tested in accordance with EMC rules.</p> <ul style="list-style-type: none">• Despite compliance with all applicable EMC directives and standards, the product may be interfered with or disturbed by other electronic devices (e.g. EAS systems of department stores). If this happens, please move the product out of the interference range.• As far as we know, other types of handheld devices, such as radio phones, notebook computers, AM/FM radios, televisions, CD players and tape players, and small appliances, such as electric shavers and hair dryers, are unlikely to cause EMC problems in the stretcher trolley.
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1.5 Delivery instructions

When an electric stretcher trolley is delivered, product assembling is usually completed and meets the individual needs of the corresponding user. When you receive the stretcher trolley, please check whether the product is complete according to the packing list! If the product you receive is incomplete, please contact the after-sales customer service immediately.

Packing list

Name	Quantity	Unit
Electric stretcher trolley	1	set
Instruction Manual	1	copy
Charger	1	set
Square key	1	piece
Certificate of Conformity	1	piece
Warranty card	1	piece
Optional components	Please refer to the list in the packing box	--

Chapter II Operating Instructions for Electric Stretcher Trolley

2.1 Electrical operation

2.1.1 Power switch

Before using the electric stretcher trolley, be sure to turn on the power switch between the left and right columns of the stretcher trolley rack (method: press the switch button, the breathing light is on and the stretcher trolley is powered on), and then continue to use the stretcher trolley.

After using the stretcher trolley, please hold the power switch button for about 3S, the breathing light is off, and the power is turned off at this time.

- **Turn on power supply:** Press the power switch button, at this time, the breathing light is on and the stretcher trolley is powered on.

- **Turn off power supply:** Press and hold the switch for 3S, the breathing light is off.



Power switch

Breathing light

Attention!



- When operating the power switch, please be gentle, and do not use too much force to avoid damaging the controller.

2.1.2 Emergency stop switch

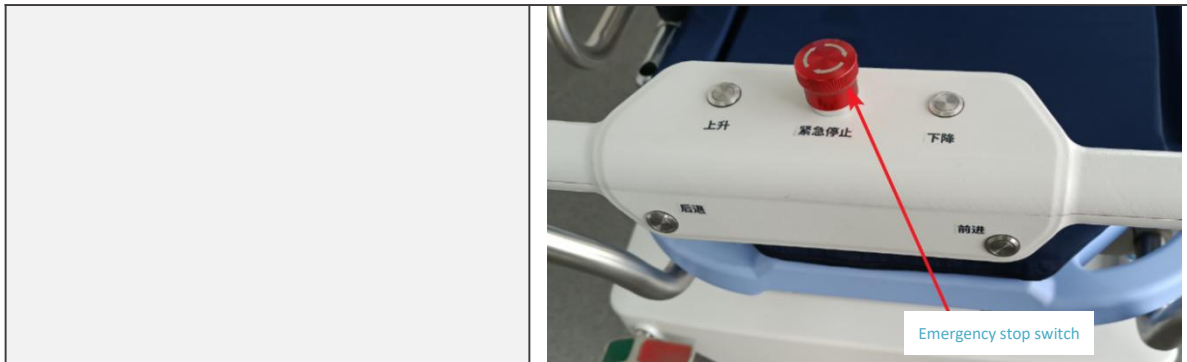
While using the stretcher trolley, if you need to cut off the power supply in case of emergency, please operate the emergency stop switch. There are two emergency stop switches, which are respectively located on the operating table between the left and right columns of the rack and the handrail switch box. You can press the emergency stop button to cut off the power supply.

- **Turn on the emergency stop switch:** Press the emergency stop button to cut off the power supply.


- **Reset the emergency stop switch:** Turn the button clockwise, and the switch will bounce up and reset.



Emergency stop switch



Attention!




- When operating the emergency stop button, please be gentle, and do not use too much force to avoid damaging the controller.

2.1.3 Battery level display


You can know the remaining capacity in the battery by the battery level shown in the system. The value is not completely accurate because the battery level is calculated based on the battery voltage percentage, but it can help you follow the power information and avoid running out of battery. The product can be used 60 times at most when it is full charged (a single transfer-in/transfer-out is counted as one).

Note: This parameter is related to factors such as load-bearing capacity, using habit, battery service cycle and charging habit.

- The battery level is displayed in 5 bars.
- 5 bars means the battery is fully charged and 1 bar means low battery



Attention!



- Do not use the stretcher trolley when the battery level is less than 1 bar and charge it as soon as possible. If this condition is not complied with, there will be potential safety hazards.

2.1.4 Charging port

A high-performance lithium battery is used by the electric stretcher trolley. The battery charging port of the stretcher trolley is below the handle on the column. Insert the charger to charge the battery, and the charging indicator on the charger will be on.

When charging, please insert the charger plug into the charging port first, and then insert the plug at the other end of the wire into the household 220V power socket. At this time, the charging indicator is on in red, indicating that the charger is charging the battery; When the battery is dead, it will takes 4~5 hours for the battery to be fully charged. When the charging indicator turns green, it indicates that the battery is basically full. To ensure sufficient charging, continue floating charging for 1-2 hours after full charge is displayed.

