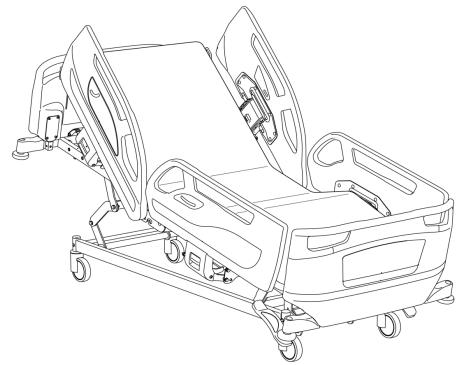


INSTRUCTION MANUAL

Qualitas Nx Series Electrical Hospital Bed

7C01941700A5



* An optional mattress is attached in the illustration.

Preface

Thank you for purchasing the Qualitas Nx Series ("bed").

This instruction manual describes precautions and how to safely use and operate the bed.

- To ensure safe and proper use of the bed, be sure to read this instruction manual before use.
- The safe and correct operating procedures should be explained not only to the patient using the bed for medical treatment but also to the patient's attendant.
- After reading this instruction manual, store it in a place that can be easily accessed for later reference.
- The actual product purchased may differ from detailed descriptions given in this instruction manual due to product improvements.
- Values in the specifications such as operation ranges, dimensions, angles and mass are subject to normal manufacturing tolerances. Except for special cases, words such as "approximately" and "about" are omitted in this instruction manual to improve readability.
- For any queries, please feel free to directly contact Paramount Bed or your distributor.

Users and/or patients are requested to report information about any serious incident that occurs within the EU to the regulating authority of the member country of residence.

Serious incident means any incident that directly or indirectly resulted in, may have resulted in, or may result in any of the following.

- · Death of a patient, user, or other person
- · Serious temporary or permanent adverse effects on the health of a patient, user, or other person
- · Serious public health threat

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1. About this bed

Intended use and benefits

[Intended use]

This hospital bed is designed to help maintain a comfortable posture for quality care and efficient treatment for patients due to disabilities and illnesses in medical institutions. [Clinical benefit]

- Patient comfort
- Quality Patient Care and efficient care provision

[Patient target group]

- User weight (min. max.): 40 kg to 195 kg
- Minimum user height: 146 cm
- Minimum user body mass index (BMI): 17
- Supported age range: 13 years and older
- * Do not use the bed for children (aged 12 or under) or patient weighing more than 195 kg. [Intended users]

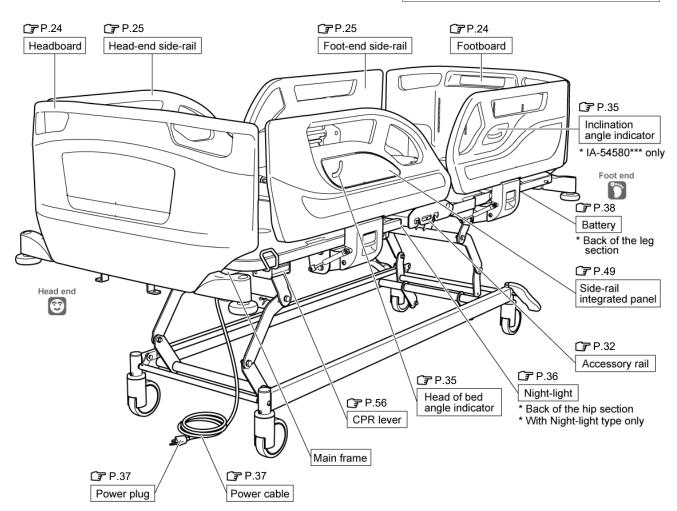
Medical professionals, patients, close relatives of patients, and maintenance staff

* "Caregivers" is used in this manual to refer to medical professionals and close relatives of patients.

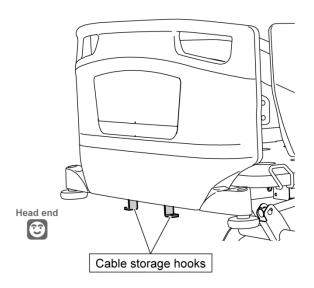
Part names

* This illustration uses the IA-54580141 for explanation.

Numbers with this symbol mark indicate pages where a related explanation is provided.

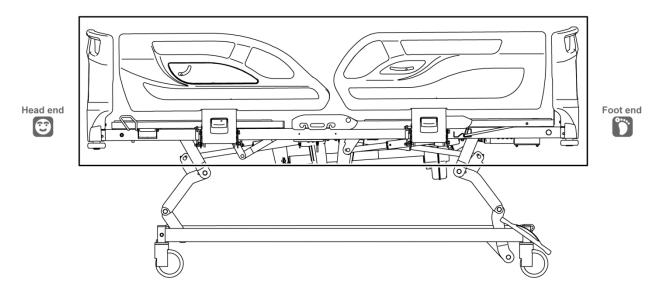


* This illustration uses the IA-54580141 for explanation Numbers with this symbol mark indicate pages where a related explanation is provided. **☐** P.53 Patient control panel **₽** P.36 Knee section mattress deck Head section mattress deck Accessory attachment hole Leg section mattress deck Hip section mattress deck **₽** P.34 Roller bumper Foot end Head end **(B)** Mattress stopper Back angle indicator **₽** P.27 Extension frame * Extension frame type only Base frame **₽** P.29 Caster **₽** P.29 Caster operation pedal



Applied parts

- * Parts of the bed that in normal use necessarily come into physical contact with the patient for the bed to perform its function.
- * This illustration uses the IA-54580141 for explanation



2. Safety precautions

■ Be sure to read these safety precautions beforehand to ensure proper use.

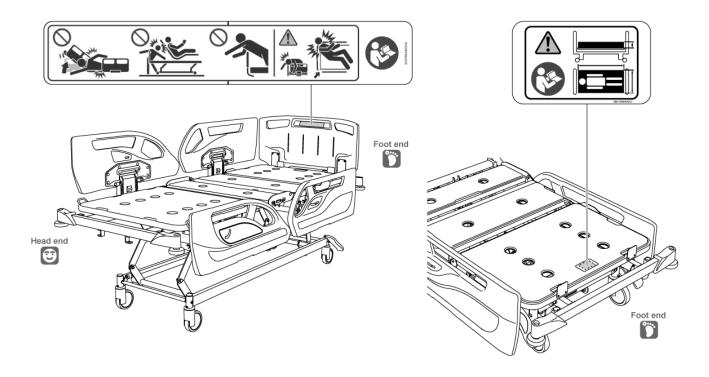
They are all important safety precautions that must be strictly observed.

WARNING	Indicates that improper handling by ignoring this indication may cause death or serious injury (broken bones, pressure being applied, or paralysis).
Indicates that improper handling by ignoring this indication may cause minor injurt (such as bruises, scratches, or cuts) or property damage.	

^{*} With regard to the items described in "Safety precautions," <Gap related notes> (see p. 7 and 8) are especially important because ignoring them could result in serious life-threatening accidents. Be sure to read these notes to ensure safe and proper use of bed. Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.

<Safety labels>

- Warnings and precautions requiring special attention by persons using the bed are described on labels that are affixed inside of the footboard, and at the top of the leg section. Do not remove or deface them.
- If a safety label is removed or defaced, replace it with a new one obtained from Paramount Bed (see p.100) or your distributor.



^{*}After reading this instruction manual, store it in a place that can be easily accessed for later reference.

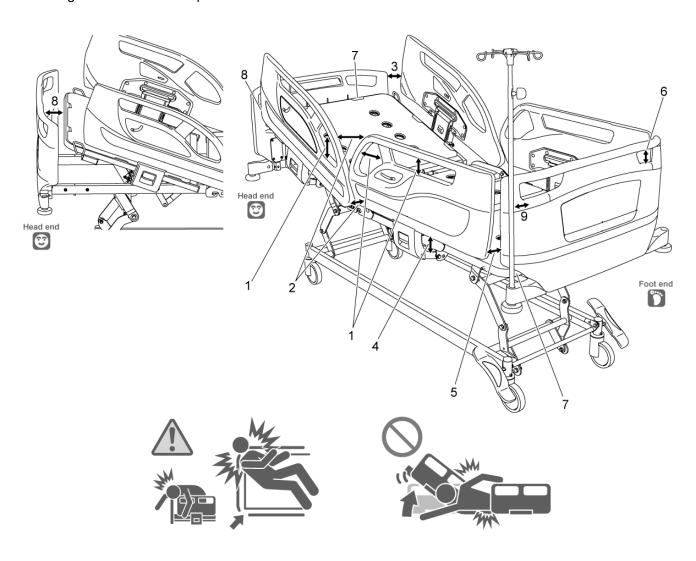
№ WARNING

<Gap related notes>

■ Watch the gaps.

- There are gaps in the bed, side-rail, etc. There is a risk of injury if part of the body (especially the head and neck) gets caught in those gaps.
- Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- Pay attention to the following points.
- 1. Gap in side-rail
- 2. Gap between side-rails (head end/foot end)
- 3. Gap between side-rail and board
- 4. Gap between side-rail and mattress deck/mattress (vertical direction)
- 5. Gap between side-rail and mattress deck/mattress (horizontal direction)
- 6. Gap inside the board
- 7. Gap between board and mattress deck/mattress
- 8. Gap between raised mattress deck and board/side-rail
- 9. Gap between IV pole/foot spacer/Side-rail spacer/Traction frame and board/side-rail/mattress deck/mattress

^{*} The figure shows an example.



NARNING

Do not operate the bed with part of the body placed in a gap.



- A body part could get caught in a gap, resulting in injury.
- Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- Do not insert a hand (fingers) or legs between the bed frame and the mattress deck during bed operation.
 - A body part could get caught in the gap between the lowered mattress deck and the bed frame or board, resulting in injury.
 - Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- Be careful to prevent any part of the body from entering the gap between the bed and a wall or other objects.
 - There is a risk that a part of the body may get caught, resulting in injury.
 - Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- Do not crawl under the bed or place your head, hands, or legs under the bed.



- A body part could get caught in the gap between the moving parts of the bed and the frame or side-rail, resulting in injury. Check to make sure there are no objects around the bed before operating the bed.
- Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- Check the patient's condition when adjusting the mattress deck angle or bed height.

If the patient moves while the mattress deck angle or bed height is adjusted, the patient may fall off the bed or get caught in a gap, resulting in injury. In particular, if the patient cannot maintain their posture independently, support their body when performing an adjustment.

■ When attaching an accessory, make sure there are no foreign objects in the Accessory attachment holes.

If there are foreign objects, the accessory cannot be attached correctly and there is a risk of the patient falling off the bed, or unexpected gaps being created and part of the body getting caught, resulting in injury.

WARNING

<Falling off>

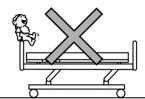
- Be careful to prevent the patient from falling off the bed even when side-rails are raised.
 - The patient may fall through a gap between side-rails, or between a board and side-rail, resulting in injury.
 - The patient may bend forward over a side-rail and fall off the bed, resulting in injury.
 - When a thick mattress is used, the effective height of the side-rails becomes lower. Be careful because this makes it easier for the patient to roll over them and fall, which may result in injury.
 - Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- When transferring a patient, raise the side-rails.

The patient may fall off the bed, resulting in injury.

■ The side-rails should be operated by the nurse from outside the bed.

If the patient operates the side-rails from inside the bed, the side-rails may go down suddenly and the patient may fall off the bed, resulting in injury.

■ Do not sit on the side-rails, headboard, or footboard.



The patient could fall off the bed or fall down, or the bed or side-rails could be damaged or deformed, resulting in injury.

- When leaving the bed area or taking your eyes off the patient, check the mattress deck angle, bed height, and the state of the side-rails and boards.
 - If a physician, nurse, or attendant will leave the bed area or take their eyes off the patient, set the mattress deck angle to zero (flat) and the bed height to the lowest position according to the condition of the patient in case of falling off the bed.
 - If a patient cannot maintain a posture independently or has difficulty in walking, raise all side-rails. If you want to fill the gap between the Foot-end side-rail and footboard when using an extension frame, use a foot spacer/Side-rail spacer (accessory, see p. 68).
- Do not transport the bed with the patient on it while the head is raised using cardiac chair motion or the bed is inclined.

The patient may fall from the bed or be caught in a gap, resulting in injury.

<Operating the bed>

- Do not allow the bed to be operated by a person deemed incapable of understanding bed operation (a child aged 12 or under or a person with dementia).
 - If a person deemed incapable of understanding the operation operates the side-rail integrated panel, patient control panel, handheld controller, or nurse control panel (accessory) by oneself, the body may get caught in the bed by mistake, resulting in unexpected injury. If there is a possibility that such a person operates the side-rail integrated panel, patient control panel, handheld controller, or nurse control panel (accessory), use one of the following procedures to limit operation to prevent accidents caused by unintended operation.
 - Set Overall lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the side-rail integrated panel, patient control panel, handheld controller, and nurse control panel (accessory). (For the setting procedure, see p.49 and 61.)
 - Set Patient lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the patient control panel and handheld controller. (For the setting procedure, see p.49 and 61.)
 - Set Selective lock-out on the handheld controller (accessory) to disable individual head/knee/height/inclining (IA-54580*** only) operations. (For the setting procedure, see p.54.)
 - Note that resetting the settings on the nurse control panel (accessory) enables all bed operations again even when the side-rail integrated panel, patient control panel, handheld controller (accessory), and nurse control panel (accessory) operations have been disabled. The bed may move unexpectedly, resulting in injury. (See the instruction manual for the nurse control panel (accessory).)
- Use the bed in the correct orientation.



Lying down on the bed with the feet at the head end and the head at the foot end induces an unnatural posture during bed operation (mattress deck angle) which may result in injury.

■ Do not perform any angle adjustment when the patient is lying face down or on their side (in any posture other than lying face up).



There is a risk of injury caused by extending the joints backward.

/ WARNING

■ Do not perform bed operations such as raising the head or knee section with a restraint belt attached to the mattress deck.

- The patient's body may be squeezed resulting in injury or the bed may be damaged or deformed.
- If the patient or attendant operates the side-rail integrated panel, patient control panel, handheld controller (standard or accessory), or nurse control panel (accessory), the body may get caught in the bed by mistake, resulting in unexpected injury. If there is a possibility that such a person operates the side-rail integrated panel, patient control panel, handheld controller (standard or accessory), or nurse control panel (accessory), use one of the following procedures to limit operation to prevent accidents caused by unintended operation
 - Set Overall lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the side-rail integrated panel, patient control panel, handheld controller, and nurse control panel (accessory). (For the setting procedure, see p.49 and 61.)
 - Set Patient lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the patient control panel and handheld controller. (For the setting procedure, see p.49 and 61.)
 - Set Selective lock-out on the handheld controller (accessory) to disable individual head/knee/height/inclining (IA-54580*** only) operations. (For the setting procedure, see p.54.)
- Note that resetting the settings on the nurse control panel (accessory) enables all bed operations again even when the side-rail integrated panel, patient control panel, handheld controller (accessory), and nurse control panel (accessory) operations have been disabled. The bed may move unexpectedly, resulting in injury. (See the instruction manual for the nurse control panel (accessory).)

■ Use the bed according to the patient's medical condition.

- Depending on the patient's medical condition, the condition may become worse if the patient's posture is changed by operating the bed or raising the head or knees.
- If the patient or a family member operates the bed, make sure that the physician or nurse explains the details given in the instruction manual and usage suitable for the patient's medical condition.

■ Pay attention to the board and devices that install at the attachment holes during tilt angle adjustment.

During tilt angle adjustment, pay attention the board and accessory attachment holes will become tilted at an angle, which may cause equipment to drop, leading to injury as well as damage and deformity to the equipment.

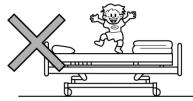
WARNING

<Using the bed>

- Use the bed with the boards attached, except when providing treatment. Also, check the patient's condition when detaching the board.
 - A body part may get caught in a gap between the board and other objects, such as an accessory or peripheral device, resulting in injury.
 - The patient may fall off the bed, resulting in injury.
- Do not use the bed for patients with a height of 146 cm or less, a weight of 40 kg or less, and a BMI of 17 or less.



- This product is not designed for patients with a height of 146 cm or less, a weight of 40 kg or less, and a BMI of 17 or less. A part of the body may get caught in a gap between the bed and side-rail, resulting in injury.
- Even when the side-rails are used, an infant or small child may fall off the bed through a gap between the bed and side-rail, resulting in injury.
- Do not stand on the bed.



The patient may fall off the bed resulting in injury or the bed may be damaged or deformed. In particular, be careful with children.

- Do not spill liquids on the bed.
 - Do not spill liquids on the bed's electrical components, such as the connector*, side-rail integrated panel, and patient control panel. The bed may malfunction resulting in injury or may be damaged due to a short circuit.
 - If liquid is accidentally spilled on the bed, disconnect the power plug from the outlet and wipe off the liquid. Dry the bed completely and make sure that the bed operates safely before use.
 *Connector to connect optional electrical components, such as a handheld controller or nurse control panel.
- Do not place the bed in a strong electromagnetic environment such as an MRI.

The bed may operate abnormally, resulting in injury or in damage to the bed.

■ Do not attach the restraint belt to any location other than the restraint holder.

The restraint belt may unexpectedly come off resulting in injury, or the bed may be damaged or deformed.

WARNING

■ The bed should be transferred by at least two persons.

- When transferring the bed, blind spots may occur in the direction of travel and the bed may collide
 with a person, resulting in injury. In addition, the bed may collide with an object and the bed and the
 object may be damaged or deformed.
- The person at the front should pay attention to the direction of travel and corners.
- When using accessories directly attached to the bed such as mattresses, use products suitable for the bed specified by Paramount Bed.

The use of products other than the specified ones or those from other companies may create unintended gaps, cause contact between products, or lower stability, resulting in injury or failure of the bed. (For accessories, see p.57.)

■ Keep the bed away from fire.

Do not use heating appliances such as heaters near the bed. This may cause deterioration, deformation, or fire.

- Do not use the bed in the oxygen tent.
 - Fire could result.
 - When using oxygen administration devices, use nasal type, mask type, or artificial respirator type only.
- When using flammable anesthetics, do not operate the bed.

Fire could result.

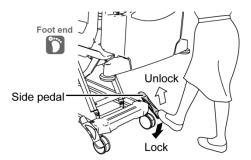
- Be careful to prevent clothing from getting caught on accessories and protrusions.
 - If the bed is operated with clothing caught, the clothing may be pulled, resulting in injury.
 - When getting on or off the bed, the patient may fall off the bed or fall down, resulting in injury.
- When using the IV pole with the oxygen cylinder holder, do not insert it into the accessory attachment hole of the head side and foot side.
 - If used on a sloped floor, the bed may fall over and cause injury.
 - When using the oxygen cylinder holder and an IV pole together, use the accessory attachment holes on the left and right sides of the head.

<Transferring and moving the bed>

■ When transferring the bed, watch your step.

Your leg may bump into the side pedal or your foot may get caught by a caster, resulting in injury.

Lock casters at all times except when moving the bed.



- When the patient gets into or out of the bed, the bed may move, resulting in unexpected injury.
- When moving the bed, operate the side pedal and unlock the casters. (See p.29)

■ Do not stand on the side pedal.

There is a risk of injury due to falling or damage to the bed.

<Power plug and cables>

- Be careful not to trip over the power cable, handheld controller cable or nurse control cable.
 - The power plug or cables may be damaged, resulting in electric shock or fire.
 - You may fall over and injure yourself.
- Do not run cables (such as the power cable) of the bed or other electrical appliances under the bed.

The cables may get caught in casters or moving parts and be damaged, resulting in electric shock or fire

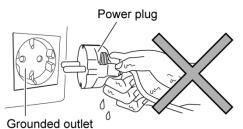
■ Do not apply excessive force to the power plug.

The power plug may be damaged, resulting in electric shock or fire.

■ Do not allow dust to accumulate on the power plug.



- Dust on the power plug can absorb moisture and conduct electricity, resulting in a short circuit, electric shock, or fire.
- Use a dry cloth to wipe away any dust that accumulates on the surface of the power plug.
- * The illustration shows a type C power plug.
- Do not connect or disconnect the power plug with wet hands.



There is a risk of electric shock or failure due to a short circuit.

^{*} The illustration shows a type C power plug.

WARNING

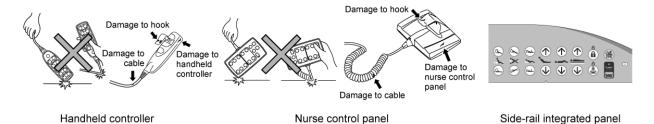
When disconnecting the power plug, hold the power plug.

