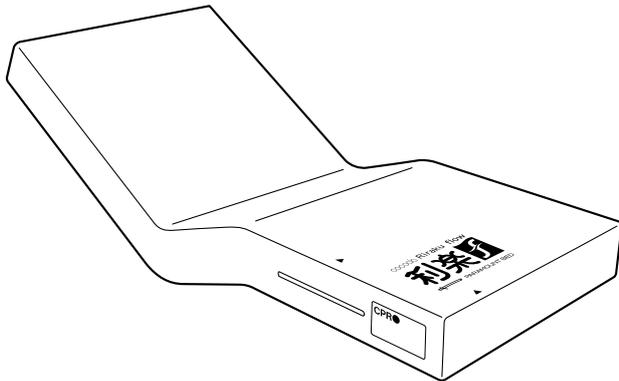


**Alternating pressure air flotation mattress  
cococia Riraku flow**



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**Preface**

Thank you for purchasing the **Alternating pressure air flotation mattress cococia Riraku flow** (hereinafter referred to as **the product**).

- Before using the product, please read this instruction manual to fully understand the safe and proper operating procedures. In addition, attendants and caregivers should also read this instruction manual.
- Store this instruction manual in a place that can be easily accessed for later reference.
- Users and/or carers are requested to report information about any serious incident related to this air mattress that occurs within the EU to the manufacturer and the regulating authority of the member country of residence.
- ‘Serious incident’ means any incident that directly or indirectly leads, might have led or might lead to any of the following:
  - a) the death of a user, carer or other person.
  - b) the temporary or permanent serious deterioration of a user’s, carer’s or other person’s state of health.
  - c) a serious public health threat.
- Some of the descriptions in this instruction manual may differ from the product you have purchased due to model improvements.
- Values described for the operating range, dimensions, angles, and weights 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.
- If you have any questions, please contact Paramount Bed or your distributor.

**Intended Use**

cococia Riraku flow is an air mattress with an internal pump, which is designed to disperse the body pressure to prevent pressure ulcers in medical and elderly care facilities. Its operation panel, an accessory for cococia Riraku flow, is intended to operate the alternating pressure air flotation mattress.

**Note:**

Patient target group: Persons weighing 20 to 180 kg who are at least 13 years of age  
 Persons requiring a function to disperse pressure applied to the body  
 Clinical benefit: Body pressure dispersal to reduce the risk of pressure injury  
 Intended users: Medical professionals and maintenance staff

- \* Consult with an expert, such as a doctor, nurse, or care counselor to prevent pressure ulcers. Pressure ulcers cannot be prevented by the product alone. Full body control (such as nutritional status control or underlying disease control) is required.
- \* The product is one of the tools for general prevention of pressure ulcers. It is not intended to be used with a view to treatment or alleviation of on-going pressure ulcers. It does not eliminate the need of posture change, either. Provide appropriate care such as changing posture during the use of the product.

# 1 SAFETY PRECAUTIONS

The safety precautions described in this instruction manual are intended to ensure safe use of the product and prevent personal injury and property damage. Precautions are classified into “WARNING” and “CAUTION,” which indicate the degree of hazard or injury that could result from improper use. They are all important safety precautions that must be strictly observed.

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

## **WARNING**

### ■ Using the air mattress

- **Take care to prevent the drain tube, etc. from getting caught in the gap between the product and the bed, bed side-rail, etc.**  
The drain tube, etc. may come off or break.
- **Do not operate this product with part of the body placed in a gap between the product and the bed, bed side-rail, etc.**  
The body part may get caught in the gap, possibly causing injury.
- **For the bed or other products used in combination with the product, use suitable products specified by Paramount Bed (see page 28).**  
Otherwise, unintended gaps may be created, interference between products may occur, and stability may be lowered, resulting in injury or damage to the product.
- **Do not use the product for infants or small children (aged 12 or under).**  
There is a risk of injury or suffocation due to pressure caused by a part of the body getting caught in the gap between the product and a bed side-rail, etc.
- **Use a mattress that is the same width and length as the bed.**  
Unintended gaps may be created and part of the body may get caught, resulting in injury.
- **Do not move the product while a person is on it.**  
The person may fall off the product resulting in injury or the product may be damaged.
- **Do not stand or jump on the product.**  
You may fall or the product may tip over resulting in injury or damage to the product.
- **Use the product according to the user’s medical condition.**  
Depending on the user’s medical condition, the user’s medical condition could worsen by operating the product.
- **Do not use the product for a person lighter or heavier than the specified weight range (20 to 180 kg).**  
Effective body pressure dispersion will not be possible.
- **Multiple persons should not get on the product at the same time.**  
The body pressure may not be dispersed effectively, causing pressure ulcers or damage to the product.
- **Do not lie face down for a long time.**  
There is a risk of suffocation.
- **Do not apply a strong impact to the pump and cable connectors, and do not allow a person’s weight to be applied through their hips or knees.**  
There is a risk of an electric shock or fire due to damage or deformation of the pump.
- **Do not apply a strong shock to the part connecting the mattress and pump, and do not allow a person’s weight to be applied through their hips or knees.**  
The coupling may become disconnected resulting in air leakage and the body pressure not being dispersed effectively.
- **Do not get the bed link cable caught in the movable parts of the bed, run over them with the bed, apply excessive force to them, or place a heavy object on them.**  
They may be damaged, resulting in an electric shock or fire. Request repair (or replacement) of damaged cables.
- **Install electrical equipment so the bed link cable do not get caught in the casters or movable parts of the bed.**  
Damage to the cables may cause electric shock or fire.
- **Do not drop the pump on the floor, hit it against a wall, forcefully pull the cable connected to the pump, etc.**  
Doing so may cause an electric shock or fire due to damage.
- **Do not allow operation by a user, especially person deemed incapable of understanding the operation (a child aged 12 or under or a person with dementia).**  
Part of the body may get caught in a gap resulting in injury, or the body pressure may not be dispersed effectively resulting in pressure ulcers.
- **If emergency response such as cardiac massage is required, use the CPR function (see page 21).**  
Otherwise, immediate action cannot be taken and the symptoms may worsen.
- **Do not lean the product against a wall, etc.**  
There is a risk of an electric shock or fire due to the product falling.
- **Do not place the product in a strong electromagnetic environment such as an MRI.**
  - The product may malfunction or fail to work.
  - The product needs special precautions regarding EMC and needs to be installed according to the EMC information provided.
- **Do not smoke on the product.**  
Doing so may cause fire.



## WARNING

- **Do not use the product if the cover or padding is soiled or damaged.**  
Excretion, blood, etc. could seep into the product, which may cause infectious disease. For details on cleaning the product, see page 22.
  - **Do not spill liquid on an electrical part or touch it with wet hands.**  
An electric shock or failure may occur due to a short circuit of an electrical component.
  - **Do not insert or remove the bed link cable with wet hands.**  
An electric shock or malfunction may occur.
  - **Do not use a cell phone or other wireless device near the pump (within 30 cm).**  
The product may malfunction.
  - **When using an electrical product such as an electric cover blanket, keep the temperature below 40°C.**  
There is a risk of a fire or failure due to the pump generating heat. Check the safe operating procedures described in the instruction manual or other materials for the electrical product.
  - **Do not use electrical equipment that is placed under the body, such as an electric sheet blanket.**
  - **Disconnect the bed link cable from the bed when using electronic medical equipment at the same time.**  
A malfunction or operational failure may occur.
  - **Do not attempt to repair or modify the product yourself.**  
Doing so may cause an accidental injury or damage.
  - **If the product is damaged in a disaster, request inspection and repair (see page 36).**  
An electric shock or fire may occur due to a short circuit or current leakage from electrical components or malfunction may occur due to damage or deformation of the product, resulting in injury.
  - **Inspect the product regularly (see page 24).**
    - For maintaining basic safety and essential performance in regards to EMC, the pump have an expected service life of five years. To maintain the condition of the pump, have the pump serviced regularly according to the schedule recommended. Do not use unapproved accessories or attempt to modify, disassemble or otherwise misuse the pump.
    - The product will exhibit wear and deterioration depending on the frequency of use and the environment. Regularly inspect the operation in each mode and for the presence of damage, etc. The continued use of an air mattress in a worn / deteriorated condition may result in unexpected injury.
  - **Do not use the air mattress in an environment where combustible anesthetic gases and high-concentration oxygen may be present.**  
There is a risk of explosion or fire.
- **About the power adapter set (sold separately)**
- **Do not allow dust to accumulate on the power plug.**  
An electric shock or fire may occur. Wipe off any dust accumulating on the surfaces of the power plug using a dry cloth.
  - **Do not apply excessive force to the power plug. Also, when disconnecting the power plug, hold the power plug.**  
The power plug or cable may be damaged, resulting in an electric shock or fire.
  - **The power should be fed directly from the outlet.**  
If other electrical equipment is plugged into an extension cable and its rated capacity is exceeded, it could cause the power cable or plug to overheat, resulting in fire.
  - **Do not plug the power cable into a multiple-socket outlet.**  
Plugging the power cable into a multiple-socket outlet or power strip shared by other electrical equipment could cause the outlet to exceed its rated capacity, causing the power cable or plug to overheat, resulting in fire.
  - **Do not plug the power cable into an outlet shared by other ME devices.**  
There is a risk of fire caused by heating up of the power cable or power plug.
  - **Make sure to plug the power cable into an outlet equipped with a circuit protector.**  
There is a risk of electric shock.
  - **Ensure the pump is used with stable power or in connection with UPS.**
  - **Do not place the air mattress or other devices in locations that hinder access to the power plug.**  
Doing so prevents the power plug being disconnected immediately when necessary.
  - **Remove the power plug of the bed from the outlet before transferring the bed.**  
There is a risk of the power plug and power cable being damaged or a wire breaking, resulting in an electric shock or fire.
- **About the bed link cable**
- **Disconnect the power plug of the bed from the outlet and turn off the battery of the bed before disconnecting and connecting the bed link cable.**  
Failure to do so may cause the air mattress or bed to malfunction or fail.
  - **Turn off the power of the mattress properly before performing cleaning and maintenance (see “How to shut-down” on page 14).**  
Failure to do so may cause the air mattress to start unexpectedly, possibly causing injury.

# 1 SAFETY PRECAUTIONS



## CAUTION

- **Do not drop the mattress.**  
The couplings may be damaged.
- **Do not operate the product with any objects placed on it.**  
The objects may fall, possibly causing damage.
- **Do not directly put items having a cooling function such as an ice pack or refrigerant on the product.**  
The product may deteriorate due to condensation.
- **Do not apply a spray-type insecticide directly on the product.**  
Discoloration may occur, or damage or dissolving may cause unexpected injury.
- **Do not forcibly bend while inflated with air.**  
Damage or deformation may occur.
- **Take care that toes and other body parts do not get caught in the gap between the pump and air cells.**  
There is a risk of injury.

## 2 PART NAMES

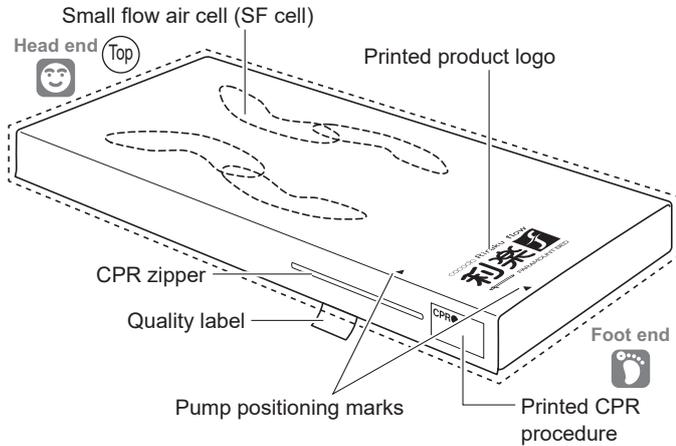
### Mattress

#### Applied part

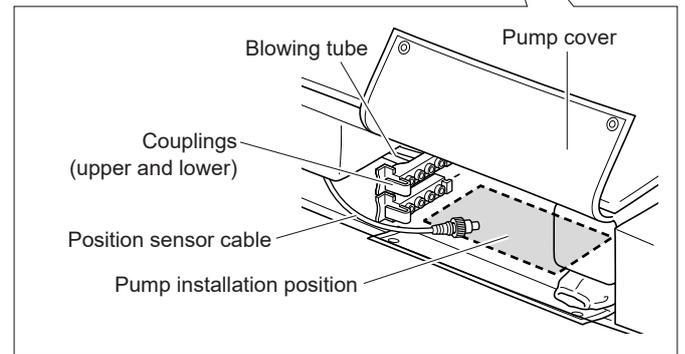
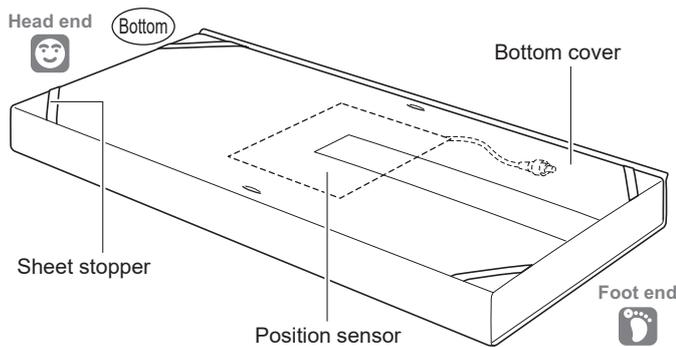
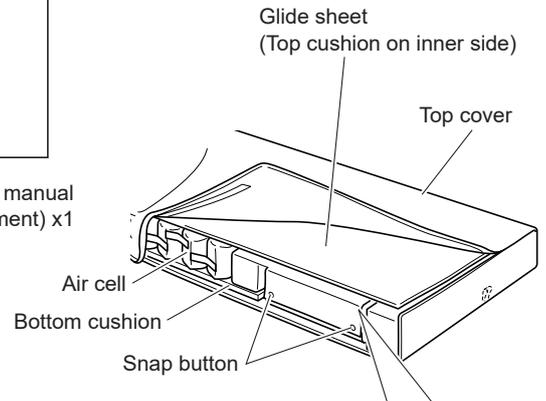
\* Part of ME EQUIPMENT that in normal use necessarily comes into physical contact with patient for ME EQUIPMENT to perform its function.

\* For details on the product symbol definitions, see “3. Product symbol definitions” on page 29

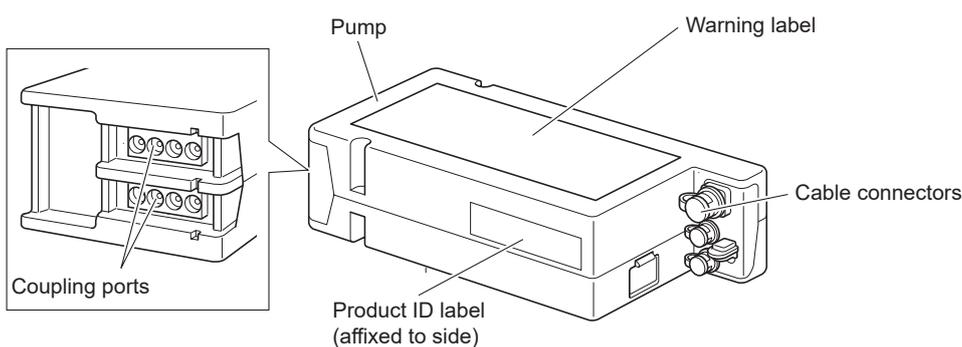
\* If the labels are removed or defaced, contact Paramount Bed (see page 36) or your distributor.



