



**Dual Low Profile**  
User Manual

# Pressure Relieving Alternating Air Mattress Overlay System

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Thank you for purchasing this Shelden Healthcare pressure relieving mattress system.

**PLEASE READ THIS USER MANUAL CAREFULLY BEFORE SETTING UP AND USING THE DEVICE.**

Pay special attention to the warnings and other safety information. Use genuine Shelden Healthcare components to maintain the products optimal performance. If you do not fully understand all the instructions, safety precautions, and warnings, do not use this device. In case you have questions, please contact Shelden Healthcare on **01788 833 989**.



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1.0 Indications



Attention! Please read enclosed document thoroughly



Double insulated (Class II)



Declaration of Conformity to Medical Device Directive



International Electronics Approval



Do not immerse power unit in liquid or spray liquids directly on power unit



Type B Equipment

Indications

This air alternating mattress system is designed for patients who are at high risk of pressure of ulcers or require treatment for existing pressure ulcers. This device is intended to treat and prevent pressure ulcers by facilitating blood circulation, reactive hyperaemia and decreasing interface pressures. Always consult a physician or health professional before using this mattress system. This pressure relieving mattress system is suitable for patients assessed to be high risk and up to catagory 3 pressure ulcers.

Contraindications

Certain patient conditions are not suitable for using this type of device. Contraindications such as unstable fractures of vertebrae and conditions of

the vertebrae. Always consult a physician or health professional before using this device.

The use of this system does not replace the regular repositioning, monitoring, and nursing of the patient.

2.0 Safety Precautions

- (1) To ensure proper operation, please inspect and verify all parts are setup properly and anchor securely. Do not place anything on top of the power unit. Make sure power cord is underneath bed frame and free from hazard.

(2) It is recommended to limit bed linens to a single layer in order to allow the moisture escape efficiently through the coverlet. Only “breathable” incontinent pads are recommended for use with this mattress system.

(3) Avoid using this device near open flames, lighters, or cigarettes. Flammability hazard exists. This device draws air from the surrounding. Thus, cigarette smoking may damage internal component.

(4) This system should disinfect thoroughly between patients to avoid cross contamination.

(5) Verify patient weight does not exceed bed frame, bed rails, and this mattress system’s weight capacity

3.0 Warnings

- (1) Use this mattress with proper side rails to ensure

the gap between the side rail and top of the mattress is small enough to prevent patient from getting his or her head or neck into the gap. Fail to do so could result in serious patient injury.

- (2) DO NOT disassemble the power unit if you are not a qualified technician. Please contact your local distributor for all service.

(3) This product is NOT AP/APG protected.

(4) Re-position the patient once awhile is still necessary when using this mattress.

(5) Incorrect battery replacement may result in risk of explosion. Replace only with same or equivalent battery type recommended by the manufacturer.

(6) If the equipment needs maintenance, contact Sheldon Healthcare. as soon as possible. For equipment that is no longer functional, make sure to follow national, state, and/or facility requirements for disposal of the unit.

7) The use of this system does not replace the regular repositioning, monitoring, and nursing of the patient.

(8) Operating, transportation, and storage conditions:

Temperature: 5°C - 45°C

Humidity: 15% - 60%

**CAUTION:** ENSURE THAT THERE ARE NO PROTRUDING OBJECTS, SHARP POINTS OR BED SPRINGS UNDER THE MATTRESS AS THESE COULD PUNCTURE THE AIR CELLS.

4.0 System Package

- Power Unit Package

  - \* Power unit x 1
  - \* Power cord x 1
  - \* Operation manual x 1

Mattress Package

  - \* Mattress replacement unit with coverlet x 1

\*The air mattress operates at a max of 100O F

5.0 Features

Control Panel Features

See Figure 5a on page 5.

Power / Mute

Press power/ mute button to turn on the power unit and the green LED will light. The LED will change to red if abnormal power outage occurs.

weight (kg)

Simply press weight (kg) button to adjust the patient weight from 30 kg to 180 kg according to each individual. The scale is only an approximation. Please adjust the weight setting if the mattress is too soft or firm to suit each patient.