If you hold only the power cable when disconnecting the power plug, the cable may be damaged, resulting in electric shock or fire.

■ Be sure to disconnect the power plug and turn the battery off before per- forming maintenance.

The bed may operate due to unintended operation, resulting in injury.

- Do not damage the cables (such as the power cable).
 - The cables may be damaged, resulting in electric shock or fire.
 - Be careful to prevent cables from getting caught in the moving parts of the bed.
 - Do not place heavy objects on cables or apply excessive force to them.
 - Do not run over cables with the bed.
 - Request repair (or replacement) of damaged cables.
- Take care when handling electrical components such as the side-rail integrated panel etc.
 - The bed may malfunction resulting in injury or damage. In addition, a short circuit may cause electric shock or fire.
 - Do not hit or damage electrical components.
 - Do not drop electrical components, or forcefully pull their cables.
 - Request repair (or replacement) of electrical components such as the side-rail integrated panel if they are damaged.



Do not apply a strong impact to the control panel of the side-rail integrated panel, patient control panel, handheld controller, and nurse control panel (accessory) or do not touch it with a sharp object.

Doing so may damage the control panel, resulting in injury, electric shock, or malfunction.

- Disconnect the power plug from the outlet and turn the battery off when using electronic medical equipment.
 - Using the bed at the same time with electronic medical equipment (e.g., microwave or ultrasonic medical equipment) may cause failure or malfunction.
 - Check for safety before using the bed in conjunction with other medical equipment.

\triangle	WARNING

<Maintenance>

■ Do not repair or modify the bed or its components by yourself.

This may create unintended gaps or may cause malfunction, resulting in injury.

- When operating the bed, pay attention to lines connected to the patient.
 - Lines may be pulled, resulting in injury, or the lines or devices may be damaged.
 - Lines may be pinched by the bed, resulting in injury, or the lines or devices may be damaged.
- Inspect the bed regularly.

The product wears out and deteriorates differently depending on the operating frequency and environment. Inspect for loose parts and damage and the operation of the moving parts regularly. The continued use of a product in a worn/deteriorated condition may result in unexpected injury. (See p.82)

Request inspection or repair of a damaged bed.

If the bed is damaged in an earthquake, fire, flood, or any other incident, contact Paramount Bed (see p.100) or your distributor for inspection or repair. Otherwise, there is a risk of electric shock or fire due to a short circuit or current leakage from electrical components, or injury due to malfunction caused by deformation of the bed.

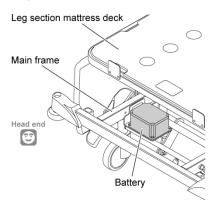
NARNING

<Battery>

- Do not disassemble the battery.
- Do not throw the battery into fire.
- Keep the battery away from fire.
- Do not charge the battery with a non-suitable bed.
- Do not use the battery with equipment other than suitable beds.
- Do not apply a strong impact to the battery.
- Do not recharge the battery or operate the bed with the bed upside down.

Improper handling by ignoring the above instructions may cause personal injury or property damage due to fluid leakage, fire, explosion, electric shock, or case rupture.

- If fluid leaks out of the battery and spills on your skin or clothing, immediately wash it off with copious amounts of water.
 - In particular, if the fluid gets into your eyes, rinse them with copious amounts of clean water and seek medical attention.
 - Since the battery fluid is diluted sulphuric acid, contact with eyes may cause loss of sight and with skin may cause a burn injury.
 - If fluid leaks out of the battery, replace it immediately with a new one.
- Check regularly whether the bed can be battery-operated or whether the battery replacement time has been reached. Replace a battery that has reached the replacement time.
 - The continued use of a battery that has reached the replacement life may cause fluid to leak out of the battery, resulting in fire.
 - The estimated replacement time of the battery is 2 to 3 years after purchase. If the indicator shows that the remaining power is low or insufficient (see p.38) soon after starting bed operation, even though the battery was recharged for more than 12 hours, replace the battery.
 - *The battery life varies depending on the operating frequency and environment, and storage condition of the battery.
 - For assistance with checking the battery life or replacing or recycling the battery, contact Paramount Bed (see p.100) or your distributor.
- When disconnect the battery, be careful not to get caught in the moving parts of the bed.

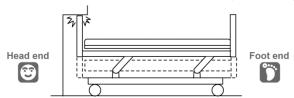


You may get caught in a gap between the mattress deck and main frame, resulting in injury.

^{*} The illustration shows the bed with the footboard removed.

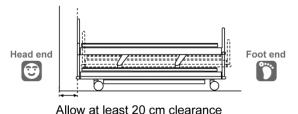
CAUTION

■ When adjusting the height or inclination angle, make sure that the bed does not hit a wall, beam, or power outlet on the wall.



The bed, wall, or floor may be damaged or deformed. Make sure that the bed does not hit a wall, beam, or power plug during height or inclination angle adjustment.

■ When setting up the bed, allow at least 20 cm clearance from the wall.



The main frame moves back and forth during inclination angle adjustment and may hit a wall, resulting in damage or deformation of the bed, wall, or floor.

Do not get on the mattress deck when it is raised.



This applies excessive force to the support of the mattress deck, resulting in damage or deformation of the mattress deck.

■ The bed should not be used by two or more persons.



- This bed is designed for use by one person. If the bed is used by two or more persons, it may be damaged, resulting in injury. The maximum user weight allowed on the bed is 195 kg. If a physician, nurse, or caregiver needs to get on the bed for a short time, check the following points.
 - The total weight of the persons who will get on the bed must not exceed 195 kg.
 - The mattress deck has been lowered all the way and is horizontal (flat) at the lowest position.
- If a physician, nurse, or caregiver often gets on the bed, contact Paramount Bed (see p.100) or your distributor for regular inspection of the bed.
- Do not apply a load exceeding the safe working load on the bed.

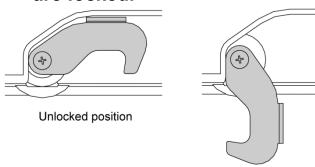
The bed may be damaged or deformed, resulting in injury. The safe working load of this bed is 230 kg (2250 N). The safe working load is the maximum load with which the bed can be operated safely and is the total load of the user's weight and incidental items such as the mattress and accessories.

! CAUTION

Check around the bed before operating the bed.

Bed operation may damage objects around the bed, or may cause the bed to be damaged or deformed.

■ Make sure that the board stoppers of the headboard and footboard are locked.



If the board is not attached properly, the board may suddenly disengage when the board is pushed or pulled to move the bed or the patient grabs the board to support their body, and the nurse or patient may lose their balance and fall down, resulting in injury. (See p.24)

Do not move the bed while holding the side-rails.

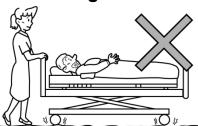
Locked position

This applies excessive force to the side-rails, resulting in damage or deformation of the side-rails. Avoid moving the bed over uneven floors.

■ Do not place the bed on the inclination which angle is 6 degree or more.

The bed may tip over, resulting in an injury.

Avoid moving the bed over uneven floors.



This may cause damage to the bed, or deformation or failure of the bed. If you must move the bed, move it as slowly as possible.

■ Attach a handheld controller (standard or accessory) or nurse control panel (accessory) suitable for the bed.

- If a handheld controller or nurse control panel not suitable for the bed is attached by mistake, the bed may malfunction.
- A suitable handheld controller or nurse control panel may be different among beds of the same series due to specification changes. Before attaching a handheld controller or nurse control panel to the bed, check the model number and shape of the handheld controller or nurse control panel to make sure that they are the same as those of the handheld controller or nurse control panel suitable for the bed. (See p.59 and p.61)

! CAUTION

Do not apply a spray-type insecticide directly to the bed.

The solvents contained in the insecticide may damage, discolor, or dissolve the casters or other resin parts of the bed. Furthermore, damaged or dissolved parts may cause accidental injury.

■ To avoid possible malfunctions, avoid installing in the following locations. n Locations exposed to direct sunlight

- Locations exposed to cool or warm air from an air conditioner
- Locations exposed to excessive water or oil vapor
- Locations exposed to high temperature or humidity, low temperature, and dryness
- Locations with a large amount of dust, smoke, salt, sulfur, or corrosive substances
- Locations with poor ventilation
- Locations exposed to vibration and shock
- Locations where the floor is not flat
- Locations where the floor is not strong enough.

