



AMBIENCE
PA6970 Low Air Loss Mattress Replacement System



User Manual

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IMPORTANT SAFEGUARDS

READ ALL INSTRUCTIONS BEFORE USING

DANGER - To reduce risk of electrocution

1. Always unplug this product immediately after using.
2. Do not use while bathing
3. Do not place or store product where it can fall or be pulled onto a tub or sink.
4. Do not place in or drop into water or other liquid.
5. Do not reach for a product that has fallen into water. Unplug immediately.

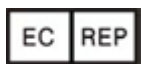
WARNING – To reduce risk of burns, electrocution, fire or injury to persons:

1. This product should never be left unattended when plugged in.
2. Close supervision is necessary when this product is used or near children.
3. Use this product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
4. Never operate this product if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropping in water, return the product to a service centre for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never block the air opening of this product or place it in a soft surface, such as bed or couch, where their openings may be blocked. Keep the air opening free of lint, hair and other similar particles.
7. Never drop or insert any object into any opening or hose.
8. Connect this product to a properly grounded outlet only. See grounding instructions.

NOTE, CAUTION AND WARNING STATEMENTS

Note	-	Indicate some tips
Caution	-	Indicates correct operating or maintenance procedures in order to prevent damage to or destruction of the equipment or other property
Warning	-	Calls attention to a potential danger that requires correct procedures or practices in order to prevent personal injury.

SYMBOLS



Authorised representative in the European community



“BF” symbol indicates this product is according to the degree of protecting against electric shock for type BF equipment.



Attention, should read the instructions.



Grounding terminal (for 230V system)
Medical device Class I Equipment



Disposal of Electrical & Electronic Equipment (WEEE):
This product should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. For more detailed information about recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.



Manufacturer

SAVE THIS MANUAL FOR REFERENCE

Fire Warning

This active mattress system complies with all UK fire safety standards.

In order to reduce the risk of fire:

DO NOT SMOKE - Smoking will contaminate the product and is NOT permitted around or on the mattress system. This is a common cause of fatal fires. This system uses room air for circulation through the mattress. A cigarette could burn a hole in the mattress surface and cause damage to the mattress system. Patient clothing, bed sheets and other items, may be combustible and could catch fire. Failure to observe this warning could result in a severe fire, property damage, physical injury or death.

DO NOT - use candles on or around the mattress system

DO NOT - use electric blankets with this mattress system

DO - keep hot equipment off the mattress surface. E.g. Hair dryer, curling tong, etc.

DO - keep matches and lighters away from children

DO - keep heaters away from the mattress system

Follow all manufacturer's instructions and warning.

In case of fire, exit and call 999.

1. Introduction

This manual should be used for initial setup of the system and for reference purposes.

1.1 General Information

The Ambience Low Air Loss System uses the most advanced technologies to deliver optimum pressure relief and comfort through whisper-quiet operation.

The Ambience Low Air Loss System has been independently tested and successfully approved to the following standards:



EN 60601-1 / UL 60601-1

EN 60601-1-1-2

IEC 61000-4-2

IEC 61000-4-3

IEC 61000-4-4

IEC 61000-4-5

IEC 61000-4-6

IEC 61000-4-8

IEC 61000-4-11

1.2 Intended Use

The Ambience Low Air Loss replacement system is suitable for very high risk patients. It is a non-alternating mattress designed with very low average pressure dispersion.



NOTE:

Equipment not suitable for use in the presence of a flammable anaesthetic with air oxygen or nitrous oxide.

2. Product Description

True Low Air Loss therapy is achieved through a high volume airflow blower and numerous air loss holes in the mattress. It also provides excellent ventilation and keeps patients dry from humidity. The mattress consists of air bladders which sit on top of a layer of CMHR foam to provide maximum comfort for patients. The foam also functions as the emergency pressure dispersion in case of a power failure. The air tube connector also operates as a CPR facility and can deflate the mattress to aid emergency situations.

3. Installation

3.1 Unpacking

The pump unit and mattress are packaged in separate boxes to secure the contents inside. When unpacking the boxes to remove the pump unit and mattress, check for any damage which may have occurred during shipping. Please report any damages to Park House Healthcare and remove the system from use.

3.2 Setting Up

1. Place the mattress on top of the bed frame. Making sure the hose at the foot end of the bed. The mattress can be secured firmly by fixing the straps to the moving part of the bed.



NOTE: Please cover the mattress with a cotton sheet to avoid direct skin contact and for patients comfort.

