



Electric Hospital bed

HBN02

Product Reference Guide



Customer support: support@olernmedical.com

-
- Prior to the use of the electric hospital bed, it is essential to thoroughly review the "Product Reference Guide" and utilize it in a correct and safe manner.
 - After perusing this guide, kindly store it in a secure location for easy reference as needed.
-

SCAN THE QR CODE TO VIEW ON YOUR PHONE OR TABLET,
Electronic manual available here.



If you experience any difficulties or issues when using the product, please feel free to contact our customer service first. We will provide professional troubleshooting and effective solutions to help you resolve the problem. We highly recommend reaching out to us for professional support prior to initiating any return.

Customer Service Email: support@olernmedical.com

Content

Installation Instructions

1. Parts list	1
2. Step 1 : Installation of Head/ Foot board	2
3. Step 2 : Insert IV Pole (Optional)	4

Instruction Manuals

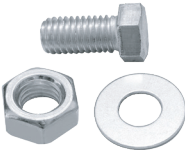
1. Safety Instruction	5
2. Working conditions and User responsibilities	7
3. Product Introduction	8
4. Procedure of starting	10
5. Funtion Introduction	13
6. Maintenance and Clean	18
7. Troubleshooting and Identification	20
8. Deposit	20
9. End-of-life of products	21

Installation Instructions

Parts list

NOTE: Upon receiving the product, please check the parts list to ensure all installation accessories are included.

WARNING: Keep any packaging materials away from children and pets —these materials are a potential source of danger. e.g. suffocation.

Number	Designation	Image	Quantity
1	Bed Frame		1
2	Headboard		1
3	Footboard		1
4	IV Pole		1
5	Mattress		1
6	Screws (Spare. Please keep it properly.)	 M10 screws x4 M10 gasket x8 M10 nuts x4	1 pack

Step 1: Installation of Head/Foot Board

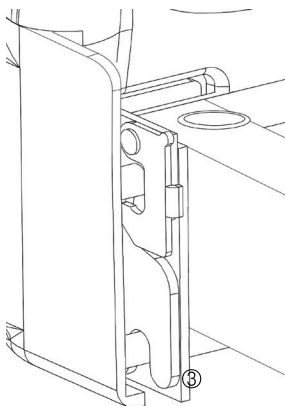
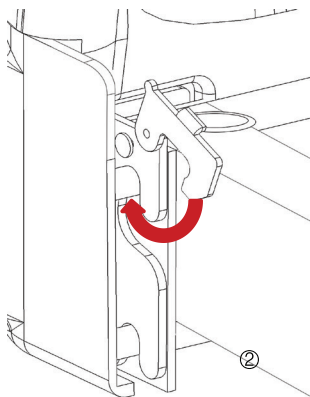
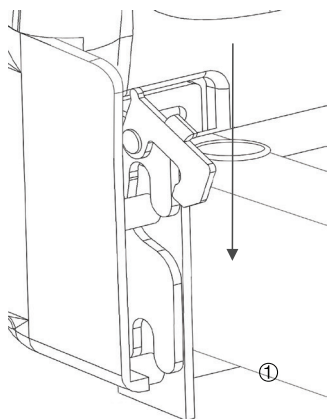
Required componment:

Number	Designation	Image	Quantity
1	Headboard		1
2	Footboard		1

- The head/foot board is installed with hooks. Align the headboard with the head of the bed and make sure the snap fasteners are in the open state.



- As shown in figure, hang the head/foot board into the hanger at the head and foot of the bed, and then fasten the locking switch to lock the headboard and footboard.



Step 2: Insert IV Pole (Optional)

Required component:

Number	Designation	Image	Quantity
1	IV Pole		1

- Insert the IV Pole into the corresponding infusion stand jack at the head or end of the bed to complete the installation.