3. Product symbol definitionsThe following symbols are used for this product.

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Symbol	Description
•••	Manufacturer * It may be called "Legal Manufacturer" or "Brand Owner" etc. * This symbols is not applicable in the country of origin.
~~~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Country of manufacture (Made in India)  Manufacturing site In the country of origin, the site acts as the manufacturer.  Date of manufacture (YYYY-MM-DD)
( (	CE mark
EC REP	Authorised representaive in the european community * Either of the symbols is used.
SN	Serial number
#	Model number
LOT	Lot number
MD	Medical device (This product is a medical device or an accessory for medical devices in Europe, and may be such a device in some other countries and regions depending on their regulations. An accessory for medical devices is required to be labeled as "Medical Device" under medical device regulations in Europe.)
UDI	Unique Device Identifier This is a 2D Code (GS1 DataMatrix) that encodes the UDI (Unique Device Identifier) required by the Unique Device Identification System designed to adequately identify devices through distribution and use.
Z	Indicates products covered by the EU directive on waste electrical and electronic equipment (WEEE).
	Indoor use
[]i	Refer to the instruction manual
<b>③</b>	Refer to the instruction manual
<b>†</b>	Type B applied part
$\sim$	AC input

Symbol	Description
	Protective ground mark
IPX4	International protection code
<u> </u>	Safe working load
	Maximum user weight
+	Maximum weight (Product weight + Safe working load)
<b>.</b>	Product weight
+ 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	The medical bed for adults
<b>ĕ CPR ≅</b>	CPR lever
	Do not operate the bed with part of the body placed in a gap.
	Be careful not to get caught in the moving parts of the bed.
	Do not lean over a side-rail.
	Be careful not to get your head and neck caught in the gap of the side-rail.
	Make sure that a mattress or other products used with the bed are accessories designated by Paramount Bed.
	Locking steering (straight forward movement)
<b>→</b>	Four casters free
<b>•</b> Ø	Four casters locked

# Side-rail integrated panel / Patient control panel

	Symbol	Description
		Cardiac chair motion up/down * IA-54580***only
		Head and knee coordinated up/down
		Trendelenburg/reverse Trendelenburg * IA-54580***only
$\oplus$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$		Head up/down
		Knee up/down
(h)		Height up/down

Symbol	Description
CPR CPR	Electric CPR
	Disable handheld controller operation
	Disable all operations
	Battery status
	Not minimum height

## Handheld controller

Symbol	Description
	Head up/down
	Knee up/down
	Height up/down
	Head and knee coordinated up/down * IA-53580*** only
	Cardiac Chair motion up/down * IA-54580*** only
	Trendelenburg/reverse Trendelenburg * IA-54580*** only
<b>(1)</b>	Disable handheld controller operation * Handheld controller only
	Battery status
<b>₩</b>	<ul> <li>Country of manufacture Made in Denmark)</li> <li>Date of manufacture (YYYY-MM-DD)</li> </ul>

#### Battery

Symbol	Description
X	Indicates products covered by the EU directive on waste electrical and electronic equipment (WEEE).
Pb	Indicates products covered by the Act on the Promotion of Effective Utilization of Resources in Japan.
<u> </u>	Caution: Indicates that there are handling notes. Refer to the attached document.

## Nurse control panel

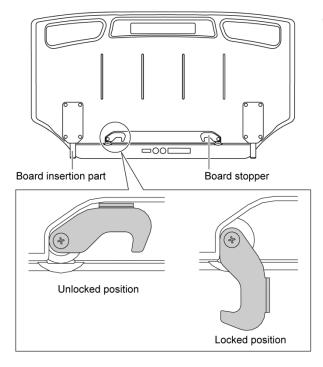
Symbol	Description
 	Cardiac Chair motion up/down
	Trendelenburg/ reverse Trendelenburg
	Height up/down
<b>⊕</b> :	Knee up/down
	Height up/down

Symbol	Description
CPR	Electric CPR
ET	Emergency Trendelenburg
<b>(3)</b>	Disable patient control panel and handheld controller operation
(a)	Disable all operations
	Battery status
	Not minimum height
<b>₩</b>	<ul> <li>Country of manufacture (Made in Denmark)</li> <li>Date of manufacture (YYYY-MM-DD)</li> </ul>

## 4. Preparing the bed

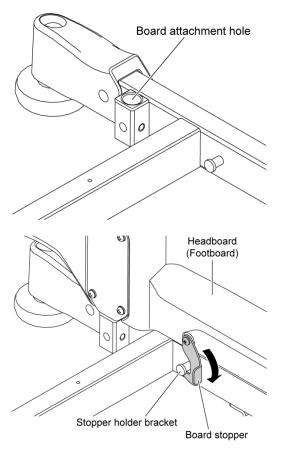
#### Attaching and detaching the headboard or footboard

The headboard and footboard can be attached and detached. When washing the patient's hair, detach the headboard. When performing lower limb training or giving a foot bath, detach the footboard.



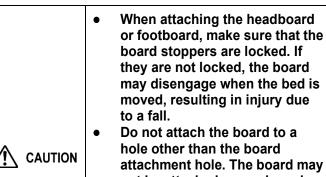
#### <Attaching>

- **1.** Set the board stoppers to the unlocked position.
- **2.** Hold the grips of the headboard or footboard, lift up the board, and insert the board insertion parts into the board attachment holes of the bed securely.
- **3.** Securely hook the board stoppers on the stopper holder brackets and set them to the locked position. (2 locations)
- **4.** Lightly pull up the headboard or footboard to make sure that the board is locked.



### <Detaching>

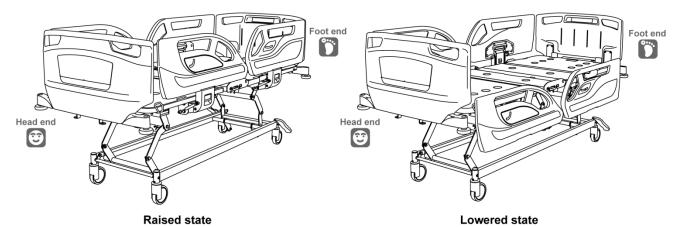
- 1. Detach the board stoppers from the stopper holder brackets and set them to the unlocked position.
- **2.** You can detach the headboard or footboard by holding the grips of the headboard or footboard and pulling it straight up.



- hole other than the board attachment hole. The board may not be attached securely and may become loose or come off, resulting in injury.
  - When detaching the headboard or footboard, do not forcefully lift up the board while it is tilted. The board insertion part may be deformed.

#### Side-rail

- There are a total of 4 side-rails, 2 on the left and right, respectively.
- Side-rails prevent the patient from falling off the bed.

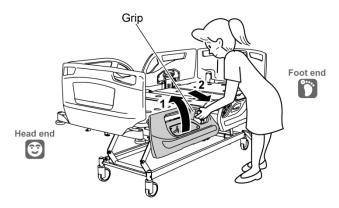


- Be careful to prevent a body part (especially the head or neck) from entering a gap between the side-rail and mattress deck or mattress. If a body part is stuck in a gap, it may not be able to be pulled out, resulting in injury. Be especially careful to check a patient who might act in unexpected ways or cannot maintain their posture independently.
- The side-rails should be operated by the nurse from outside the bed. If the patient operates the side-rails from inside the bed, the side-rails may go down suddenly and the patient may fall off the bed, resulting in injury.
- Do not let the patient lean against a side-rail while it is raised. The patient may lose their balance and fall off the bed, resulting in injury.
- When a thick mattress is used, the effective height of the side-rails becomes lower. Be careful because this makes it easier for the patient to roll over them and fall, which may result in injury.
- Do not hang your legs over a side-rail while it is lowered. The bed may tip over, resulting in injury.



- When raising a side-rail, make sure that the lock is engaged. If the lock is not fully engaged, the side-rail may go down unexpectedly and the patient may fall off the bed, resulting in injury.
- Be careful to prevent lines from getting caught. When operating a side-rail, lines may get caught between the side-rail and mattress and be damaged, resulting in injury.
- When adjusting the height or inclination angle with the side-rail lowered, do not put your legs under the side-rail. They may get caught, resulting in injury.
- When operating a side-rail, make sure that the patient's hands or legs have not entered a gap between the side-rail and mattress deck. They may get caught in the gap, resulting in injury.
- Do not put your fingers in the moving parts of a side-rail. They may get caught, resulting in injury.
- Caution is required when operating a side-rail with the head section raised. If the head section angle is not proper, the side-rail may move unexpectedly, resulting in injury.





### <Raising the side-rail>

- **1.** Raise the side-rail and push in until it clicks into place.
- **2.** Pull the side-rail toward you to make sure that the side-rail is locked.



### <Lowering the side-rail>

- 1. Use one hand to hold the grip of the side-rail and push it to the back (toward the center of the bed).
- 2. While pushing it to the back, use the other hand to pull the operation lever toward you and, while supporting the side-rail, lower the side-rail until it stops.



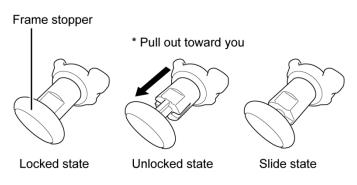
The side-rails have an Anti-tampering Lock Feature that keeps the patient safely within the bed by preventing the side-rail lock from being released when the patient is leaning against the side-rail. This prevents the patient from falling over when they are attempting to lower the side-rail by themselves.

#### Extension frame (with extension frame type only)

The bed can be extended for tall patients by pulling out the extension frame and adding an extension mattress (accessory).

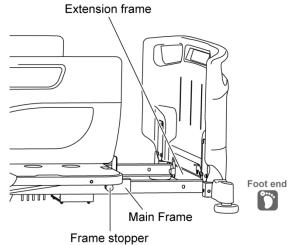


- When using the extension frame, use a suitable extension mattress (accessory: see p.67). If an unsuitable mattress is used, a body part may get caught in a gap between the bed and extension frame or side-rail, resulting in injury.
- Do not use the extension frame for patients who cannot maintain their posture independently. There is a risk of injury caused by a patient falling off the bed.

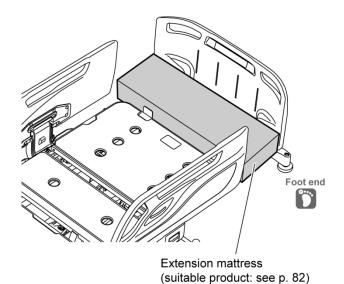


#### <Pulling out the extension frame>

1. Pull the frame stoppers attached to the left and right of the bed toward you and turn them either clockwise or counterclockwise to unlock.



- **2.** Hold the extension frame and pull it toward you a little.
- **3.** Turn the frame stoppers to the locked position and set them to the slide state (half-engaged state).
- **4.** Hold the extension frame again and pull it toward you until there is a click and the frame stoppers become locked in place.
- **5.** Lightly push the extension frame to make sure that it is securely locked.
- **6.** Refer to the instruction manual of the extension mattress (accessory) and then attach the extension mattress.



## <Storing the extension frame>

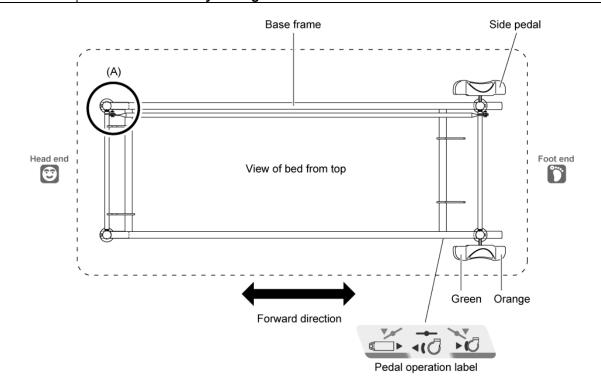
- **1.** Detach the extension mattress (accessory).
- 2. Pull the frame stoppers on both sides of the bed toward you and turn them either clockwise or counterclockwise to unlock. (See p.27)
- **3.** Hold the extension frame and push the extension frame back a little.
- **4.** Turn the frame stoppers to the locked position and then set them to the slide state (half-engaged state).
- **5.** Hold the extension frame again and push it until there is a click and the frame stoppers become locked in place.
- **6.** Lightly pull the extension frame to make sure that it is securely locked.

MARNING	Do not put your hand, foot, or knee on the edge of the extension mattress (accessory). Since there is no support, you may lose your balance and fall over, resulting in injury.	
⚠ CAUTION	<ul> <li>When storing the extension frame, do not put your arms or legs between the bed and extension frame. They may get caught, resulting in injury.</li> <li>Securely lock the frame stoppers (see p.27). The extension frame may come out unexpectedly during bed operation or transfer, resulting in injury.</li> </ul>	

#### Locking casters

Casters can be locked with side pedals on the left and right of the foot end.

MARNING	Lock casters at all times except when moving the bed. When the patient gets into or out of the bed, the bed may move unexpectedly, resulting in injury.	
A CAUTION	<ul> <li>When locking the casters, be careful to prevent your foot from getting caught in a gap between the side pedal and floor. You may accidentally injure yourself.</li> <li>Do not forcibly move the bed when the casters are locked. The bed may break or the casters may damage the floor.</li> </ul>	



#### **Locking 4 casters**

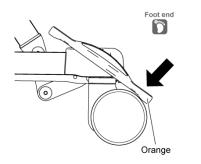
Push down the orange side of the pedal to lock the swivel and rotation of all 4 casters.

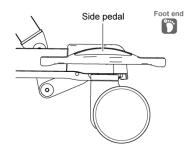
### **Unlocking 4 casters**

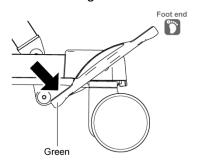
Return the pedal to the horizontal position to unlock the swivel and rotation of all 4 casters.

# Locking steering (straight forward movement)

Step on the green pedal to lock swiveling of caster (A) in the straight forward movement direction. This helps the bed to be transferred straight forward easier.





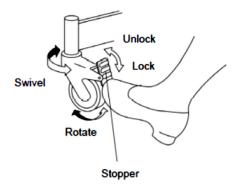




Inspect the casters regularly. Casters wear out and deteriorate depending on the operating frequency and environment (deterioration may be accelerated in a high temperature and humidity environment). If the performance of the stopper deteriorates or wheels are discolored or cracked, contact Paramount Bed (see p.100) or your distributor for after-sales services, such as repair.

#### <Individual locking system>

- Use the stopper to lock or unlock the casters.
- The stoppers are located on the four casters, each at one corner of the bed. When locking, be sure to lock all the casters.
- Stepping on the stopper locks the swiveling and rotation of the caster.
- Prior to locking, ensure that the caster is not protruding out of the bed frame.
- To unlock, press the upper part of the stopper with your toes.





Inspect the casters regularly. Casters wear out and deteriorate depending on the operating frequency and environment (deterioration may be accelerated in a high temperature and humidity environment). If the performance of the stopper deteriorates or wheels are discolored or cracked, contact Paramount Bed (see p.100) or your distributor for after-sales services, such as repair.

#### Raising the foot end

You can change the angle of the leg section so that the foot end is raised.

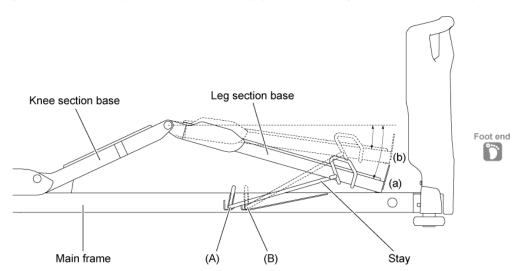


The angle of the leg section must be adjusted by at least two persons from both sides of the bed. If only one person attempts to adjust the angle, the person may get caught between the leg section and main frame, resulting in injury.



The angle of the leg section base can be manually adjusted in two levels.

- Normally, the leg section base moves to position (b) when the knee section base is raised.
- Adjustment to position (a) should be performed when the knee section base is raised.
- When adjusting to position (a), hold the end of the leg section base and pull it up, and lift up the end
  of the leg section base stay. When the end of the leg section base stay moves to position (A), lower
  the leg section base slowly.
- When adjusting to position (b), hold the end of the leg section base and pull it up. When the end of the leg section base stay moves to position (B), lower the leg section base slowly.



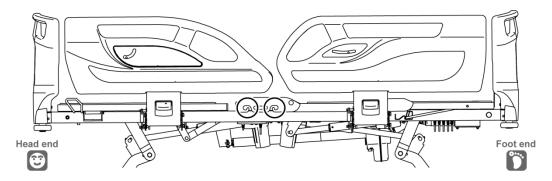
## Accessory rail

Accessory rails are in the locations shown below on the right and left sides of the bed. These rails can be used to hang accessory such as drainage bags.

Two each on the left and right sides of the hip section (4 locations in total)



Do not apply a load of 3 kg or more to an accessory rail. This may damage or deform the accessory rail.





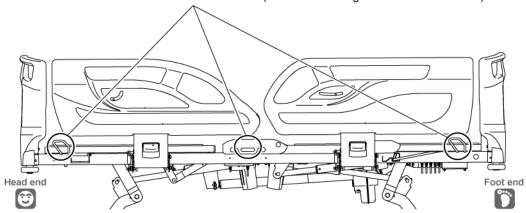
- Since the attachment method and dimensions of commercial drainage bags differ by manufacturer, use those suitable for the bed.
- When hanging a drainage bag, take care to prevent the bag or tube from getting caught when operating the bed or side-rail.
- When hanging a drainage bag, take care to prevent the bag from coming into contact with the floor.

### Restraint belt holder

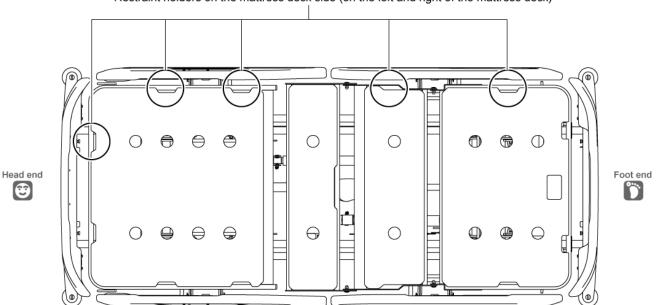
When fastening restraint belts, fasten them in the locations in the figure below.

<b>WARNING</b>	Do not operate the bed with restraint belts fastened. The restraint belts may apply pressure to the patient, resulting in injury.	
A CAUTION	When making a bed or getting into or out of the bed, be careful not to put your hand or fingers in the hole of a restraint holder by mistake. There is a risk of injury.	

Restraint holders on the mattress deck side (on the left and right of the mattress deck)

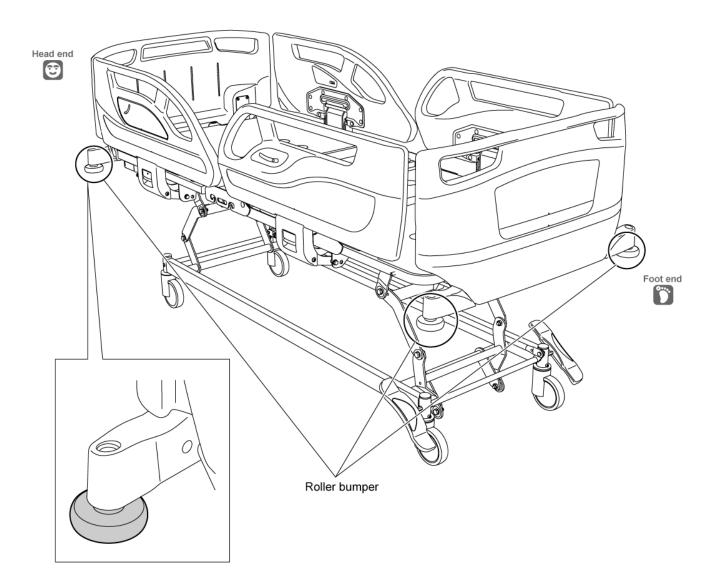


Restraint holders on the mattress deck side (on the left and right of the mattress deck)



## Roller bumper

Roller bumpers are attached to the 4 corners of the bed. When the bed is moved, they can absorb any impact that occurs when the bed hits a wall or equipment.

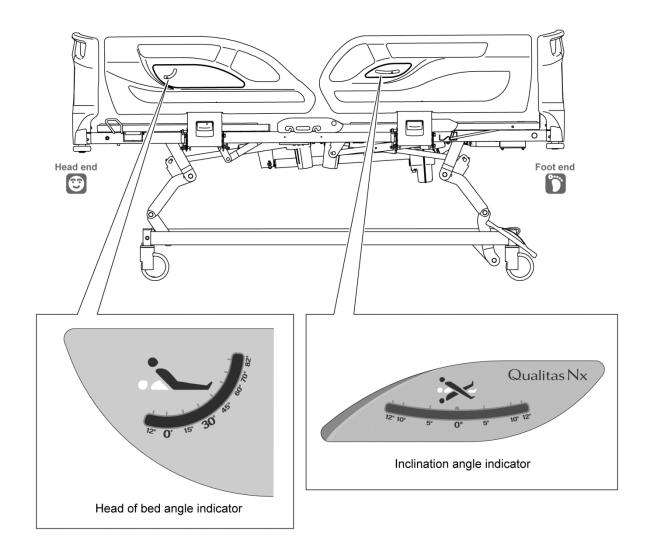


### Angle indicator

A head of bed angle indicator is located on the outside of the Head-end side-rail and an inclination angle indicator (IA-54580*** only) is located on the outside of the Foot-end side-rail.

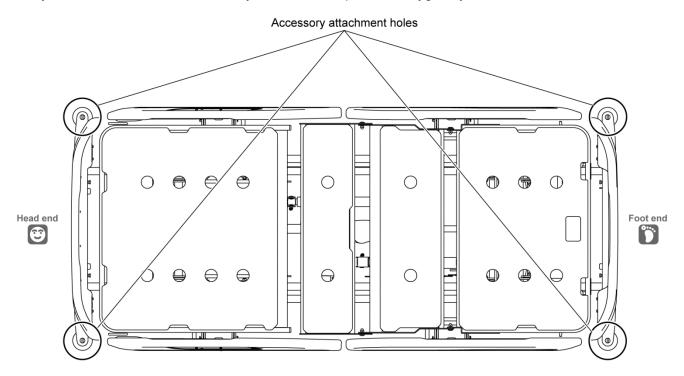
The head of bed angle and inclination angle can be checked respectively.

* The indicated angle values should be used as approximations.



# Accessory attachment hole

Accessory attachment holes are located at the head end and foot end of the bed in a total of 4 locations. They can be used to attach accessory such as an IV pole and oxygen cylinder holder.



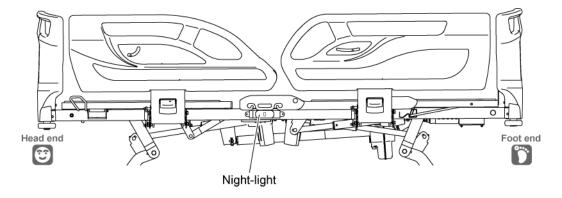


Note that changing the inclination angle of the bed changes the inclination angle of accessory inserted into the Accessory attachment holes. (IA-54580*** only)

# Night-light (with night-light type only)

The night-light can be used for illuminating the area around the feet in the dark.

- The night-lights are located at 2 locations on the left and right under the hip section of the bed.
- The night-lights automatically turn on when the power cable is plugged into the power outlet or when the battery is connected.

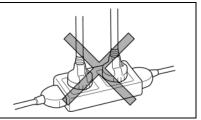


# I. BEFORE USING THE BED

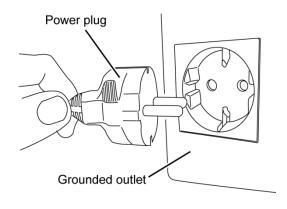
# Connecting to the power supply



Do not connect multiple cables to a single outlet. If other electrical equipment is plugged into the same outlet and the rated capacity of the outlet or extension cable is exceeded, the power cable and plug may overheat and cause fire.



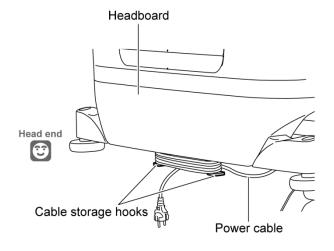
### <Outlet>



* The illustration uses a type C power plug for explanation.

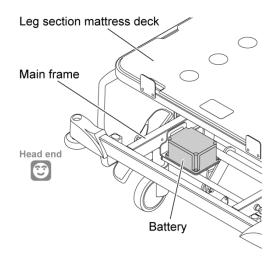
- Use a properly wired grounded outlet for each bed that meets the power consumption requirements of the bed. Also, firmly insert the power plug into the outlet.
- When installing the bed, place it where connecting and disconnecting the power plug will not be blocked.
- After use, disconnect the power plug from the outlet. For models with a battery, also turn the battery off.

# <using the cable storage hooks>



Wind the power cable around the cable storage hooks before moving the bed.

### **Battery**



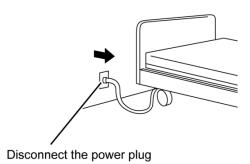
The battery is located at the foot end of the bed's main frame.

* The illustration shows the bed with the leg section raised and the footboard removed.



- By default (when the power plug is not connected), the battery always self-discharges.
- The battery is automatically charged when the power plug is connected.
- If the battery has been over-discharged, the power supply automatically turns off.

# <Battery-powered bed operation>



If the battery have been charged, the bed can be operated by power from the battery while the power plug is not inserted into the outlet (or in the event of a power failure).



Do not operate the bed electrically during the emergency headdown operation with the CPR lever of the bed. This may damage the motor.



- When the remaining battery power is sufficient (after recharging for 12 hours), three up-and-down movements can be performed for height adjustment while the safe working load is applied on the bed (at an ambient temperature of 25°C). However, the number of up-and down movements varies depending on the operating frequency and environment, and storage condition of the battery.