Charging tips:

1. Do not use the electric stretcher trolley while the battery is being charged.
- 2: You will see the current state of charge after turning on the switch.



Attention!

Charging misunderstanding: Charging is not completed or undercharging due to improper operation.




- When the charging indicator is red, it indicates that the charger is charging the battery.
- When the charging indicator is green, it indicates that the battery is basically fully charged.

Attention!

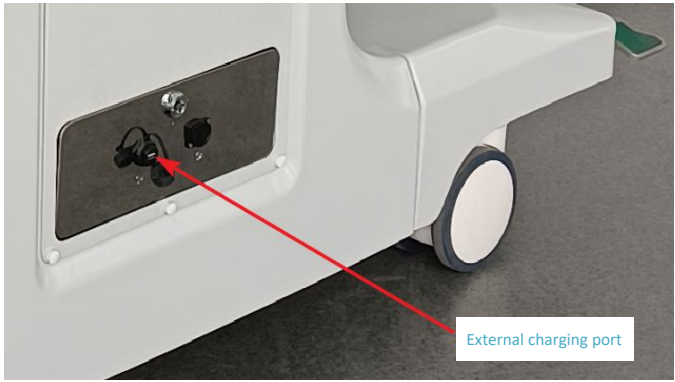


- The charger of the stretcher trolley is a built-in charger, which will automatically stop after the battery is fully charged with the charger.
- Do not charge the battery in direct sunlight or high temperature environment.
- If the battery in the lifting device gets abnormally hot, stop charging immediately and contact the after-sales customer service.
- No matter what battery level is, it is recommended to charge the battery after each use.
- During charging, the charger may stop charging due to the power grid fluctuation and static electricity. After the power grid returns to normal or static electricity is eliminated, the charger will automatically resume charging.
- Only use the battery charger within the specified temperature and humidity limits.
- Avoid deep discharge of the battery. The manufacturer will not assumes any responsibility for the damage caused by deep discharge.
- If the stretcher trolley is left unused for a long period of time, please charge the battery every 2 months.
- The battery cannot be charged when the emergency stop switch is pressed.

Warning!	
	<ul style="list-style-type: none">• Do not short circuit the positive and negative electrodes of the charging port/battery.• Do not use other batteries, and please use the batteries provided by the manufacturer. Do not use the battery of the electric stretcher trolley for other purposes.• When the battery is charged, pay attention to heat dissipation. Please keep the product away from children and inflammable and explosive materials.• Please charge the battery with the charger specially designed for the electric stretcher trolley, and do not use other chargers.• Before each use, please carefully check whether the connecting cable and connector of the charger are damaged.• Please do not disassemble the charger. If the charger fails, please contact the after-sales customer service.• Do not use the electric stretcher trolley in the charging state.• If the battery becomes hot, smells, discolours, deforms or other abnormalities are found during use, charging or storage, please stop using the battery.• Do not disassemble, change the battery or modify the installation position of the battery without permission, and these operations can only be performed by authorized personnel trained by the manufacturer.• Avoid dust, dirt and moisture.

2.1.5 External charging port

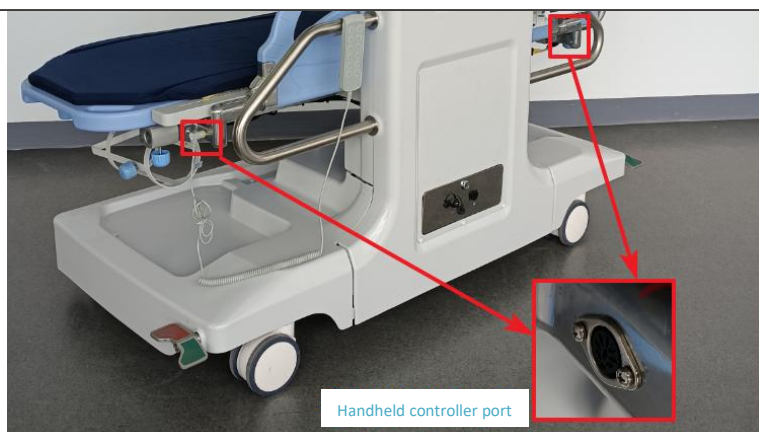
During the daily use of the stretcher trolley, the external charging port can be used for emergency charging of mobile electronic device, and the tablet PC of the stretcher trolley can be charged with the external charging port.

<ul style="list-style-type: none">• The external charging port is used for emergency charging of mobile electronic devices.	
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2.1.6 Handheld controller port

In the daily use of the stretcher trolley, it is usually more convenient to use the hand-held controller, so hand-held controller ports are reserved on both sides of the transfer trolley. As long as you insert the hand-held controller plug into the corresponding port on the mounting base of the transfer trolley, you can control the action of the stretcher trolley through the hand-held controller.

- The hand-held controller provides convenience to the caregiver, and the patient also can use the hand-held controller to adjust his/her posture if the physical condition permits.