Caregivers should always perform a hand check by placing their hands underneath patient’s pelvis area to check if there is sufficient air support to ensure the patient is not bottoming out.

Dynamic/Static

Press Mode to change between dynamic and static mode. Dynamic mode will have an alternating cycle time of 10 minutes.minutes and static mode to meet a variety of requirements.



Control Panel Features (Figure 5a)

#### alert LED

This alert notifies medical staff the mattress has insufficient pressure. Audible alarm will sound for 15 seconds at each cycle and the indicator will stay on until the problem has been solved.

#### Right Side Panel Features

See Figure 5b

#### Rocker Switch (1)

Power unit's main power switch.

#### Couplers (2)

Quick release female couplers are used to secure mattress air hoses to power unit.

#### Power Receptacle (3)

Insert power cord firmly into receptacle.

#### Rear Panel Features

See Figure 5c

#### Convenient Handle (1)

It provides additional gripping surface for user to carry the power unit.

#### Hanging Hooks (2)

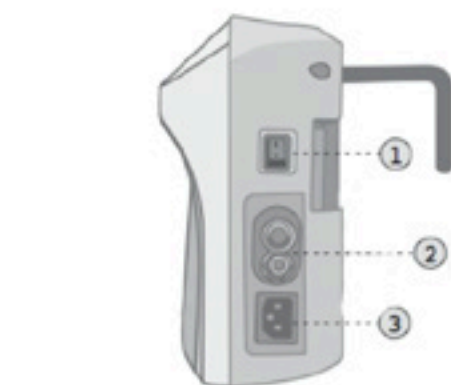
Hanging hooks are designed to hang the power unit on almost any foot board.

#### Fuse (3)

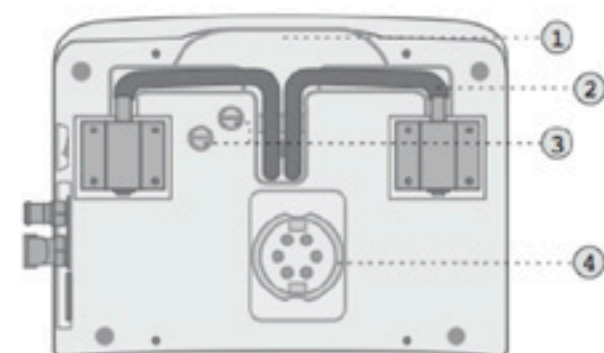
Fuse holder can be opened for maintenance.

#### Air Filter and Filter Cap (4)

Carilex recommends that the filter to be clean or replace once a month to ensure optimal performance of the power unit.



Side Panel Features (Figure 5b)



#### pressure monitoring LED

Power unit features an integrated pressure sensor which can monitor the mattress' internal pressure 24 hour to achieve optimal internal pressure and to ensure maximum pressure relief. LED indicates the system is monitoring the mattress' internal pressure while the compressor is inflating.

## 6.0 Mattress and Power Unit

### Installations

(1) Place Shelden Healthcare mattress overlay on top of a 1" or 2" foam mattress with the logo at foot end. Secure the mattress using the elastic straps at four corners. Please verify all bed functions are working properly without interference before proceeding to the next step.

(2) Secure the power unit onto the foot board using hanging hooks.

(3) Check if the mattress' CPR latch is firmly inserted and the CPR tag is in place.

(4) Firmly connect the mattress' air hose couplings to the quick release couplers on the power unit's air outlet.

(5) Plug the power unit into a wall outlet and turn on the main power rocker switch on the right side panel.

(6) Press power/ mute button to inflate the mattress system. Please wait for approx. 30 seconds until the power unit is ready before making any program adjustment.

(7) Wait for approx. 15 minutes for the mattress to inflate fully.