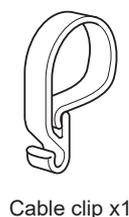
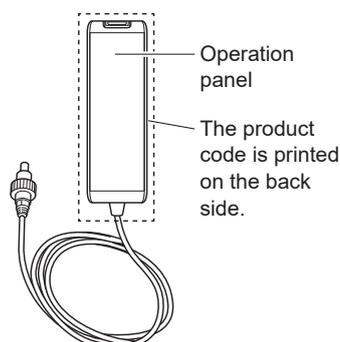
Instruction manual (this document) x1



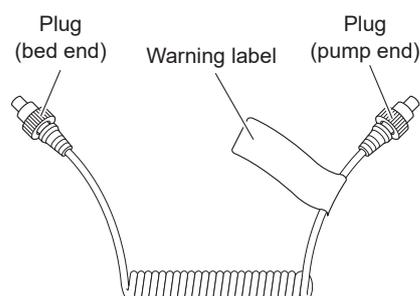
### Pump



### Operation panel (RC-2030W: Accessory)



### Bed link cable



● When using the bed link cable, check the suitable bed (bed connection). For details on the suitable bed, see “2. Suitable product” on page 28.

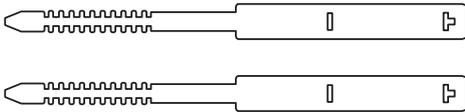
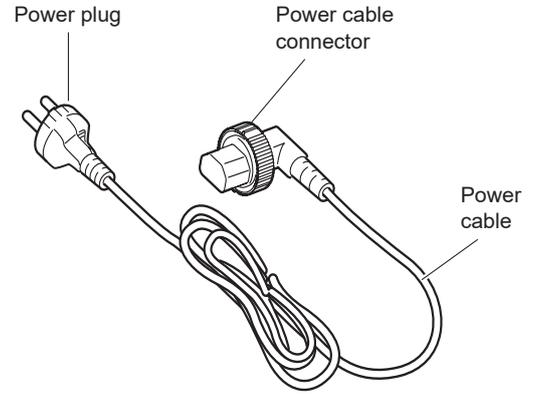
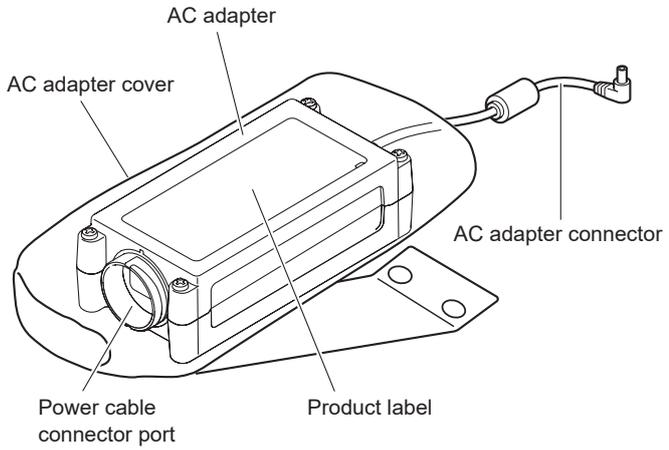
■ For suitable beds or the latest information, visit the Paramount Bed website (<https://www.paramount.co.jp/english/>) or contact Paramount Bed.

## 2 PART NAMES

### Power adapter set (sold separately)

The power adapter set (sold separately) is a separately sold part that allows you to use the air mattress by supplying power from an outlet.

- Purchase a power adapter set (sold separately) suitable for your region.
- To use the air mattress by supplying power from a suitable bed (see page 28), use the bed link cable supplied with this air mattress (see page 10).



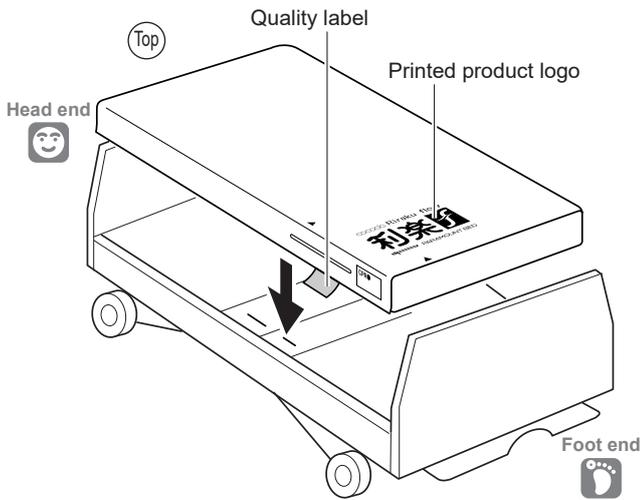
Bed cable clamp x2

Model No.	KE-ADB	KE-ADD	KE-ADF	KE-ADT	KE-ADG	KE-ADW
Plug type	Type B	Type D	Type F	Type F	Type G	Type I

\* For the detail on the plug types or any queries, contact your distributor or directly contact Paramount Bed.

# 3 INSTALLATION PROCEDURE

## 1. Installing the mattress



- ① When installing the mattress, make the bottom of the bed flat and check that there are no obstacles on the bottom of the bed.
- ② The product has a top, bottom, head end, and foot end. When installing the mattress, make sure that the surface with the printed product logo faces up and that the quality label is at the foot end of the user.



### WARNING

- Place the product properly with regard to the top, bottom, head end, and foot end. Failure to do so will result in not being able to disperse the body pressure effectively.
- Place the product directly on the bed and do not place anything other than sheets and mattress pads on the product. There is a risk of the body pressure not being dispersed effectively. In addition, when the thickness increases, the user may roll over the bed side-rails and fall from the bed or a body part may get caught in the gap between the product and bed side-rails, resulting in injury.
- Take care to prevent the product from protruding from the bed and slipping off it. The user may fall off or topple over.

## 2. Installing the power adapter set (sold separately)

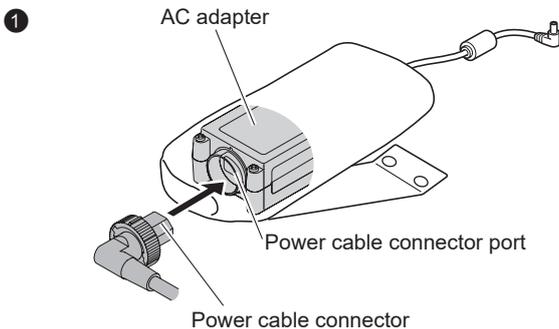


### CAUTION

- Insert the power plug into the outlet after all of the wiring work is finished. If the operation panel or sleep position sensor is attached or removed while the power plug is still inserted in the outlet, the operation panel, sleep position sensor, or pump may be damaged.
- Make sure to plug the power cable into an outlet equipped with a protective earth. There is a risk of electric shock.



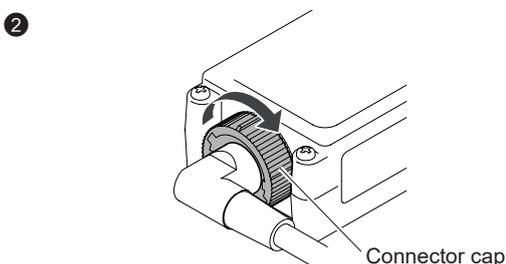
- When using the bed link cable, you do not need to connect the power adapter set (sold separately) (see page 8).
- Devices in locations that hinder access to the power plug. Doing so prevents the power plug being disconnected immediately when necessary.



- ① Insert the power cable connector into the power cable connector port of the AC adapter.

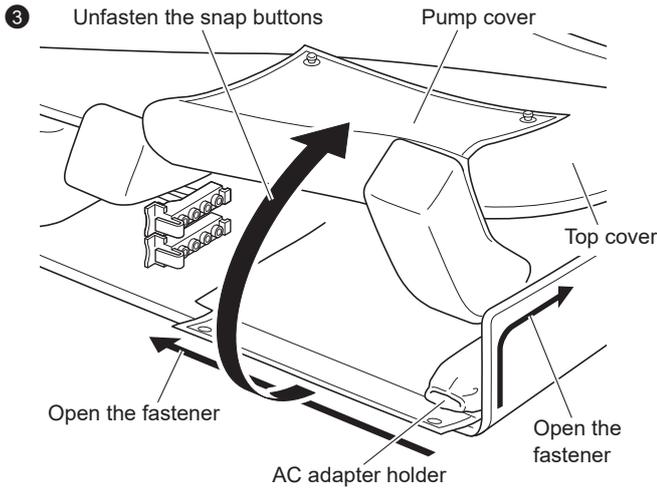


- Firmly insert the power cable connector all the way into the power cable connector port.
- When inserting the power cable connector into the power cable connector port, take care that a cover, etc. does not get caught between them.

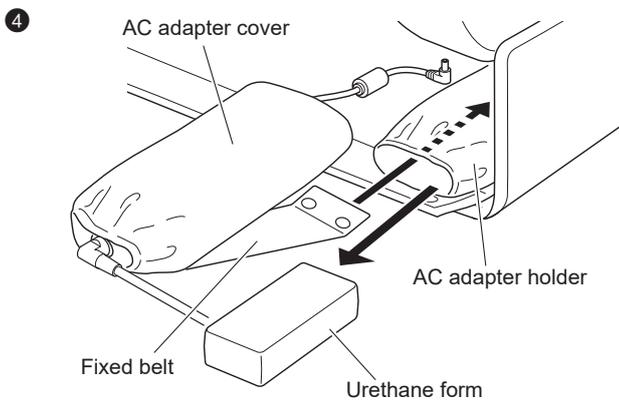


- ② Turn the connector cap clockwise so that the notch of the cap is topmost. The connector clicks into place.

### 3 INSTALLATION PROCEDURE



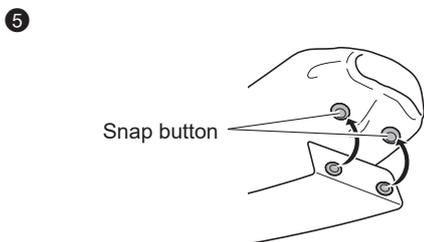
3 Open the top cover and pump cover.



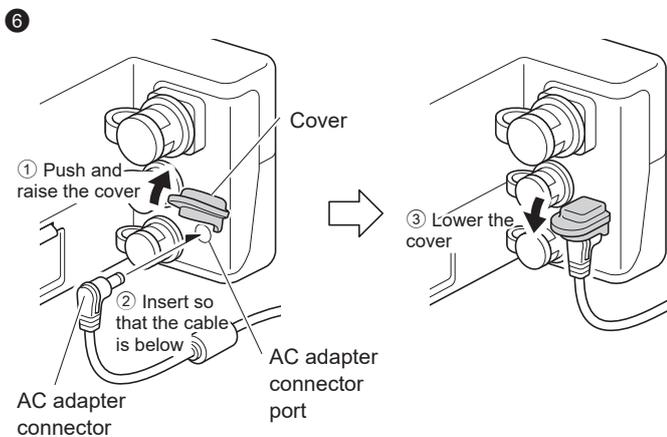
4 Remove the urethane form in the AC adapter holder, and pass the fixed belt of the AC adapter cover through.



**Note!** Keep the removed urethane form in an appropriate location so that it will not be lost.



5 Fasten the snap buttons on the AC adapter cover main body and fixed belt.



6 Connect the AC adapter connector to the pump. (Steps 1 to 3)



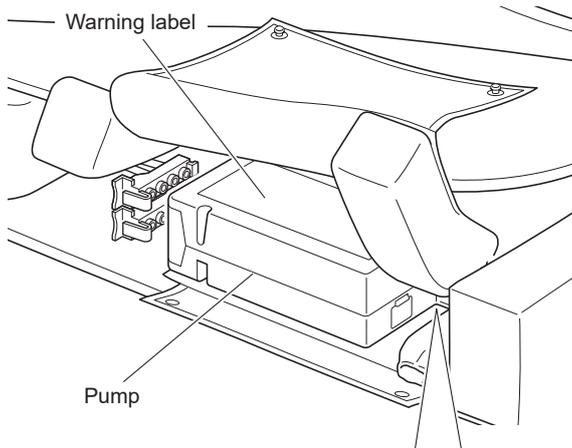
**Note!** When connecting the AC adapter connector, insert the connector so that the cable is below, and firmly lower the cover so that it covers the AC adapter connector. The AC adapter connector becomes disconnected easily.

### 3. Installing the pump and connecting a separately sold operation panel (accessory)



#### WARNING

- Install the pump properly according to the prescribed procedure, and check that the pump is connected and fixed to the mattress properly. Improper installation, connection, or fixing may cause the body pressure to not be dispersed effectively. Also, the pump may fall, causing injury, and there is a risk of an electric shock or fire due to a short circuit caused by damage or deformation.
- When handling the pump, do not hold the operation panel cable, but hold the pump firmly with both hands. There is a risk of electric shock and fire due to disconnection.
- Take care when handling electrical parts such as the pump, operation panel (accessory), and bed link cable, and do subject them to actions such as stepping on them, bumping or pulling them, or spilling water on them. The product may malfunction, causing injury or failure. In addition, there is a risk of an electric shock or fire due to a short circuit.



① Install the pump with its warning label facing up.



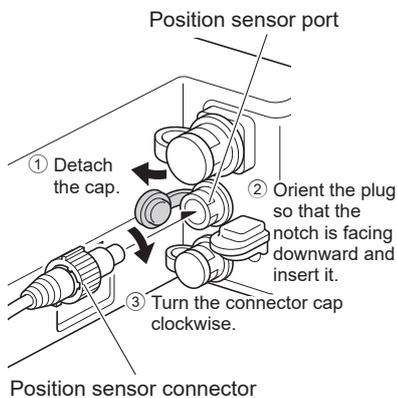
- Pay attention to the orientation of the top, bottom, head end, and foot end.
- Install the pump in the pump installation position correctly. Otherwise, vibration noise may be generated.

② Connect the position sensor. (Steps ① to ③)

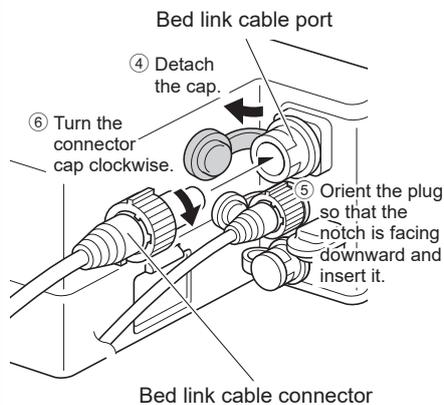
③ When using the bed link cable, connect the bed link cable. (Steps ④ to ⑥)

④ When using a separately sold operation panel (accessory), connect the operation panel. (Steps ⑦ to ⑨)

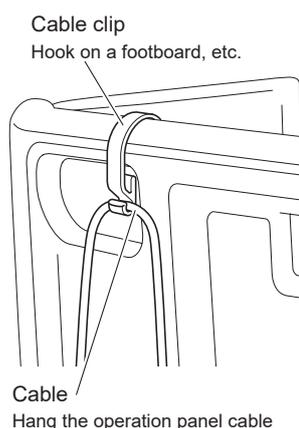
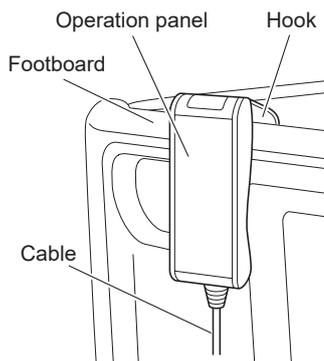
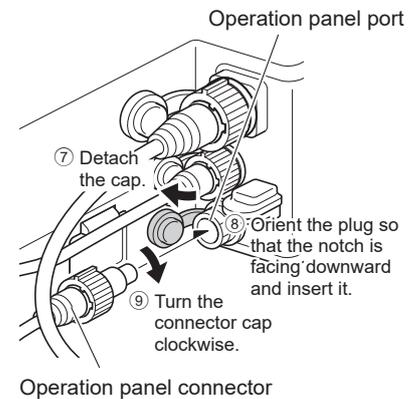
② Connect the position sensor.