2.2 Instructions for handheld controller

You can control the action of the stretcher trolley with the buttons on the button panel of the hand-held controller:




1	Transfer-in	Hold the key to execute the transfer-in process, move the target from the outside to the device, and release the key to stop.
2	Transfer-out	Hold the key to execute the transfer-out process, move the target out of the device, and release the key to stop.
3	Suspension up	Independently control the suspension mechanism to ascend, and release the key to stop.
4	Suspension down	Independently control the suspension mechanism to descend, and release the key to stop.
5	Translation extension	Independently control the translation mechanism to extend, and release the key to stop; This function is disabled when the anti-tilt device is not in place.
6	Translation retraction	Independently control the translation mechanism to retract, and release the key to stop.
7	Bed up	Independently control the bed mechanism to ascend, and release the key to stop.
8	Bed down	Independently control the bed mechanism to descend, and release the key to stop.
9	Anti-tilt extension	Independently control the anti-tilt mechanism to extend, and release the key to stop.

10	Anti-tilt retraction	Independently control the anti-tilt mechanism to retract, and release the key to stop; This function is disabled when the translation mechanism does not retract in place.
11	One-key reset	Automatically reset the device from any state to the initial state.
12	Mode switch	Switch between double support, left support and right support.

2.3 Instructions for slings

There are two main types of slings for the stretcher trolley: Soft-bag sling and semi-soft-bag sling, which are used in different scenarios.

Attention!	
	<ul style="list-style-type: none">• Please refer to the instruction video for details of how to use each specific sling of the stretcher trolley in different application scenarios.• Before lifting each specific sling of the stretcher trolley, please check that the rings, sling straps, sling bag and the screws on the translation suspension apparatus are tightened and the translation suspension apparatus is firmly suspended.

2.3.1 How to use soft-bag sling

The soft-bag sling (multi-functional shifting sling bag, multi-functional shifting toilet sling bag) is mainly used to move old persons or patients, and can be placed under the transfer trolley or bed sheets and used at any time; When necessary, you can temporarily put the soft bag under the patient's body by turning the patient sideways twice. When in use, put the lifting rope hooks on the stretcher trolley one by one in the lifting holes on both sides of the soft-bag sling, and then use the lifting function of the stretcher trolley.



Soft-bag sling

2.3.2 How to use semi-soft-bag sling

The semi-soft-bag sling (combined stretcher, 5-fold positioning pad) is suitable for patients with special needs such as fracture and postoperative care, and it can prevent the body from being squeezed and improve comfort. A combined stretcher is added to the soft bag to form the semi-soft bag, that is, there are extension rods or fixed rods on both sides and ends of the bag. When in use, put the soft bag under the patient, fix the two sides with zippers, and then transfer the patient with the stretcher trolley.



Semi-soft-bag sling

2.4 How to use the brake

When the stretcher trolley is left unused or you don't need to move it to another place, please step on the brake of the stretcher trolley to fix it. The brake of the stretcher trolley is on the transfer trolley, as shown in the following picture. Step on the red part of the brake and when releasing the brake, step on the green part of the brake.



Brake of the stretcher trolley.

2.5 Patient-transfer-in-lying-position function

The electric stretcher trolley can realize the transfer of old persons or patients in lying position from one platform to another. With this function, the old person or patient can be transferred onto the transfer trolley, operating table, etc. (the anti-tilt module is used) The operation method is as follows:

2.5.1 Preparation

1. Check the battery level of the device and whether the sling bag is ready.
2. Check the patient information and evaluate the patient's current condition.
3. Inform the patient of the transfer purpose and precautions.
4. Make sure that there are no obstacles in the use area.
5. Unfold the disposable cloth on the bed.
6. Put down the bed bars on both sides of the bed.

2.5.2 Transfer-in: Transfer the patient from the bed to the stretcher trolley

1. Unfold the sling bag and select sling bags with different functions according to requirements

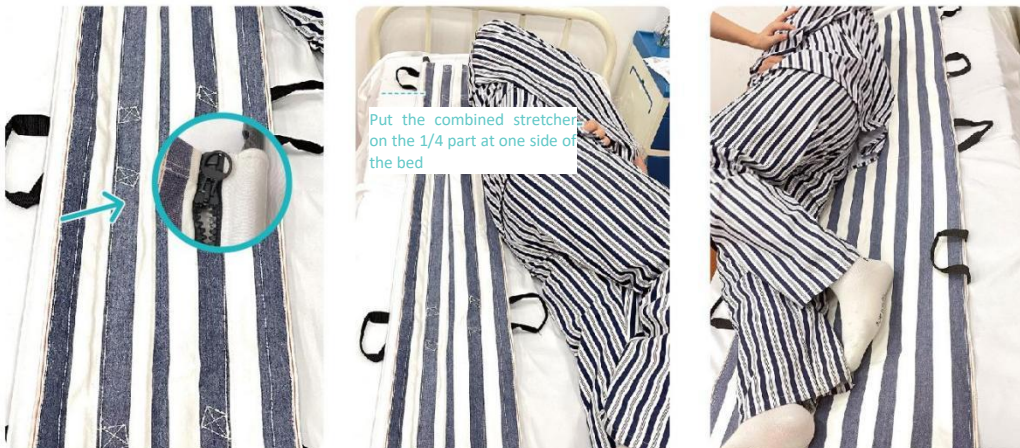
Transfer-in: Transfer the patient from the bed to the stretcher trolley

1. Put the sling bag on bed: Choose sling bags with different functions

示例1: 移位吊兜



示例2: 组合式担架



示例3: 五折转移垫



2. Turn on the power switch



Transfer-in: Transfer the patient from the stretcher trolley

3. Release the brake (green area)

Put the sling bag on bed: Determine the model of the sling bag according to the patient's weight, height and other information, and put the sling bag under the patient through standardized nursing operation.