Instruction Manuals

1.Safety Instruction

1.1 The beds in this series are designed to guarantee safe usage, as long as the user follows the operating instruction.

1.2 The combined weight of the patient and any additional equipment must not exceed the maximum weight capacity. In the event that the bed is temporarily overloaded, such as during cardiopulmonary resuscitation, it should be lowered to its lowest position.

1.3 The bed is intended for use by patients only; sitting on the bed by others is strictly prohibited.

1.4 The patient's height should not surpass 78.7inch (200cm).

1.5 When the patient is not under medical supervision, potentially harmful functions should be locked out.

1.6 This bed should be kept level when the patient is confused for clinical reasons and when the patient is not under medical supervision. (Except for individualized medical advice and special circumstances.)

1.7 When the patient is not awake, please secure the siderail controller to prevent accidental operations that could harm the patient.

1.8 The user should prevent hazards resulting from cable connections, such as stretching or squeezing the cables.

1.9 When the electric hospital bed is near frequently used equipment or in the cardiac chair position, it is crucial to operate the bed according to the manual instructions. Failure to do so may result in unexpected and serious accidents, such as potential injury from metal parts of the bed or its equipment.

1.10 When the patient using the bed is not under medical supervision, it is recommended to adjust the bed to its lowest horizontal position in order to minimize the risk of injury from potential falls when getting on or off the bed, or while lying on it.

1.11 Before adjusting the bed surface position, healthcare workers must ensure that the movement of the bed panels and equipment around the bed will not pose a danger to the patient.

1.12 CPR handles are essential for patient resuscitation and should be routinely inspected by healthcare professionals to ensure proper functionality.

1.13 During the folding or raising of the siderails, healthcare workers should be mindful of potential hand pinching and ensure the safety of both the patient and themselves, as well as other objects.

1.14 When raising or lowering the bed, healthcare workers should ensure that the raised bed will not interfere with surrounding equipment and create a hazard. Similarly, when lowering the bed, they should verify that no equipment under the bed will be crushed and pose a hazard.

1.15 When the hospital bed is in operation, refrain from using equipment that emits electromagnetic and radio waves nearby, as this can lead to malfunctions in the bed.

1.16 The performance of the electric hospital bed may be affected by portable and mobile RF communication devices. It is important to avoid strong electrical interference when using these devices, such as being near mobile phones or microwave ovens.

1.17 In the event of accidental movement of the bed, immediately depress the caster locking pedal to lock the casters.

1.18 If the manual CPR handle is activated inadvertently, it may result in rapid descent of the backrest or legrest, potentially causing vibration shock to the patient. Similarly, if the emergency stop switch is mistakenly pressed, it will halt the movement of the bed and could lead to discomfort for the patient.

1.19 If infusion holders that do not match are used, the weight-bearing properties of the infusion holders cannot be ensured.

2. Working conditions and User responsibilities

2.1 Working conditions

The equipment is designed for indoor use.

Temperature range: -4°F to 131°F (Ambient temperature change not exceeding 68°F over an 8-hour period)

Humidity: ≤85%

Atmospheric pressure: 700hPa to 1060hPa



Warning

- Any care or maintenance beyond the instructions provided in this guide is prohibited. The company will not be held responsible for any damage resulting from operation that violates the instruction manual.
- Equipment or systems should not be used in close proximity to or stacked on top of other equipment. If it is necessary for them to be used in such a manner, they should be carefully observed to ensure proper functionality within the given configuration.
- Class A equipment is intended for use in industrial environments where there may be potential difficulties in ensuring EMC in other environments due to the conducted and radiated nuisance of the HBN02 electric hospital bed.