- BED SPEED is slower than when operating the bed while the power plug is inserted into the outlet (except in the event of a power failure). In addition, the speed varies depending on the remaining power, operating frequency and environment, and storage condition of the battery.
- If battery-powered operation of the bed is not possible, check the battery status (see p.38).

# I. BEFORE USING THE BED

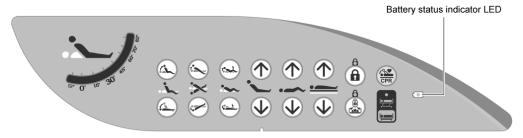
# <Checking the battery status>

The battery status is displayed as shown in the table below.

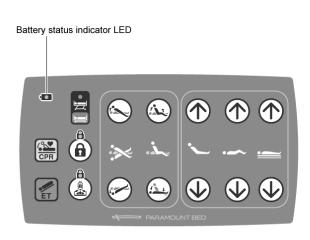
Power status	Battery status indicator LED	Battery status
	Lights in green	Remaining battery power is sufficient.
The power plug is not inserted into the outlet or power failure is	Flashes green (on for 2 seconds → off for 2 seconds)	Remaining battery power is low. Since bed operation may become impossible, stop using and recharge the battery as soon as possible.  * The buzzer sounds if the buttons are pressed while the battery power is low or insufficient.
occurring	Flashes green (on for 0.1 seconds → off for 3.9 seconds)	Remaining battery power is insufficient. Buttons on the side-rail integrated panel, nurse control panel (accessory), and handheld controller do not work. Recharge the battery immediately. * The buzzer sounds if the buttons are pressed while the battery power is low or insufficient.
The power plug is	Flashes green (on for 3.9 seconds $\rightarrow$ off for 0.1 seconds)	Battery is being recharged.
inserted into the outlet	Lights in green	Battery is fully charged.



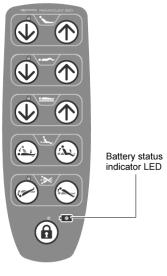
To extend the battery life, recharge the battery as frequently as possible before the indicator shows that the remaining power is low or insufficient (see the table above).



Side-rail integrated panel

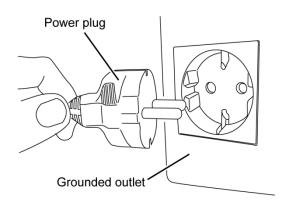


Nurse control panel



Handheld controller (IC-A15*0: accessory)

# <Recharging the battery>



Inserting the power plug of the bed into the outlet starts recharging of the battery, and recharging will complete automatically after 12 hours. When using the bed for the first time, recharge the battery before use.



- Normally use the bed with the power plug of the bed inserted into the outlet and the battery recharged.
- Repeated recharging after the battery power is used up results in early degradation of maximum capacity and a shorter life span. After battery-powered operation of the bed, recharge the battery when possible.
- If the indicator shows that the remaining power is low or insufficient (see p.38) soon after starting bed operation, even though the recharge is completed, it is time to replace the battery.

# <Handling the battery> Battery life

The battery is not designed to be recharged after the battery power is totally used up. Repeatedly recharging the battery from zero charge will reduce its battery life. Always recharge the battery after operating the bed on battery power. If the bed is equipped with a battery and is stored for long periods of time, the battery must be fully charged every 3 months. Failure to do so may cause damage to the battery or decrease its life. The battery life will vary depending on the usage frequency, usage conditions and storage conditions. Regardless of whether the battery is used, its life will start to decrease after a few years.



Check regularly whether the bed can be battery-operated or whether the battery replacement time has been reached. Replace a battery that has reached the replacement time.

### Storage

The battery self-discharges slightly. When storing the bed, recharge the battery for 12 hours or more, and disconnect the power plug of the bed. Do not press any of the operating buttons during storage as pressing the buttons will cause the bed to switch from the power-saving mode to the normal mode, which uses the battery power. If any of the buttons are pressed and the LED indicators (e.g., battery status indicator LED) turn on, reconnect and then disconnect the power plug to save power and prolong the time that the battery can last. This reduces the impact of excessive discharge on the battery life. Note that it is recommended to store the bed at an ambient temperature of 25°C. When storing the bed for a long period of time, recharge the battery for 12 hours or more once every 3 months. If the battery is not recharged, the battery may deteriorate or the battery may become no longer rechargeable. Recharging the battery automatically turns the power supply on.

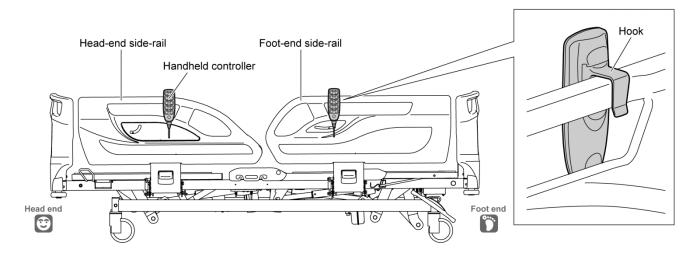
# I. BEFORE USING THE BED

# Handheld controller and nurse control panel hook

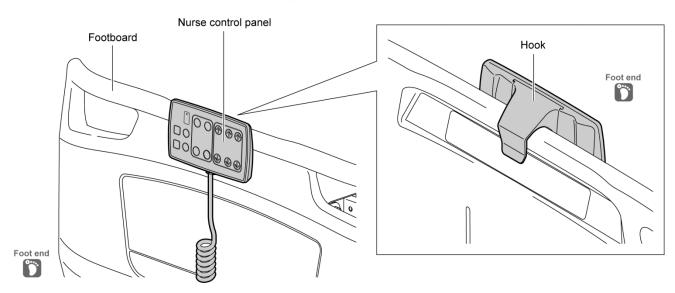
The handheld controller, optional handheld controller (IC-A15*0) and nurse control panel (IC-A1340) have a hook.

- When not using the handheld controller, hook it on the top of the side-rail.
- Make sure that the operation buttons of the handheld controller face out in order to prevent them from being pressed by the patient.
- When not using the nurse control panel, hook it on the top of the footboard.

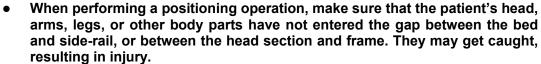
# <Handheld controller and optional handheld controller (IC-A15*0: accessory)>



# <Nurse control panel (IC-A1340: accessory)>



### 1. Bed functions



• When adjusting the height or inclination angle with the side-rail lowered, do not put your legs under the side-rail. They may get caught, resulting in injury.



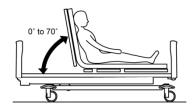
- Do not allow the patient to get in or out of the bed while the bed is inclined or the knee section is raised. The patient may fall down or fall over, resulting in injury.
- Performing the Trendelenburg/reverse Trendelenburg operation of the bed or head up using Cardiac Chair motion shall be allowed only under observation of a physician or a nurse. You may accidentally injure yourself.
- Be careful of lines during bed operation. Lines may be pulled, resulting in injury or damage to the lines or equipment.

## Head up / Knee up / Head and knee coordination / Height adjustment

The angle of the head and knee sections and the bed height and Trendelenburg/reverse Trendelenburg angle (see p.44) can be electrically adjusted with no increments. (For the operation procedure, see p.49 to 54)

### <Head up>







You can adjust the angle of the head section. You can adjust the head section from an angle of  $0^{\circ}$  to  $70^{\circ}$ .



The angle of the head section relative to the floor is displayed on the head of bed angle indicator.

## <Knee up>







You can adjust the angle of the knee section. You can adjust the knee section from an angle of  $0^{\circ}$  to  $25^{\circ}$ .

### <Head and knee coordination>





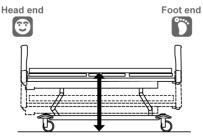


You can adjust the angles of the head section and knee section. You can adjust the head of bed angle from  $0^{\circ}$  to  $70^{\circ}$ , and the knee section angle from  $0^{\circ}$  to  $25^{\circ}$ .

*You cannot adjust the head and knee sections individually with this button.

# **II. FUNCTIONS AND OPERATIONS**

# <Height adjustment>



For the dimensions, see the table below.

You can adjust the bed height. You can adjust the height from the floor to mattress deck top in the range shown below.

125 mm single-wheel (total lock)	35 to 70 cm
125 mm single-wheel (indiviual lock)	35 to 70 cm
125 mm double-wheel (total lock)	35 to 70 cm
150 mm single-wheel (total lock)	37 to 72 cm
150 mm single-wheel high type (total lock)	45 to 80 cm

# Pause function

When lowering the bed, an alarm sounds and the movement is stopped when the height from floor to mattress deck top (floor height) reaches 43 cm to ensure safety. Press the down button again to lower the bed to its minimum height while the alarm sounds continuously.

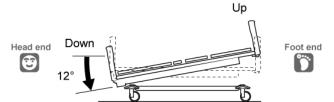
^{*} Lowering a side-rail with a floor height of 43 cm creates a gap of 14 cm between the floor and side-rail.



If you operate the bed with a floor height of lower than 43 cm, the bed is lowered all the way down to the minimum height without stopping while the alarm sounds continuously.

### Trendelenburg/reverse Trendelenburg (IA-54580*** only)

### <Trendelenburg>



You can lower the head end of the bed to a maximum angle of 12°.

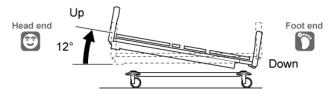


In the Trendelenburg operation, the following steps (1) to (3) are carried out. As an operation specification, the Trendelenburg operation tilts the bed without changing the height of the position of the patient's head as much as possible. Therefore, priority is given to raising the foot end of the bed before the head end is lowered. If you want to lower the head end of the bed further after pausing, press the button again to resume the operation.

- 1. Pause when the foot end linear actuator is extended and the bed becomes horizontal.
- 2. Pause when the foot end linear actuator is extended to the maximum length.
- 3. The head end linear actuator is shortened.

You can also stop at any angle by releasing the button.

## <Reverse Trendelenburg>



You can raise the head end of the bed to a maximum angle of 12°.



In the reverse Trendelenburg operation, the following steps (1) to (3) are carried out. As an operation specification, the reverse Trendelenburg operation tilts the bed without changing the height of the position of the patient's head as much as possible. Therefore, priority is given to lowering the foot end of the bed before the head end is raised. If you want to lower the foot end of the bed further after pausing, press the button again to resume the operation.

- 1. Pause when the foot end linear actuator is shortened and the bed becomes horizontal.
- 2. Pause when the foot end linear actuator is shortened to the minimum length.
- 3. The head end linear actuator is extended.

You can also stop at any angle by releasing the button.

# **II. FUNCTIONS AND OPERATIONS**

### Cardiac Chair motion (IA-54580*** only)

Cardiac Chair motion is a function to reduce the feeling of pressure or slippage to help the patient maintain a better posture by alternately or simultaneously performing the head up, knee up, and inclining operations. The function has the following features.

- To reduce the feeling of pressure when performing the head up operation.
- To significantly reduce slippage of the body when performing the head up and down operation.
- To firmly maintain a posture when performing the head up operation.

## <Cardiac chair up>

The Cardiac Chair up operation moves the bed to the position in the table below.

Operation part	Head of bed angle (a)	Inclination angle of bed (b)	Angle of knee section (c)
Position	70°	12°	25°

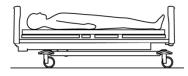


- The part that moves when pressing the button varies depending on the posture when the operation is started.
- If you are using the handheld controller and the nurse control panel, pause after the head and knee sections are raised. Press the button again to incline the bed.

### <Cardiac chair down>

The Cardiac Chair down operation moves the bed to the position in the table below.

Operation part	Head of bed angle (a)	Inclination angle of bed (b)	Angle of knee section (c)
Position	0°	0°	0°





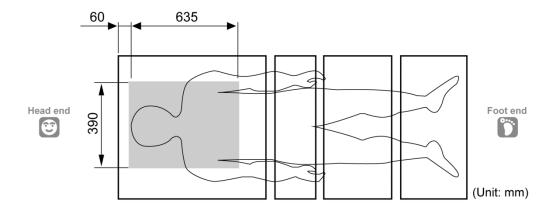
The part that moves when pressing the button varies depending on the posture when the operation is started.

# X-ray cassette imaging (type with X-ray cassette tray only)

<b>∱</b> WARNING	<ul> <li>Do not move the bed when using X-ray equipment. The bed may malfunction resulting in injury or damage. If there is a possibility that the patient operates the side-rail integrated panel, patient control panel, handheld controller, or nurse control panel (accessory), use one of the following procedures to limit operation to prevent accidents caused by unintended operation.</li> <li>Set Overall lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the side-rail integrated panel, patient control panel, handheld controller, and nurse control panel (accessory). (For the setting procedure, see p.49 and 61.)</li> <li>Set Patient lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the patient control panel and handheld controller. (For the setting procedure, see p.49 and 61.)</li> <li>Set Selective lock-out on the handheld controller to disable individual head/knee/height/inclining (IA-54580*** only) operations. (For the setting procedure, see p.54.)</li> <li>Do not perform X-ray imaging using a cassette tray while an air mattress is installed. The X-ray imaging results may be affected by reflections of parts of an air mattress.</li> </ul>
A CAUTION	Use a cassette of the specified size. If other than the specified one is used, the cassette may fall, resulting in injury or cassette damage or deformation.

You can perform X-ray imaging using a cassette within the range of the ____ area in the figure below.

SizeHalf: 38.8 x 46.4 cm or less Square: 38.8 x 38.8 cm or less Thickness1.5 cm or less
Weight3.5 kg or less





- When performing imaging by raising the head section, set the cassette all the way to the back of cassette tray. In this case, the imaging range will be narrower than the range indicated in the figure above.
- X-ray imaging in an inclined state (Trendelenburg position) is not possible.

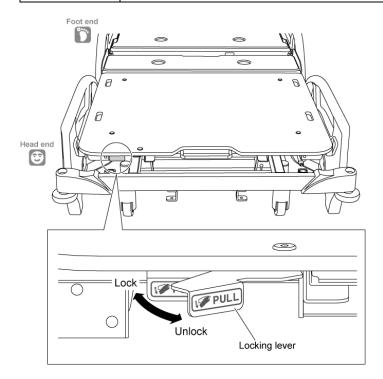
# **II. FUNCTIONS AND OPERATIONS**

# <Cassette setting procedure>

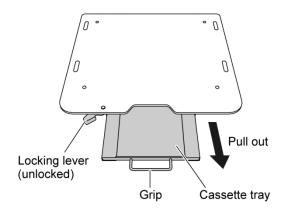
Set a cassette while the head section is in a horizontal state.



- When unlocking the locking lever, pull it toward you all the way until it stops. Otherwise, the lever may be damaged or deformed when the cassette tray is operated.
- While pulling out the cassette tray, do not change the locking lever from the unlocked state. Otherwise, the lever may be damaged or deformed when the cassette tray is operated.



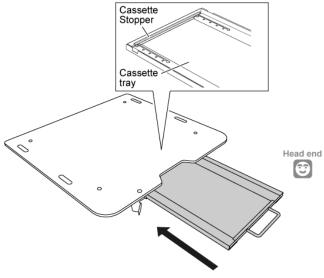
- **1.** Detach the headboard. (See p.24)
- 2. Pull the locking lever toward you to unlock it.



**3.** Hold the grip and pull the cassette tray all the way out.

# • Operate the cassette tray slowly. Not doing so may cause the cassette to be out of position resulting in imaging problems.

- Hold the grip when operating the cassette tray. Not doing so may cause your hand or fingers to be caught and injured.
- Other than when setting a cassette, use the bed with the cassette tray pushed in all the way to the back and the locking lever locked. Otherwise, the cassette tray or cassette may come out due to bed operation, resulting in injury or cassette damage or deformation.
- Do not incline the bed while a cassette is set. The cassette may come out, resulting in injury or cassette damage or deformation.



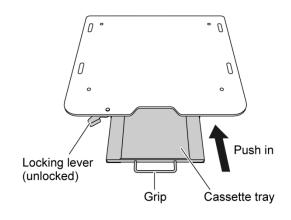
/ CAUTION

**4.** Set the cassette stopper to the appropriate position. The cassette stopper can be adjusted in 5 levels. Set a cassette in the cassette tray.

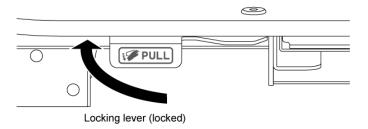


For imaging of the chest, set the cassette all the way to the back of the cassette tray.

* Cassette position when used for imaging of the head



**5.** Hold the grip and slowly push the cassette tray all the way to the back.



**6.** Push the locking lever until it locks into place.

# **FUNCTIONS AND OPERATIONS**

# 2. Operation procedure

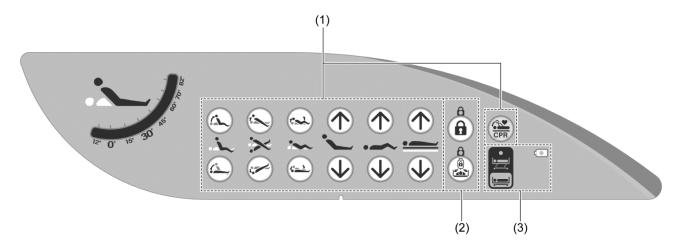
# Using the side-rail integrated panel (excluding handheld controller type)

The side-rail integrated panel is intended for operation by physicians, nurses, and other medical professionals. It is located on the outside of the left or right Head-end side-rail.

/!\ WARNING

- Do not apply excessive force to the side-rail integrated panel or touch it with sharp objects. The side-rail integrated panel may be damaged, resulting in electric shock or malfunction.
- Do not allow it to be operated by a person deemed incapable of understanding the operation (a child aged 12 or under or a person with dementia). If a person deemed incapable of understanding the operation operates the side-rail integrated panel by oneself, a body part may get caught in the bed by mistake, resulting in unexpected injury. When such a person runs the risk of operating the side-rail integrated panel by oneself, you can use one of the following procedures to limit operation and decrease the chance of injury.
  - Set Overall lock-out on the side-rail integrated panel to disable the operation of the side-rail integrated panel. (For the setting procedure, see p.52.)

### <Part names and functions>



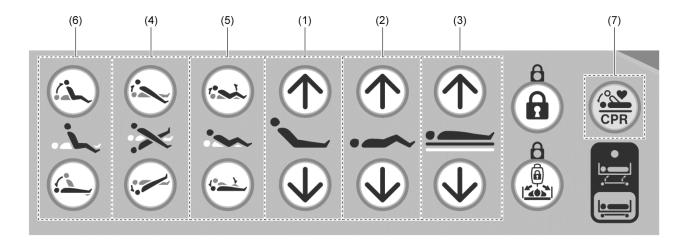
(1) Bed operation buttons ......... Perform each bed positioning operation and electric CPR operation.

(2) Function buttons ...... Set Overall lock-out and Patient lock-out

Indicates the battery status, bed height status, and whether or not an (3) Status indicator .....

error occurred by LED flashing.

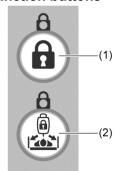
## **Bed operation buttons**



the inclination angle of the bed in Cardiac Chair motion. (IA-54580*** only) Flattens the inclined head/knee sections and

bed, and adjusts the bed height to the minimum height.

### **Function buttons**



### (1) Overall lock-out button

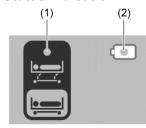
(7) Electric CPR button .....

Used to disable all bed operations except for electric CPR and emergency Trendelenburg.

# (2) Patient lock-out button

Used to disable the operation of the patient control panel and handheld controller.

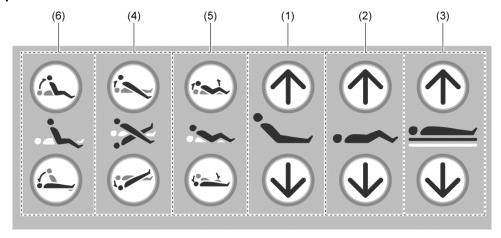
### Status indication



- (1) Low height indicator LEDMinimum height: LED indicator turns offOtherwise: LED indicator turns on (orange)
- (2) Battery status indicator LED Flashing, etc. indicates the battery status.

# **II. FUNCTIONS AND OPERATIONS**

### <Operation procedure>



### Head up/down

Press the \(\frac{1}{2}\) button (1) to raise the head section and press the \(\partial\) button to lower it.

* Releasing the button stops the operation at its position.

### Knee up/down

Press the \(\bar{\cap}\) button (2) to raise the knee section and press the \(\bar{\cup}\) button to lower it.

* Releasing the button stops the operation at its position.

### Height up/down

Press the \(\frac{1}{2}\) button (3) to raise the bed and press the \(\psi\) button to lower it.

* Releasing the button stops the operation at its position.

# Trendelenburg/reverse Trendelenburg (IA-54580*** only)

Press the button (4) to lower the head end of the bed (Trendelenburg).

Press the button (4) to raise the head end of the bed (reverse Trendelenburg).



If the bed is inclined to the opposite side, the operation is paused when the bed becomes horizontal or when the foot end liner actuator becomes extended to its maximum. To incline the bed further, press the button again.

### Head and knee coordination

Press the button (5) to raise the head and knee sections.

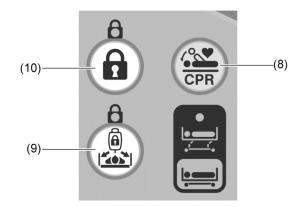
Press the button (5) to lower the head and knee sections.

# Cardiac Chair up (IA-54580*** only)

Press the \( \bigcap \) button (6) to incline the bed after adjusting the angle of the head/knee sections.