## 7.0 Program Settings

(1) Center the patient on the mattress. Adjust the mattress' internal pressure according to the patient weight by using the weight (kg) button on

the control panel of the power unit. If the patient feels the mattress is too soft or firm, increases or decreases the mattress' internal pressure one increment at a time and wait for the system to stabilize before making another change until a comfortable state is achieved.

(2) Caregivers should always perform a hand check by placing their hands underneath patient's pelvis area to check if there is sufficient air support to ensure the patient is not bottoming out.

(3) **IMPORTANT:** TUCKING THE SHEET IN TIGHTLY REDUCES THE EFFECTIVENESS OF THE SYSTEM.

## 8.0 Patient Transfer and Transport

### Transfer

It is recommended to have the mattress system at maximum weight setting during transfer. Make sure the bed is secured before proceeding.

### Transport

If a transport occasion comes up, two options are available:

(1) Detach the mattress' air hose couplings from the power unit's quick release couplers and connect the two air hose couplings together to retain air in the mattress and the mattress will stay inflated for approx. 2 hours. (2) Unplug the power unit's power cord from the wall outlet and the mattress should stay inflated for approx. 40~50 minutes. To resume normal operation, please follow 7.0 Program Setting.

9.0 Emergency CPR Deflation

In the case of emergency, pull hard to remove the mattress’ CPR latch for emergency deflation and turn off the power unit by pressing the power/ mute button on the control panel at the same time. The air will discharge from the mattress with patient’s own weight. To resume normal operation, simply re- insert CPR latch securely, press the power/ mute button again and reset the patient weight.

10.0 Cleaning Instruction

Air mattress and power unit must be cleaned thoroughly between patients to avoid cross contamination. The following is a suggested guideline, but local infection control policies should be followed as well.

Mattress cleaning with hand hot water with a PH neutral detergent. Decontamination by wiping with a Sodium Hypochlorite solution of 1000ppm in line with HSG9518 and BHTA guidelines. Please ensure air mattress and cover are completely dry before patient use.

Machine wash warm water at maximum 71°C. Dry mattress cover on a cool tumble setting.

Do not iron.

11.0 Routine Maintenance

Remove air filter from the rear panel of the power unit by opening up the filter cap to clean or replace the air filter. Inspect the filter for dirt or dust and clean it with mild soap and water. Reinsert the dried air filter after cleaning and ensure the cap is secure. Replace with genuine air filter once a year is recommended and compressor every two year is strongly suggested to prolong system lifetime.

Only disinfected and dry systems are to be stored. Disconnect the air hoses from the power unit. Roll up the mattress starting from head end and working down toward the foot end. Use the straps to fix it.

12.0 Troubleshooting

Problem	Inspection Procedure	Possible Solutions
1. Power unit does not function.	Check if power cord is firmly plugged into wall outlet.	Secure power cord into wall outlet.
	Check if power switch is in ON position.	Turn power switch to ON position.
	Check if power surge shuts down power unit.	A power surge may overload the circuitry temporarily. Turn the unit off and check the fuse for damage. Turn the unit ON again with normal procedure.
	Make sure there is no power failure.	
	Power unit does not respond to possible solutions.	Please contact Shelden Healthcare on 01788 833 989.
2. Low pressure alert does not go out in 30 sec. after systems start.	Possible control failure.	Please contact Shelden Healthcare on 01788 833 989.
3. alert LED is lit during operation.	Check if there is leakage in air tubes* or air cells.	Please contact Shelden Healthcare on 01788 833 989.
4. Power unit is working, but mattress replacement is not inflating  and/or  Bottoming out is occurring and/or  Patient leaves a deep indentation at the contact area which does not return back to its original shape.	Verify that CPR latch is properly inserted.	Insert CPR latch securely.
	Check if mattress’ air hose couplers are properly connected to power unit’s quick release couplers.	Secure air hose couplers firmly into place.
	Verify that patient weight setting is correct.	Increase or decrease weight setting until appropriate pressure is reached.
	Inspect air filter for dust or dirt.	Clean or replace air filter.
	Lift mattress coverlet up to check if air cells are connected correctly.	Make sure all air cells are properly linked to air supply.
	Lift mattress coverlet up to check if air tubes are kinked or obstructed.	Check and adjust air tubes’ positions.
	Check if air cells are cut or cracked.	Please contact Shelden Healthcare on 01788 833 989.
5. Alternating or static setting is not available.	Possible control failure.	Please contact Shelden Healthcare on 01788 833 989.
6. Patient is not getting pressure relief due to system failure (reddening of skin).		Contact your physician and/or nursing service immediately.