2.2 User responsibilities

2.2.1 Any individual or organization utilizing this product is considered a user.

2.2.2 The user must use this product appropriately, per its intended purpose and designated conditions of use.

2.2.3 The user shall try to prevent damage to the body and life of users, patients, and third parties.

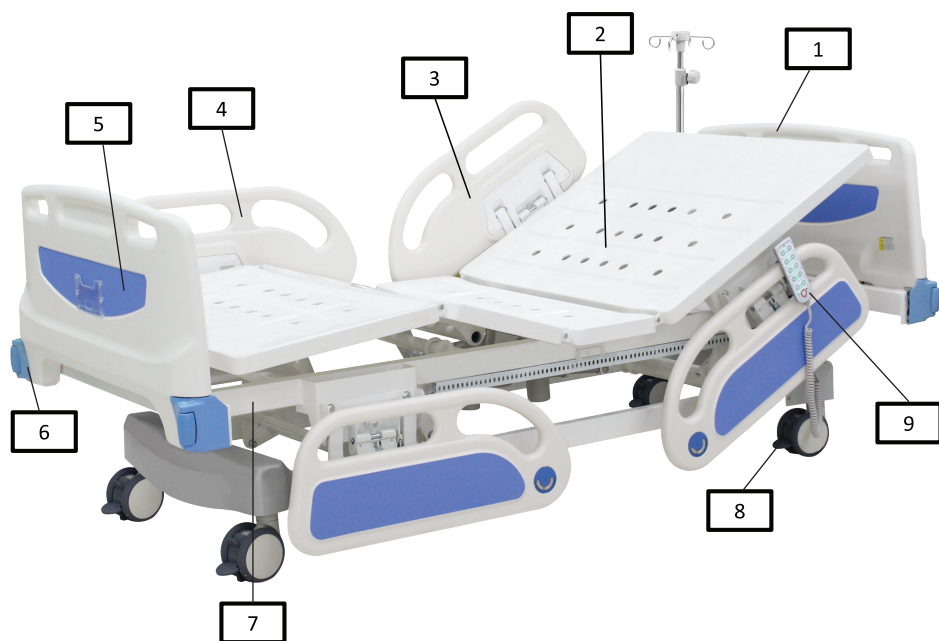
2.2.4 The user is accountable for ensuring that all individuals or entities utilizing this product have reviewed and comprehended these operating instructions, and will comply with them.

3. Product Introduction

3.1 Description of Electric hospital bed

A gear decelerates the drive motor in the electric actuator and drives a pair of screw nuts, converting the rotary motion of the motor into linear motion. The positive and negative rotation of the motor completes the action of the actuator. Through various levers, rockers, linkages, and other mechanisms, the actuator achieves a variety of movements to operate an electric hospital bed.

3.2 Product Illustration and Configuration



HBN02

Number	Designation
1	Headboard Component
2	Mattress Platform
3	Headrail
4	Footrail
5	Footboard Component
6	Anti-collision wheel
7	Bed Frame
8	Caster
9	Hand controller

3.3 Specification

3.3.1 Structural parameters

Feature	Parameter
Length of bed	76.0 ± 0.8inch (1930 ± 20mm)
Width of bed	35.4 ± 0.8inch (900 ± 20mm)
Overall length	85.4 ± 0.8inch (2170 ± 20mm)
Overall width	39.8 ± 0.8inch (1010 ± 20mm)
Max. height	29.9 ± 0.8inch (760 ± 20mm)
Min. height	18.1 ± 0.8inch (460 ± 20mm)
Backrest adjustable to the maximum angle	75° ± 5°
Legrest adjustable to the maximum angle	45° ± 5°
Thetascope position/Antitheta position	≤13°
Siderail Angle Indicator	Headrail with angle indicator
Electric CPR function	Yes

3.3.2 Electrical properties

Feature	Parameter
Rated Voltage	50/60Hz/100-240V
Rated Power	91.4W
Electric shock protector	Class II/B
Protection class	IP56

3.3.3 Critical parameters

Feature	Parameter
Max. safty loading weight(Patient+ Equipment)	550 LBS
Max. safty loading weight of IV pole	4.4LBS per hanger

4. Procedure of starting

4.1 Unpack

Electric hospital beds are shipped as a single unit in a packaging box with a centrally controlled locking brake system. The bed is wrapped in polyethylene film to prevent collision damage during transportation. To avoid accidental damage, please unpack indoors.