③ When using the bed link cable, connect the bed link cable.



④ When using a separately sold operation panel (accessory), connect the operation panel.



⑤ When using a separately sold operation panel (accessory), use the hook and cable clip to hang it on the top of the bed footboard.

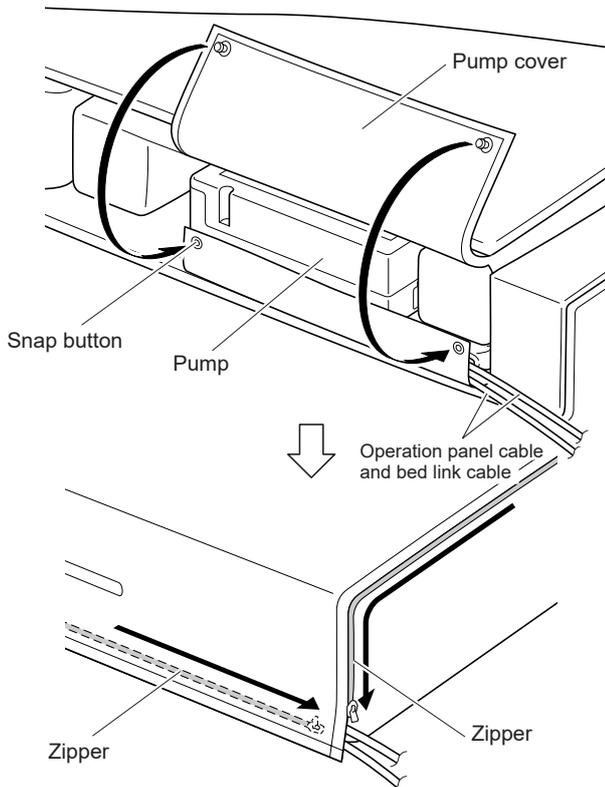
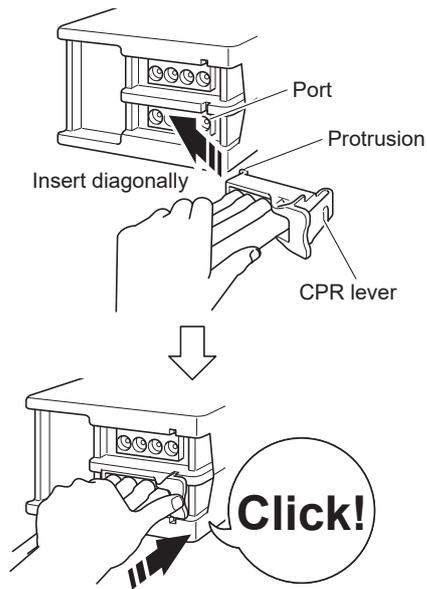


#### WARNING

Hang the operation panel on the designated part (top of the bed footboard). Otherwise, a button may be accidentally pressed, and the product may behave unexpectedly, resulting in injury. Furthermore, a wire may break due to the cable catching in a movable part of the bed, a bed side-rail, etc., resulting in a malfunction or failure.

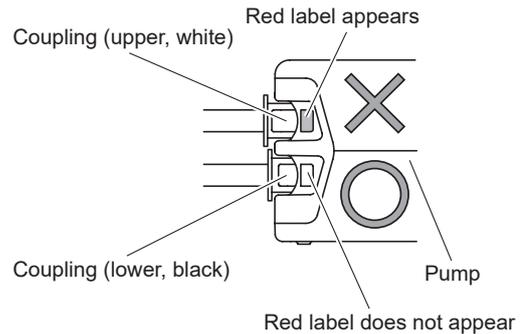
### 3 INSTALLATION PROCEDURE

#### 4. Connecting the pump and mattress



There is an upper coupling and a lower coupling. When connecting them, connect the lower one and then the upper one.

- 1 Diagonally insert the protrusions on the far side of the couplings into the grooves in the pump ports and then firmly insert the CPR levers straight on the near side until you hear a click.
- 2 After attaching the couplings, check that the red labels affixed to the couplings cannot be seen from the two holes at the side. (See the figure below.)



- 3 Fasten the snap buttons in two locations on the pump cover.
- 4 Close the cover zippers (two locations) and pull the operation panel cable, cable and power cable (only when using the power adapter set (sold separately)) and bed link cable out of the cover from the corner of the cover between the zippers.



#### WARNING

- Check that the pump and couplings (upper and lower) are connected properly. There is a risk of the body pressure not being dispersed effectively.
- Securely fasten the snap buttons of the pump cover to fix the pump in the pump installation position. Improper fixing may result in the pump falling down, causing injury or damage or deformation. Damage may also result in a short circuit, which may cause an electric shock or a fire.



#### CAUTION

Remove the pump before moving the product. There is a risk of damage or deformation of the pump due to falling.

## 5. Connecting to the bed with a bed link cable

The back raise/lower pressure relief function and bed power function can be used by connecting the product to a suitable bed specified by Paramount Bed using a bed link cable.



### WARNING

When using the bed link cable, check how to connect to the bed and perform the wiring correctly. The bed link cable may be damaged and cause an electric shock or fire due to getting caught in a movable part, etc.

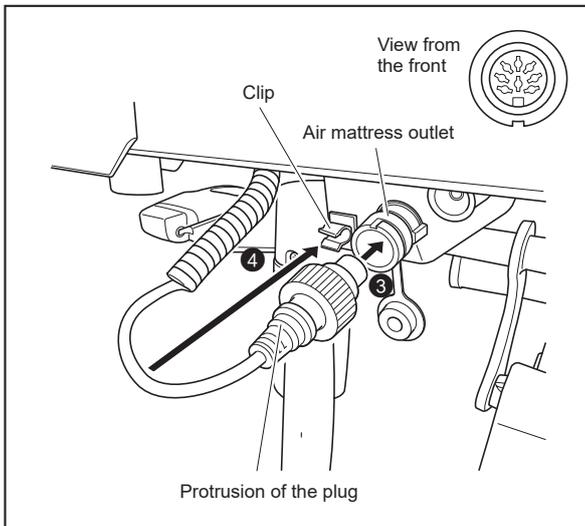
### ALiUS series



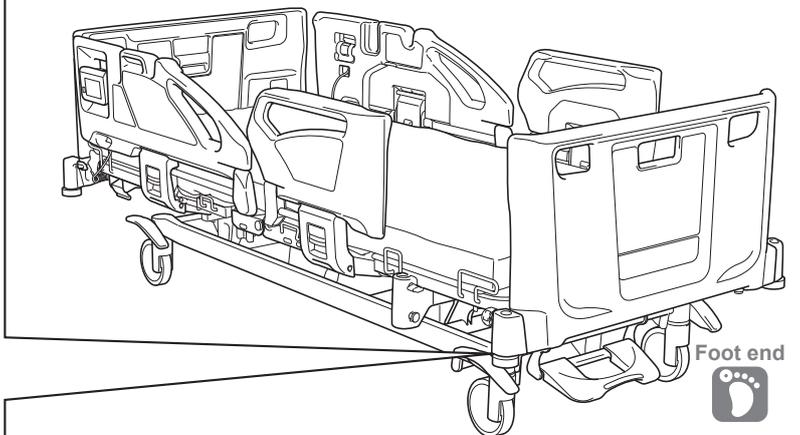
Carefully read the instruction manual of the bed to learn how to operate the bed and ensure you understand how to safely and properly use the bed before operating it.

- ① Make the bottom of the bed flat (horizontal).
- ② Remove the power plug of the bed from the outlet and turn the battery off.
- ③ Orient the plug (without warning label) of the bed link cable with its protrusion facing up, and insert it into the air mattress outlet of the bed.
- ④ Insert the bed link cable into the clip.

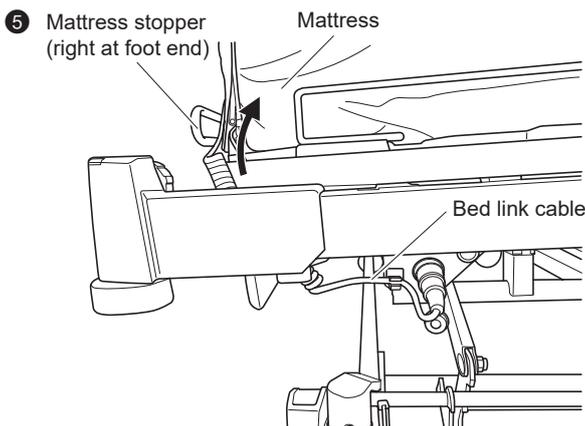
[Diagram showing cable connected]



Head end



[Diagram showing cable connected]



- ⑤ Pass the bed link cable between the mattress stopper (right at foot end) and mattress.

# 3 INSTALLATION PROCEDURE

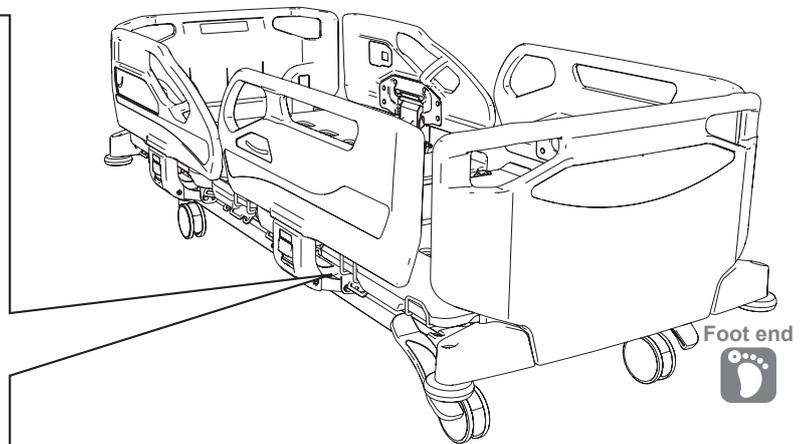
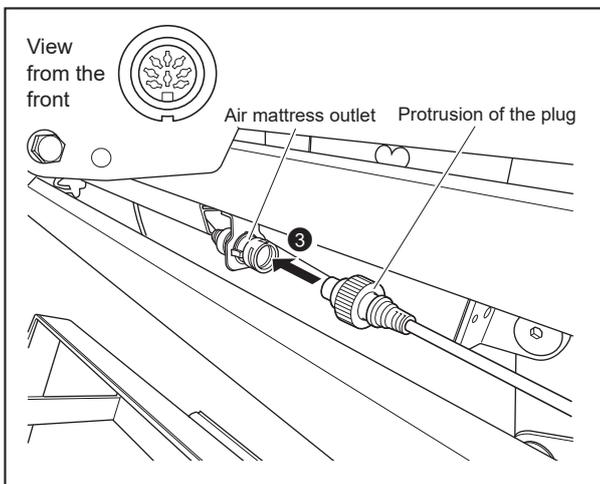
A6 series



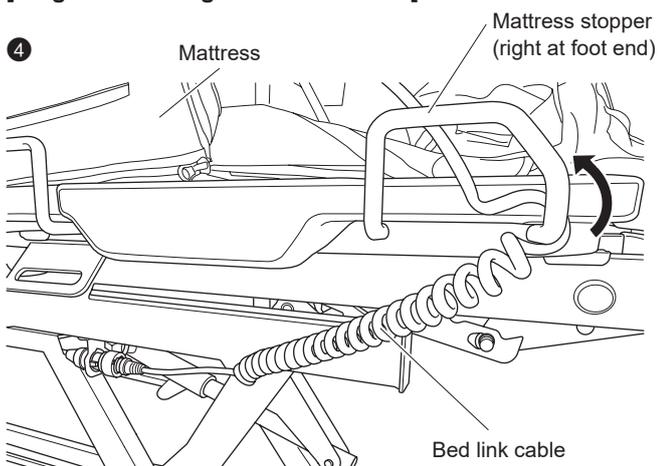
Carefully read the instruction manual of the bed to learn how to operate the bed and ensure you understand how to safely and properly use the bed before operating it.

- 1 Make the bottom of the bed flat (horizontal) and raise the side-rails at the foot end.
- 2 Remove the power plug of the bed from the outlet and turn the battery off.
- 3 Orient the plug (without warning label) of the bed link cable with its protrusion facing up, and insert it into the air mattress outlet of the bed.

Head end



[Diagram showing cable connected]



- 4 Pass the bed link cable around the outside of the mattress stopper (right at foot end).

## 6. Routing the power cable



### WARNING

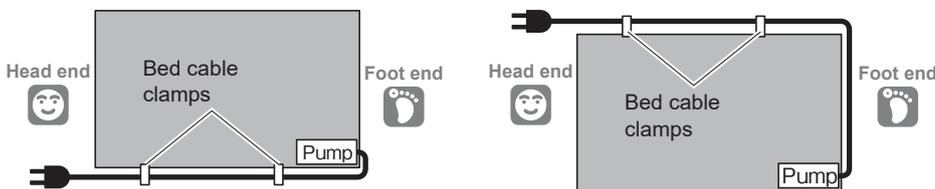
- Route the power cable on the side where the user does not get on or off the product and a bed side table, etc. is not used. There is a risk of tripping over the power cable and falling over. There is also a risk that the power cable may be damaged, causing an electric shock or fire.
- Route the power cable and connect the power plug properly. If the wiring work is performed incorrectly, there is a risk of injury due to a hand, leg, or other body part getting caught. Furthermore, there is a risk of the power cable being caught in a movable part of the bed and a wire breaking, resulting in an electric shock or fire.
- If the bed has height adjustment and knee raise functions, route the power cable with the height and the knee section raised to the maximum positions. If the power cable is not routed while they are raised, the power cable may be pulled and break when the height and the knee section are raised during use, possibly causing a fire.

#### ■ When the outlet is at the foot end of the bed

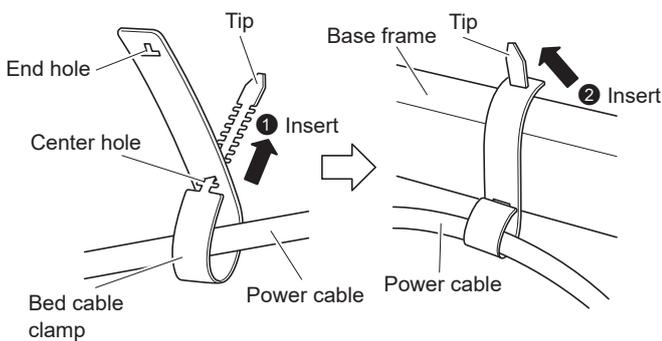
Route the power cable so that it does not run inside or under the bed.