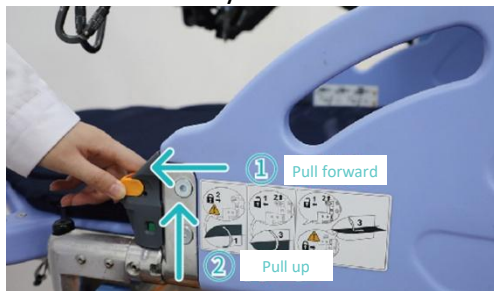
Example 1: Sling bag



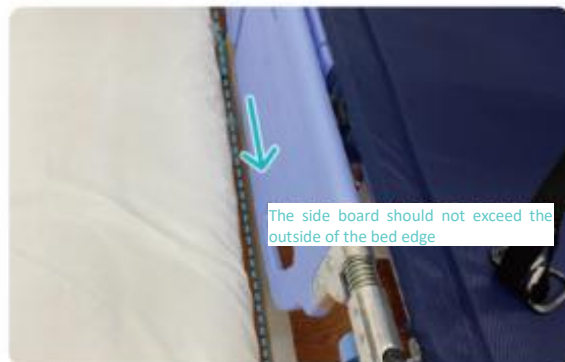
4. Press the Forward and Backward buttons to push the stretcher trolley to the designated position, and then release the Forward and Backward buttons;



5. Release the side board of the stretcher trolley



6. Push the stretcher trolley to the designated position





7. Press the brake (red area)



8. Long press the "Transfer-in" button



9. Hang the sling straps and press the buckles to adjust the length of the sling strap to a tight state (please thread the sling strap from the back of the buckle when reconnecting the buckle to the sling strap)



10. Long press the “Transfer-in” until one-click operation is completed





11. Release the brake (green area)



12. Retract the side board of the stretcher trolley (transfer the infusion bottle and pipeline to the corresponding position of the stretcher trolley)



2.5.3 Transfer-out: Transfer the patient from the patient lift to the bed

1. Lower the side board of the stretcher trolley and push it to the designated position (see steps 4, 5 and 6 of transfer-in for details)



2. Step on the brake (red area)



3. Anti-tilt module extends



4. The transfer platform descends, and the translation mechanism moves up vertically and moves forward horizontally





5. Untie the sling strap



6. Long press the Transfer-out button until one-key operation is completed, and transfer the infusion bottle and pipeline to the corresponding position of the bed.



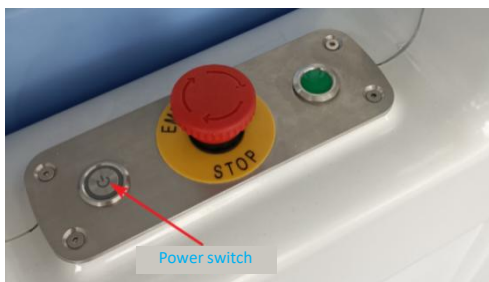
7. Release the brake (green area)





8. Retract the board of the stretcher trolley



9. Turn off the power supply



Attention!	
	<ul style="list-style-type: none">• Please refer to the instruction video for details of how to use the patient-transfer-in-lying-position function.

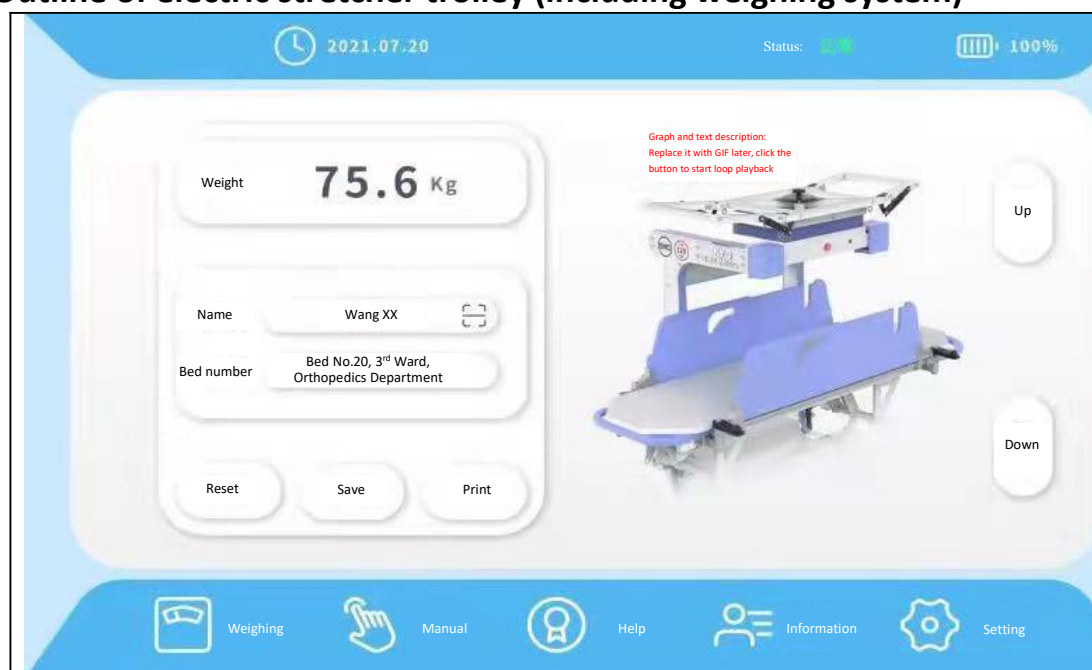
Warning!	
	<ul style="list-style-type: none">• Pay attention to the direction when the sling strap passes through the buckle, and thread the sling strap from the back of the buckle.