# Cardiac Chair down (IA-54580*** only)

Press the button (6) to adjust the inclined bed and head/knee sections to the horizontal position.



### **Electric CPR**

Hold down the button (8) for at least 2 seconds or press it twice quickly to operate the bed so the head/knee sections and inclination angles become 0° (horizontal).

- * The bed is lowered to the minimum height.
- * Releasing the button stops the operation at its position.

### Patient lock-out

Press the <a>®</a> button (9) to disable the operation of the patient control panel and handheld controller (accessory).

Press the button (9) again to cancel the lock-out status.

* The LED indicator is on when locked.

### **Overall lock-out**

Press the (a) button (10) to disable all bed operations except for electric CPR.

Press the (a) button (10) again to cancel the lock-out status.

- * The LED indicator is on when locked.
- * Even in the patient lock-out state, the overall lock-out state can be set by pressing the button. When the overall lock-out state is canceled, the patient lock-out state is also canceled.



- Pressing two or more buttons simultaneously stops the adjustment. If you stop the adjustment by pressing two or more buttons, release your finger from all buttons and then perform the adjustment again.
- When the TR/RTR button is selected with the head end raised and S is pressed, the movement stops when the bed becomes flat. To incline the bed further, press again.
- When the TR/RTR button is selected with the head end lowered and 

  is pressed, the movement stops when the bed becomes flat. To incline the bed further, press 

  again.
- In order to protect electrical parts from overheating, the buttons cannot be operated if the bed is used continuously. In that case, disconnect the power cable, and leave the bed for 10 minutes.
- If the Electric CPR button is pressed, the head section flattens first, and then the bed lowers to the minimum height and the knee section flattens.

# **II. FUNCTIONS AND OPERATIONS**

### Using the patient control panel (excluding handheld controller type)

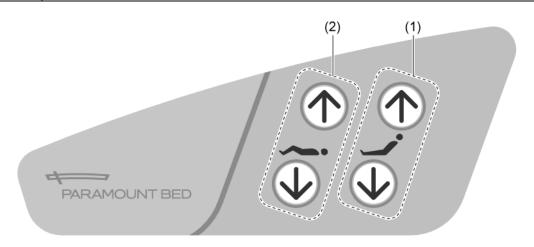
#### <Part names and functions>

The patient control panel is intended for patients to perform the following operations. It is located on the inside of the left or right Head-end side-rail.

Adjusting the angle of the head/knee sections

# ↑ WARNING

- Do not apply excessive force to the patient control panel or touch it with sharp objects. The patient control panel may be damaged, resulting in electric shock or malfunction.
- Do not allow it to be operated by a person deemed incapable of understanding the operation (a child aged 12 or under or a person with dementia). If a person deemed incapable of understanding the operation operates the patient control panel by oneself, a body part may get caught in the bed by mistake, resulting in unexpected injury. When such a person runs the risk of operating the patient control panel by oneself, you can use one of the following procedures to limit operation and decrease the chance of accident caused by incorrect operation.
  - Set Overall lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the patient control panel. (For the setting procedure, see p. 52.)
  - Set Patient lock-out on the side-rail integrated panel or nurse control panel (accessory) to disable the operation of the patient control panel. (For the setting procedure, see p. 52.)



# <Operation procedure>

# Head up/down

Press the \( \bar{\Phi} \) button (1) to raise the head section and press the \( \bar{\Phi} \) button to lower it.

* Releasing the button stops the operation at its position.

### Knee up/down

Press the \( \bar{\psi} \) button (2) to raise the knee section and press the \( \bar{\psi} \) button to lower it.

* Releasing the button stops the operation at its position.



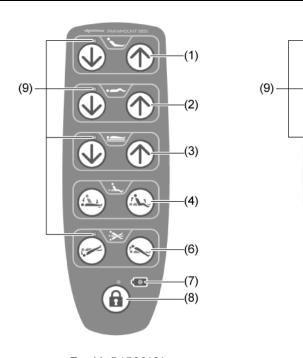
Pressing two or more buttons simultaneously stops the adjustment. If you stop the adjustment by pressing two or more buttons, release your finger from all buttons and then perform the adjustment again.

## Using the handheld controller (handheld controller type only)

You can adjust the angle of the head and knee sections, bed height, and bed inclination angle with the handheld controller. The handheld controller is intended to be operated by patients. However, the function selection buttons are not intended to be used by patients.



Do not allow it to be operated by a person deemed incapable of understanding the operation (a child aged 12 or under or a person with dementia). If a person deemed incapable of understanding the operation operates the handheld controller by oneself, the body may get caught in the bed by mistake, resulting in unexpected injury.



For IA-54580*3*

For IA-53580*3*

(1)

(5)

(7)

(8)

# <Part names and functions> Operation buttons

To raise the part to operate, press the 1 button, and to lower it, press the 4 button. (Only (1) – (4))

- (1) Head up/down buttons ....... Adjust the angle of the head section.
- (2) Knee up/down buttons...... Adjust the angle of the knee section.
- (3) Height up/down buttons...... Adjust the bed height.
- - bed.
- (5) Head and knee coordination buttons...... Adjust the angle of the head/knee sections.
- (6) Trendelenburg/reverse Trendelenburg button...... Adjust the inclination angle of the bed.



- Press the operation button to operate the bed and release the button to stop the operation at its position.
- Press two or more operation buttons simultaneously to stop the operation.
- If you stopped the operation by pressing two or more buttons simultaneously, release your finger from all buttons to perform the operation again.
- If you are using the Cardiac Chair motion button, pause after the head and knee sections are raised. Press the button again to incline the bed.

# **II. FUNCTIONS AND OPERATIONS**

#### **Indicator LEDs**

(7) Battery status indicator LED ...... Indicates the power supply status for the bed (See p.38).

On (green) : Remaining battery power is sufficient.

Off : The power plug is disconnected and the battery power is fully used up.

Flashing (green) : Indicates the battery status. See p.38.

### **Function buttons and LED indicators**

(8) Selective lock-out button ...... Disable individual bed operations

(Head/Knee/Height/Trendelenburg).

The LED indicator near the lock-out button turns on when (8) is

pressed. (When patient lock-out is set on the side-rail

integrated panel, the selective lock-out button is locked as well. The LED indicator near the lock-out button does not turn on under the patient lock-out state but flashes when (8) is

pressed.)

(9) Selective lock-out LED...... Indicates the lock-out status. The LED indicator turns on when

locked.

### <Setting selective lock-out>

- **1.** When (8) is pressed, the (8) LED indicator will turn on. While pressing (8), press the button of the bed operation you want to lock.
- 2. Release your finger from the (8) button after the target LED indicator turns on. (The lock-out setting is enabled.)

# <Canceling selective lock-out >

- 1. When (8) is pressed, the (8) LED indicator will turn on. While pressing (8), press the button of the bed operation that you want to cancel the lock-out for.
- 2. Release your finger from the (8) button after the target LED indicator turns off. (The lock-out setting is disabled.)

^{*} The lock-out setting can be operated repeatedly while the (8) button is pressed.



- When the TR/RTR button is selected with the head end raised and S is pressed, the movement stops when the bed becomes flat. To incline the bed further, press S again.
- When the TR/RTR button is selected with the head end lowered and is pressed, the movement stops when the bed becomes flat. To incline the bed further, press again.
- In order to protect electrical parts from overheating, the buttons cannot be operated if the bed is used continuously. In that case, disconnect the power cable, and leave the bed for 10 minutes.
- Selective lock-out is only available for the operations of the handheld controller, and it is possible to operate the bed from the side-rail integrated panel or nurse control panel (accessory) even if selective lock-out is set.
- Also, you cannot set or cancel selective lock-out from the side-rail integrated panel or nurse control panel (accessory).

^{*} The lock-out setting can be operated repeatedly while the (8) button is pressed.

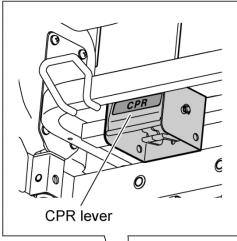
# 3. Emergency operation

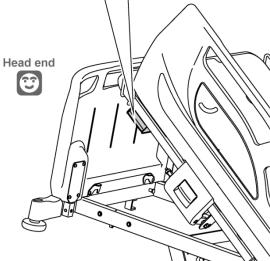
### Lowering the head section with a CPR lever

In an emergency, you can easily perform the cardiopulmonary resuscitation (CPR) by operating the CPR lever attached to the head section or the electric CPR on the side-rail integrated panel.

**№** WARNING

- When pressing the CPR button or pulling the CPR lever, make sure that the patient's, caregiver's, and other people's head, arms, legs, or other body parts have not entered the gap between the mattress deck and main frame. They may get caught, resulting in injury.
- Do not perform the emergency operation except for the CPR operation. If it is used for a purpose other than the intended purpose, the patient may fall off the bed or fall over due to bed operation, resulting in injury, or the bed may be damaged or deformed.
- Do not stop the head down operation halfway through. This may cause malfunction of the bed.





CPR levers are located on the right and left of the head section at the head end.

- Place one hand on the side of the back section base and pull the emergency CPR lever.
- **2.** Keep pulling the lever until the back section base returns to flattened state.



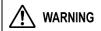
- Sometimes it is difficult to lower the head section due to the weight of the patient or the angle of the head section. In such a case, strongly push the head section in the lowering direction while pulling the CPR lever.
- You cannot raise the head section with the CPR lever.
- You can operate the CPR lever even in the event of a power failure or bed failure.

^ CAUTION

- Do not operate electrical components, such as the side-rail integrated panel, during CPR lever operation.
   This may damage the motor.
- Do not pull the CPR levers on the left and right simultaneously. The CPR levers may be damaged.

# 1. Suitable product table

- Use suitable products after confirming that the combination with the bed is correct. Using an incorrect combination of suitable product may cause accidental injury or failure. The model number of each suitable product is printed on the cardboard box and on the product ID label.
  - For example, the model number is indicated as C56A on the product ID label. Example: C56A indicates KC-56A.
    - * The label description may differ from the above for some products. For any queries, contact Paramount Bed (see p.100) or your distributor.



- Do not use other than the suitable product listed in the suitable product table (see below). Unintended gaps may be created and the product may be damaged or deformed, resulting in injury.
- Read the instruction manual for each suitable product.
- When connecting the bed to other equipment with cables, perform the wiring work properly. The cables may be damaged, resulting in electric shock or fire.
  - Be careful to prevent cables from getting caught in the moving parts of the bed, side-rails, etc.
  - Regularly check that the wiring work has been performed properly.



Suitable product may be changed due to specification changes or combinations. In addition, some suitable products may not be listed in the table due to new release or discontinuation of sales. For any queries on accessory, contact Paramount Bed (see p.100) or your distributor.

Suitable products*1)*2)	Model No.*1)	Reference page
Handheld controller	IC-A1530 (IA-53580*** only), IC-A1540 (IA-54580*** only)	59
Nurse control panel	IC-A1340 (IA-54580*** only)	61
IV pole	IC-56A, IC-56B, IC-56C, KC-56A, KC-56B, EC-562	63
Oxygen cylinder holder	IC-A83, IC-A34HQ, PC-5116, IC-A84	64
Extension mattress	IE-52EB, IE-52ED, PE-6410, PE-6420	67
Foot spacer/Side-rail spacer	IC-A33321Q, PC-5112	68
Side-rail spacer holder	PC-5118	69
Lifting pole	PC-5111	70
Monitor table	PC-5119	71
Traction frame	KA-83U, KA-86U	72
Bed linen rack	PC-5060	73
Chart holder	IZ-C21CH	74
Bedside table	IF-3100A, IF-3110A, KF-1900, KF-1920, KF-1930, KF-1950, KF-1960, KF-1970, KF-1924, KF-1934, KF-1954, KF-1964, KF-1974, KF-282A, PF-3100A, PF-3110A, PF-3120A, PF-3130A	75
Overbed table	KF-832LA/LB/LD, KF-833LA/LB/LD, KF-835LA/LB/LD, KF-813	76
Sittan™/Rehabilitation table	KF-890, KF-840	76
Electric patient lift (floor traveling)	KQ-781, KQ-787	77

^{*1)} These products may not be available in some countries or regions. For details, contact Paramount Bed (see p.100) or your distributor.

^{*2)} This product is sold as an accessory for the medical equipment in some countries and regions. For details, contact Paramount Bed or your nearest distributor.

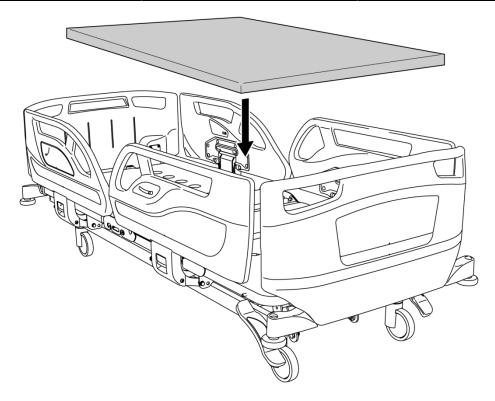
### 2. Mattress



- Do not use the bed without any mattress being installed. Fingers or toes may get caught in gaps or air holes on the mattress deck, resulting in injury.
- Use this bed in combination with a standard mattress designated by Paramount Bed. If you use the bed in a combination with a mattress other than standard mattresses designated by Paramount Bed, they may not match in dimensions and the patient may get caught in the gap between the mattress and side-rail resulting in injury, or an overload may be applied to the bed, resulting in a failure.
- Do not perform X-ray imaging using a cassette tray while an air mattress is installed. The X-ray imaging results may be affected by reflections of parts of an air mattress.

### <Standard mattress>

Width	Length	Thickness
860 mm	2000 mm	100 to 150 mm





For more information about mattress specification and any queries, please feel free to contact Paramount Bed (see p.100) or your distributor.

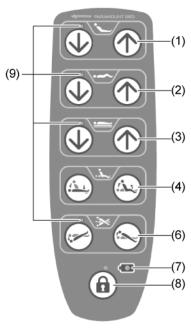
# 3. Suitable product

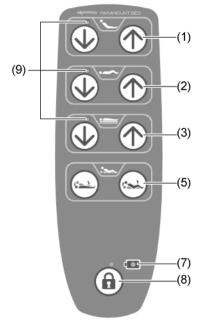
### Handheld controller

You can adjust the angle of the head and knee sections, bed height, and bed inclination angle with the handheld controller. The handheld controller is intended to be operated by patients. However, the function selection buttons are not intended to be used by patients.

Model No.
IC-A1530 (IA-53580*** only),
IC-A1540 (IA-54580*** only)

# <Part names and functions> Operation buttons





For IA-54580***

For IA-53580***

To raise the part to operate, press the button, and to lower it, press the button. (Only (1) – (4))

(1) Head up/down buttons Adjust the angle of the head section.

(2) Knee up/down buttons Adjust the angle of the knee section.

(3) Height up/down buttons Adjust the bed height.

(4) Cardiac Chair motion buttons Adjust the angle of the head/knee sections and bed.

(5) Head and knee coordination buttons Adjust the angle of the head/knee sections.

(6) Trendelenburg/reverse Trendelenburg (TR/RTR) button. Adjust the inclination angle of the bed.



- Press the operation button to operate the bed and release the button to stop the operation at its position.
- Press two or more operation buttons simultaneously to stop the operation.
- If you stopped the operation by pressing two or more buttons simultaneously, release your finger from all buttons to perform the operation again.
- If you are using the Cardiac Chair motion button, pause after the head and knee sections are raised. Press the button again to incline the bed.

#### **Indicator LEDs**

(7) Battery status indicator LED ............ Indicates the power supply status for the bed (See p.38).

: Remaining battery power is sufficient. On (green)

Off : The power plug is disconnected and the battery power is fully used up.

Flashing (green) : Indicates the battery status. See p.38.

### **Function buttons and LED indicators**

(8) Selective lock-out button ...... Disable individual bed operations

(Head/Knee/Height/Trendelenburg).

The LED indicator near the lock-out button turns on when (8) is pressed. (When patient lock-out is set on the side-rail integrated panel, the selective lock-out button is locked as well. The LED indicator near the lock-out button does not turn on under the

patient lock-out state but flashes when (8) is pressed.)

(9) Selective lock-out LED...... Indicates the lock-out status. The LED indicator turns on when

locked.

### <Setting selective lock-out>

- 1. When (8) is pressed, the (8) LED indicator will turn on. While pressing (8), press the button of the bed operation you want to lock.
- 2. Release your finger from the (8) button after the target LED indicator turns on. (The lock-out setting is enabled.)

# <Canceling selective lock-out >

- 1. When (8) is pressed, the (8) LED indicator will turn on. While pressing (8), press the button of the bed operation that you want to cancel the lock-out for.
- 2. Release your finger from the (8) button after the target LED indicator turns off. (The lock-out setting is disabled.)

^{*} The lock-out setting can be operated repeatedly while the (8) button is pressed.



- When the TR/RTR button is selected with the head end raised and the button is pressed, the movement stops when the bed becomes flat. To incline the bed further, press the button again.
- When the TR/RTR button is selected with the head end lowered and the button is pressed, the movement stops when the bed becomes flat. To incline the bed further, press the button again.
- In order to protect electrical parts from overheating, the buttons cannot be operated if the bed is used continuously. In that case, disconnect the power cable, and leave the bed for 10 minutes.
- Selective lock-out is only available for the operations of the handheld controller, and it is possible to operate the bed from the side-rail integrated panel or nurse control panel (accessory) even if selective lock-out is set.
- Also, you cannot set or cancel selective lock-out from the side-rail integrated panel or nurse control panel (accessory).

^{*} The lock-out setting can be operated repeatedly while the (8) button is pressed.

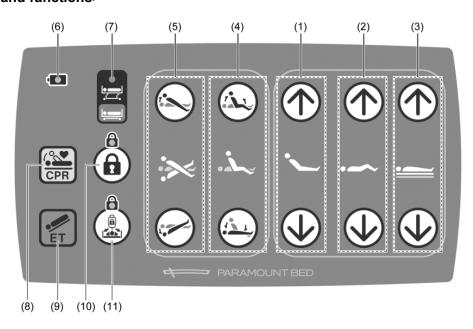
### Nurse control panel (IA-54580*** only)

You can adjust the angle of the head and knee sections, bed angle, bed height, and bed inclination angle with the nurse control panel. The nurse control panel is intended to be operated only by medical professionals.

# Model No.

IC-A1340 (IA-54580*** only)

### <Part names and functions>



### **Operation buttons**

To raise the part to operate, press the  $\bigcirc$  button, and to lower it, press the  $\bigcirc$  button. (Only (1) – (3))

- (1) Head up/down buttons ...... Adjust the angle of the head section.
- (2) Knee up/down buttons...... Adjust the angle of the knee section.
- (3) Height up/down buttons...... Adjust the bed height.
- (4) Cardiac Chair motion buttons...... Adjust the angle of the head/knee sections
  - and bed.
- (5) Trendelenburg/reverse Trendelenburg (TR/RTR) button..... Adjust the inclination angle of the bed.



- Press the operation button to operate the bed and release the button to stop the operation at its position.
- Press two or more operation buttons simultaneously to stop the operation.
- If you stopped the operation by pressing two or more buttons simultaneously, release your finger from all buttons to perform the operation again.