4.1.1 Remove the components and set them aside.

4.1.2 Loosen the castor retaining straps.

4.1.3 Switch on the brake system according to the guide.

4.1.4 Use two people to lift the bed out of the packaging box and lock the castors. (Prevent sliding when the ground is tilted)

4.1.5 Verify that the product and accessories match the configuration listed on the packing list attached to the box.

4.1.6 Read the project reference guide carefully.

4.1.7 Initiate the bed according to the installation and first-time use instructions provided in the guide.



Warning

- When moving the bed, avoid grabbing the plastic part of the bed body and the bed frame to prevent damage.
- When removing the bed from the packaging box, lift the bed out in its entirety and avoid pushing it out by rolling the casters. Pushing the bed out of the box may cause friction that could break the motor power cord.
- If the bed's functional indicators do not match the data in the guide, refrain from using it and report the situation to the brand immediately.

4.2 Packing List

Number	Designation	Quantity
1	Main frame	1
2	Headboard component	1
3	Footboard component	1
4	Mattress	1
5	IV pole	1
6	Product reference guide	1
7	Screw+Nut	4

4.3 Initiate the start-up process

4.3.1 Verify that all bed controls, including the push-button hand controller, siderail controller and bed-end controller are operating correctly.

4.3.2 Verify the locking function key for the push-button hand controller, siderail controller and bed-end controller.

4.3.3 Verify the angle of inclination of the backrest and legrest.

4.3.4 All procedures must be conducted in accordance with the pertinent sections pertaining to the electronic control system outlined in this guide.

4.3.5 After verifying all functions for any abnormalities, connect the 100-240V external power plug and ensure that the power supply is functioning normally.

4.3.6 When conducting all operations, it is important to observe whether the bed moves smoothly and quietly, without any abnormal stops or unusual noises. The mechanical transmission and motor noise should not exceed 65 decibels when measured one meter away from the bed.



Warning

- All electrical equipment connected to the patient should be linked to the designated additional mounting system.
- Ensure that there are no short circuits or loose connections after installation before conducting a power test.
- If the bed does not move smoothly and quietly, it should not be used further. Please promptly notify the Brand Owner of this issue. If use continues despite this warning, the brand owner will not be held responsible for any potential consequences.

4.4 Assessment of the standard operation of hospital beds.



Warning

- Before using the product for the first time, it is important to thoroughly assess its functionality.

The following are criteria for assessing the proper functioning of the product.

- Assess the stability of the bed: Lock all castors and attempting to push the bed by hand. The bed should remain stationary without tilting or moving in any direction.
- Evaluate all motion functions of the bed within its specified parameters. : Adjustment of the height and angle of the bed, adjustment of the angle of inclination of the backrest and legrest.
- During all inspection operations, the bed's movement device should operate smoothly and quietly without abnormal stops or unusual noises. The test standard is set at one meter away from the bed, with the noise level of the bed's mechanical transmission and motor not exceeding 65 decibels.
- Test all functions of the electronic control system, including the push-button hand controls.
- Inspect all locking mechanisms for proper functionality.

If the bed meets all of the criteria listed above, it is deemed safe for use.

5. Function Introduction

5.1 Height adjustment

The bed can be raised and lowered as a whole, with an adjustable range from 18.1inch (460mm) to 29.9inch (760mm). This feature facilitates easy access for patients getting in and out of bed, as well as accommodating healthcare professionals of varying sizes when handling patients.

5.2 Backrest adjustment

The backrest can be tilted upwards to an angle of $\leq 75^\circ$, providing convenience for patients or medical staff to adjust the body position as needed. This feature is particularly suitable for patients with chest drainage and liver ascites.

5.3 Legrest adjustment

The legrest can be elevated to an angle of $\leq 45^\circ$, facilitating medical staff in treating and caring for patients with lower limb disorders. Additionally, this feature helps reduce skin tension on the lower limbs and abdomen, thereby preventing wound rupture in these areas.