2.6 Weighing function of stretcher trolley

2.6.1 Weighing configuration table

Weighing management system	Weighing system	Sensor + touch screen, etc.
	Printing system	Printer

2.6.2 Outline of electric stretcher trolley (including weighing system)



Operation diagram of weighing system of the electric stretcher trolley

This product has passed the inspection before delivery, and has undergone comprehensive commissioning run test.

2.6.3 Operating instructions for weighing system

Using the electric stretcher trolley to measure the weight of old persons or patients is to use a sling bag for patient transfer in lying position, a combined stretcher, as well as the lifting function of the stretcher trolley to gently lift the old person or patient and directly measure the weight. The operation method is as follows:

(1) Touch screen reset operation

- ① Put the the sling bag on the transfer trolley;
- ② Insert two long rods of the combined stretcher into the sling bag, and then insert two short rods to fix the sling bag;
- ③ Start the weighing touch screen of the stretcher trolley. After the reading shows zero, push it to the side of the transfer trolley, slide and adjust the two sling straps at the head section to the front end of the suspension frame, and then slide and adjust the two sling sling straps at the foot section to the rear end of the suspension frame;
- ④ Lift the sling, and adjust the straps at the head and feet to the same length;
- ⑤ Operate the stretcher trolley to slowly raise the patient until a stable value appears on the touch screen;
- ⑥ Click the touch screen to reset;


⑦ Lower the stretcher (do not turn off the touch screen at this time).


(2) Weighing

- ① Place the sling bag under the patient by turning the patient over twice;
- ② Use zippers to fix the two long rods of the combined stretcher on the sling bag, and then insert two short rods to fix the sling bag;
- ③ Push the stretcher trolley to the side of the transfer trolley, lift the sling, and adjust the straps at the head and feet to the same length;
- ④ Operate the stretcher trolley to slowly raise the patient until a stable value appears on the touch screen;
- ⑤ After weighing, put down the patient and store the stretcher trolley.

(3) Calibration operation (the calibration has been completed before delivery and does not need to be adjusted after the trolley is delivered to the user)

- ① Hang the empty sling bag or stretcher on the device;
- ② Lift the empty sling bag or stretcher and it will suspend in the air;
- ③ Press the reset button to reset the weight of the empty sling bag, and ensure that the weight displayed is 0 at this time;
- ④ Place 200kg standard weight on the sling bag , enter the weight and click Calibration;
- ⑤ Shut down the device and save the current parameters;

Attention!	
	<ul style="list-style-type: none"> • Please refer to the instruction video details of how to use the weighing function. • For specific use of the weighing touch screen, please refer to the separate instruction manual of the touch screen.

Warning!	
	<ul style="list-style-type: none"> • Do not use other batteries, and please use the batteries provided by the manufacturer. Do not use the battery of the touch screen for other purposes. • When the battery is charged, pay attention to heat dissipation. Please keep the product away from children and inflammable and explosive materials. • Please charge the battery with the charger specially designed for the electric stretcher trolley, and do not use other chargers. • Before each use, please carefully check whether the connecting cable and connector of the charger are damaged. • The charger shall not be used outdoors, but only indoors. • Do not use the electric stretcher trolley in the charging state. • If the battery becomes hot, smells, discolours, deforms or other abnormalities are found during use, charging or storage, please stop using the battery. • Do not disassemble, change the battery or modify the installation position of the battery without permission, and these operations can only be performed by authorized personnel trained by the manufacturer. • Avoid dust, dirt and moisture.

2.6.4 Weighing and printing system

External printer (optional)

Please refer to the instruction manual in the printer packing box for specific use.




Name: Printer


For this product, just click on the touch screen to start printing.

Chapter III Safety and Precautions in Use

3.1 Load-bearing capacity


The maximum load-bearing capacity of this electric stretcher trolley is 150kg/200kg.

Attention!	
	<ul style="list-style-type: none">• The electric stretcher trolley has the maximum load-bearing capacity. Exceeding the maximum load-bearing capacity may cause injury or property loss to the patient. In this case, the manufacturer does not bear any responsibility.• Only trained users are allowed to the product.• Note that some options and add-ons will change the load-bearing capacity of the product.

Warning!	
	<ul style="list-style-type: none">• The electric stretcher trolley is intended for the use of one person only at any time.• This product is only used for its original purpose.