- If you are using the Cardiac Chair motion button, pause after the head and knee sections are raised. Press the button again to incline the bed.

### **Status indication**

- (6) Battery status indicator LED ...... Indicates the power supply status for the bed (See p.38).
  - On (green) : Remaining battery power is sufficient.
  - Off : The power plug is disconnected and the battery power is fully used up.
  - Flashing (green) : Indicates the battery status. See p.38.
- (7) Low height indicator LED ....... Minimum height: LED indicator turns off, otherwise: LED indicator turns on.

Function buttons and LED indicators	
(8) Electric CPR button	Flattens the inclined head/knee sections and bed.
	Hold down the 🔛 button (8) for at least 2 seconds or press
	it twice quickly to operate the bed so the head/knee sections
	and inclination angles become 0° (horizontal).
	* The bed is lowered to the minimum height.
(0) Emergency Trandelenburg butten	* Releasing the button stops the operation at its position.
(9) Emergency Trendelenburg button	Flattens the inclined head/knee sections and bed.
	Hold down the button (9) for at least 2 seconds or press it twice quickly to operate the bed so the head/knee sections
	and inclination angles become 12°.
	* The bed is lowered to the minimum height.
	* Releasing the button stops the operation at its position.
	* If the bed is inclined when pressed, it will return to the flat
	position once, then the head section will flatten and then
	transition to Trendelenburg operation. If the knee section is
(40) 0	raised, it will run until the knee section is flat.
(10) Overall lock-out button	Used to disable all bed operations except for electric CPR
	and emergency Trendelenburg.
	Press the (a) button (10) to disable all bed operations except for electric CPR and emergency Trendelenburg.
	* The LED indicator is on when locked.
(11) Patient lock-out button	Used to disable the operation of the patient control panel and
(11) radon rook out battoriiii	handheld controller.
	Press the 🔊 button (11) to disable the operation of the
	patient control panel and handheld controller.
	* The LED indicator is on when locked.



- When the TR/RTR button is selected with the head end raised and is So is pressed, the movement stops when the bed becomes flat. To incline the bed further, press So again.
- When the TR/RTR button is selected with the head end lowered and is pressed, the movement stops when the bed becomes flat. To incline the bed further, press again.
- In order to protect electrical parts from overheating, the buttons cannot be operated if the bed is used continuously. In that case, disconnect the power cable, and leave the bed for 10 minutes.
- If the Electric CPR button is pressed, the head section flattens first, and then the bed lowers to the minimum height and the knee section flattens.

### IV pole



Each hook's load capacity is 1 kg. Do not hang an article exceeding the load capacity because it may damage the hook, resulting in an injury.

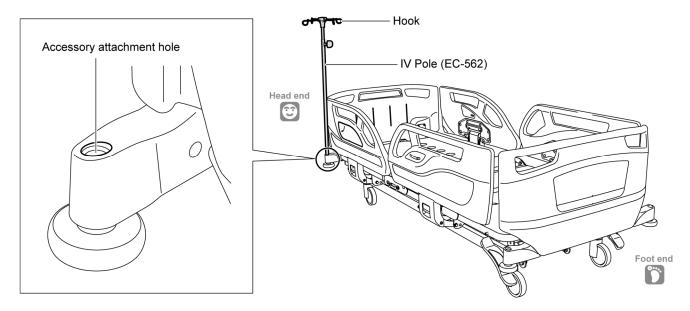
* IV pole (IC-56A, IC-56B, IC-56C) is not designed for sales in Europe. Also, it is not distributed in some regions as well where it is not registered as medical equipment. For details on the sales of IV pole, contact Paramount Bed (see p.100) or your distributor.

## You can hook a drip bag by attaching an IV pole.

Accessory attachment holes are located at the head end and foot end of the bed in a total of 4 locations.

Model No.
IC-56A, IC-56B, IC-56C, KC-56A, KC-56B, EC-562

- * IC-56B, IC-56C and KC-56B have two hooks.
- * IC-56A, KC-56A and EC-562 have four hooks.





Note that the Accessory attachment hole at the foot end moves together when the extension frame is pulled out.

### Oxygen cylinder holder



When using the IV pole with the oxygen cylinder holder, do not insert the IV pole into the accessory attachment hole at the head end and foot end.

- If used on a sloped floor, the bed may tip over, resulting in injury.
- When using an oxygen cylinder holder and an IV pole together, use the accessory attachment holes on the left and right sides at the head end.

You can use an oxygen cylinder by attaching an oxygen cylinder holder.



<IC-A83, PC-5116>

Be sure to use a 500 L oxygen cylinder (with a diameter between 9.5 cm and 11.5 cm). <IC-A34HQ, IC-A84>

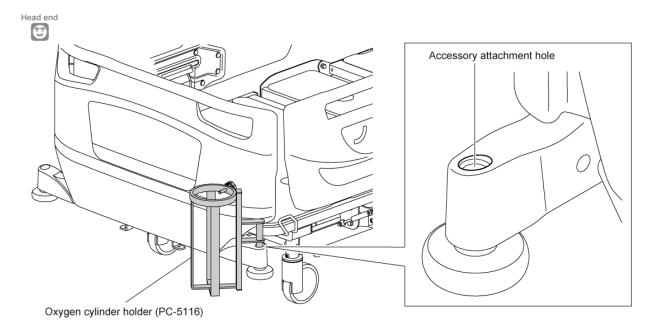
Be sure to use a 1000 L to 1500 L oxygen cylinder (with a diameter between 14 cm and 15.5 cm).

## Model No.

IC-A83, IC-A34HQ, PC-5116, IC-A84

# <IC-A83, PC-5116>

Accessory attachment holes are located at the head end and foot end of the bed in a total of 4 locations.





Note that the Accessory attachment hole at the foot end moves together when the extension frame is pulled out.

^{*} Oxygen cylinder holder (IC-A34HQ, IC-A83) is not designed for sales in Europe. Also, it is not distributed in some regions as well where it is not registered as medical equipment. For details on the sales of oxygen cylinder holder, contact Paramount Bed (see p.100) or your distributor.

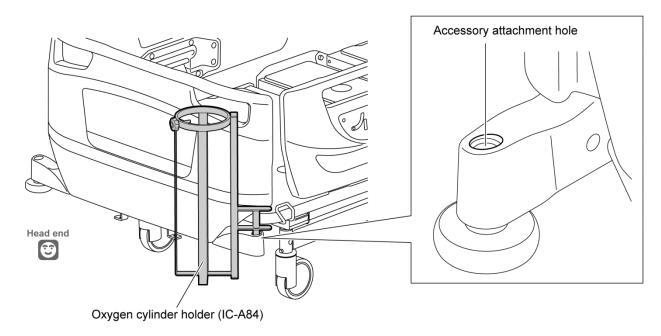
# <IC-A84>

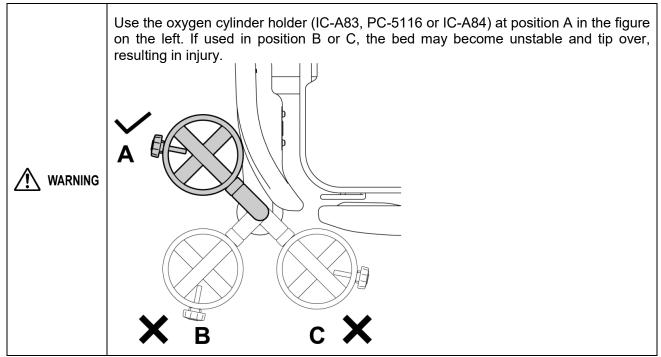
Accessory attachment holes are located at the head end of the bed in a total of 2 locations.



When the oxygen cylinder holder (IC-A84) is being used, the following accessory cannot be attached.

- Lifting pole (PC-5111)
- Oxygen cylinder holder (IC-A34HQ)



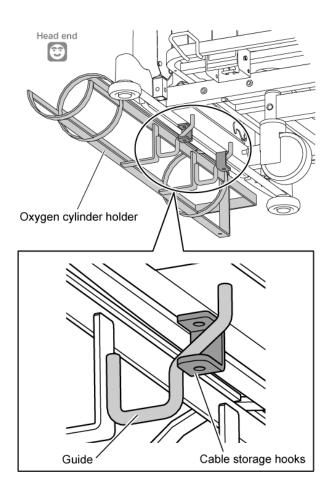


# <IC-A34HQ>



When the oxygen cylinder holder (IC-A34HQ) is being used, the following accessory cannot be attached.

- Lifting pole (PC-5111)
- Oxygen cylinder holder (IC-A84)



Attach the guide of the oxygen cylinder holder to the cable storage hooks.



Make sure that the guide of the oxygen cylinder holder is firmly hooked onto both cable storage hooks.

### **Extension mattress**

**!** WARNING

Do not put your hand, foot, or knee on the edge of the extension mattress (accessory). Since there is no support, you may lose your balance and fall over, resulting in injury.

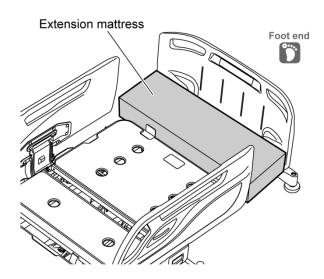
- * Extension mattress (IE-52EB, IE-52ED, PE-6410, PE-6420) is not an accessory for medical devices.
- * Extension mattress (IE-52EB, IE-52ED, PE-6410, PE-6420) is not designed for sales in Europe.

The bed can be extended for tall patients by pulling out the extension frame and adding an extension mattress.

* For details, see the instruction manual for the extension mattress.

### Model No.

IE-52EB, IE-52ED, PE-6410, PE-6420



# Foot spacer/Side-rail spacer

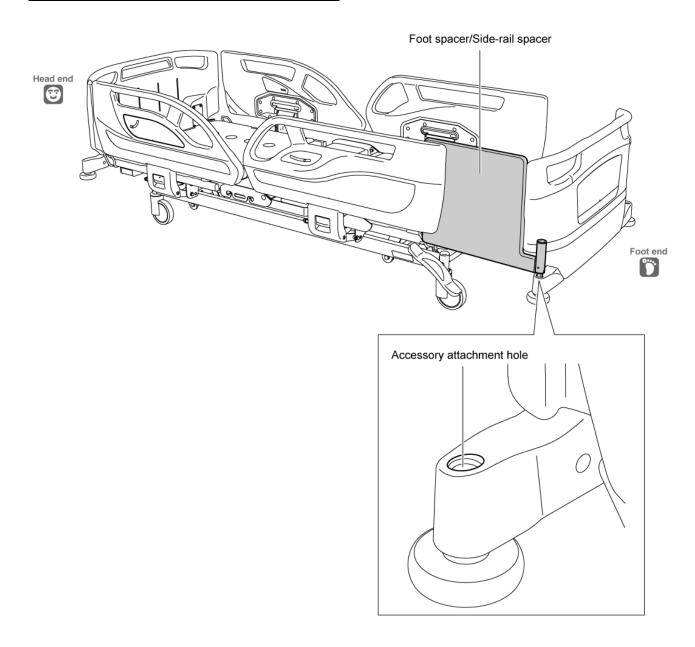
- * Foot spacer/Side-rail spacer (IC-A33321Q, PC-5112) is not an accessory for medical devices. * Foot spacer/Side-rail spacer (IC-A33321Q, PC-5112) is not designed for sales in Europe.

# The gap between the footboard and side-rail created when using the extension frame can be filled in by attaching the foot spacer/side-rail spacer.

Insert the foot spacer/side-rail spacer into the Accessory attachment hole at the foot end before use.

* The foot spacer/side-rail spacer is not a part of the side-rail.

# Model No. IC-A33321Q, PC-5112



# Side-rail spacer holder

**WARNING** 

Attach the side-rail spacer holder in the correct orientation. If attached in the wrong orientation, it may hit the patient, resulting in injury.

- * Side-rail spacer holder (PC-5118) is not an accessory for medical devices.
- * Side-rail spacer holder (PC-5118) is not designed for sales in Europe.

# You can store the foot spacer/side-rail spacer.

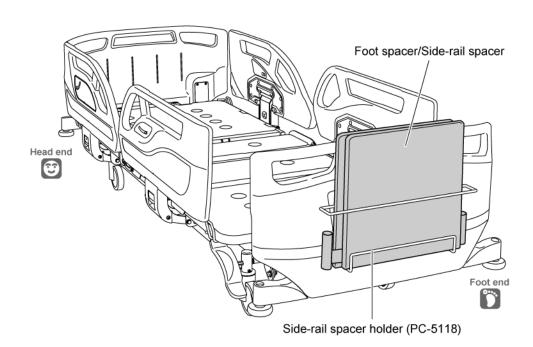
Hang the side-rail spacer holder on the footboard outer side.



When the side-rail spacer holder is being used, the following accessory cannot be attached to the footboard.

- Linen rack (PC-5060)
- Monitor table (PC-5119)
- Chart holder (IZ-C21CH)

Model No.
PC-5118



# Lifting pole



- Load capacity is 76 kg. Do not hang an article exceeding the load capacity because it may damage the lifting pole, resulting in injury.
- During transportation, do not hang on to the lifting pole. It may tip over the bed, and the patient on the bed may fall off the bed, resulting in injury.



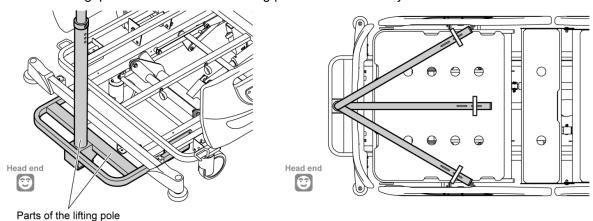
When the lifting pole (PC-5111) is being used, the following accessory cannot be attached.

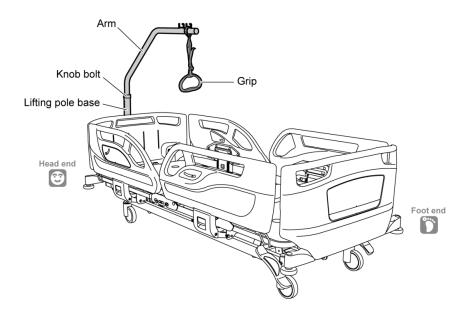
- Oxygen cylinder holder (IC-A34HQ)
- Oxygen cylinder holder (IC-A84)

The lifting pole can be used for support to raise the body from the bed by attaching to the bed. It can be used for training too. For details, see the instruction manual for the lifting pole.

Model No.
PC-5111

- **1.** Attach the parts of the lifting pole to the bed as shown in figure.
- **2.** Inset the arm into the outer pipe.
- **3.** Tighten the knob bolt to fasten the arm. The arm can be set in three positions as shown in figure by changing the knob bolt positions.
- **4.** Pull down the grip to make sure that the lifting pole is attached firmly.





Monitor table	
★ WARNING	<ul> <li>Do not place an object exceeding 12 kg on the monitor table. The monitor table or bed may be damaged or deformed resulting in injury, or the placed object may be damaged or deformed.</li> <li>When an overbed table is placed over the bed, do not place an object on the monitor table. The object may fall, resulting in injury or in damage to the object.</li> </ul>
<u> </u>	Attach the monitor table in the correct orientation. If the monitor table is lowered when in the wrong orientation, it may hit the patient, resulting in injury.

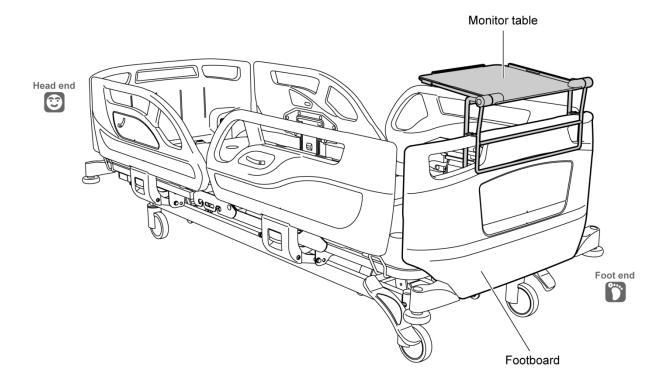
You can attach the monitor table to the footboard of the bed and use it as a table to place a monitor.



When the monitor table is being used, the following accessory cannot be attached to the footboard.

- Side-rail spacer holder (PC-5118)
- Linen rack (PC-5060)
- Chart holder (IZ-C21CH)

Model No.
PC-5119



#### Traction frame

* Traction frame (KA-83U, KA-86U) is not designed for sale in Europe. Also, it is not distributed in some regions where it is not registered as medical equipment. For details on the sale of the traction frame, contact Paramount Bed (see p.100) or your distributor.

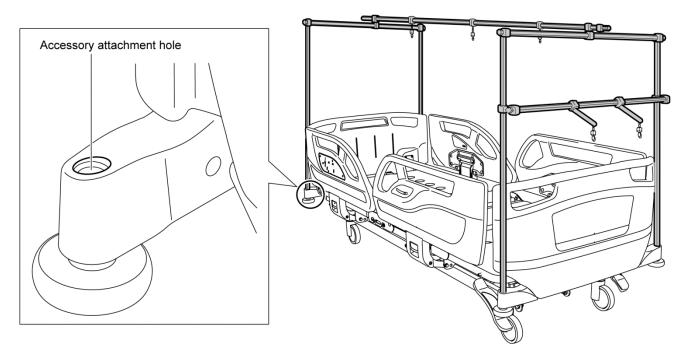
## Insert it into the Accessory attachment hole of the bed before use.

Insert the Traction frame into the Accessory attachment hole of the bed.

* For details, see the instruction manual for the Traction frame.

Model No.				
KA-83U, KA-86U*				

* The KA-86U can be used by attaching the CA-A343E (orthopedic frame attachment) to the bed.



* This illustration uses the KA-83U model for explanation.



Do not use the traction frame (KA-83U) with the extension frame drawn out. The traction frame (KA-83U) cannot be properly attached to the bed, and it may unexpectedly come off, resulting in injury, or the bed and the object may be damaged or deformed.

# **III. SUITABLE PRODUCTS**

#### Bed linen rack

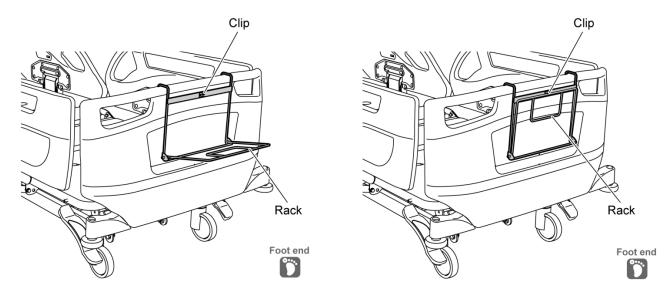


- Load capacity is 1 kg. Do not set an article exceeding the load capacity because it may cause the linen rack to be damaged or deformed.
- Attach the bed linen rack in the correct orientation. If attached in the wrong orientation, the rack may hit the patient, resulting in injury.
- * Bed linen rack (PC-5060) is not an accessory for medical devices.
- * Bed linen rack (PC-5060) is not designed for sales in Europe.

The bed linen rack can be used for setting the linen temporarily when bedmaking.

Model No.
PC-5060

- 1. Hang the bed linen rack on the footboard with the rack facing the outside of the bed.
- 2. When using the bed linen rack, pull the rack out.
- **3.** After using the bed linen rack, push the rack to the clip.



Using the bed linen rack

Storing the bed linen rack



When the bed linen rack is being used, the following accessory cannot be attached to the footboard.

- Side-rail spacer holder (PC-5118)
- Monitor table (PC-5119)
- Chart holder (IZ-C21CH)

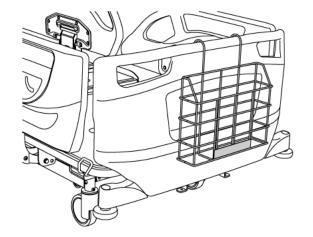
## Chart holder



- Load capacity is 1 kg. Do not hang an article exceeding the load capacity because it may damage the chart holder, resulting in injury.
- Attach the chart holder in the correct orientation. If attached in the wrong orientation, the rack may hit the patient, resulting in injury.
- * Chart holder (IZ-C21CH) is not an accessory for medical devices.
- * Chart holder (IZ-C21CH) is not designed for sales in Europe.

The chart holder can be used for setting the charts.

Model No.	
IZ-C21CH	



Hang the chart holder on the footboard with the holder facing the outside of the bed.



When the chart holder is being used, the following accessory cannot be attached to the footboard.

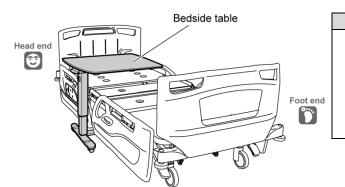
- Side-rail spacer holder (PC-5118)
- Monitor table (PC-5119)
- Bed linen rack (PC-5060)

# III. SUITABLE PRODUCTS

## 4. Peripherals

#### Bedside table

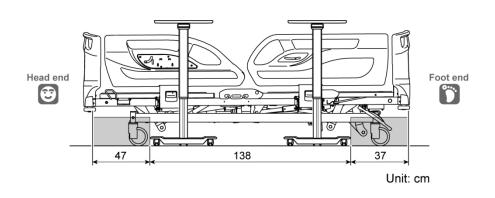
The bedside table is used for having meals or doing easy chores on the bed.



Model No.
IF-3100A, IF-3110A,
KF-1900, KF-1920, KF-1930,
KF-1950, KF-1960, KF-1970,
KF-1924, KF-1934, KF-1954,
KF-1964, KF-1974, KF-282A,
PF-3100A, PF-3110A, PF-3120A, PF-3130A

- Do not perform bed operations when the bedside table is placed on the side of the bed. If you perform bed operations such as head up or height adjustment, you may get caught between the bed and bedside table resulting in injury, or the bedside table or bed may be damaged or deformed.
- When moving the bedside table around the bed, be careful to prevent the bedside table from hitting the side pedal. The bed may operate unexpectedly, resulting in accidental injury.
- The following figure shows the usage range of the bedside table. ( area cannot be used.) If it is used anywhere outside the range shown in the figure below, the casters of the bed may be unlocked and the bed may move unexpectedly, resulting in accidental injury. The bedside table may be damaged or deformed.



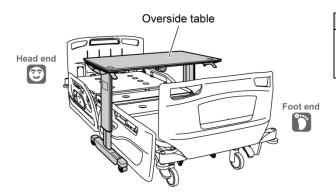




When side-rails are raised, you cannot use the bedside table in the vicinity of the maximum bed height.

## Overbed table

The overbed table is used for having meals or doing easy chores on the bed.



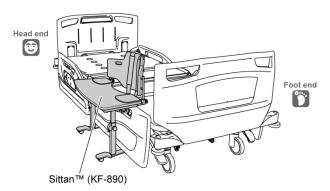
## Model No.

KF-832LA/LB/LD, KF-833LA/LB/LD, KF-835LA/LB/LD, KF-813

## Sittan™/Rehabilitation table*1)

You can use the Sittan™ to support the sitting position of a patient on the bed side who cannot maintain a sitting position without assistance. The rehabilitation table can be used as a table for patients sitting on the bed side.

*1) The Sittan™ and rehabilitation table are not sold in some countries or regions. Also, they may be classified as medical equipment. For details, contact Paramount Bed (see p.100) or your distributor.



Model No.	
KF-890, KF-840	

# **III. SUITABLE PRODUCTS**

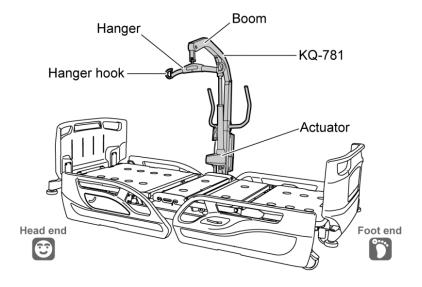
#### Electrical patient lift (floor traveling)*1)

You can use the floor traveling electric patient lift ("lift") shown on the right.

Model No.	
KQ-781, KQ-787	

*1) The lift is not sold in some countries or regions.
Also, it may be classified as medical
equipment. For details, contact Paramount
Bed (see p.100) or your distributor.

- Also read the instruction manual supplied with the lift. Improper use may result in accidental injury.
- When operating the bed and the lift, be careful around the lift.
  - A body part may get caught between the bed and hanger or hit the hanger, resulting in injury.
  - The boom or hanger may hit a person resulting in injury, or hit the bed or furniture, causing damage.
  - The hanger hook may get caught in the side-rail and the lift or side-rail may be damaged or deformed.
  - The bed may hit the foot of the lift or the actuator, causing damage or deformation.
- Do not lock the casters of the lift when the foot of the lift is inserted under the bed. If the bed hits the foot of the lift or the actuator during bed operation, the lift may fall over resulting in injury, or the bed or lift may be damaged or deformed.
- When inserting the foot of the lift under the bed, do not step on or run over the power cable. The power cable may be damaged, resulting in electric shock or fire.
- When moving the lift around the bed, be careful to prevent it from hitting the side pedal of the bed. The casters may be unlocked and the bed may move unexpectedly when getting into or out of the bed, resulting in accidental injury.





Do not perform bed operations when the lift is placed on the side of the bed. If you perform bed operations such as head up or height adjustment, you may get caught between the bed and lift resulting in injury, or the lift or bed may be damaged or deformed.
 The following figure shows the usage range of the lift. (☐ area cannot be used.) If it is used anywhere outside the range shown in the figure below, the casters of the bed may be unlocked and the bed may move unexpectedly, resulting in accidental injury. The lift may be damaged or deformed.

WARNING
WARNING
Unit: cm

# IV. IN CASE OF TROUBLE

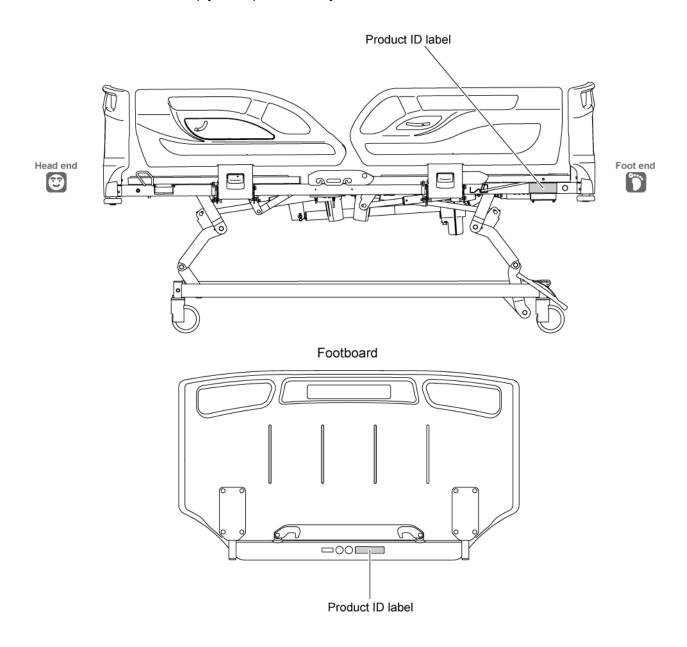
# 1. Troubleshooting

- Problems may not always indicate faults. Check the following once again before requesting repair.
- If the problem persists after taking corrective action, stop using the bed immediately, disconnect the power plug from the outlet and turn the battery off, and then contact Paramount Bed (see p.100) or your distributor for repair.
- If the bed is damaged in an earthquake, fire, flood, or any other incident, contact Paramount Bed (see p.100) or your distributor for inspection or repair. Electric shock or fire may occur due to a short circuit or current leakage from electrical components or malfunction may occur due to deformation of the bed, resulting in injury.

Symptoms and status	Check	Corrective action	Reference page
	Is the power plug inserted into the outlet?	Insert the power plug into the outlet.	37
Buttons do not work on the side-rail integrated panel, patient control panel, handheld controller, or nurse control panel	·	<ul> <li>Disconnect the power plug from the outlet and insert it in again.</li> <li>Plug another electrical device into the outlet and check that power is available.</li> </ul>	37
(accessory).	Is overall lock-out set on the side-rail integrated panel?	Cancel overall lock-out on the side-rail integrated panel.	49
	Is patient lock-out set on the side-rail integrated panel?	Cancel patient lock-out on the side-rail integrated panel.	49
	Is the power plug inserted into the outlet?	Insert the power plug into the outlet.	37
The battery status indicator LED on the handheld controller is off.	The power plug is inserted into the outlet, but the power LED on the handheld controller is off.	<ul> <li>Disconnect the power plug from the outlet and insert it in again.</li> <li>Plug another electrical device into the outlet and check that power is available.</li> </ul>	37
	Is the cable connected properly?	Make sure that the cable is properly inserted and connected to the device (connector).	-
Beeping alert sound occurs when the handheld controller, the side-rail integrated panel, the patient control panel or the nurse control panel button is pressed.	Check if the battery is charged.	Plug the power plug into the outlet.	37