5.4 Trendelenburg and Reverse trendelenburg

The mattress platform can be tilted overall anteriorly or posteriorly. An anterior tilt angle of $\leq 13^\circ$ is used to improve drainage and enhance lower limb perfusion in patients with thoracic- abdominal drainage, while a posterior tilt (Trendelenburg position) angle of $\leq 13^\circ$ is employed to improve cardiac and cerebral blood supply in patients with shock.

5.5 “CPR” function

The CPR button on the controller offers an electric one-click CPR function, swiftly adjusting the backboard to a horizontal position for medical personnel to perform CPR on the patient.

5.6 Folding of siderail

5.6.1 Folding siderail:

As shown in Figure 1, pull the siderail fixed plate outward, and manually retract the siderail outward to facilitate folding.

5.6.2 Raise siderail:

As shown in Figure 2, Raise the side guardrail manually, then lift it up until you hear a 'click' indicating that the siderail is locked in place.



Figure 1

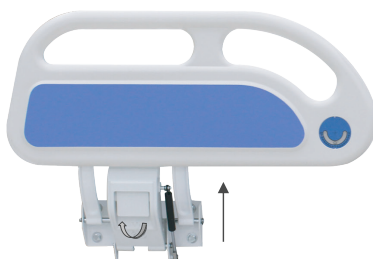
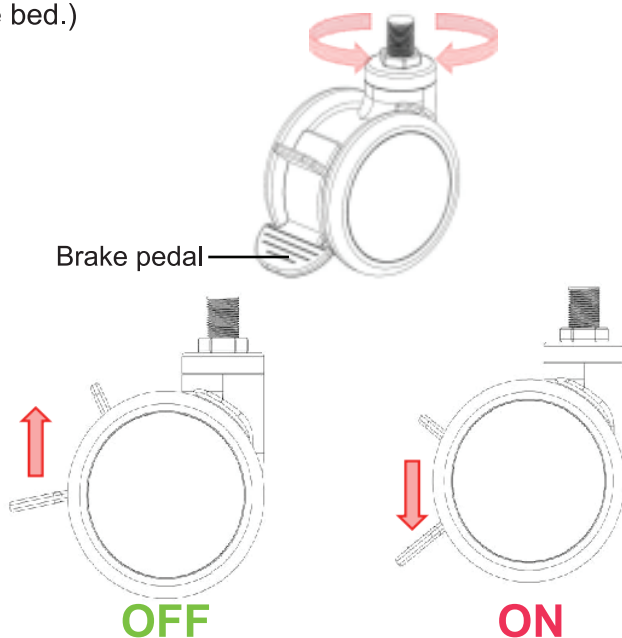


Figure 2

5.7 Use of Brake Wheels

This product is a movable universal caster. The main shaft of the caster can rotate 360 degrees. The external brake pedal is provided for the caster. Pressing the pedal will fix the caster, and releasing the pedal will unlock the caster. (Note: This product comes with 4 universal casters. When braking, each caster needs to be fixed separately to secure the bed.)