#### ■ When the outlet is at the head end of the bed

Route the power cable from the position of the outlet, and fix it to the bed with the supplied bed cable clamps. (2 locations)



**This product does not require a ground wire to be connected.**

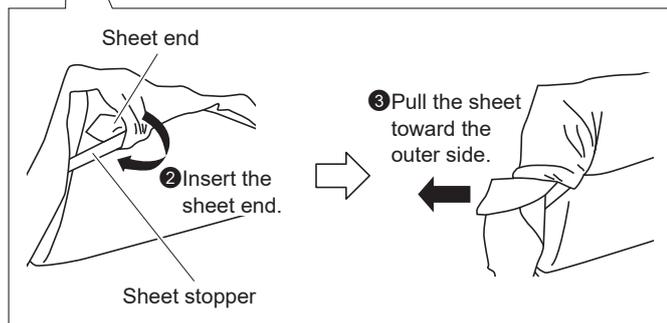
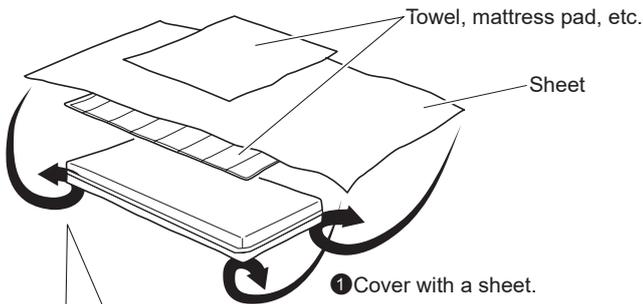


#### [How to attach bed cable clamps]

- ① While wrapping the bed cable clamp around the power cable, make a loop by inserting the end of the clamp into the hole at the center of the clamp.
- ② Wrap the excess part of the bed cable clamp around the base frame of the bed and fix the bed cable clamp by inserting the tip into the hole at the end of the clamp.
- ③ After fixing the bed cable clamp in place, check that it does not shift left or right and that the power cable is not excessively taut. If the bed cable clamp is fixed loosely, fix the clamp securely by tightening it again.

### 3 INSTALLATION PROCEDURE

#### 7. Making the bed



- ① When the product has expanded, see the figure on the left and then cover the top and sides of the air mattress with a sheet.  
\* Use a towel, mattress pad, etc. as needed.
- ② Insert the ends of the sheet into the sheet stoppers located at the four corners on the underside of the mattress.
- ③ Firmly pull the ends of the sheet from the inner side to the outer side so that they will not come loose.

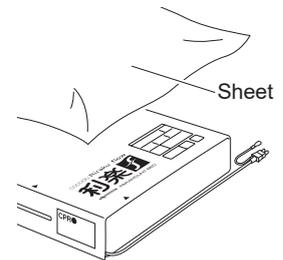


**Do not use the sheet stoppers for any purpose other than as sheet stoppers.**



#### WARNING

When routing the power cable on the opposite side of the pump, route it along the width direction of the mattress as shown in the figure on the right and then cover it with the sheet. There is a risk of electric shock or fire due to the power cable getting caught and breaking when bed siderails are stored at the foot end.

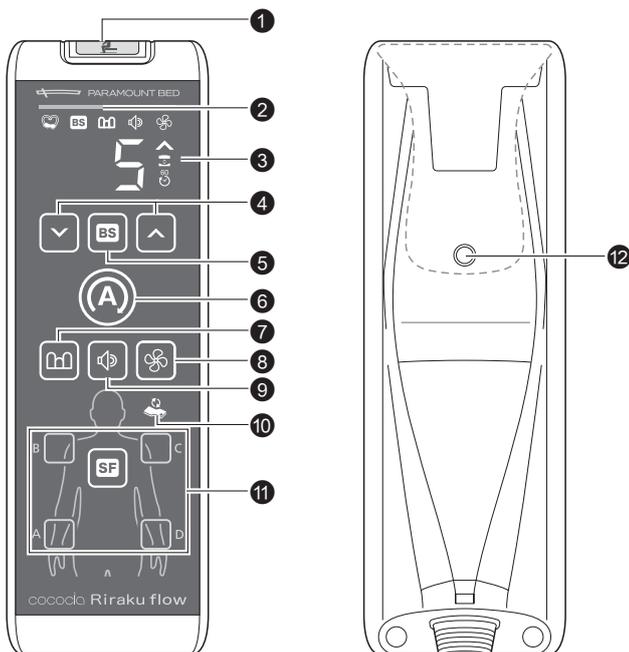


### 4 FUNCTIONS AND OPERATING PROCEDURES

The mattress can be operated using the BED Navi attached to the bed and a separately sold operation panel (accessory).

#### Using the operation panel (accessory)

#### 1. Names and functions of operation panel parts



- ① Max. inflate mode button page 17
- ② Power lamp
  - Lit in green: Operating
  - Lit in orange: Minor error page 25
  - Flashes in orange: Major error page 25
- ③ Status display screen  
Displays information such as the operation status and various setting statuses of the product.
- ④ Adjustment buttons  
Sets the mattress width or softness.
- ⑤ Back support (BS) button page 15
- ⑥ Automatic softness control button page 15
- ⑦ Alternating pressure button page 16
- ⑧ Dehumidify button page 16
- ⑨ Operation sound button page 16
- ⑩ Preparing indication  
This is lit during internal pressure adjustment with fast inflation.
- ⑪ Small flow (SF) button page 16
- ⑫ Setting button page 14

## 4 FUNCTIONS AND OPERATING PROCEDURES

### 2. Starting use

#### ■ How to start

Disconnect the power plug of the bed, then connect the bed link cable to the bed. See the procedure on pages 10 to 11.

#### ■ How to shutdown

Disconnect the power plug of the bed and turn the battery off, then disconnect the bed link cable from the bed.

#### ■ Time required to complete air inflation

When you insert the power plug into an outlet or connect bed link cable to bed, the air cells will be automatically inflated with air after a short while. The "Preparing" indication will be lit during inflation. When air inflation completes, the "Preparing" indication turns off. (Time required to complete air inflation: 10 minutes)

#### ■ When automatic softness control

When the user is lying in the bed, a softness (mattress internal pressure) that matches the weight, body shape, and lying position will be set automatically. The set softness is displayed for a while and then disappears. It can be displayed for a while by pressing the [Automatic softness control] button.

	<b>WARNING</b>
---	----------------

When using automatic softness control, check that the width of the mattress matches the width setting indicated on the operation panel (see page 15). If it does not match, the body pressure may not be dispersed effectively.



- If the user leaves the bed when using automatic softness control, the softness may be automatically set to 5. This is not a failure.
- When the user is lying in bed, a softness that matches the user's weight, body shape, and lying position will be set in about 5 to 15 minutes.

#### ■ When manual softness control

Press the adjustment buttons to adjust the softness. To use automatic softness control, see page 15 and then switch to automatic softness control.

#### ■ Fast inflation

Inflate the mattress at high speed when power is supplied or max. inflate mode is set to ON.

\* The pump sound will be loud and the "Preparing" indication on the operation panel will be lit during fast inflation.

#### ■ Functions retained after power-off

- The function settings immediately before a power-off will be retained in the following cases.
  - When the power has recovered after a power failure
  - When restarted by disconnecting and reinserting the power plug or the bed link cable
- The remaining time immediately before a power-off is retained for the max. inflate mode.
- If "18A" was used with manual softness control, the softness setting becomes "18."

#### ■ Power failure countermeasure function

Automatically stop air discharge in the event of a power failure. Air can be held for two weeks, but this period varies depending on the conditions of use. However, the depressurization effect, alternating pressure function, etc. for the product do not work during a power failure, so be careful about the user's condition. The small flow air cells (SF cells) maintain their expanded state. Contract them by disconnecting the coupling (upper) if necessary.

### 3. Setting of each function

#### 3-1. How to switch to the setting display

- ① Press the Setting button on the back of the operation panel.
- ② When you press the Setting button, the various setting buttons light and operation becomes possible. Unselected setting buttons of the various setting buttons are dimmed.
- ③ Press the Setting button on the back of the operation panel. The changes to the settings complete and the various setting buttons turn off.



Even if you select various settings during setting display, changing of the settings will not complete if you do not press the Setting button on the back of the operation panel again. Check that the changes are reflected in the status display screen after changing settings.



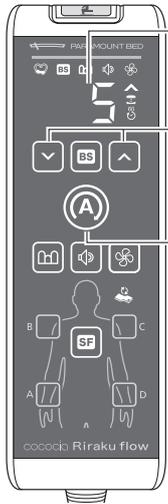
# 4 FUNCTIONS AND OPERATING PROCEDURES

## 3-2. How to change settings



### Automatic softness control setting

Automatically change the internal pressure of the air cells to match the weight, body shape, and lying position of the user. The internal pressure of the air cells can also be changed manually. (The initial setting is automatic softness control, and the initial softness is 5.)



#### Status display screen (digital number)

When automatic adjustment: Mattress width display  
When manual adjustment: Softness display

#### Adjustment buttons

When automatic adjustment: Mattress width selection  
When manual adjustment: Softness control

#### Automatic softness control button

When automatic adjustment: Bright  
When manual adjustment: Dim

### [Switching between automatic softness control and manual softness control]

- 1 Press the Setting button to switch to setting display.
- 2 Press the [Automatic softness control] button to switch between automatic softness control and manual softness control.
- 3 **When using automatic softness control:** The mattress width can be set. Set it to 86 if the mattress is 86 cm or 83 cm wide, and to 91 if the mattress is 91 cm wide.  
**When using manual softness control:** Press the adjustment buttons to adjust the softness. There are the 18 softness levels of 2 to "18^" (See below.)
- 4 Press the Setting button to complete the setting.

### Manual softness control: Recommended weight and recommended softness level

Softness	2	3	4	5	6	7	8	9	10
Recommended weight (kg)	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	85 to 94	95 to 104
Softness	11	12	13	14	15	16	17	18	18^
Recommended weight (kg)	105 to 114	115 to 124	125 to 134	135 to 144	145 to 154	155 to 164	165 to 174	175 to 180	*

\* If a heavy user contacts the mattress base when the back section is raised, use the "18^" softness level, which is one level above 18. (The softness will become 18 automatically after 120 minutes elapse.)

### Automatic softness control

Softness	2	3	4	...	...	...	17	18	18^
Recommended weight (kg)	The softness is set automatically to match the back raising state, user lying position, and body shape in addition to the weight during automatic softness control.								

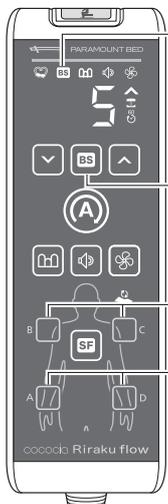


- The table for Manual softness control shows the recommended softness level corresponding to the recommended weight. The user selects and sets the softness level based on the recommended weight.
- When Automatic softness control is selected, the target softness level is displayed for 10 seconds. However, since the softness level is not determined by weight alone, it cannot be converted to the weight using the table for Manual softness control.



### Back support (BS) setting

When you perform the back raising operation, the position sensor automatically detects when the back angle has become 30° or more, and all of the small flow air cells (SF cells) are expanded to maintain the user's posture. (Initial setting: Enabled)



#### Status display screen (BS icon)

When enabled: Displayed  
When disabled: Not displayed

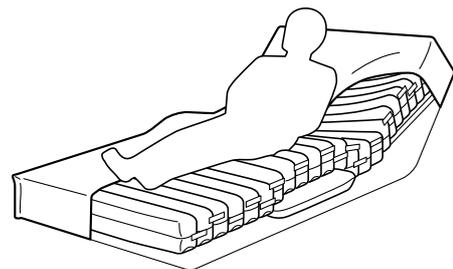
#### Back support button

When enabled: Bright  
When disabled: Dim

#### A to D buttons

When back support operation: Light in the order of B and C → A and D

- 1 Press the Setting button to switch to setting display.
- 2 Press the [Back support] button to enable or disable the setting.
- 3 Press the Setting button to complete the setting.



Check that the A to D buttons are lit during the back support operation.



### ■ Alternating pressure setting

Repeatedly expand and contract sets of three air cells alternately and release the pressure on the body sequentially. (Initial setting: Enabled)



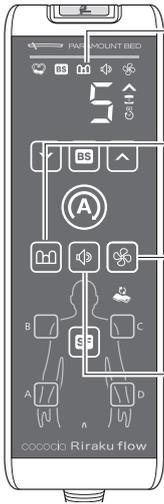
### ■ Operation sound setting

Enable or disable the operation sound of the operation panel. (Initial setting: Enabled)



### ■ Dehumidify setting

Eliminate any moisture and heat that have penetrated into the air mattress by periodically supplying air to the inside. (Initial setting: Enabled)



#### Status display screen (BS, speaker, fan icon)

When enabled: Displayed  
When disabled: Not displayed

#### Alternating pressure button

When enabled: Bright  
When disabled: Dim

#### Dehumidify button

When enabled: Bright  
When disabled: Dim

#### Operation sound button

When enabled: Bright  
When disabled: Dim

① Press the Setting button to switch to setting display.

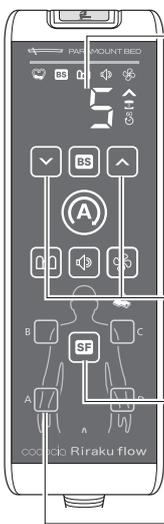
② Press the [Alternating pressure], [Operation sound], or [Dehumidify] button to enable or disable the setting.

③ Press the Setting button to complete the setting.



### ■ Small flow air cell (SF) setting

Automatically change the posture by expanding and contracting the four independent small flow air cells (SF cells) one at a time for 15 minutes each in the sequence of A to D. If the user's sleep position is extremely close to a mattress edge, the position sensor detects the SF cell that could cause shifting or falling, and the corresponding SF cell is disabled so that it is automatically skipped in the expansion and contraction sequence. If user has a contracture, pain, etc., you can skip arbitrary SF cells in the expansion and contraction sequence by enabling and disabling SF cells manually. (Initial setting: Small flow)



#### Status display screen (digital number)

When you select any of the [A] to [D] buttons during manual cell expansion, the softness is displayed.



#### Adjustment buttons (down, up arrows)

When manual SF cell expansion:  
Adjust the softness.

#### Small flow button

When small flow: Bright  
When manual SF expansion: Dim

#### A to D buttons

When small flow: Enables or disables.  
When manual SF cell expansion:  
Selects the SF cell for which to adjust the softness.

#### [Switching between small flow and manual SF cell expansion]

① Press the Setting button to switch to setting display.

② Press the [Small flow] button to switch between small flow and manual SF cell expansion.

#### ③ When small flow:

Press the [A] to [D] buttons as necessary to enable and disable the SF cells.

- When SF cells are enabled: Corresponding [A] to [D] buttons are bright.
- When SF cells are disabled: Corresponding [A] to [D] buttons are dim.



- Small flow sequence expansion and contraction are performed only for the enabled SF cells.
- When back support is disabled, all SF cells are disabled if the back angle becomes 45° or more.

#### SF sensor off mode:

If you insert the power plug into an outlet while pressing the Setting button, the SF cells will be enabled regardless of the sleep position. (The [Small flow] button flashes. Please note that the automatic max. inflate mode will not function in this state.)

#### When manual SF expansion:

Select an [A] to [D] button and press the adjustment buttons to adjust the softness of the SF cell. There are the 4 softness levels of 0 to 3.



- Expansion is not performed for any SF cell with the softness set to 0 during manual SF cell expansion. Furthermore, expansion and contraction are not performed and the expanded state is maintained for any SF cell with the softness set to 1 to 3.
- Adjust the SF cells to the appropriate softness while checking the condition of the user.

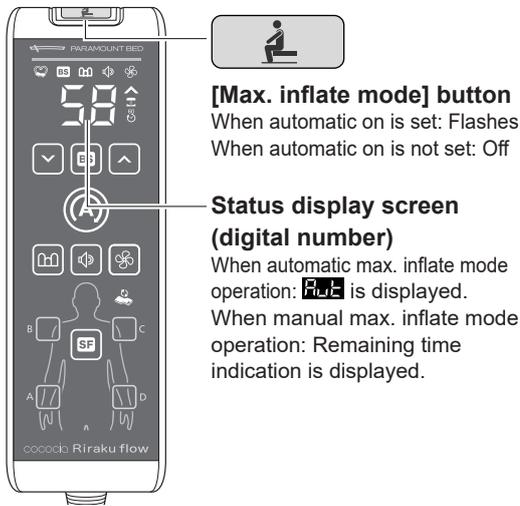
④ Press the Setting button to complete the setting.