3.2 Turning

When turning, pay attention to the turning speed, turning angle, road conditions and other information so as to prevent the stretcher trolley from tipping over. Conditions that may cause the stretcher trolley to tip over while turning include but are not limited to: Fast turning speed, large turning angle, uneven road surface, inclined road surface, stepped road surface (such as the drop between rooms), and other sudden road surface changes.

Warning!	
	<ul style="list-style-type: none">• Don't turn fast. When you have to turn urgently, please slow down first, stabilize the center of gravity of the trolley, and then turn slowly.• Do not operate the stretcher trolley to turn on very smooth surfaces (such as icy surfaces, surfaces with water) or very rough surfaces (such as gravel).


3.3 Obstacles

The casters of the electric stretcher trolley shall not cross any obstacles larger than 20mm (height) × 80mm (width).

Warning!	
	<ul style="list-style-type: none">• The manufacturer will not be liable for the tipping of the electric stretcher trolley caused by crossing obstacles.

3.4 Retrofitting


Do not change any part of the electric stretcher trolley.

Warning!	
	<ul style="list-style-type: none">• The manufacturer will not be liable for any loss caused by unauthorized retrofitting or change of the stretcher trolley.

3.5 Transferring


Please try not to sit horizontally, lean against or sit on one side in the sling bag of the electric stretcher trolley, and also put your hands in the sling bag. If the stretcher trolley cannot lift the patient in normal posture, keep a stable center of gravity within the two columns of the moving support.

The electric stretcher trolley shall not climb slopes greater than 10° while transferring a patient.

Warning!	
	<ul style="list-style-type: none">• When transferring a patient with the electric stretcher trolley, the center of gravity shall be within the two columns of the moving support.• The patient shall not touch other objects other than the sling bag during transferring.• The manufacturer will not be liable for the tipping of the electric stretcher trolley caused by climbing or crossing obstacles.

3.6 Electromagnetic compatibility

Electrical equipment may be affected by electromagnetic interference. These interferences may be caused by radio stations, television stations or other wireless transmitters and mobile phones. If the stretcher trolley runs abnormally due to electromagnetic interference, please turn off the power immediately and contact your service agent.

Warning!	
	<ul style="list-style-type: none">• People with pacemakers should avoid approaching the magnetic field. This product is an electrical device with magnetic field inside. It is recommended that people with pacemakers should not use this electric stretcher trolley.• Turn off all mobile devices when driving the trolley, because the driving characteristics of the product are affected by electromagnetic fields.• Turn off the control unit when it is not needed, because the product may generate electromagnetic fields that may cause interference to other devices. The product has been tested in accordance with EMC rules.• Despite compliance with all applicable EMC directives and standards, the product may be interfered with or disturbed by other electronic devices (e.g. EAS systems of department stores). If this happens, please move the product out of the interference range.• As far as we know, other types of handheld devices, such as radio phones, notebook computers, AM/FM radios, televisions, CD players and tape players, and small appliances, such as electric shavers and hair dryers, are unlikely to cause EMC problems in the stretcher trolley.

3.7 Transportation


3.7.1 Notes during transportation

During the transportation of electric stretcher trolley, please pay attention to the following matters:

- (1) In the process of long-distance transportation, the packing box should be placed in the upward direction and fixed;
- (2) Packing boxes shall not be stacked for more than 1 layer;
- (3) Do not step on, impact or roll the packing boxes and keep them away from rain in the process of transportation and handling.

Chapter IV Care and Maintenance


The stretcher trolley is a mechatronic device. To ensure its normal operation, we need to perform some necessary routine maintenance and care. This section will guide you how to carry out routine maintenance and care. If you have any questions, please contact the after-sales customer service.

Warning!	
	<ul style="list-style-type: none">• Only authorized personnel trained by the manufacturer can maintain the stretcher trolley. To ensure the functions and operational safety of the stretcher trolley, please carry out maintenance and overhaul at least once every six months.• Do not repair or maintain the stretcher trolley during use.• Check all functions of the stretcher trolley for obvious signs of damage at least once a month, and ensure that all screw are firmly connected.• If any fault, defect or other risks that may cause personal injury is found during inspection, please stop using the product immediately.• If the product moves uncontrollably due to faults, please stop the operation and contact the after-sales customer service.• The battery shall not be disposed of as domestic garbage. Please follow the information indicated on the battery by the manufacturer.

4.1 Handling of water or other liquids

Water or other liquids can cause corrosion of electrical components, which will lead to electrical or mechanical failure of the stretcher trolley. Liquids that may be involved in daily use include: Water, drink, body fluids, etc. When the electric stretcher trolley comes into contact with water or other liquids, please handle it as follows:

- (1) Wipe the stretcher trolley with a dry towel first.
- (2) Then move the stretcher trolley to a ventilated and dry place and let the liquid volatilize completely.
- (3) Before using the stretcher trolley again, check that the hand-held controller and lifting device are working properly and other functions are normal.
- (4) If you find any problems, please consult the after-sales customer service.