Lifting the central pedal
upwards unlocks the bed

Pressing the central pedal
downward locks the bed



Warning

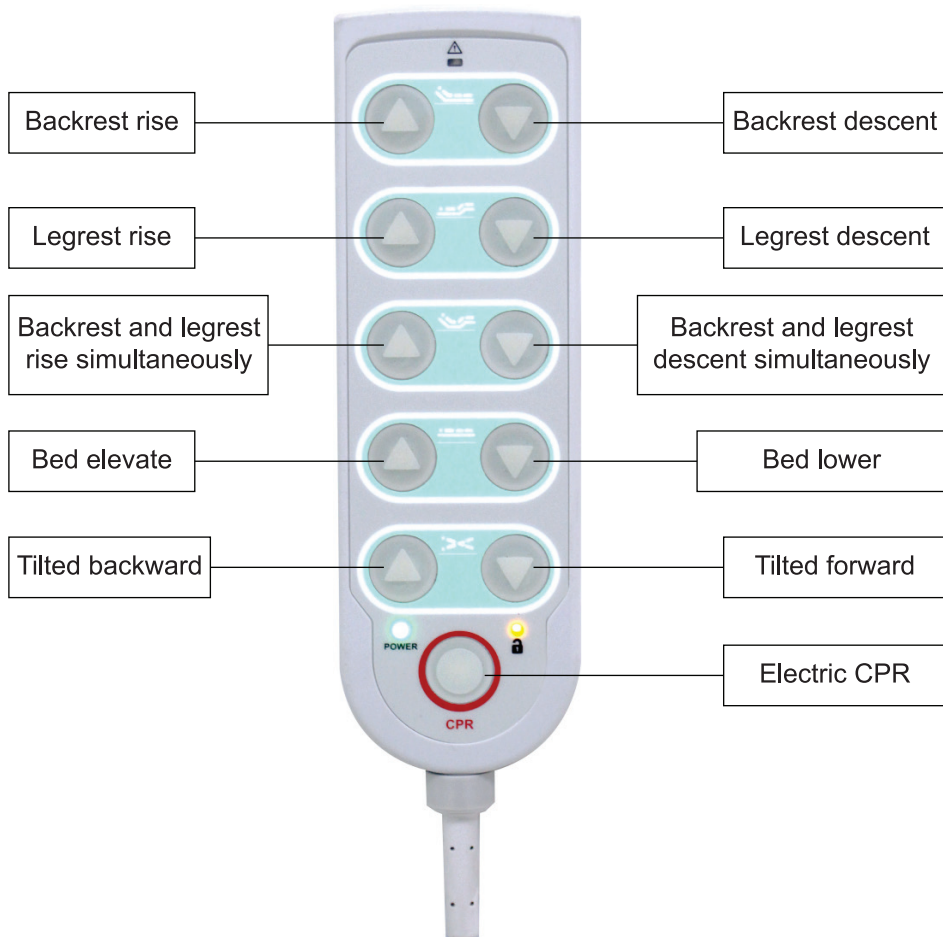
- After disconnecting the power cord, ensure that the bed is set to a horizontal position before moving it.
- When moving the bed, ensure that it moves on a flat surface.
- When moving the bed, it is important to avoid collisions that could potentially compromise the precision fittings of the bed.