## 4 FUNCTIONS AND OPERATING PROCEDURES

### 3-3. Max. inflate mode

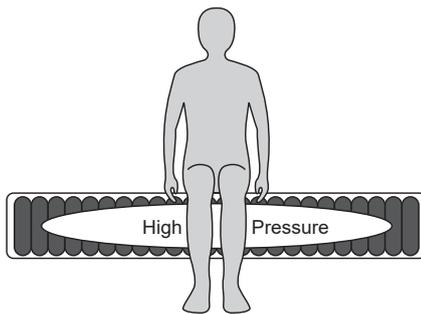
Increase the internal pressure of the air cells to make it easy to get on and off the bed, sit on the side of the bed, and change posture. In addition, the small flow air cell (SF cell) are contracted.

When the user sits on the side of the bed, use the max. inflate mode so that the user can sit with a more stable posture.



**[Max. inflate mode] button**  
When automatic on is set: Flashes  
When automatic on is not set: Off

**Status display screen (digital number)**  
When automatic max. inflate mode operation: **Full** is displayed.  
When manual max. inflate mode operation: Remaining time indication is displayed.



#### ■ Auto max. inflate mode setting

The position sensor detects when the user sits up, rolls over to a mattress edge, and sits on the side of the bed, and then max. inflate mode turns on automatically.

- 1 Press the [Max. inflate mode] button at the top of the operation panel to enable or disable the setting.
- 2 Press the Setting button to complete the setting.



- The range in which sitting on the side of the bed can be detected in automatic max. inflate mode is an area at the mattress center extending one third the length of the mattress.
- When the back angle of the bed is 20° or more, only rolling over to a mattress edge and sitting on the side of the bed are detected. Sitting up is not detected.
- The [Max. inflate mode] button flashes in blue and **Full** is displayed on the status display screen during automatic max. inflate mode operation.
- Automatic max. inflate mode can be turned off manually by pressing the [Max. inflate mode] button during automatic max. inflate mode operation. (Automatic max. inflate mode remains set.)
- The automatic max. inflate mode turns off automatically in the following cases. (Automatic max. inflate mode remains set.)
  - When the user is still at the center of the mattress for 10 seconds
  - When the user is still at an edge of the mattress for 5 minutes.
  - When 60 minutes elapse
- Correct detection may not be possible depending on the operating environment and the movement and posture of the user.

#### ■ How to turn manual max. inflate mode on

Press the [Max. inflate mode] button at the top of the operation panel. The manual max. inflate mode turns on, the [Max. inflate mode] button lights in blue, and the status display screen displays the remaining time indication. (Example)



#### ■ How to turn manual max. inflate mode off

Press the [Max. inflate mode] button during manual max. inflate mode operation. The manual max. inflate mode turns off and display returns to normal display.

- \* The manual max. inflate mode will turn off automatically after 60 minutes elapses.
- \* The setting of each function is returned to the setting before the manual max. inflate mode was turned on.

### 3-4. Pressure relief function and bed power function

When the pump and bed are connected,  is displayed on the status display screen and the following functions turn on.

#### ■ Pressure relief function

Relieve the pressure on the upper part of the body by changing the pressure at high speed if the back raising or lowering operation is performed when the angle of the back section of the bed is at 20° or more.

#### 3-5. Reset

Press the Setting button to switch to setting display and press and hold down the [Max. inflate mode] button. A beep sound is output and the settings are reset to the initial settings.

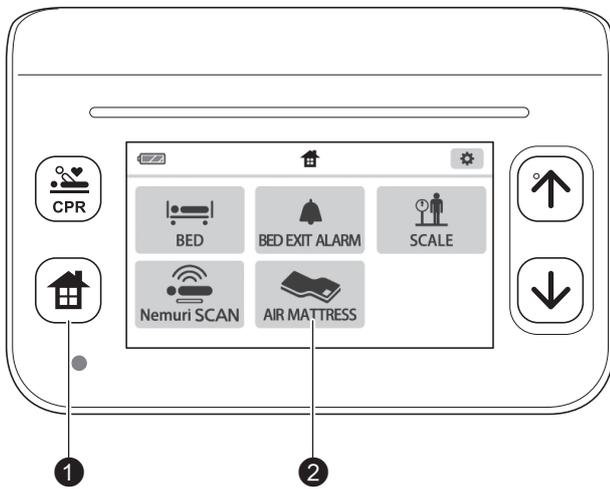
#### ■ Bed power function

Supply power from the bed to the product through a bed link cable.

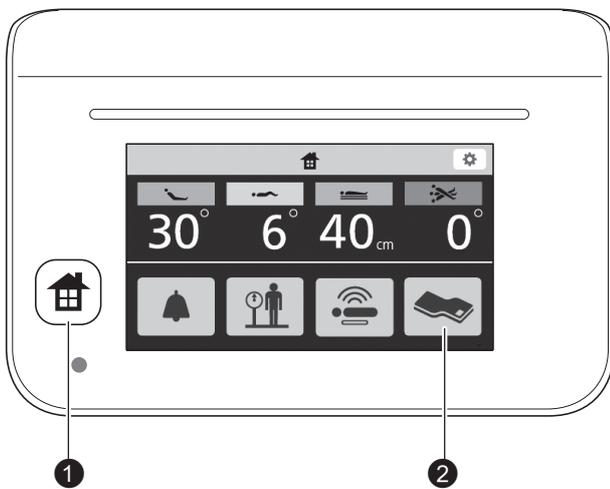
- \* The power cable of the product cannot be used when using this function.

## Using the BED Navi

Use of the mattress may not be possible depending on the type of bed and BED Navi used. For details, contact Paramount Bed or your distributor.



- ①  button  
Displays the home screen.
- ② AIR MATTRESS button  
Displays the AIR MATTRESS home screen. (see page 19)

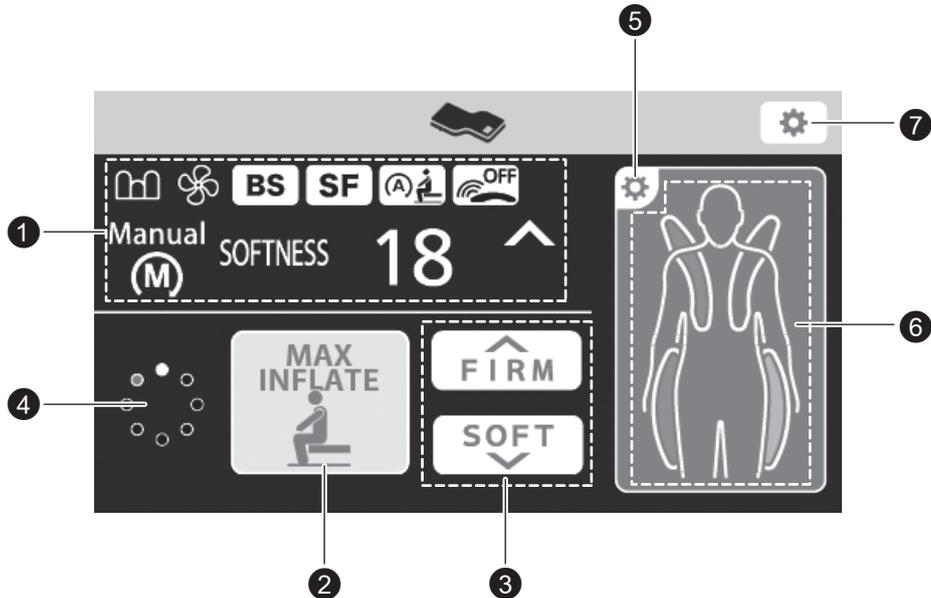


\* The figure shows an example. The screen displayed varies depending on the suitable products.

## 4 FUNCTIONS AND OPERATING PROCEDURES

### ■ AIR MATTRESS home screen

Touch the  button in the home screen to display the AIR MATTRESS home screen.



**1** Status display

Displays information such as the air mattress operation status and various setting statuses.

**2** MAX INFLATE mode button

Turn on the button to display the remaining time of the max. inflate mode in the status display.

**3** MANUAL SOFTNESS CONTROL setting buttons

Adjust the softness during manual softness control operation.

**4** Preparing indication

This is lit during internal pressure adjustment with fast inflation.

**5** SMALL FLOW SETTING button

Changes the small flow setting.

**6** SF cell status display

Indicates the SF cell operation status and setting status by color.

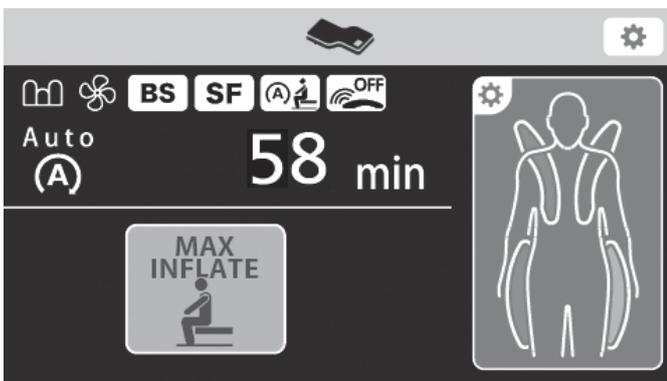
Green : Operating

White : Enabled

Black : Disabled

**7** SETTINGS button

Displays the air mattress settings display screen.



\* The illustration shows that the max. inflate mode is turned on during automatic softness control.

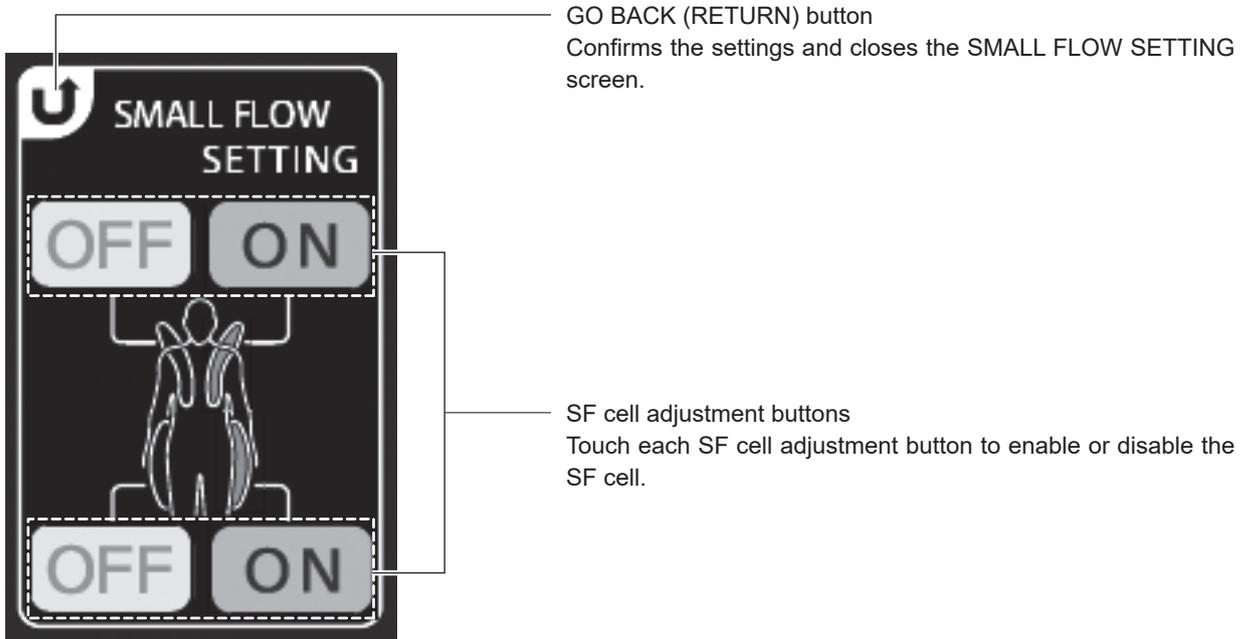


\* The illustration shows that the automatic max. inflate mode is turned on during automatic softness control.

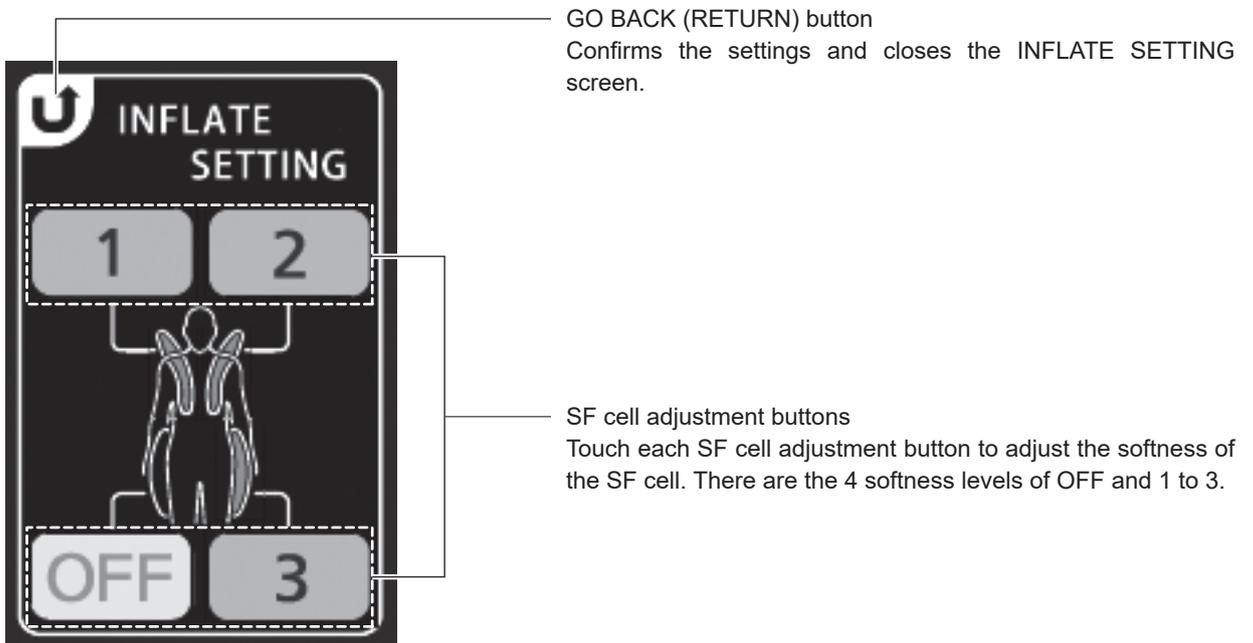
### ■ SMALL FLOW SETTING screen

Touch the small flow setting button in the AIR MATTRESS home screen to display the SMALL FLOW SETTING screen if the small flow setting is ON, and the INFLATE SETTING screen if it is OFF.