\*Air tube is referring to the mean of directing air flow from the power unit to each individual air cell.



13.0 Returns for Service

This device is not self-serviceable. Service and repair must be performed by an authorized technician or representative. All returned device must be cleaned and disinfected prior to shipping. Unsanitary or soiled systems will be returned without servicing.

14.0 Warranty

Shelden Healthcare warrants the product to be free from defects from the date of purchase. Please inspect all accessories when you purchase our product. If there is any damage or missing accessories when you receive the product, please ask for a replacement from your local distributor within three days of purchase.

The warranty periods for Shelden Healthcare products are according to the regulations in your country, the minimum period is 1 year from date of purchase for the power unit and 1 year for the mattress and the coverlet. The warranty coverage of any Shelden Healthcare product is contingent up on its purchase from an authorized dealer. Warranty for any product in the Shelden Healthcare product line will be honored by the official distributor in your country.

Warranty coverage will not be extended to any product on which the production lot number has been removed or defaced, on which repair has been attempted by any person or agency not authorized by Shelden Healthcare or if in the sole opinion of Shelden Healthcare that the system shows evidence of tampering, abnormal or unreasonable abuse, negligence, accident or operation without regard for the restrictions specified in the instructions which accompany

the system. This warranty does not cover normal maintenance such as cleaning, adjustment, lubrication, and updating of equipment or parts. If the damage is result from improper operation, a reasonable service fee and part cost will be charged.

The warranty stated above is the only warranty made and is in lieu of all other warranties whether expressed or implied, including any warranty of merchantability or fitness for a particular reason. Shelden Healthcare will not be liable for consequential or incidental damages or any kind.

15.0 Product Specifications

System Number S2203-0031/S2203-0041

Mattress Dimension (MSR207)

Standard: 200 x 90 x 13 cm

Narrow: 200 x 82 x 13 cm

Number of Air Cells

20 Air Cells for 200 x 90 x 13 cm mattress

21 Air Cells for 200 x 82 x 13 cm mattress

Integrated Foam

2"

Power Control Unit Dimension (SR363)

29.5 x 22.5 x 12.0 cm

Material

Power Unit ABS fire retardant UL

Mattress Cell

Power Unit – ABS fire retardant UL

Mattress Cell – 100 % nylon with TPU lamination

Cover – Quilted nylontaffeta backing

Power Input

AC220 – 240V / 50Hz

Power Consumption

Normal Operation: Max 15W

Power Control Unit Weight

2.5 kg

Power Cord

H05VV-F 3x1.00mm2

Fuse Rating

T1A/250V

Operating & Transportation & Storage Conditions

Temperature:5°C~40°C Humidity:15%~60%

Atmospheric Pressure:700~1060hPA

This system is not AP/APG Protected. Continuous operation.

Electrical Classification

Class 1 Type B.

IPX0, do not immerse power unit in any liquid or

spray any liquids directly on the power unit.

Agency Approval

EN60601 – 1, EN60601 – 1 – 2, Complies with Cal. Tech. Bulletin #117

Electromagnetic Compatibility

EN60601 – 1 – 2: 2006

Maximum Weight Capacity

147.55 kg

Shelden Healthcare reserves the right to change prices or design parameters and specifications without incurring any liability in connection with such modifications.

## Shelden Healthcare Ltd

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