2. Hang the pump at the foot end of the bed; adjust the hanger to secure the pump against the foot board.
3. Connect the air tube connector from the mattress to the pump. Make sure the mattress is in the correct position. Rotate the connector clockwise to the lock position. When a “click” is felt / heard, the connector is secure.



NOTE: Check and ensure the air tube is not kinked or tucked under mattress.



NOTE: Ensure the CPR connector is sealed completely.

4. Connect and secure the automatic fowler boost adaptor on the side of the pump. The sensor pad must be snapped into the designated location inside the bottom of the mattress foam pocket



NOTE: Use the Velcro strips to fasten the cable of the fowler boost sensor pad to prevent trips.

5. Plug into mains electrical outlet.



NOTE: Make sure the pump unit is suitable for the local voltage.



NOTE: The Ambience pump can only be used with the Ambience mattress. Do not use it for any other mattress.

6. Then turn the main power switch ON. The power switch is located on the right side panel of the pump unit.

After Installation, any extra wire of power cord should be neatly arranged to avoid any trips. The equipment should be placed in a position where users have complete access.

4. Operation



NOTE: Always read the operating instructions before use.

4.1 Function Description

Power

Two conditions:

1. To turn on the control unit. The mattress will take a few minutes to inflate. The default setting is at comfort range level 6 for the quickest inflation time. (The system will automatically go into “Max Firm” mode for a few minutes of inflation)
2. The mattress is equipped with differential zone features; therefore the centre of the mattress will inflate quicker than the head or foot sections.

Audible and Visual Alarm

When the following situation occurred, flashing orange LED will illuminate along with the audible alarm:

1. CPR is performed or the Quick Connector is on Disconnect position.
2. POWER FAILURE: Electrical shortage condition or power cord is disconnected without turning off the pump first (See troubleshooting).
3. LOW PRESSURE: Abnormal low pressure occurring in body section (see troubleshooting).

Alarm Mute

Enables and disables the audible alarm. Press this button to mute the audible alarm. The alarm will sound again after 3 minutes if the problem has not been resolved. The alarm will not sound once the Alarm Mute button has been pressed during a power failure

Panel Lock

Locks the control panel to prevent unauthorised setting changes. To unlock the panel, press and the button for 3 seconds.

Max Firm

Ensure pump reaches its maximum operating pressure.

Fowler Boost

Provides additional support for the patient, whilst in the semi recumbent positions.

4.2 CPR

When CPR needs to be performed, rotate the Quick Connector anti clockwise to the CPR position to release the air.

4.3 Comfort Range Set Up

Users can adjust the pressure of air mattress by adjusting the comfort range from level 1 to 10. Please consult your physician for a suitable setting.



NOTE: Check that suitable comfort range (or pressure setting) is selected by sliding one hand between the air cell and the patients' sacrum. You should be able to feel the minimum contact.

4.4 Low Pressure and Alarm Functions

If an abnormal low pressure is detected, the Low Pressure Indicator (flashing orange LED) will illuminate and the alarm will make an intermittent sound. Check if all the connections are correctly installed and secure as per installation instructions in this manual. This will continue until the low pressure fault is resolved, the Low Pressure Indicator will flash and the alarm will sound when the air pressure is below normal (preset pressure). To mute the alarm, simply press the alarm mute button, it will be silent for 3 minutes but the Low Pressure Indicator will remain flashing. After 3 minutes, the alarm will sound again if the pressure has not returned to normal.

4.5 Power Failure Alarm

In the event of a power failure during normal use, the power indicator (orange LED) on the control panel will light up and the alarm will make a constant sound. The alarm will sound until the backup battery is low or it has been turned off by manual operation.

To mute the alarm and deactivate the LED simply press the alarm mute button.

Once power failure is resolved, the pump will start in Standby status. It is recommended to reset the pump unit by switching it off and on.

5. Cleaning

The following guidelines are suggested by Park House Healthcare as being suitable infection control procedures. Further information is available upon request.

5.1 Pump Unit

General cleaning may be affected by using a cloth dampened with a mild detergent and water solution. This approach may be followed either by wiping with a sodium hypochlorite solution to a dilution of 1000 ppm or by using an alcoholic wipe.

Do not use hyper carbonate or phenol based cleaning solutions.
Do not use any abrasive compounds or cleaning pads.

5.2 Mattress

General Cleaning

During general use the mattress and tube set may be cleaned using a neutral detergent solution. Using a single use wipe, clean the mattress cover and/or tube set with a solution of neutral detergent and hand hot water. Rinse thoroughly with clean water and a damp single use wipe.