[SMALL FLOW SETTING screen (when the small flow setting is ON)]



[INFLATE SETTING screen (when the small flow setting is OFF)]



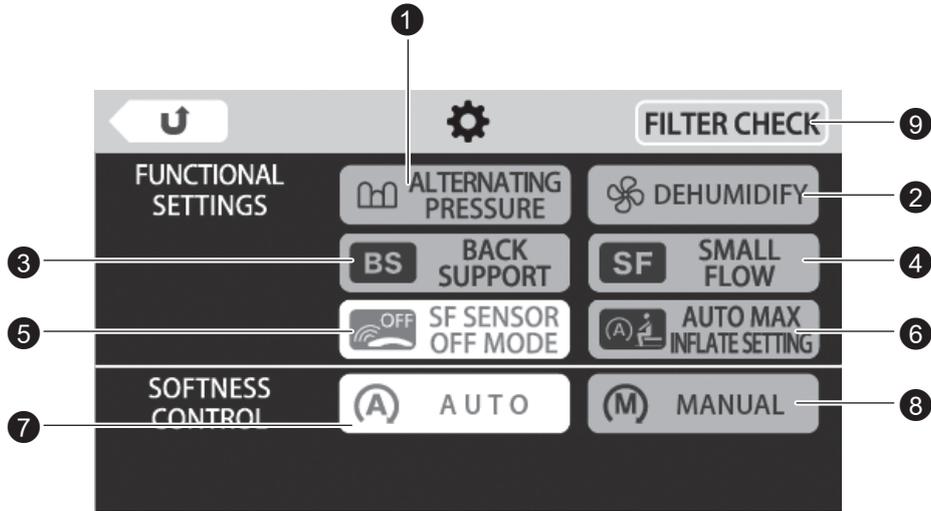
#### CAUTION

When you have completed the settings, touch the GO BACK (RETURN) button to confirm the settings. If you do not press the GO BACK (RETURN) button, the changed settings are not confirmed and you may be injured by unexpected movement of the SF cells.

# 4 FUNCTIONS AND OPERATING PROCEDURES

## ■Function settings

Touch the  button in the AIR MATTRESS home screen to display the air mattress settings screen.



### ① ALTERNATING PRESSURE button

Sets alternating pressure.  is displayed in the AIR MATTRESS home screen while alternating pressure is set.

### ② DEHUMIDIFY button

Sets dehumidify.  is displayed in the AIR MATTRESS home screen while dehumidify is set.

### ③ BACK SUPPORT (BS) button

Sets the back support function.  is displayed in the AIR MATTRESS home screen while the back support function is set.

### ④ SMALL FLOW (SF) button

Switches the setting between small flow and inflate.  is displayed in the AIR MATTRESS home screen while small flow is set.

### ⑤ SF SENSOR OFF MODE button

Sets SF sensor off mode.  is displayed in the AIR MATTRESS home screen while SF sensor off mode is set.

### ⑥ AUTO MAX INFLATE SETTING button

Sets auto max. inflate mode.  is displayed in the AIR MATTRESS home screen while auto max. inflate mode is set.

### ⑦ AUTO button

Sets the automatic softness control function.  is displayed in the AIR MATTRESS home screen while automatic softness control is set.

### ⑧ MANUAL button

Sets the manual softness control function.  is displayed in the AIR MATTRESS home screen while manual softness control is set.

### ⑨ FILTER CHECK button

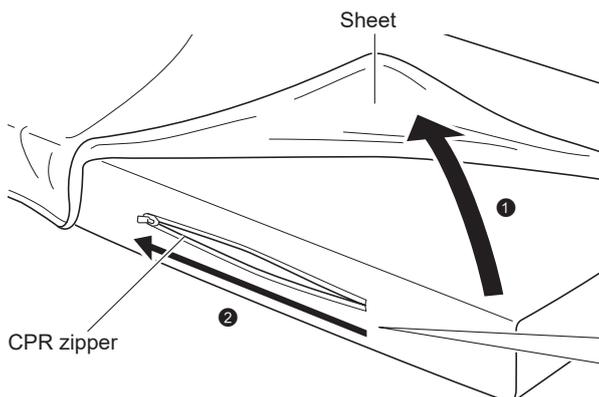
The button is displayed when the filter operating time exceeded the recommended replacement time (8,800 hours). Press this button to reset the filter operating time.

\* For details on replacing the filter, see page 23.

\* For the details on the filter for cococia, contact Paramount Bed (see page 36) or your distributor.

## 4. How to use the CPR function

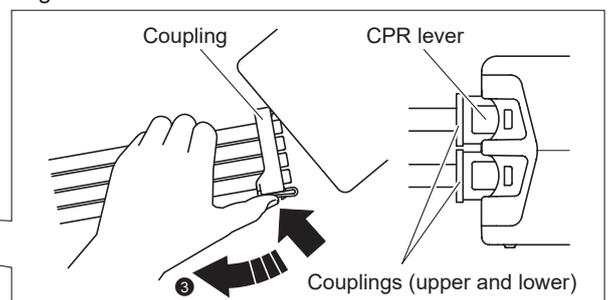
Air can be discharged from the air mattress quickly by using the CPR function in case of emergency, and cardiac massage can be started in 30 seconds.



① Fold back the sheet in the vicinity of the pump.

② Open the CPR zipper.

③ Pull out the couplings (upper and lower) toward you while pressing the CPR levers.



# 5 MAINTENANCE AND INSPECTION

## 1. Maintenance



### WARNING

- Shutdown the air mattress by following procedure on page 14 before carrying out maintenance. There is a risk of malfunction of the product, possibly causing injury.
- After maintenance, check that the glide sheet or air cells and covers (bottom cover and pump cover) are secured properly.
- If they are detached for maintenance, attach each part properly after maintenance. If they detach from the attachment parts, the air cells may shift toward one side, causing the body pressure to not be dispersed effectively.
- Do not carry out maintenance while this product is in use.
- User shouldn't carry out maintenance.



### CAUTION

- Do not clean the cover while the AC adapter is still inserted. It may be damaged.
- When the pump is removed from the mattress for maintenance, be careful that water or other liquid does not enter the couplings (upper and lower) and pump ports (upper and lower). Entry of moisture into the pump and air cells may cause a failure and mold generation.
- After maintenance, check that the zippers are closed properly. Entry of moisture from an open zipper may cause the padding (air cells, blowing tubes, etc.) to deteriorate and mold generation.
- The product cannot be cleaned with a mattress cleaning machine, ozone sterilizer, or autoclave. The product or cleaning/sterilizing equipment may be altered, damaged, or deteriorated.
- Do not open the zippers for cleaning. Doing so may cause the padding (air cells, blowing tubes, etc.) to deteriorate and mold generation.
- If blood, urine, sebum, and other stains are present, use neutral detergent or soap to clean them and do not leave them. If such stains are left as is, the cover may deteriorate or develop an odor or permanent stain.
  - Odors adhering to the cover during use can be reduced using commercial mouthwash.
  - For stain removal, use oxydol (hydrogen peroxide water: 3% concentration).
- Do not use volatile solution (such as paint thinner, benzene, or gasoline) or cresol. There is a risk of discoloration or deterioration.
- Do not use disinfectants other than those listed above. Doing so may cause deterioration in the waterproof performance of the cover or discoloration.

### ■How to clean the covers

- ① Use soapy water (commercially available soap, such as neutral detergent diluted with water) to wipe and clean.
- ② Use disinfectant to clean and disinfect.  
For disinfectant, use the following chemicals and observe the specified concentration. Also, use those disinfectants according to the handling method of each disinfectant.

● 76.9% to 81.4%	Ethanol for disinfection	● 0.05% to 0.2%	Benzalkonium chloride
● 70%	Isopropanol	● 0.05% to 0.2%	Benzethonium chloride
● 0.02% to 1.0%	Sodium hypochlorite	● 0.05%	Chlorhexidine gluconate
- ③ Naturally dry the cover on the bed, etc. \* Do not dry the cover in the sun.

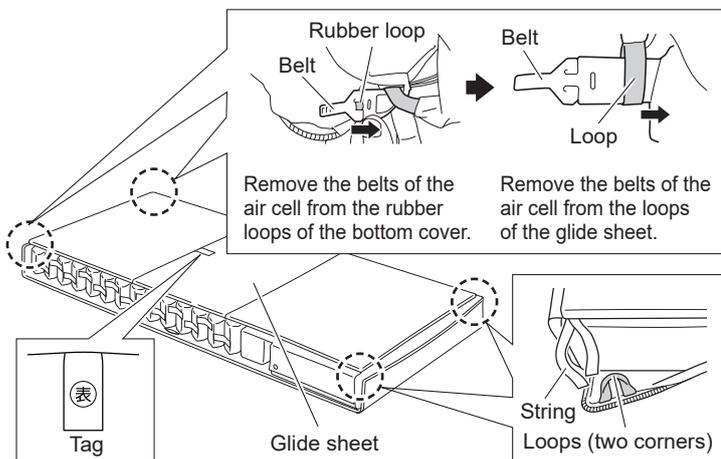
### ■How to clean the top cover

- ① Open the zippers and then remove the top cover from the bottom cover.
- ② Use soapy water (commercially available soap, such as neutral detergent diluted with water) to soak the cover to wash it.
- ③ Rinse with water until there is no residual detergent and wring out gently without twisting.
- ④ Dry completely in a shaded area.

## 5 MAINTENANCE AND INSPECTION

### How to clean the glide sheet and top cushion

- 1 Open the zippers and then remove the top cover from the bottom cover.
- 2 Remove the belts of the air cell from the rubber loops of the bottom cover at the head end two corners, and then remove the belts of the air cell from the loops of the glide sheet. Remove the strings from the loops at the foot end two corners. Untie the strings from the loops at the two corners and then remove both the glide sheet and top cushion together.
- 3 Use soapy water (commercially available soap, such as neutral detergent diluted with water) to soak the glide sheet and top cushion to wash them together without separating them.
- 4 Rinse with water until there is no residual detergent and wring out gently without twisting. Dry completely in a shaded area.



### How to attach the glide sheet

- 1 Lay the glide sheet on the air cells so that the tag is facing up.
- 2 Pass the belts of the air cell through the loops of the glide sheet at the head end two corners, and then attach the rubber loops of the bottom cover to the belts of the air cell.
- 3 Pass the strings at the foot end two corners of the glide sheet through the loops from the outer side to the inner side of the bottom cover and then tie securely.



- When attaching the glide sheet, take care that the urethane sheet inside does not shift toward one side.
- Do not separate the glide sheet and top cushion. If they are separated, check that the glide sheet is not turned inside out and then insert the top cushion. (Ensure the tag is on the outer side of the glide sheet.)

### How to clean the air cells

- 1 Remove the couplings (upper and lower) from the pump and discharge air from the air cells.
- 2 Remove the top cover.
- 3 Clean the air cells using the same method as the covers. (See page 22)
- 4 Dry the air cells naturally and always connect the couplings (upper and lower) to the pump properly. (See page 9)
- 5 Close the cover zippers properly.



### CAUTION

After maintenance, check that the connector for the blowing tubes are not disconnected. Air may not be supplied.



- When maintaining the air cells, do not separate each air cell from the mattress.
- If the mattress is used for a long period of time, the urethane film of the air cells may be discolored but there will be no problem with performance.

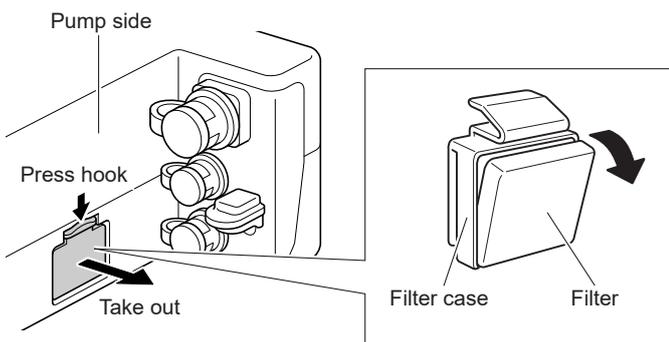
### How to clean the pump and operation panel

- 1 Use soapy water (commercially available soap, such as neutral detergent diluted with water) to wipe and clean the pump and operation panel.
- 2 Use disinfectant to clean and disinfect the pump and operation panel. For disinfectant, use the following chemicals and observe the specified concentration. Also, use those disinfectants according to the handling method of each disinfectant.
 

● 76.9% to 81.4% Ethanol for disinfection	● 0.05% to 0.2% Benzethonium chloride
● 70% Isopropanol	● 0.05% Chlorhexidine gluconate
● 0.05% to 0.2% Benzalkonium chloride	● 0.02% to 1.0% Sodium hypochlorite

### Replacing the filter

Regularly inspect and replace the filter. For the details on the dedicated filter, contact Paramount Bed (see page 36) or your distributor.



- 1 Press the hook of the filter case on the side of the pump and take out the case.
- 2 Replace the filter. **Reset the filter operating time after replacing the filter.**



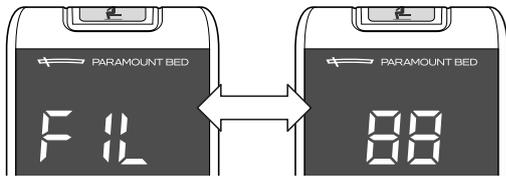
### CAUTION

- Regularly inspect the filter. If the filter is clogged, it may not work properly.
- If a filter other than specified is attached or no filter is attached, insects or dust may enter the inside of the pump, possibly causing malfunction. This also may cause failure.

## 2. Inspection

### ■ Filter check mode

This mode allows you to check and reset the filter operating time.



- \* The filter operation time is indicated starting from the 100th digit. Examples: 160 hours is indicated as "1" and 80 hours is indicated as "0"
- \* When the filter is used continuously, the approximate timing for replacing the filter is when "88" is indicated, but this varies depending on the location and environment of use and how long used.

- ① Press and hold down the Setting button.
- ② The "FIL" indication and filter operating time indication are displayed alternately in the status display screen.
- ③ Press the Setting button. The filter check mode will also end after 1 minute elapses.

#### [How to reset the filter operating time]

Press and hold down the Max. inflate mode button for 3 seconds in the filter check mode. A beep sound is output and the filter operating time indication becomes "0."



- The filter operating time can also be reset using the BED Navi (see page 21) .

### ■ Daily inspection

Perform daily inspection for use while paying attention to the following points.

Part to inspect	Inspection item	Check method
Mattress	Is sinking excessive? * Some air cells will sink in the alternating pressure mode. * If the mattress sinking is excessive, air cells may be damaged. Check the internal air cells, see "6 TROUBLESHOOTING" on page 25, and then take the necessary action.	Touch inspection
Operation panel (accessory)	<ul style="list-style-type: none"> <li>• Is the power lamp lit in green?</li> <li>• Is an error code displayed?</li> <li>* If the power lamp is not lit in green or an error code is displayed, see "6 TROUBLESHOOTING" on page 25, and then take the necessary action.</li> </ul>	Visual inspection
Couplings (upper and lower)	Are the couplings secured to the pump properly? * If they are not secured properly, see "4. Connecting the pump and mattress" on page 9, and then reconnect them.	
Cable connectors (pump)	<ul style="list-style-type: none"> <li>• Are the cable and AC adapter connector connected properly?</li> <li>* If they are not connected properly, see "2. Installing the power adapter set (sold separately)" and "3. Installing the pump and connecting a separately sold operation panel (accessory)" on page 6 to 8 and then reconnect them.</li> <li>• Are the caps attached properly (except when connecting the operation panel and bed link cable)?</li> <li>* If they are detached, moisture and dust may enter inside and cause an electric shock or failure. Attach them properly.</li> </ul>	

### ■ Regular inspection

To ensure safe use, inspect the product at least once a year. The product wears out and deteriorates differently depending on the frequency of use and environment. Regularly inspect the following items. When an irregularity has been noticed or when a detailed inspection is desired, contact Paramount Bed (see page 36) or your distributor.