Parts cannot be positioned correctly.	Are there objects in the moving parts?	Remove any objects.	-
The bed cannot be moved.	Are the casters locked?	Unlock the casters.	29
Board cannot be detached.	Is the board stopper locked?	Unlock the board stopper.	24
Noises when emergency CPR function is operated.	Check if the CPR lever is fully pulled/gripped when in use.	Fully pull/grip the CPR lever when in use.	56

# Positions of product ID labels

Product ID labels are affixed to the right side of the main frame and on the inside of the footboard. The labels in this manual are simply examples and may differ from the actual labels.



#### Service life

The lifetime of this equipment is typically 8 years. The lifetime is defined as the period during which the product will maintain the specified performance and safety, provided it has been maintained and operated in conditions of normal use in accordance with the requirements in this instruction manual.

# **IV. IN CASE OF TROUBLE**

# 2. Product error indication with LED lighting

# LED lighting list

If a failure occurs, the LED indicators on the side-rail integrated panel, the nurse control panel (accessory), or the handheld controller may flash to indicate an error condition. Check the list below.

Problem	Power LED flashing rate	Cause	Corrective action
	Flashing (0.2-second interval)	The load on the bed exceeded the safe working load.	Check that the load on the bed is within the safe working load.
		Operation of the bed is restricted by an obstacle.	Make sure that operation of the bed is not restricted by an obstacle.
			This error can be solved by setting the bed height to the minimum height.
The LED indicators flash when a button on the side-rail integrated panel, patient control panel, handheld controller, or nurse control panel is pressed.		The linear actuator in the bed is causing an error. (The control unit cannot detect the height of the bed.)	Press the height adjustment  and  buttons simultaneously at the same time to make the buzzer sound. Press the buttons until the buzzer sound stops to release the error status and resume normal operation. If the error is not resolved, contact Paramount Bed (see p.100) or your distributor.
		The linear actuator on the bed is disconnected.	Contact Paramount Bed (see p.100) or your distributor.
		The cable is broken.	Contact Paramount Bed (see p.100) or your distributor.
		Pressing any button other than the bed operation buttons for 30 seconds or longer.	Release all pressed buttons and wait for 10 seconds for the error to be resolved.
	LED indicator does not flash	Two or more bed operation buttons are pressed simultaneously.	Release all the pressed buttons.
Bed does not work.		Three or more optional buttons are pressed simultaneously.	Release all the pressed buttons.
		The bed operation exceeded the maximum continuous operating time.	Disconnect the power plug from the outlet and leave the bed for 10 minutes. There is a possibility that a circuit to protect the electrical components against overheating was activated. This is not a failure.



If the problem persists after taking the corrective action above, contact Paramount Bed (see p.100) or your distributor.

# 1. Regular inspection and daily maintenance

# Regular inspection

To ensure safety, inspect the product regularly, at least once a year. The product wears out and deteriorates differently depending on the operating frequency and environment. Inspect for loose parts and damage and the operation of the moving parts regularly. If you notice an irregularity or want a detailed inspection, contact Paramount Bed (see p.100) or your distributor.

Part	Operation	Inspection item			
	Head up operation	Proper operation can be achieved.			
	* See p.42	There must not be any strange noises.			
	Knee up operation	Proper operation can be achieved.			
	* See p.42	There must not be any strange noises.			
	Height adjustment	Proper operation can be achieved.			
	operation	There must not be any strange noises or significant			
	* See p.42	rattling.			
Bed	Bed operation buttons * See p.49 to 53	All bed operation buttons must work.			
	CPR * See p.56	The head section must be lowered with a CPR lever.			
		There must not be any deformation, damage, or detachment of roller bumpers or resin parts.			
	Miscellaneous	There must not be any peeling of labels, and the text must be legible.			
		There must not be any scratches or deformation at the mattress deck, frame, or any other parts.			
	Attachment state	The board stopper must be locked properly.			
Board	* See p.24				
	ОСС р.24	There must not be any significant rattling.			
		There must not be any strange noises when the bed			
	Traveling	is traveling.  There must not be any abnormal vibrations when the			
		bed is traveling.			
		Proper operation can be achieved.			
Caster		The operation must not be overly difficult.			
Casto		The bed must not move when casters are locked.			
	Caster locking operation	The bed must move smoothly when the lock is			
	* See p.29	released.			
		When in the steering position, swiveling of the			
		steering caster must be locked.			
		Proper operation can be achieved.			
0:4:	Side-rail operation	There must not be any strange noises or significant			
Side-rail	* See p.25	rattling.			
		The operation must not be overly difficult.			
		Cables must not get tangled in the bed.			
		The plug and the cable must have no scratches or			
		damage.			
Electrical components	Visual check of electrical	]			
Liouriour components	components	handheld controller (standard or accessory), and			
		nurse control panel (accessory) must have no			
		scratches or damage.			
		Brightness of night-light does not decrease.			

#### Daily maintenance



- To prevent accidents caused by incorrect operation, always disconnect the power plug from the outlet and turn the battery off before maintenance.
- Do not clean the bed by pouring water onto it. Short circuit and electric shock may occur.

#### <Bed>

#### When removing stains from parts

Perform steps 1 to 3 below.

- 1. Wipe off stains with a cloth soaked in a neutral detergent diluted with water and wrung out well.
- **2.** Wipe off any residual detergent with a cloth soaked in water and wrung out well.
- **3.** Wipe away any leftover moisture with a dry cloth.

#### **Lubrication (if there is abnormal noise)**

Lubrication is needed if there is abnormal noise. Please feel free to contact Paramount Bed (see p.100) or your distributor to request for lubrication.



Condensation or moisture on the bed or mattress may cause corrosion, abnormal noise or contamination. If there is condensation or moisture on the bed or mattress, wipe off immediately.

## When disinfecting parts

Use one of the disinfectants listed below at the specified concentrations by following the instructions in the instruction manual for the disinfectant.

76.9% - 81.4% Ethanol for disinfection
Up to 0.2% Benzalkonium chloride (e.g., Osvan)
Up to 0.2% Benzethonium chloride (e.g., Hyamine)
Up to 0.05% Chlorhexidine gluconate (e.g., Hibitane)
Up to 1.0% Sodium hypochlorite (e.g., Milton)



- Do not use volatile cleaning solutions (such as paint thinner, benzine, or gasoline) or cresol. Discoloration or deterioration may result.
- Do not use disinfectants other than those listed above. Damage or deterioration may result.
- Thoroughly wipe off parts with a damp cloth after using a neutral detergent or sodium hypochlorite. Not doing so may cause cracking, discoloration, or deterioration of the resin.



Do not sterilize. The bed is not intended for sterilization and has not been tested for compatibility with healthcare sterilization systems including ozone, moist heat/steam, dry heat, ethylene oxide vaporized Hydrogen peroxide and other chemical sterilizers. Exposure of the bed to these processes may damage the bed and render it non-functional.

#### <Suitable product, etc.>

Follow the instructions described in the instruction manual supplied with the respective accessory.

#### <Mattress>

Follow the instructions described in the instruction manual supplied with the mattress.

^{*} It is recommended to disinfect the bed before another patient uses the bed.

## 2. Long-term storage and disposal

#### Long-term storage

The following precautions should be observed when the bed will not be in use for an extended period of time.

- Lay the head and knee sections flat.
- Lower the bed height to the minimum height.
- Do not place objects other than a mattress on the bed.
- Do not place any objects on the mattress.
- Avoid a location subject to high temperature or humidity, low temperature, dryness or excessive dust. Store the bed at a temperature between -10°C and 50°C, humidity between 20% RH and 90% RH and atmospheric pressure between 700 hPa and 1060 hPa.
- Do not lean the bed against a wall, but store it level on the floor.
- Be sure to disconnect the power plug from the outlet and bundle the power cable in a location where the cable is not pinched or stepped on.
- The battery must be fully charged before storage and once every 3 months. Recharge the battery for 12 hours or more.



Inspect the product regularly at least once a year, even if it is kept in storage.

#### Disposal

When the product has reached the end of its usable life, dispose of it according to the local rules and regulations.

# 3. Specifications

	<125 mm single-wheel (total lock)>						
Fai	mily name	Qualitas Nx Series					
Pro	duct name	Electrical Hospital Bed					
		IA-54580131	IA-54580133	IA-53580131	IA-53580133		
Model No.		IA-54580141	IA-54580143	IA-53580141	IA-53580143		
		IA-54580132*1)	IA-54580134*1)	IA-53580132*1)	IA-53580134*1)		
		IA-54580142*1)	IA-54580144*1)	IA-53580142 ^{*1)}	IA-53580144*1)		
	Total length		222 cm		222 cm		
	(min. to max.)	222 to 252 cm	(no extension)	222 to 252 cm	(no extension)		
	Total width	98.8		∟rail is stored: 99 8			
Dimensions	Total height	98.8 cm (when the side-rail is stored: 99.8 cm) 77 [+2, -1] to 112 [±1.5] cm					
	Mattress deck length	200 cm					
	Mattress deck height*2)	35 [+2, -1] to 70 [±1.5] cm					
Power cable leng				ngth: 260 cm			
1 ower capie leng	without X-ray cassette						
Product weight	tray	128.	5 kg	127	' kg		
1 Toddot Wolgin	with X-ray cassette tray	133	3 kg	131.	5 kg		
Maximum user we		100		5 kg	o ng		
Safe working load			230 kg (				
Guaranteed	Temperature			40°C			
operating	Humidity			RH at 30°C			
conditions	Atmospheric pressure			060 hPa			
Transport and	Temperature		-10 to				
storage	Humidity		20 to 90%				
conditions	Atmospheric pressure			060 hPa			
	, amountered processio	8 years (based on Paramount Bed data)					
Service life		* On condition that you perform the specified maintenance and					
		inspection and replace the consumable parts (e.g., casters).					
	Headboard/footboard	HDPE resin					
	Bed side-rail		HDPE	resin			
	Roller bumper		EPDM	1 resin			
	Head section						
	(without X-ray cassette		HDPE	resin			
Materials	tray)						
Materials	Head section						
	(with X-ray cassette		Phenol	ic resin			
	tray)						
	Hip/knee/leg sections		HDPE	resin			
	Main frame			pated steel			
	Control panel*4)			resin			
Operating principl	les	Link mechanisi	m using expansior		of electric linear		
Operating principl		actuator					
Head up	Inclination angle		0 to 70				
точа ар	Required time			conds			
Knee up	Inclination angle			5° [±4]°			
	Required time			conds			
High/low height	Range	35 cm					
Required time 25 seconds							
Trendelenburg/	[	Trendelenburg:					
Reverse	Inclination angle	Reverse Trendelenburg: 0 to 12° -					
Trendelenburg		[+2.5,					
	Required time	equired time 25 seconds -					

Product name			Electrical Hospital Bed			
Model No.			IA-54580131 IA-54580141 IA-54580132*1) IA-54580142*1)	IA-54580133 IA-54580143 IA-54580134*1) IA-54580144*1)	IA-53580131 IA-53580141 IA-53580132*1) IA-53580142*1)	IA-53580133 IA-53580143 IA-53580134*1) IA-53580144*1)
Туре				Linear actuat	tor (DC motor)	
	Power supply voltage/freque	ncy	100 to 240 VAC, 50/60 Hz			
	Power consumption		Head up: 215 VA or less Knee up: 140 VA or less Height adjustment: 350 VA or less		Head up: 195 VA or less Knee up: 120 VA or less Height adjustment: 290 VA or less	
Electrical	Maximum continuous operating time		2 min. (downtime: 18 min.)*6)			
components	Operating		53 dB or less*7)			
	Fuse Control box 250		250 V	VAC, 4 A		
	Pottony	Type/ quantity	Small sealed lead acid battery (12 VDC/1		1.3 Ah) x2	
	Battery Rating		24 VDC/1.3 Ah (10 hour rate)			

## Frequently used functions

Head up, knee up, height adjustment, side-rail up/down operations

- *1) Beds come standard with an X-ray cassette tray.
- *2) Mattress deck height indicates the height from the floor to the top of the mattress deck.
- *3) Safe working load: Load that can safely use the bed.

  (Weight of the user and the total weight of accessory such as mattresses and accessories)
- *4) Excluding model of handheld controller type. Control panel is side-rail integrated panel and patient control panel.
- *5) Time to protect electrical components from overheating when the bed is used continuously for maximum continuous operating time.
- *6) Based on the internal metrics.

<125 mm single-wheel (Individual lock)>

	125 mm single-wheel (Individual lock)>  Family name  Qualitas Nx Series				
		Qualitas Nx Series			
Pro	oduct name	Electrical Hospital Bed			
N	Model No.	IA-54580331 IA-54580341 IA-54580332*1) IA-54580342*1)	IA-54580333 IA-54580343 IA-54580334*1) IA-54580344*1)	IA-53580331 IA-53580341 IA-53580332*1) IA-53580342*1)	IA-53580333 IA-53580343 IA-53580334 ^{*1)} IA-53580344 ^{*1)}
	Total length	222 to 252 am	222 cm	222 to 252 am	222 cm
	(min. to max.)	222 to 252 cm	(no extension)	222 to 252 cm	(no extension)
Dimensions	Total width	98.8	cm (when the side	-rail is stored: 99.	8 cm)
Diffictisions	Total height	77 [+2, -1] to 112 [±1.5] cm			
	Mattress deck length		200	cm	
	Mattress deck height*2)		35 [+2, -1] to	70 [±1.5] cm	
Power cable leng	gth .		Effective len	gth: 260 cm	
	without X-ray cassette	120	5 kg	107	' kg
Product weight	tray	120.	5 kg	127	ky
	with X-ray cassette tray	133			5 kg
Maximum user w				i kg	
Safe working load	d* ³⁾		230 kg (		
Guaranteed	Temperature		5 to 4		
operating	Humidity		20 to 90% l		
conditions	Atmospheric pressure		700 to 1		
Transport and	Temperature		-10 to	50°C	
storage	Humidity		20 to 90% l	RH at 30°C	
conditions	Atmospheric pressure		700 to 1	060 hPa	
Service life		8 years (based on Paramount Bed data)  * On condition that you perform the specified maintenance and			
Service lile			nd replace the cor		
	Headboard/footboard	I	HDPE		J , , ,
	Bed side-rail		HDPE		
	Roller bumper	EPDM resin			
	Head section				
	(without X-ray cassette		HDPE	resin	
Materials	tray)				
	Head section		Phenol	io rocin	
	(with X-ray cassette tray)		FITERIO	ic resiri	
	Hip/knee/leg sections		HDPE	resin	
	Main frame		Powder co		
	Control panel*4)		PET	resin	
Operating princip	oles	Link mechanism using expansion and contraction of electric linear actuator			
Heading	Inclination angle		0 to 70	)° [±7]°	
Head up	Required time		35 se	conds	
Knee up	Inclination angle		0 to 25	5° [±4]°	
πiee up	Required time		10 se	conds	
High/low/ boight	Range		35	cm	
High/low height	Required time		25 se	conds	
Trendelenburg/		Trendelenburg:	0 to 12° [+3, -0]°	_	
Trendelenburg/ Reverse	Inclination angle		lenburg: 0 to 12°		-
Trendelenburg	_		-0.5]°		
Treffueleffbulg	Required time	25 se	conds		•

Product name			Electrical Hospital Bed			
	Model No.		IA-54580331 IA-54580341 IA-54580332*1) IA-54580342*1)	IA-54580333 IA-54580343 IA-54580334*1) IA-54580344*1)	IA-53580331 IA-53580341 IA-53580332*1) IA-53580342*1)	IA-53580333 IA-53580343 IA-53580334*1) IA-53580344*1)
	Туре			Linear actuato	or (DC motor)	
	Power supply voltage/frequency		100 to 240 VAC, 50/60 Hz			
	Power consumption		Head up: 215 VA or less Knee up: 140 VA or less Height adjustment: 350 VA or less		Head up: 195 VA or less Knee up: 120 VA or less Height adjustment: 290 VA or less	
Electrical components	Maximum continuous operating time		2 min. (downtime: 18 min.)* ⁵⁾			
components	Operating		53 dB or less*6)			
	Fuse	Control box		250 VA	C, 4 A	
	Battery	Type/ quantity	Small seal	ed lead acid ba	ttery (12 VDC/1.	3 Ah) x2
	specifications	Rating	24 VDC/1.3 Ah (10 hour rate)			

## Frequently used functions

Head up, knee up, height adjustment, side-rail up/down operations

- *1) Beds come standard with an X-ray cassette tray.
- *2) Mattress deck height indicates the height from the floor to the top of the mattress deck.
- *3) Safe working load: Load that can safely use the bed.

  (Weight of the user and the total weight of accessory such as mattresses and accessory)
- *4) Control panel includes the side-rail integrated panel and patient control panel.
- *5) Time to protect electrical components from overheating when the bed is used continuously for maximum continuous operating time.
- *6) Based on the internal metrics.

# <125 mm double-wheel (total lock)>

Fam	ily name	Qualitas Nx Series				
	uct name	Electrical Hospital Bed				
	del No.	IA-54580531 IA-54580541 IA-54580532*1) IA-54580542*1)	IA-54580533 IA-54580543 IA-54580534*1) IA-54580544*1)	IA-53580531 IA-53580541 IA-53580532*1) IA-53580542*1)	IA-53580533 IA-53580543 IA-53580534*1) IA-53580544*1)	
	Total length (min. to max.)	222 to 252 cm	222 cm (no extension)	222 to 252 cm	222 cm (no extension)	
	Total width	08.87	cm (when the side	rail is stored: 00		
Dimensions	Total height	30.0 (		112 [±1.5] cm	o om,	
Diricisions	Mattress deck length			cm		
	Mattress deck					
	height*2)		35 [+2, -1] to	70 [±1.5] cm		
Power cable length	1		Effective len	gth: 260 cm		
	without X-ray cassette tray	128.	5 kg		' kg	
Product weight	with X-ray cassette tray	133	3 kg	131.	5 kg	
Maximum user weig	, ,		195	i kg		
Safe working load*3			230 kg (			
Guaranteed	Temperature		5 to 4			
operating	Humidity		20 to 90%	RH at 30°C		
conditions	Atmospheric pressure		700 to 1	060 hPa		
Tueseessatessat	Temperature	-10 to 50°C				
Transport and	Humidity		20 to 90%	RH at 30°C		
storage conditions	Atmospheric pressure	700 to 1060 hPa				
Service life		8 years (based on Paramount Bed data)  * On condition that you perform the specified maintenance and inspection and replace the consumable parts (e.g., casters).				
	Headboard/footboard	HDPE resin				
	Bed side-rail	HDPE resin				
	Roller bumper		EPDM	1 resin		
Materials	Head section (without X-ray cassette tray)		HDPE	resin		
Materiale	Head section (with X-ray cassette tray)		Phenol			
	Hip/knee/leg sections		HDPE			
	Main frame		Powder co			
	Control panel*4)		PET			
Operating principles	5	Link mechanism using expansion and contraction of electric linear actuator				
Head up	Inclination angle		0 to 70			
. Required time		35 seconds				
Knee up	Inclination angle	0 to 25° [±4]°				
	Required time	10 seconds				
High/low height	Range	35 cm				
J	Required time		25 se	conds		
Trendelenburg/ Reverse	Inclination angle	Trendelenburg: Reverse Trende (+2 5			-	
Trendelenburg	Required time					
	i radanaa muo	25 seconds		· ·		

Р	roduct name		Electrical Hospital Bed				
	Model No.			IA-54580533 IA-54580543 IA-54580534*1) IA-54580544*1)	IA-53580531 IA-53580541 IA-53580532*1) IA-53580542*1)	IA-53580533 IA-53580543 IA-53580534*1) IA-53580544*1)	
	Туре			Linear actuat	tor (DC motor)		
	Power supply voltage/frequency		100 to 240 VAC, 50/60 Hz				