Warning!	
	<ul style="list-style-type: none">• Do not blow dry the device with hot air blower. Hot air can deform plastic parts. The sling bag must be completely dry before use to prevent skin allergy or other personal injury.• Do not use any corrosive detergent, solvent or hard brush.• Do not clean the lifting device and the frame with a damp plastic brush.• Do not use high-pressure washer to clean the product.

4.2 Daily inspection

- (1) Check all the cables: The connectors are fastened, free from damage and corrosion. Cable sheaths are not broken and bunched cables are not loose.
- (2) Keep the electric stretcher trolley clean.
- (3) Check whether all screws and nuts are loose or fall off.

4.3 Weekly inspection


Check the stretcher trolley for loose parts and screws.

4.4 Manufacturer's maintenance

Regular battery inspection, usually after two years of use.

4.5 Cleaning and disinfection


Clean and disinfect the trolley with soft wet towels and mild detergents and disinfectants. Wipe it regularly with 500 mg/L clear water containing chlorine reagent; If the patient's blood, secretions and excretions pollute the trolley, wipe it clean with 2000 mg/L clear water containing chlorine reagent and dry it for later use.

Warning!	
	<ul style="list-style-type: none">• When using disinfectants and detergents, please follow relevant safety instructions and use them in moderate amount. In this way, you can prevent skin allergies or damage to the sling surface or rack coating.• Corrosive detergents will damage the surfaces of plastic and metal parts and cause skin allergies.• Do not clean the rack of the stretcher trolley with water or flush it directly with water, and you can only wipe it with a wet towel.• Clean the control panel and handrail before disinfection. You can wipe all parts of the product with a colorless water-based disinfectant. Please follow the instructions provided by the manufacturer.

4.6. Storage

Before storage, please turn off the main switch of the battery and fully charge the battery of the electric stretcher trolley. If it is left unused for a long time, please charge the battery once every two months.

Please store the stretcher trolley in a dry place, keep it away from damp and corrosive environment, and avoid component rust and damage to electronic components. Avoid storage the product under low temperature or high temperature, and the proper storage temperature is: $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$, RH 20%~90%, no corrosive gas, indoor environment with good ventilation.

Caution!	
Improper operation in long-term storage: Product damage due to improper storage.	
	<ul style="list-style-type: none">• Please store the electric stretcher trolley in a dry place, keep it away from damp and corrosive environment, and avoid component rust and damage to electronic components. When storing, please disconnect the main switch of the battery.• When the electric stretcher trolley is parked for a long time, the tires may be deformed (become flat in some areas). When in use, this deformation will disappear by itself with the passage of time.

Chapter V Warranty

5.1 Warranty regulations

The stretcher trolley meets the relevant national quality standards and has passed the corresponding quality inspection and certification.

From the date of purchase, in case of quality problems, after-sales service will be provided according to the following warranty regulations based on the warranty card. The warranty period starts from the date on the delivery document or warranty card.

5.2 Warranty period for normal use

See the follow information:

- (1) The warranty period of the rack of the electric stretcher trolley is 3 years.
- (2) The warranty period of the motor is 1 year.
- (3) The warranty period of the controller and the electronic control system is 1 year.
- (4) The warranty period of the battery is 6 months (special note: Battery life is related to use and maintenance habits).

5.3 Not covered by warranty

- (1) Beyond the warranty period.
- (2) Damage caused by failure to use, maintain and keep the product according to the instructions in the Instruction Manual.
- (3) Unauthorized repairs or retrofitting.
- (4) Failure to provide the warranty card or the proof of purchase.
- (5) Products without certificates.
- (6) Man-made damage.
- (7) Appearance damage is not covered by warranty.

Attention!



- To maintain the ecological environment of the earth and avoid environmental pollution, when any part of the electric stretcher trolley is damaged or the battery is replaced, please dispose of the waste according to local laws and regulations or hand over the old products to the after-sales for handling, and do not discard them at will.
- Nanjing Kangni Smart Technology Co., Ltd. reserves the right of final interpretation for all contents in this Manual.

5.5 Non-retrofitting agreement

After the stretcher trolley is delivered, please do not retrofit, disassemble, transform the product or add accessories to it without permission. The manufacturer does not assume warranty and related safety responsibilities for any products retrofitted by users themselves.

5.6 Contact us

If you find any problems in relation to product safety or reliability or have other suggestions during use, please let us know and we will continue to improve them. Our contact information is as follows:

Company name: Nanjing Kangni Smart Technology Co., Ltd.

Website: www.kangnismart.com

Sales hotline: 400-828-0900

E-mail: smart@kn-nanjing.com

5.7 Legal statements

1. Nanjing Kangni Smart Technology Co., Ltd. reserves the copyright of this Instruction Manual.
2. This Instruction Manual is only provided to the buyers of the electric stretcher trolley, and shall not be used for other purposes; No part of this text shall be extracted, copied, translated or used in commercial related activities without permission.
3. The electric stretcher trolley product, together with the related technologies and text descriptions of the electric stretcher trolley stated in this Instruction Manual, is the intellectual property of Nanjing Kangni Smart Technology Co., Ltd., and may not be copied or counterfeited without the permission of Kangni Smart Technology.