Part to inspect	Inspection item	Check method
Cover	Is there damage?	Visual inspection
Inside mattress	<ul style="list-style-type: none"> <li>• Are the snap buttons present?</li> <li>• Are the blowing tubes and air cells connected?</li> <li>• Are the couplings (upper and lower) and blowing tubes connected?</li> <li>• Is the top cushion damaged?</li> </ul>	
Pump	<ul style="list-style-type: none"> <li>• Is there damage?</li> <li>• Is the filter dirty?</li> <li>* If the filter is dirty, see "Replacing the filter" on page 23, and then replace the filter.</li> </ul>	
Couplings (upper and lower)	Is there damage?	
Cables	Are there scratches and damage?	
Operation panel (accessory)	<ul style="list-style-type: none"> <li>• Are the cables tangled in the air mattress or bed?</li> <li>• Are any of the plugs and cables damaged?</li> <li>• Is the operation panel scratched or damaged?</li> <li>* Request repair (or replacement) of electrical parts such as the operation panel if they are damaged.</li> </ul>	
Position sensor	<ul style="list-style-type: none"> <li>• Are there scratches and damage?</li> <li>• Is it detached from the cover?</li> <li>• Are the left and right sensor cover attachment zippers closed?</li> <li>• Is the sensor sheet bent?</li> </ul>	

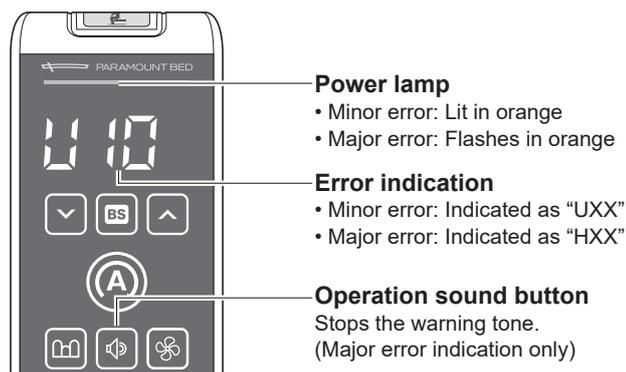
## 6 TROUBLESHOOTING

Problems may not always indicate faults. Check the following once again before requesting repair. If a problem persists even after checking and taking corrective action or if the cause is unknown, stop using the product, turn off the power of the mattress properly (see “How to shutdown” on page 14), and contact Paramount Bed (see page 36) or your distributor for repair.

Symptoms and status	Error code	Check	Corrective action	Reference page
Power of the operation panel (accessory) does not turn on.	—	<ul style="list-style-type: none"> <li>Is the power plug connected to an outlet?</li> <li>Is the power cable connected to the AC adapter?</li> <li>Are the AC adapter connector and pump connected?</li> <li>Is the operation panel connected to the pump?</li> </ul>	<ul style="list-style-type: none"> <li>Insert the power plug into the outlet.</li> <li>Connect the power cable to the AC adapter.</li> <li>Insert the AC adapter connector into the pump.</li> <li>Connect the operation panel to the pump.</li> </ul>	6•8
		Is the power plug inserted into the outlet, but the power lamp on the operation panel is off?	Plug another electrical device into the outlet to check that power is available.	—
		<ul style="list-style-type: none"> <li>Is the bed link cable connected to the bed?</li> <li>Is the power plug of the bed connected to an outlet?</li> <li>Are the bed link cable and pump connected?</li> <li>Is the operation panel connected to the pump?</li> </ul>	<ul style="list-style-type: none"> <li>Insert the bed link cable into the bed.</li> <li>Insert the power plug of the bed into the outlet.</li> <li>Insert the bed link cable into the pump.</li> <li>Connect the operation panel to the pump.</li> </ul>	—
Mattress does not expand.	—	—	The filter may be clogged. Replace the filter. For a replacement filter, contact Paramount Bed or your distributor.	23•24
	U10	Are the couplings (upper and lower) disconnected from the pump?	Insert the couplings (upper and lower) into the insertion ports of the pump again.	9
Air is not present in some air cells.	—	Is alternating pressure set?	Since alternating pressure is set, the air cells expands and contracts alternately. This is not a failure.	16
	U10, U11, U12, U13, U14, U15, U16, U17, U19	Is there a hole in the air cells?	Air cells are damaged. Contact Paramount Bed or your distributor.	36
		Are the blowing tubes and air cells disconnected?	Connect the blowing tubes and air cells.	23
		Are the blowing tubes and the couplings (upper and lower) disconnected?	Connect the blowing tubes and couplings (upper and lower).	24
	U21, U22, U23, U24, U25, U26, U27	Is a blowing tube bent?	Straighten the blowing tube and then connect it.	23
Mattress is too soft and the mattress base is contacted.	—	Is an extremely low softness set with the manual softness control setting?	Manually set the softness while referring to the guide to softness settings. Alternatively, use automatic softness control.	14
		Did the user leave the bed?	The softness is adjusted automatically if the user leaves the bed when using automatic softness control. When the user lies down on the bed, a softness suitable for the user will be set automatically again. This is not a failure.	14
		Was the back section of the bed raised when using manual softness control?	When raising the back section of the bed, set automatic softness control or increase the softness setting by manual adjustment while checking that there is no contact with the mattress base.	14
		Is the user of the product a patient with a prominent bone projection, hump back, or lower limb contracture?	If a user with a prominent bone projection, hump back, or lower limb contracture contacts the mattress base, increase the softness setting by manual adjustment while checking that there is no contact with the mattress base.	14
Air cells or small flow air cells (SF cells) do not alternately expand and contract.	—	Is alternating pressure or small flow not set (manual SF cell expansion)?	To allow alternate expansion and contraction, set alternating pressure or small flow.	16
		Is the max. inflate mode on?	Air cells and small flow cells do not alternately expand and contract in the max. inflate mode. This is not a failure.	17
		Is the sleep position close to a mattress edge?	Small flow is disabled because the position sensor detected that the sleep position is near a mattress edge. Go to sleep at the center of the mattress.	—
		Is the back section of the bed raised?	The small flow operation is automatically set to off when back support is operating or when the bed angle is 45° or more while back support is not set. This is not a failure.	15•16
	U20, U28, U29	Is wind from a heater or stove blowing against the pump? Is electrical equipment such as an electric cover blanket being used with the temperature at 40°C or higher?	Take care that the pump does not get warm during use.	—
	—	Is there a hole in the SF cells?	SF cells are damaged. Contact Paramount Bed or your distributor.	36
Buttons are not displayed on the operation panel.	U02	Is the operation panel connected properly?	Connect the operation panel properly.	8
		Is another product's operation panel or pump connected?	Check that the combination of the operation panel and pump are correct.	8
		Is the cable of the operation panel damaged?	Contact Paramount Bed or your distributor and request repair (replacement) of the operation panel.	36
U08	—	Stop using the product and contact Paramount Bed or your distributor.	36	
Settings do not change when I press the buttons on the operation panel.	—	Was the Setting button on the back of the operation panel pressed?	Press the Setting button on the back of the operation panel.	14
		Was the Setting button on the back of the operation panel pressed again after changing the settings?	Press the Setting button on the back of the operation panel again after changing the settings.	15
		The A to D buttons turn off after setting completes.	Small flow is disabled because the position sensor detected that the sleep position is near a mattress edge. Go to sleep at the center of the mattress.	16
	U09	Is an operation button being pressed continuously?	Release the pressed button.	—

Symptoms and status	Error code	Check	Corrective action	Reference page
A button that was not pressed on the operation panel is responding.	—	—	Press the Setting button again while not touching the front surface of the operation panel.	14
		Is <b>Auto</b> displayed on the operation panel?	Operate the buttons with an index finger or little finger. Since automatic max. inflate mode is set, the max. inflate mode operates automatically in response to sitting up, rolling over to a mattress edge, and sitting on the side of the bed. It will turn off automatically if the user lies down at the center of the mattress for 10 seconds. When not necessary, use the mattress with the mode turned off.	17
Mattress is too hard.	—	Is an extremely high softness set with the manual softness control setting?	Manually set the softness while referring to the guide to softness settings. Alternatively, use automatic softness control.	15
		<ul style="list-style-type: none"> <li>Is the max. inflate mode on?</li> <li>Is <b>Auto</b> displayed on the operation panel?</li> </ul>	Since the max. inflate mode or automatic max. inflate mode is on, the internal pressure of the mattress is high. When not necessary, use the mattress with the max. inflate mode or automatic max. inflate mode turned off.	17
	H02	—	Stop using the product and contact Paramount Bed or your distributor.	36
Setting value for automatic softness control does not match the user's weight.	—	<ul style="list-style-type: none"> <li>Is the back section of the bed raised?</li> <li>Did the user change position or take a sitting position?</li> <li>Is the user of the product a patient with a bone projection, hump back, or lower limb contracture?</li> </ul>	The softness is set automatically to match the back raising state, user lying position, and body shape in addition to the weight during automatic softness control. This is not a failure.	15
		Does the width setting on the operation panel match the width of the mattress?	Match the width setting on the operation panel to the width of the mattress.	15
Automatic max. inflate mode is not operating.	—	Is automatic max. inflate mode not set?	Set automatic max. inflate mode.	17
		Is the user sitting down on the side of the bed in a position outside of the position sensor detection range?	The detection range of the position sensor is an area at the mattress center extending one third the length of the mattress. Have the user sit down on the side of the bed in a position inside of the sensor detection range?	17
		Is the back section of the bed raised?	When the back angle of the bed is 20° or more, only rolling over to a mattress edge and sitting on the side of the bed are detected. Sitting up is not detected. This is not a failure.	17
		Is the SF sensor off mode set?	Automatic max. inflate mode will not function in this state. Insert the power plug into the outlet while pressing the Setting button.	25
		—	Correct detection may not be possible depending on the operating environment and the movement and posture of the user. This is not a failure.	17
	U31, U33, U35	Is the position sensor connected properly?	Connect the position sensor properly.	8
Automatic max. inflate mode operates unexpectedly.	—	—	Even if the automatic max. inflate mode operated unexpectedly, it will turn off automatically if the user lies down at the center of the mattress for 10 seconds. When not necessary, use the mattress with the automatic max. inflate mode turned off. This is not a failure.	17
Back support does not operate.	—	Is back support not set?	Set back support.	15
		Is the sleep position close to a mattress edge?	Back support is disabled because the position sensor detected that the sleep position is near a mattress edge. Go to sleep at the center of the mattress.	—
	U31, U32 U34	Is the position sensor connected properly? Is the mattress installed properly?	Connect the position sensor properly. Install the mattress properly.	8 6
Inside of the pump makes a knocking sound.	—	—	It is working properly. This is not a failure.	—
Pump is noisy.	—	Is the pump installed in the correct position?	Install the pump correctly by following the specified procedure.	8
		Is the "Preparing" indication on the operation panel lit?	Fast inflation is performed while the "Preparing" indication on the operation panel is lit or during the back raise/lower pressure relief operation so the operation sound becomes louder than normal operation. This is not a failure.	13
There is an abnormal odor.	—	Do you perform maintenance regularly?	See "1. Maintenance" and then perform maintenance.	22
Small flow air cells (SF cells) expanded in the max. inflate mode. The "Preparing" indication takes time to turn off in the max. inflate mode.	—	—	After the power turns on, the max. inflate mode first expands and contracts the SF cells to check the operation and then turns the "Preparing" indication off. This is not a failure.	—

## 6 TROUBLESHOOTING



- The error code is also displayed on the BED Navi.

### ■ Operation panel display when errors occur

There are two types of errors, minor errors and major errors.

#### [Minor errors]

The power lamp lights in orange and the error code is indicated as "UXX." The error indication is cleared when the state becomes any of the following:

- Error is resolved.
- The power plug is disconnected from and then reinserted into the outlet.

#### [Major errors]

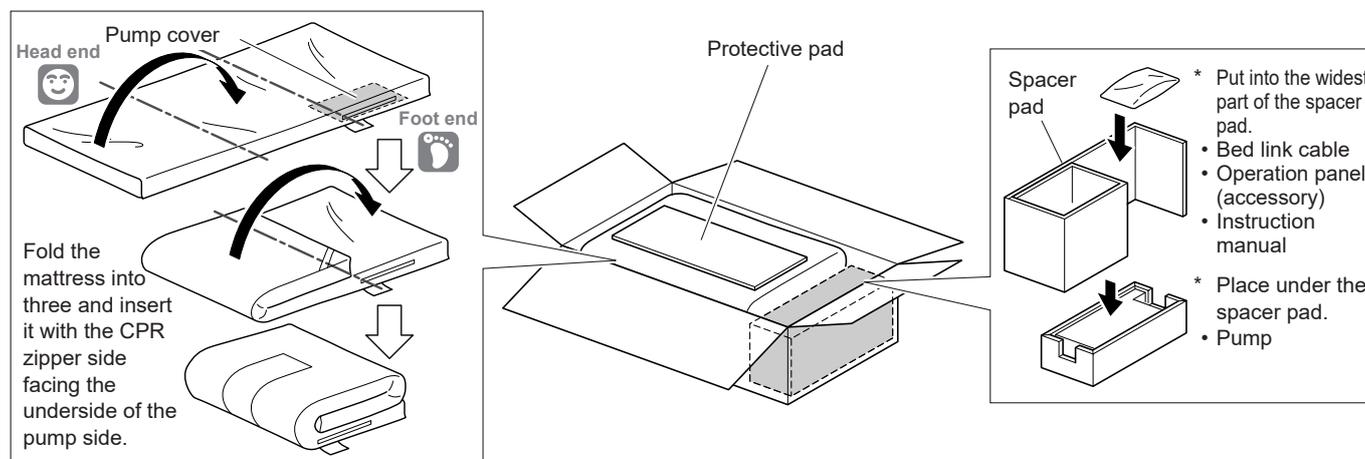
The power lamp flashes in orange and the error code is indicated as "HXX." A warning tone is output and the pump stops operating.

- \* Stop using the product and contact Paramount Bed (see page 36) or your distributor.
- \* The operation sound button flashes while a major error is indicated. The warning tone can be stopped by pressing the operation sound button.

## 7 LONG-TERM STORAGE AND TRANSPORTATION

### ■ How to pack the air mattress

- 1 Power the mattress off (see "How to shutdown" on page 14).
- 2 Disconnect power adapter set (sold separately), operation panel (accessory), bed link cable, and position sensor cable from the pump, and attach the cable connector caps.
- 3 Remove the pump from the mattress.
- 4 Put the pump, instruction manual, bed link cable, operation panel (accessory), and cable clips (accessory) into the pads and cardboard box in which they were packaged at the time of purchase as shown in the figure below.
- 5 Fold the mattress as shown in the figure below and then put it in the cardboard box.



### ■ Pack-away assist function (only when a separately sold operation panel used)

This function discharges the air in the air cells using the pump.

- 1 Insert the power plug into the outlet while pressing the [Max. inflate mode] button on the operation panel when the mattress and pump are connected. **PAI** appears on the status display screen of the operation panel, and the pack-away assist function operates.
- 2 When all of the air in the air cells is discharged, a beeping sound is output and operation stops. (Discharge time: 12 minutes)



### CAUTION

- Store the product within the specified storage temperature and humidity ranges. Failure to do so may cause mold generation or a failure.
- Do not place heavy objects on the cardboard box. Doing so may cause damage and deformation.
- Remove the pump from the mattress before storage. Failure to do so may cause damage and deformation.



- Do not store the cardboard box in a location subject to high temperatures and humidity, low temperatures, dryness, excessive dust, or direct sunlight.
  - \* For the storage environment, see "Specifications" (see p. 28).
  - \* The padding (air cells, blowing tubes, etc.) may be discolored but there will be no problem with product performance.
  - \* If you notice an odor (e.g., urethane smell), leave the air mattress in a shaded area exposed to a good breeze for one day or perform maintenance (see page 22). This will help reduce the odor.
- Keep the instruction manual in a safe place so that it does not become lost.