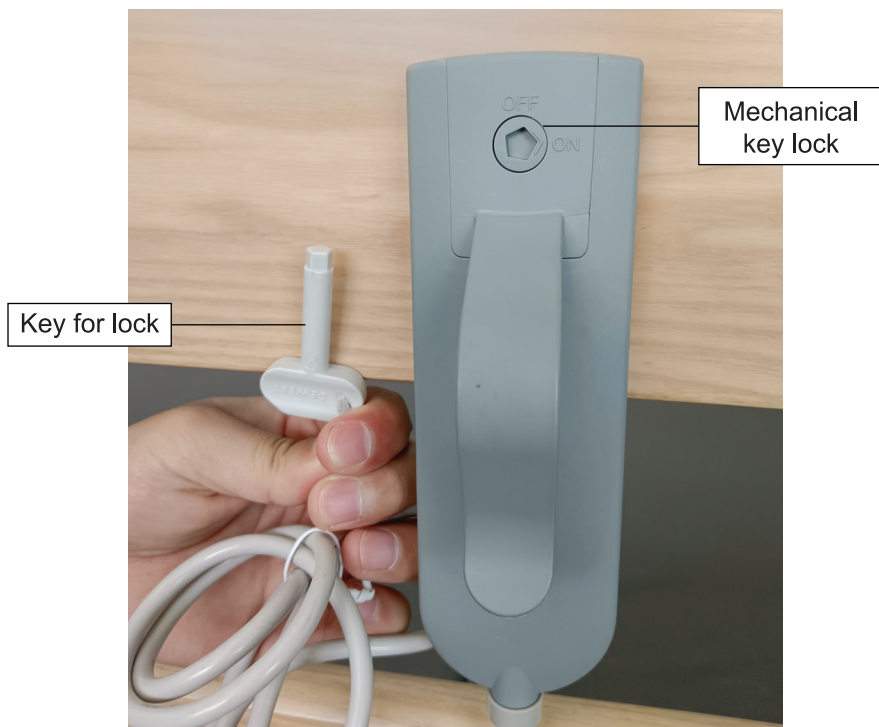
5.8 Electronic control system



Warning

- The controller must be operated by medical personnel or under the guidance of medical personnel.
- To prevent misuse, the hand-held controller, side rail controller, and end-of-bed controller are equipped with monostable control keys. This means that the control is only effective while the key is pressed and will not remain active once released.





- When the arrow of the mechanical key lock points to ON, the remote control is unlocked and the front unlock indicator lights up.
- When the arrow of the mechanical key lock points to OFF, the remote control is locked and the front unlock indicator is off.

6. Maintenance and Clean

6.1 Maintenance

For the safety and stability of the electric hospital bed, users should only use original parts provided by brand owner. Additionally, any parts removed after maintenance should be recycled in accordance with relevant provisions of local environmental protection regulations.

6.1.1 Care and maintenance during operation

When operating, it is important to monitor the running noise for any abnormalities. If the running noise exceeds the standard range, it is recommended to cease operation and conduct a thorough inspection. Additionally, apply paraffin oil to lubricate and maintain the moving parts.

6.1.2 Regular maintenance, servicing, and operational cycles.

- To ensure the safety and stability of this product over its lifespan, the manufacturer conducts regular inspections.
- The inspection should be conducted visually, and any malfunctions should be addressed in accordance with the "Troubleshooting and Identification".

Inspection item	Period
According to the guide, it is recommended to assess the overall technical condition and verify the insulation of the cable.	Inspect annually at a minimum

- To ensure the safety, stability, and longevity of this product, it is recommended that users perform the following checks every six months.

	Check the screw fit
Base	Check if the castors lock securely
	Check the electronic control system
Bed body	Check the tightness of component assembly links
	Lubricant filling
	Check the expansion and contraction of the siderails
	Check the performance of the motor
	Check if the head/foot board can be removed well
	Check if the handheld controller is functioning correctly



- To ensure the safety and stability of this product, as well as to extend its service life, it is advisable for users to perform the following checks every six months.

6.2 Clean

6.2.1 Please use medical-grade alcohol for cleaning.

6.2.2 To clean, remove any dirt by rinsing with distilled water.

6.2.3 After cleaning, use hot air at a temperature of 140°F or less to blow-dry the product, or dry it with a sterilized soft cloth.



- Clean the product only when necessary and use minimal liquid.
- This product is not suitable for sterilization in a sterilization chamber.
- Do not clean this product with bleach (including activated oxygen or chlorine), corrosive, or similar agents.
- Avoid using organic solvents to clean the plastic parts of the product.



- Disconnect the power supply before cleaning.
- Special care should be taken when cleaning each controller of this product. If a controller gets wet, dry the panel as soon as possible and also dry the grooves around it.
- Damage caused by disregarding the above warning about cleaning voids the original warranty.

7. Troubleshooting and Identification

Fault	Cause	Solution
Button doesn't work	Power light is not on	Check the power connection
	Plug is not inserted correctly	Reinsert
	Engine shut down/ failure	Check the power connection/ Change motor
Bed height adjustment error	Engine shut down/ failure	Check the power connection/ Change motor
	Plug is not inserted correctly	Reinsert
	Power box failure	Notify the brand owner
Backplane cannot be lowered	Backplane or motor is stained	Clean dirt
Siderail can not adjust	Dirt on the latch	Cleaning lock
	Latch failure	Change siderail
Caster cannot be moved	Dirt sticks to the axle	Clean caster
	Caster failure	Change caster
	Incorrect installation	Assemble in the right way
Headboard and footboard are faulty	Headboard and footboard damaged	Replace or overhaul



Warning

- If the problem still cannot be solved, notify the brand owner immediately.
- Please do not forcibly remove and replace the components.