	Power consumption		Head up: 215 VA or less Knee up: 140 VA or less Height adjustment: 350 VA or less		Head up: 195 VA or less Knee up: 120 VA or less Height adjustment: 290 VA or less		
Electrical components	Maximum continuous operating time		2 min. (downtime: 18 min.)*5)				
	Operating		53 dB or less*6)				
	Fuse	Control box		250 V	AC, 4 A		
	Battery specifications	Type/ quantity	Small sealed lead acid battery (12 VDC/1.3 Ah) x2		1.3 Ah) x2		
		Rating	24 VDC/1.3 Ah (10 hour rate)				

# Frequently used functions

Head up, knee up, height adjustment, side-rail up/down operations

- *1) Beds come standard with an X-ray cassette tray.
- *2) Mattress deck height indicates the height from the floor to the top of the mattress deck.
- *3) Safe working load: Load that can safely use the bed.

  (Weight of the user and the total weight of accessory such as mattresses and accessory)
- *4) Control panel includes the side-rail integrated panel and patient control panel.
- *5) Time to protect electrical components from overheating when the bed is used continuously for maximum continuous operating time.
- *6) Based on the internal metrics.

	vheel (total lock)>		Overlite a	No. Ondo		
	ily name	Qualitas Nx Series				
Prod	uct name	Electrical Hospital Bed				
Мо	del No.	IA-54580231 IA-54580241 IA-54580232*1) IA-54580242*1)	IA-54580233 IA-54580243 IA-54580234*1) IA-54580244*1)	IA-53580231 IA-53580241 IA-53580232*1) IA-53580242*1)	IA-53580233 IA-53580243 IA-53580234*1) IA-53580244*1)	
	Total length	222 to 252 cm	222 cm	222 to 252 cm	222 cm	
	(min. to max.)		(no extension)		(no extension)	
	Total width	98.8	cm (when the side		8 cm)	
Dimensions	Total height			114 [±1.5] cm		
	Mattress deck length		200	cm		
	Mattress deck		37 [+2, -1] to	72 [±1.5] cm		
	height*2)					
Power cable length			Effective ler	ngth: 260 cm		
	without X-ray cassette	128.	5 kg	127	′ kg	
Product weight	tray					
	with X-ray cassette	133	3 kg	131.	5 kg	
Maximum ugar waia	tray			E ka		
Maximum user weig Safe working load*3				5 kg		
Guaranteed	Temperature		230 kg (			
operating	Humidity	5 to 40°C 20 to 90% RH at 30°C				
conditions	Atmospheric pressure	700 to 1060 hPa				
	Temperature					
Transport and	Humidity	-10 to 50°C 20 to 90% RH at 30°C				
storage conditions	Atmospheric pressure			060 hPa		
	Transopriorio procedio	8 years (based on Paramount Bed data)				
Service life		* On condition that you perform the specified maintenance and inspection and replace the consumable parts (e.g., casters).				
	Headboard/footboard	HDPE resin				
	Bed side-rail	HDPE resin				
	Roller bumper		EPDM	1 resin		
	Head section					
	(without X-ray		HDPE	resin		
Materials	cassette tray)					
Waterials	Head section (with X-ray cassette tray)		Phenol	ic resin		
	Hip/knee/leg sections		HDPE	resin		
	Main frame		Powder co	oated steel		
	Control panel*4)	PET resin				
Operating principles	3	Link mechanism using expansion and contraction of electric linear actuator				
Head up	Inclination angle		0 to 70	)° [±7]°		
i leau up	Required time			conds		
Knee up	Inclination angle	0 to 25° [±4]°				
тапос ир	Required time	10 seconds				
High/low height	Range			cm		
I ligit/10W floight	Required time			conds		
Trendelenburg/ Reverse	Inclination angle	Reverse Trende	0 to 12° [+3, -0]° lenburg: 0 to 12° -0.5]°		-	
Trendelenburg	Required time		conds		-	

Product name			Electrical Hospital Bed			
	Model No.			IA-54580233 IA-54580243 IA-54580234*1) IA-54580244*1)	IA-53580231 IA-53580241 IA-53580232*1) IA-53580242*1)	IA-53580233 IA-53580243 IA-53580234*1) IA-53580244*1)
	Туре			Linear actuat	tor (DC motor)	
	Power supply voltage/frequency		100 to 240 VAC, 50/60 Hz			
	Power consumption		Knee up: 140 VA or less Knee up:		Knee up: 12 Height adjustm	5 VA or less 0 VA or less ent: 290 VA or ss
Electrical components	Maximum continuous operating time		2 min. (downtime: 18 min.)*5)			
'	Operating		53 dB or less*6)			
	Fuse	Control box		250 V	AC, 4 A	
	Battery	Type/ quantity	Small sealed lead acid battery (12 VDC/1.3 Ah)		1.3 Ah) x2	
	specifications	Rating	24 VDC/1.3 Ah (10 hour rate)			

# **■Frequently used functions**

Head up, knee up, height adjustment, side-rail up/down operations

- *1) Beds come standard with an X-ray cassette tray.
- *2) Mattress deck height indicates the height from the floor to the top of the mattress deck.
- *3) Safe working load: Load that can safely use the bed.

  (Weight of the user and the total weight of accessory such as mattresses and accessory)
- *4) Control panel includes the side-rail integrated panel and patient control panel.
- *5) Time to protect electrical components from overheating when the bed is used continuously for maximum continuous operating time.
- *6) Based on the internal metrics.

<150 mm single-wheel high type (total lock)>

	wheel high type (total	Qualitas Nx Series					
		·					
Prod	luct name	Electrical Hospital Bed					
Мс	odel No.	IA-54580631 IA-54580641 IA-54580632*1) IA-54580642*1)	IA-54580633 IA-54580643 IA-54580634*1) IA-54580644*1)	IA-53580631 IA-53580641 IA-53580632*1) IA-53580642*1)	IA-53580633 IA-53580643 IA-53580634* ⁽¹⁾ IA-53580644* ⁽¹⁾		
	Total length	222 to 252 cm	222 cm	222 to 252 cm	222 cm		
	(min. to max.)	_	(no extension)	_	(no extension)		
Dimensions	Total width	98.8	cm (when the side		8 cm)		
Diffictions	Total height			122 [±1.5] cm			
	Mattress deck length			cm			
	Mattress deck height*2)			80 [±1.5] cm			
Power cable length			Effective ler	gth: 260 cm			
	without X-ray cassette	128.	5 kg	127	' kg		
Product weight	tray						
	with X-ray cassette tray	133	3 kg		5 kg		
Maximum user wei				kg			
Safe working load*			230 kg (				
Guaranteed	Temperature			40°C			
operating	Humidity			RH at 30°C			
conditions	Atmospheric pressure	700 to 1060 hPa					
Transport and	Temperature		-10 to 50°C 20 to 90% RH at 30°C				
storage conditions	Humidity Atmospheric procesure	700 to 1060 hPa					
	Atmospheric pressure	8 years (based on Paramount Bed data)					
Service life		* On condition that you perform the specified maintenance and					
Service ine		inspection and replace the consumable parts (e.g., casters).					
	Headboard/footboard	HDPE resin					
	Bed side-rail	HDPE resin					
	Roller bumper	EPDM resin					
	Head section						
	(without X-ray cassette	HDPE resin					
   Materials	tray)	TIBLE TOOM					
iviateriais	Head section						
	(with X-ray cassette		Phenol	ic resin			
	tray)						
	Hip/knee/leg sections	HDPE resin					
	Main frame			pated steel			
	Control panel*4)	PET resin					
Operating principle	S	Link mechanism using expansion and contraction of electric linear					
- 1 1 1 1 1 1 1 1.				ator			
Head up	Inclination angle			)° [±7]°			
. Required time				conds			
Knee up	Inclination angle	0 to 25° [±4]° 10 seconds					
·	Required time						
High/low height	Range			cm			
	Required time	Trandalanhura		conds			
Trendelenburg/	Inclination angle		0 to 12° [+3, -0]° lenburg: 0 to 12°		_		
Reverse	momation angle		-0.5]°	,	-		
Trendelenburg	Required time		conds		-		
	i redanca milo	20 30					

Product name			Electrical Hospital Bed			
	Model No.			IA-54580633 IA-54580643 IA-54580634*1) IA-54580644*1)	IA-53580631 IA-53580641 IA-53580632*1) IA-53580642*1)	IA-53580633 IA-53580643 IA-53580634*1) IA-53580644*1)
	Туре			Linear actuat	tor (DC motor)	
	Power supply voltage/frequency		100 to 240 VAC, 50/60 Hz			
	Power consumption		Head up: 215 VA or less Knee up: 140 VA or less Height adjustment: 350 VA or less		Head up: 195 VA or less Knee up: 120 VA or less Height adjustment: 290 VA or less	
Electrical components	Maximum continuous operating time		2 min. (downtime: 18 min.)*5)			
	Operating		53 dB or less*6)			
	Fuse	Control box	250 VAC, 4 A			
	Battery	Type/ quantity	Small sealed lead acid battery (12 VDC/1.3 Ah) x2			
	specifications	Rating	24 VDC/1.3 Ah (10 hour rate)			

## **■**Frequently used functions

Head up, knee up, height adjustment, side-rail up/down operations

- *1) Beds come standard with an X-ray cassette tray.
- *2) Mattress deck height indicates the height from the floor to the top of the mattress deck.
- *3) Safe working load: Load that can safely use the bed.

  (Weight of the user and the total weight of accessory such as mattresses and accessory)
- *4) Control panel includes the side-rail integrated panel and patient control panel.
- *5) Time to protect electrical components from overheating when the bed is used continuously for maximum continuous operating time.
- *6) Based on the internal metrics.

Essential performance

Function to support the body of patient, Emergency CPR (head lower) function.

Classification and Standards

The electric hospital bed is designed and manufactured according to the following equipment classification and standards.

Classification as European medical device : Class 1

• Safety standards applied : IEC 60601-1:2005+AMD1:2012+AMD2:2020

: IEC 60601-1-2:2014

: IEC 60601-2-52:2009, AMD1:2015 for use with IEC

60601-1:2005

: EN 60601-1:2006+A1:2013+A2:2021

: EN 60601-1-2:2015+A1:2021 : EN 60601-2-52:2010+A1:2015

Electric shock protection : Class 1, Type B

- Application environment : 1, 2 and 3 (intensive/critical care, acute care and

(in IEC 60601-2-52:2009, AMD1:2015) long-term care)

• Protection code : IEC 60529 IPX4

#### <Casters>

Туре	Total height (cm)	Height of mattress deck top surface (cm)
125 mm single-wheel ( total lock )	73.5 [+2, -1] to 108.5 [±1.5]	35 [+2, -1] to 70 [±1.5]
125 mm single-wheel ( individual lock )	73.5 [+2, -1] to 108.5 [±1.5]	35 [+2, -1] to 70 [±1.5]
125 mm double-wheel ( total lock )	73.5 [+2, -1] to 108.5 [±1.5]	35 [+2, -1] to 70 [±1.5]
150 mm single-wheel ( total lock )	75.5 [+2, -1] to 110.5 [±1.5]	37 [+2, -1] to 72 [±1.5]
150 mm single-wheel high type ( total lock )	83.5 [+2, -1] to 118.5 [±1.5]	45 [+2, -1] to 80 [±1.5]

^{*} Equipment not suitable for use in the presence of a flammable anaesthetic mixture.

# 4. Technical explanation regarding EMD (Electromagnetic Disturbance)

The bed requires special safety precautions regarding EMC to be observed. Install, operate, and use the bed according to the information provided below.

The bed is intended for use in an electromagnetic environment specified according to "Electromagnetic interference." Using the bed in an unintended environment may result in the occurrence of the following problems.

- The function for supporting the patient's body weight may not be maintained.
- The emergency head-down function may not be maintained.

No.	Cable	Maximum length [m]	Remarks
1	AC power cable	4.6	Without shield
2	Handheld controller cable	0.8	Without shield
3	Nurse control panel cable	1.6	Without shield

The bed is intended for use in doctor's offices, clinics, exclusive medical facilities, independent surgery centers, multiple treatment facilities, hospitals (except near high-frequency surgical equipment, and outside RF shielded rooms for magnetic resonance images). The customers or users of the bed must ensure that the bed is always used in this environment.

Due to its emission characteristics, the bed is suitable for use in hospitals. If used in a home environment, this device may not offer sufficient protection against radio frequency communication services. It may be necessary for the user to take relaxation measures such as re-arranging or changing the direction of the device.



- If accessory, transducers, or cables other than those specified and sold by the manufacturers of the bed are used as replacement parts for internal components, it may result in an increase in emission or a decline in immunity of the bed.
- Use portable RF communication devices (including antenna cables and peripheral devices such as external antennas) at a distance of at least 30 cm from all parts of the bed. Using the RF communication devices within a distance of 30 cm may cause a decline in the performance of the bed.
- The bed cannot be used adjacent to another device or in a stacked state. If the bed must be used adjacent to another device or in a stacked state, make sure the bed operates appropriately at the location of use.

#### Guidance and manufacturer's declaration — electromagnetic emissions

The bed is intended for use in the electromagnetic environments specified below. The customer or the user of the bed must use it in an environment specified here.

Emission test	Compliance	Electromagnetic environment — guidance
RF emissions CISPR 11	Group 1	The bed uses RF energy only for its internal functions. Therefore, its RF emissions are low and are not likely to cause any interference with nearby electronic equipment.
RF emissions CISPR 11	Class A	
Harmonic emissions IEC 61000-3-2	N/A	Use the bed in a power supply network of a professional environment, such as a hospital or other medical facility.
Voltage fluctuations / flicker emissions IEC 61000-3-3	N/A	

Note: UT is the AC power voltage before applying the test level.

Guidance and manufacturer's declaration — electromagnetic immunity The bed is intended for use in the following electromagnetic environment. The customer or user of the bed must use it in an environment specified here. IEC 60601-1-2 Immunity test Compliance level Test level Contact discharge: ±8 kV Contact discharge: ±8 kV Electrostatic discharge (ESD) Air discharge: ±2 kV, ±4 kV, Air discharge: ±2 kV, ±4 kV, IEC 61000-4-2 ±8 kV, ±15 kV ±8 kV, ±15 kV Electrical fast transient/ burst Power supply line: ±2 kV Power supply line: ±2 kV IEC 61000-4-4 Input/output lines: ±1 kV Input/output lines: ±1 kV Line to line: ±0.5 kV, ±1.0 kV Line to line:  $\pm 0.5$  kV,  $\pm 1.0$  kV Surge Line to earth: ±0.5 kV, ±1.0 kV, Line to earth: ±0.5 kV, ±1.0 kV, IEC 61000-4-5 ±2.0 kV ±2.0 kV 0.5 cycle for test level 0% UT 0.5 cycle for test level 0% UT (Phase: at 0°, 45°, 90°, 135°, (Phase: at 0°, 45°, 90°, 135°, 180°, 180°, 225°, 270° and 315°) 225°, 270° and 315°) Voltage dips, instantaneous power failure, and voltage 1 cycle for test level 0% UT 1 cycle for test level 0% UT fluctuation in power supply cable and IEC 61000-4-11 and 25/30 cycles for test level 70% 25/30 cycles for test level 70% UT UT (Single phase: at 0°) (Single phase: at 0°) Short-term power failure IEC 250/300 cycles for test level 0% 250/300 cycles for test level 0% 61000-4-11 UT UT Power frequency (50/60 Hz) magnetic field 30 A/m 30 A/m IEC 61000-4-8 **Proximity Magnetic Fields** 134.2 kHz, 50% Pulse at 2.1 kHz, 65 A/m 134.2 kHz, 50% Pulse at 2.1 kHz, 65 A/m IEC 61000-4-39 13.56 MHz, 50% Pulse at 50 kHz, 7.5 A/m 13.56 MHz, 50% Pulse at 50 kHz, 7.5 A/m

#### Guidance and manufacturer's declaration — electromagnetic immunity

The bed is intended for use in the following electromagnetic environment. The customer or user of the bed must use it in an environment specified here.

Immunity test	IEC 60601-1-2 Test level	Compliance level	Electromagnetic environment — guidance
RF Conductivity IEC 61000-4-6	3 V 0.15 MHz to 80 MHz 6 V ISM bandwidth between 0.15 MHz and 80 MHz 80% amplitude modulation (1 kHz)	3 V 0.15 MHz to 80 MHz 6 V ISM bandwidth between 0.15 MHz and 80 MHz 80% amplitude modulation (1 kHz)	Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, must be less than the compliance level in each frequency range.  Interference may occur in the vicinity of equipment marked with the following symbol:
Radioactive RF electromagnetic field IEC 61000-4-3	3 V/m 80 MHz to 2.7 GHz 80% amplitude modulation (1 kHz)	3 V/m 80 MHz to 2.7 GHz 80% amplitude modulation (1 kHz)	

- a. Field strengths from fixed transmitters, such as those of base stations for radio (cellular/cordless) telephones, land mobile radios, amateur radios, AM and FM radio broadcasts, and TV broadcasts cannot be predicted theoretically with accuracy. To determine the electromagnetic environment due to fixed RF transmitters, an electromagnetic survey of the site should be considered. If the measured field strength in the location in which bed is used exceeds the applicable RF compliance level above, bed should be observed to verify whether or not it is operating appropriately. If an abnormal operation is seen, take additional measures as needed, such as changing the location of use of the bed.
- b. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Guidance and manufacturer's declaration — electromagnetic immunity

The bed is intended to be used in an electromagnetic environment where RF radio communication devices are used. The electromagnetic interference between the RF communication device and the bed can be prevented by maintaining the minimum distance between the two as recommended below in accordance with the maximum output and frequency of the communication device.

Immunity test	IEC 60601-1-2 Test level	Compliance level	Bandwidth (MHz)	Service	Modulation	Maximum output (W)	Distance (m)
	27 V/m 385 MHz	27 V/m	380 to 390	TETRA 400	Pulse modulation 18 Hz	1.8	0.3
	28 V/m 450 MHz	28 V/m	430 to 470	GMRS 460, FRS460	Pulse modulation 18 Hz	2	0.3
	9 V/m 710 MHz 9 V/m 745 MHz 9 V/m 780 MHz	9 V/m	704 to 787	LTE band 13, 17	Pulse modulation 217 Hz	0.2	0.3
	28 V/m 810 MHz 28 V/m 870 MHz 28 V/m 930 MHz	28 V/m	800 to 960	GSM 800/900, TETRA 800, iDen 820, CDMA 850, LTE band 5	Pulse modulation 18 Hz	2	0.3
Proximate electromagnetic field IEC 61000-4-3	28 V/m 1720 MHz 28 V/m 1845 MHz 28 V/m 1970 MHz	28 V/m	1700 to 1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	2	0.3
	28 V/m 2450 MHz	28 V/m	2400 to 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE band 7	Pulse modulation 217 Hz	2	0.3
	9 V/m 5240 MHz 9 V/m 5500 MHz 9 V/m 5785 MHz	9 V/m	5100 to 5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0.2	0.3

#### 5. After-sales service

#### 1. When requesting repairs

If you encounter trouble, perform troubleshooting according to the procedure described in "Troubleshooting" (see p.79) in this instruction manual. If the problem persists after taking corrective action, disconnect the power plug of the bed from the outlet and turn the battery off, and then contact Paramount Bed (see Contact Information below) or your distributor.

## Details necessary when requesting repair

- Product name, model number, number on product ID label (see p.80 for the label location)
- Date of purchase
- Details of failure or problem (provide as much detail as possible)
- Facility name, your name, address, and phone number

#### Consumable parts

The following are consumable parts: casters, rubber parts, handheld controller (standard or accessory), nurse control panel (accessory), side-rail damper, side-rail integrated panel, patient control panel, and battery.

#### 2. Minimum parts retention period

The minimum retention period of service functional parts (required to maintain the original functions of products) is 8 years after discontinuation of manufacturing.

## 3. When you are not sure about the after-sales service

For any queries, please feel free to contact your distributor or to the following address.

#### **Contact Information**

For any queries, contact to the address or telephone number listed below or your distributor.

For other contact information, please visit the website.

Website: https://www.paramount.co.jp/english/



Location in Japan (Manufacturer)	Location in India (Manufacturing premises)
PARAMOUNT BED CO., LTD. 14-5, 2-chome, Higashisuna, Koto-ku, Tokyo, 136-8670, Japan TEL: +81-(0)3-3648-2961 FAX: +81-(0)3-3648-5781	PARAMOUNT BED INDIA PVT. LTD. Plot no. 319, Sector 3, Phase II, Industrial Estate Bawal, Rewari, Haryana, India, 123501 TEL: +91-92896-22084



# **MEMO**