# 8 REFERENCE INFORMATION

## 1. Specifications

Product name		Alternating pressure air flotation mattress					
Model No.		KE-911AH	KE-913AH	KE-917AH	KE-918AW	KE-919AH	
Type of protection for electrical shock		Class I device					
Level of protection for electrical shock		Type BF applied part					
Protection code		IEC 60529 IP21					
Mattress	Size (cm) Width x Length x Thickness	91 x 191 x 17	83 x 191 x 17	83 x 200 x 17	86 x 200 x 17	91 x 200 x 17	
	Product weight (kg)	8.5	8.0	8.2	8.5	8.7	
	Materials	Top cover	Polyester 70%, polyurethane 30% (antibacterial, flame-resistant, waterproof, and moisture-permeable)				
		Glide sheet material	Polyester 100%				
		Top cushion	Polyurethane (flame-resistant)				
		Bottom cover	Polyester 90%, polyurethane 10% (antibacterial and flame-resistant)				
		Pump cover	Polyester 90%, polyurethane 10% (antibacterial, flame-resistant, and waterproof)				
		Sensor cover	Polyester 70%, polyurethane 30%				
		Bottom cushion/foot cushion	Polyurethane (flame-resistant)				
		Tube	PVC 100% (antibacterial and flame-resistant)				
		Air cell	Polyurethane 100% (antibacterial and flame-resistant)				
		Coupling	PC/PBT resin (flame-resistant)				
		Sensor case	PC/PBT resin (flame-resistant)				
		Sensor sheet	PET resin				
Pump		Product weight (kg)	3.4				
	Case materials	ABS resin (flame-resistant and chemical-resistant)					
Bed link cable	Product weight (kg)	0.1					
	Length (cm)	65					
	Materials	PVC resin					
Operation panel (accessory)	Product code	RC-2030W					
	Protection code	IEC 60529 IPx4					
	Size (cm) Width x Length x Thickness	5.6 x 5.6 x 17 (including hook)					
	Product weight (kg)	0.2					
	Cable length (cm)	200					
	Materials	Case	ASA resin				
		Hook	POM resin				
		Surface sheet	PC resin				
Cable		PVC resin					
Power adapter set (sold separately)	AC adapter	Product weight (kg)	0.3				
		Length (m)	4.5				
	Power cable	Product weight (kg)	0.4				
Operating environment conditions	Temperature/humidity/ Atmospheric pressure	0°C to 40°C / 30% to 85%RH / 620 hPa to 1060 hPa					
Storage environment conditions	Temperature/ humidity/ Atmospheric pressure	Mattress/Pump/Bed link cable	-10°C to 60°C / 0% to 85%RH / 620 hPa to 1060 hPa				
		Operation panel (accessory)	-10°C to 50°C / 30% to 90%RH / 620 hPa to 1060 hPa				
User's weight (kg)		20 to 180					
Power supply		DC port: 24 VDC, 1.65 A / bed link port: 30 VDC, 1.32 A / AC adapter port: 100-240 VAC, 50-60 Hz					
Service life		5 years (based on Paramount Bed data), excluding consumable items					

Essential performance: Adjust and maintain pressure in air cells

Frequently used functions: Alternating pressure and changing position function

### ■ Classification and Standards

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

- Safety standards applied : IEC 60601-1:2005+AMD1:2012+AMD2:2020  
: IEC 60601-1-2:2014+AMD1:2020

## 2. Suitable product

Suitable products may differ due to specification changes or other reasons. For the latest information or any queries, contact your distributor or directly contact Paramount Bed.

### ■ Bed

ALiUS, A6 Series (PA-H64** only), A5 Series, Qualitas Nx Series, Qualitas Plus Series, PA-90000 Series
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\* Pediatric beds are not suitable.

# 8 REFERENCE INFORMATION

## 3. Product symbol definitions

### Mattress

#### Quality label

Symbol	Description
	Refer to the instruction manual.
	Refer to the instruction manual.
	Do not damage with a sharp object.
	No fire (keep fire away).
	Do not transport the product while the pump is inside.
	Do not use the product while the top cover fastener or pump cover is open. Moisture, etc. entering inside the product from the open fastener or pump cover may cause a short circuit resulting in an electric shock or failure.
	Be careful about gaps where the head and neck could get caught.
	Take care not to fall due to rolling over a side-rail.
	Be careful about falling off or down while sitting on the side of the bed.
	CPR and operating procedure

#### Pump

Symbol	Description
	Coupling connection procedure
	Incorrect operation
	Correct operation
	Do not apply a strong impact to the pump.
	Do not sit on the pump.
	Do not place a knee on the pump.
	Do not kick the pump.
	Bed link cable port
	Position sensor port
	AC adapter port
	Operation panel port

Symbol	Description
	Refer to the instruction manual.
	Mark for restriction of the use of hazardous substances in electrical and electronic products in China

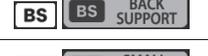
#### Bed link cable

Symbol	Description
	Do not pinch or pull the bed link cable.
	Bed link compatible
	Refer to the instruction manual.
	Mark for restriction of the use of hazardous substances in electrical and electronic products in China

#### Product ID label

Symbol	Description
	Model number
	Lot number
	Serial number
	Manufacturer * It may be called "Legal Manufacturer" or "Brand Owner" etc.
	<ul style="list-style-type: none"> <li>Country of manufacture (Made in Japan)</li> <li>Manufacturing site</li> <li>Date of manufacture (YYYY-MM-DD)</li> </ul>
	Refer to the instruction manual.
	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.
	Indicates products covered by the EU directive on waste electrical and electronic equipment (WEEE).
	Type BF applied part
	Indoor use
	International protection code
	DC
	CE mark
	Authorised representative in the European community
	This product is a medical device in Europe, and may be a medical device in some countries and regions depending on their regulations.

### DS BED Navi/ BED Navi

Symbol	Description
	Press the button to display the air mattress settings screen of the BED Navi.
	Automatic softness control
	Manual softness control
	Dehumidify function
	Alternating pressure function
	Back support function
	Small flow function
	Auto max. inflate mode setting
	SF sensor off mode setting
	Max. inflate mode
	Auto max. inflate mode
	This is displayed when the softness is set to more than 18.
	SF cell status display

Symbol	Description
	Date of manufacture
	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.
	Setting
	User's weight
	Refer to the instruction manual.

### Operation panel (accessory)

Symbol	Description
	Max. inflate mode and auto max. inflate mode
	Bed link function
	Back support function
	Alternating pressure function
	Operation sound function
	Dehumidify function
	Softness is more than 18.
	Softness display
	Remaining time (in minutes) for max. inflate mode
	Automatic softness control
	Small flow function
	Preparing
	SF cell status display

Symbol	Description
	This product is an accessory for medical devices and such accessory is required to be labeled as "Medical Device" under medical device regulations in Europe.
	International protection code
	Country of manufacture (Made in Japan)
	Indicates products covered by the EU directive on waste electrical and electronic equipment (WEEE).
	Manufacturer * It may be called "Legal Manufacturer" or "Brand Owner" etc.
	CE mark
	Authorised representative in the European community
	Model number
	Lot number
	Serial number

## 8 REFERENCE INFORMATION

### Power adapter set (sold separately)

Symbol	Description
	If an excessive force is applied to the power cable, it may be damaged, resulting in electric shock or fire, or become disconnected, resulting in the inability to perform operation correctly.
	If the AC adapter gets wet, an electric shock or fire may occur.
	Request repair or inspection of a damaged power cable.
	Do not place a heavy object on the power cable, or run over it with the bed.
	Be careful not to get the power cable caught in the movable parts and other parts of the bed.
	Be careful not to trip over the power cable.
	Do not bring fire, thermal appliance, etc. near the power cable.
	Refer to the instruction manual.

## 4. Technical explanation regarding EMD (Electromagnetic Disturbance)

The bed requires special safety precautions regarding EMD (Electromagnetic Disturbance).

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 disturbance.” Use of the bed in an unintended environment may cause the problems below.

- The function for supporting the patient’s weight may not work.
- The emergency head down function may not work.

 <b>WARNING</b>	<ul style="list-style-type: none"><li>● <b>If you use accessories, transducers, or cables other than those specified, except for transducers and cables sold by the bed manufacturer, as replacement parts for internal components, the emissions of the bed may increase or its immunity may decrease.</b></li><li>● <b>Use portable RF communication devices (including peripheral devices such as antenna cables and external antennas) at a distance of at least 30 cm (12 in.) from all parts of the bed. Use of RF communication devices within a distance of 30 cm (12 in.) may cause a decline in the performance of the bed.</b></li><li>● <b>The bed cannot be used adjacent to other devices or in a stacked state. If you must use the bed adjacent to other devices or in a stacked state, make sure that the bed operates properly in the location where it is used.</b></li></ul>
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The bed is intended for use in physician’s offices, clinics, exclusive medical facilities, independent surgery centers, multiple treatment facilities, and hospitals (except near high-frequency surgical equipment and outside RF shielded rooms for magnetic resonance images). The customer or user of the bed must use the bed in an environment specified here.

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

No.	Cable	Maximum length [m]	Remark
1	Bed link cable	0.65	Not shielded
2	Operation panel cable	2.0	Not shielded
3	AC power cable	4.5	Not shielded

## 8 REFERENCE INFORMATION

Guidance and manufacturer's declaration — electromagnetic emission		
The bed is intended for use in an electromagnetic environment specified below. The customer or the user of the bed must use this bed in an environment specified below.		
Emissions test	Compliance	Electromagnetic environment — guidance
RF emissions CISPR 11	Group 1	The bed uses RF energy only for its internal functions. Therefore, its RF emission level is low and causes almost no interference with nearby electronic equipment.
RF emissions CISPR 11	Class A	Use the bed in a power supply network of a professional environment, such as a hospital or other medical facility.
Harmonic emissions IEC 61000-3-2	N/A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	N/A	

Guidance and manufacturer's declaration — electromagnetic immunity		
The bed is intended for use in a dedicated health care facility environment. The customer or user of the bed must use this bed in an environment specified here.		
Immunity test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact discharge ±2 kV, ±4 kV, ±8 kV, ±15 kV air discharge	±8 kV contact discharge ±2 kV, ±4 kV, ±8 kV, ±15 kV air discharge
Electrical fast transient / burst IEC 61000-4-4	±2 kV power supply lines	±2 kV power supply lines
Surge IEC 61000-4-5	±0.5 kV and ±1 kV between lines ±0.5 kV, ±1 kV, and ±2 kV between lines and grounds	±0.5 kV and ±1 kV between lines ±0.5 kV, ±1 kV, and ±2 kV between lines and grounds
Voltage dip IEC 61000-4-11	0% $U_T$ for 0.5 cycle 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°	0% $U_T$ for 0.5 cycle 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°
	0% $U_T$ for 1 cycle and 70% $U_T$ for 25/30 cycles Single-phase: 0°	0% $U_T$ for 1 cycle and 70% $U_T$ for 25/30 cycles Single-phase: 0°
Short time power failure IEC 61000-4-11	0% $U_T$ for 250/300 cycle	0% $U_T$ for 250/300 cycle
Rated power frequency magnetic field IEC 61000-4-8	30 A/m	30 A/m
Proximity Magnetic Fields IEC 61000-4-39	134.2 kHz, 50% Pulse at 2.1 kHz, 65 A/m 13.56 MHz, 50% Pulse at 50 kHz, 7.5 A/m	134.2 kHz, 50% Pulse at 2.1 kHz, 65 A/m 13.56 MHz, 50% Pulse at 50 kHz, 7.5 A/m
Note: $U_T$ is the AC power supply voltage prior to application of the test level.		

Guidance and manufacturer's declaration — electromagnetic immunity

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

Immunity test	IEC 60601-1-2 Test level	Compliance level	Electromagnetic environment — guidance
Conductive RF IEC 61000-4-6	<ul style="list-style-type: none"> <li>• 3V</li> <li>0.15 MHz to 80 MHz</li> <li>• 6V</li> <li>ISM band between 0.15 MHz and 80 MHz</li> <li>80% amplitude modulation (1 kHz)</li> </ul>	<ul style="list-style-type: none"> <li>• 3V</li> <li>0.15 MHz to 80 MHz</li> <li>• 6V</li> <li>ISM band between 0.15 MHz and 80 MHz</li> <li>80% amplitude modulation (1 kHz)</li> </ul>	Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, must be less than the compliance level in each frequency range.
Radioactive RF electromagnetic field IEC 61000-4-3	<ul style="list-style-type: none"> <li>3 V/m</li> <li>80 MHz to 2.7 GHz</li> <li>80% amplitude modulation (1 kHz)</li> </ul>	<ul style="list-style-type: none"> <li>3 V/m</li> <li>80 MHz to 2.7 GHz</li> <li>80% amplitude modulation (1 kHz)</li> </ul>	Interference may occur in the vicinity of equipment marked with the following symbol:  

- 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 the bed is used exceeds the applicable RF compliance level above, be sure to monitor that the bed operates properly. If an abnormal operation is seen, take additional measures as needed, such as changing the position or orientation 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.

## 8 REFERENCE INFORMATION

Guidance and manufacturer's declaration — electromagnetic immunity							
The bed is supposed 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	Max. output (W)	Distance (m)
Near electromagnetic field from RF wireless communication equipment IEC 61000-4-3	27 V/m 385 MHz	27 V/m	380 to 390	TETRA400	Pulse modulation 18 Hz	1.8	0.3
	28 V/m 450 MHz	28 V/m	430 to 470	GMRS460 FRS460	FM ±5 kHz deviation 1 kHz sine	2	0.3
	9 V/m 710 MHz	9 V/m	704 to 787	LTE bandwidth 13, 17	Pulse modulation 217 Hz	0.2	0.3
	9 V/m 745 MHz						
	9 V/m 780 MHz						
	28 V/m 810 MHz	28 V/m	800 to 960	GSM800/900 TETRA800, iDen820, CDMA850, LTE bandwidth 5	Pulse modulation 18 Hz	2	0.3
	28 V/m 870 MHz						
	28 V/m 930 MHz						
	28 V/m 1720 MHz	28 V/m	1700 to 1990	GSM1800; CDMA1900; GSM1900; DECT; LTE bandwidth 1, 3, 4 25; UMTS	Pulse modulation 217 Hz	2	0.3
	28 V/m 1845 MHz						
	28 V/m 1970 MHz						
	28 V/m 2450 MHz	28 V/m	2400 to 2570	Bluetooth, WLAN, 802.11 b/g/n, FRID2450, LTE bandwidth 7	Pulse modulation 217 Hz	2	0.3
	9 V/m 5240 MHz	9 V/m	5100 to 5800	WLAN 802.11a/n	Pulse modulation 217 Hz	0.2	0.3
	9 V/m 5500 MHz						
	9 V/m 5785 MHz						

# 9 AFTER-SALES SERVICE

## 1. When requesting repairs

First check the items described in “6 TROUBLESHOOTING” on pages 25 to 27 in the instruction manual. If the problem persists, contact Paramount Bed (see below).

### ■Details necessary when requesting repair

- Product name, product number, product ID label number (see “2 PART NAMES” on page 4)
- Date of purchase
- Details of the fault or problem (please provide as much detail as possible)
- Your name, organization, address, and phone number

## 2. Minimum stock availability period

Paramount Bed keeps consumable parts (necessary to maintain performance of the product) in stock for at least 6 years after the discontinuation of production.

## 3. Questions regarding after-sales service

Contact Paramount Bed (see below).

## Disposal

When disposing of the product, observe the local rules and regulations.

## Contact Information

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

[Location in Japan (Manufacturer)]	[Location in Japan (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 CO., LTD. CHIBA FACTORY 2078, Shirahata, Sammu-shi, Chiba, 289-1306, Japan

For other contact information, please visit the website.  
Website: <https://www.paramount.co.jp/english/>









PARAMOUNT BED