When the product malfunctions, please check the following points first. If the fault cause still cannot be identified, please contact us. It is recommended to provide relevant videos or photos of the operation and inspection process, so that our engineers can quickly and accurately determine the cause of the fault and resolve it.

Customer support: support@olernmedical.com

Symptom	Possible Cause	Solution
Remote control indicator light does not illuminate	Faulty remote control, main unit plug, or bent pins	Reconnect the plug, power off and reset the device; replace the remote control or control box
Remote control indicator light illuminates, bed does not move, no motor sound	Motor damage	Replace the motor
Remote control indicator light illuminates, bed does not move, motor hums	Mechanical fault of the corresponding bed board (e.g., damaged connecting rod)	Replace the connecting rod and corresponding bed board
Headboard fails to lift/lower	Faulty main connecting rod or motor	Replace the headboard back panel and corresponding motor
Headboard fails to lift/lower	Faulty leg connecting rod or motor	Replace the footboard panel and corresponding motor

8. Deposit

If this product is not intended for prolonged use, it should be stored in the following environment:

Temperature: $-4^{\circ}\text{F} \sim 131^{\circ}\text{F}$ (Recommended optimum temperature $77 \pm 18^{\circ}\text{F}$)

Relative humidity: $\leq 85\%$

Attention: Disconnect all power to the bed during storage (including disconnecting the battery and control box)

9. End-of-life of products

Product obsolescence: When the user decides to discontinue use of the products, whether sterilized or not, they are obligated to properly dispose of the end-of-life products as environmental pollutants in accordance with environmental protection regulations.

9.1 Procedure

- Give products to companies that use environmentally friendly methods to dispose of end-of-life products.
- Give the product to a manufacturer that uses environmentally friendly methods to dispose of end-of-life products.

9.2 Cautions

- Remove electronic parts
- Removal of electronic devices
- Removal of plastic parts
- Removal of metal parts
- Disposal of dismantled parts: environmental protection regulations should be observed during dismantling.

IMPORTANT SAFTY INFORMATION



PLEASE READ WARNINGS

Improper use can cause safety hazards, or damage to your product and your home.

Warning	Do	Don't	Why it's important
Serious injury may occur.	● Assemble following all instructions using all indicated parts and hardware provided.	● Do not exceed the max. weight capacity ● Do not use it while moving ● Do not pull the plug with wet hands	Improper assembly, loading or use can lead to product instability, collapse or electric shockrisk.

Get Ready to Assemble

For best results, keep these tips in mind:

- ① We know you want to finish this assembly as quick as possible, but trust us: you'll have a better experience if you take it one step at a time.
- ② Give yourself some space to work near where you want to put this product
- ③ If you floor isn't carpeted, assemble this product on the empty carton to avoid scratching.
- ④ Call your best friend or your family members to do you a favor, some steps may go easier with a second set of hands.

DO

- ✓ Use the spanners in the toolkit to install
- ✓ Wear gloves at all times during assembly
- ✓ Carefully follow the instructions in this guide and complete all steps in order
- ✓ Send me email if you're having trouble with a particularity trick step

DON'T

- ✗ We know power tools are quick and easy, but you should not use them when assembling this product (Unless otherwise specified)
- ✗ Do not attempt to use this product before all steps have been completed

Consumer Service

If necessary, to quickly free replace damaged/missing parts. Simply have your order ID, instruction manual, and part number/description ready when you write an email to us. It's that easy.



Contact us

Monday to Friday (Except holidays)

We will respond within 24 hours

E-MAIL:
support@olernmedical.com