Chapter VI Annex

6.1 Performance parameters of electric stretcher trolley

Item	Model	KY3-A-8C200	KY3-A-8C150	KY3-A-7C200	KY3-A-7C150
		KY3-B-8C200	KY3-B-8C150	KY3-B-7C200	KY3-B-7C150
		KY3-A-8N200	KY3-A-8N150	KY3-A-7N200	KY3-A-7N150
		KY3-B-8N200	KY3-B-8N150	KY3-B-7N200	KY3-B-7N150
Rated load (Kg)		≤200	≤150	≤200	≤150
Overall dimensions of stretcher trolley	Maximum distance of translation mechanism L_{p1}	1640 (-10, +10)		1540 (-10, +10)	
	Total length L (mm)	2100 (-10, +10)			
	Total width W (mm)	≤870			
	Minimum lifting height H_0 (mm)	1850 (±10)			
	Maximum lifting height H_1 (mm)	2150 (±10)			
	Initial distance of translation mechanism L_{p0}	840 (-10, +10)			
	Minimum height of push handrail H_{F0}	1108 (-10, +10)			
	Maximum height of push handrail H_{F1}	908 (-10, +10)			
	Minimum height of transfer bed H_{C0}	605 (-10, +10)			
	Maximum height of transfer bed H_{C1}	805 (-10, +10)			
	Minimum size of anti-tilt extension L_{Q0}	852 (-5, +5)			
	Maximum size of anti-tilt extension L_{Q1}	1222 (-5, +5)			
	Rack material		Low alloy structural steel Q355		
Weight KG		≤285			
No-load lifting speed m/S		≤0.25			
Maximum ramp angle (°)		10			
Threshold crossing height (mm)		20			
Threshold crossing width (mm)		80			
Electrical Parameter	Rated voltage of lifting motor (V)	24			
	Translation mechanism motor (V)				
	Bed lifting motor (V)				
	Anti-tilt bracket motor (V)				
	Assisted press-down motor (V)				

Booster wheel motor (V)	
Rated power of lifting motor (W)	120
Translation mechanism motor (W)	140
Bed lifting motor (W)	125
Anti-tilt bracket motor (W)	75
Assisted press-down motor (W)	125
Booster wheel motor (W)	120
Rated battery capacity (Ah)	15
Rated battery voltage (V)	25.9
Number of batteries	1
Input power supply	100-240VAC 50/60Hz
Maximum output current of charger (A)	4
Maximum output current of controller (A)	23

6.2 Type spectrum

Model	Operation		Function selection	Maximum stroke of horizontal shift		Bearing capacity	
	Automatic	Semi-automatic	Weighing	700mm	800mm	150kg	200kg
KY3-A-8C200	●		●		●		●
KY3-A-8N200	●				●		●
KY3-A-7C200	●		●	●			●
KY3-A-7N200	●			●			●
KY3-A-8C150	●		●		●	●	
KY3-A-8N150	●				●	●	
KY3-A-7C150	●		●	●		●	
KY3-A-7N150	●			●		●	
KY3-B-8C200		●	●		●		●
KY3-B-8N200		●			●		●
KY3-B-7C200		●	●	●			●
KY3-B-7N200		●		●			●
KY3-B-8C150		●	●		●	●	
KY3-B-8N150		●			●	●	
KY3-B-7C150		●	●	●		●	
KY3-B-7N150		●		●		●	

Note: 1. Movement aid, external printer and external operating handle are optional accessories.
2. In standard configuration, there is only one battery module; For the easy long-term operation, we recommend that you purchase multiple battery modules as backups;

3. The sling bag module can be divided into: Shifting soft sling bag, hard board sling bag, splicing and combined sling bag, zipper combined sling bag, bathing sling bag, toilet sling bag and 5-fold sling bag;


4. Users can choose one or more sling bags according to the actual environment and needs; For easy operation, users can purchase multiple sling bags as backups.


Warranty card of electric stretcher trolley				
Information registration of electric stretcher trolley				
Model/plate number				
Name of user/organization				
Address				
Tel.				
Date of purchase				
Dealer information registration				
Name of dealer				
Dealer address				
Signature/seal				
Nanjing Kangni Smart Technology Co., Ltd.				
Website: www.kangnismart.com Service hotline: 400-828-0900				
Maintenance history of electric stretcher trolley				
No.	Fault cause	Time and place	Solution	Remarks
1				
2				
3				
4				
5				
6				


UDI Label Design Sample


① Electric transfer trolley

Product model:	<input type="text"/>	Production registration document number: S.N.S.Y.J.X.S.C.B. No.20200001	
Product number:	<input type="text"/>	Medical device registration document number:	④
Maximum load capacity:	<input type="text"/> ②	Registrant/manufacturer: Nanjing Kangni Smart Technology Co.,. Ltd.	⑤
Date of production:	<input type="text"/>	Production address: No.11 Hengjing Road, Economic and Technological Development Zone, Nanjing, Jiangsu Province	
Type of power supply: Lithium battery DC25.9V		Contact information: 4008-280-900	⑥
IP rating: IPX4	③		
Rated voltage: 100-240VAC 50/60Hz			
Expected service life: 3 years			

⑦ 

⑧ 

⑨ 

⑩ 

Please refer to the Instruction Manual for other information