NOTE: The top, bottom and all four sides of the cover and tube set, including under the zip flaps **MUST** be cleaned.

Make sure the cover and tube set are completely dried before refitting the cover.

Disinfecting the mattress

If the cover and/or tube set are heavily soiled or have been exposed to bodily fluids such as blood, it will require thorough cleaning procedure:

Wipe the cover and/or tube set using a single use wipe and a 0.1% Chlorine Solution (1,000ppm) and cold water. If required a 1% Chlorine Solution (10,000ppm) and cold water can be used. Rinse thoroughly with clean water and a damp single use wipe. Make sure the cover and tube set are completely dried before refitting the cover.

Surfaces must be protected during use and rinsed and thoroughly dried after application of a disinfectant. Frequent or prolonged exposure to higher concentration disinfectant solutions may prematurely age the fabric cover of mattresses.

Laundering

Before laundering mattress covers should be completely removed. Where required mattress covers and tube sets can be laundered as follows:

Pre wash 80°C + 15 minutes

Main wash 80°C + 15 minutes

This should be followed by a cold rinse and extraction.

Drying

Mattress covers and tube sets should be hung from a line or bar and drip dried in a clean indoor environment. Mattress covers can be tumble dried on a low heat setting for 90 minutes. Drying temperature must not exceed 40°C. **Exceeding this temperature can cause significant damage to the mattress cover.** Covers must be completely dried before refitting the tube set.

During cleaning procedures suitable protective clothing should be worn. Ensure that mains power supply to the pump has been disconnected prior to cleaning.

6. Storage

1. Disconnect the automatic fowler boost adaptor on the side of the pump unit.
2. Rotate the Quick Connector to the "Disconnect" position and pull up the Quick Connector.
3. Lay the mattress out flat and roll from the head end towards the foot end.
4. Foot-end strap can then be secured around the rolled mattress to prevent unrolling.
5. Wrap the power cord around the pump bumper on the back of the pump.



CAUTION:

When the pump is vacuuming air, the air temperature is hot. Do not block the air outlet.



NOTE:

Do not fold, crease or stack the mattresses.

7. Maintenance

7.1 General

1. Check the main power cord and plug for any abrasion or excessive wear.
2. Check the mattress cover for signs of wear and damage. Ensure the mattress and tubes are connected correctly.
3. Check the air tube connections for any damage.
4. Check all AV mounts for signs of wear and tear.
5. Report any problems or malfunctions to Park House Healthcare immediately.

7.2 Air Filter Replacement

The air filter should be checked and dusted regularly once per month.

1. Two foam type filters are used. Both are located on the bottom of the pump.
2. The filter is reusable and can be washed gently with a mild detergent and water. Ensure it is **fully dried before using**.
3. We suggest replacing the air filter regularly if the environment is polluted, this will help to improve the airflow. Spare filters are available from Park House Healthcare.

7.3 Fuse Replacement

Amp (rear of pump)

1. Disconnect the plug from the mains power before replacing a fuse.
2. Remove the cover of the fuse holder using a Terminal screwdriver.
3. Remove the faulty fuse from the holder and replace with correct fuse.
4. Place fuse holder back in to the rear of the pump and tighten using the terminal screw driver.

Amp (fuse in plug)

1. Disconnect the plug from the mains power before replacing a fuse.
2. Remove the fuse cover on the plug using the terminal screw driver.
3. Remove the faulty fuse from the holder and replace with correct fuse.
4. Place fuse holder back in the plug until full inserted.

8. Troubleshooting

Problem	Solution
Power is not ON	<ul style="list-style-type: none">• Check if the plug is connected to the mains.• Check if any fuse in the plug and/or in the rear of the pump has blown.
Alarm is on (audible and visual)	<ul style="list-style-type: none">• Ensure the connector is in the locked position• Check there is power to the unit• Check that the connection between the air tube connector and the pump unit is tightly secured.• Check that all tubing connections along the mattress are secure.
Patient is bottoming out	<ul style="list-style-type: none">• Pressure setting may be inadequate for the patient, adjust comfort range 1 to 2 levels higher and wait for a few minutes.
Mattress is loose	<ul style="list-style-type: none">• Check if all the snap buttons and straps containing the air cells are all securely fastened.• Check if the mattress is fixed to the moving platforms of the bed frame by the securing straps.
Air tube connector won't fit into the pump unit	<ul style="list-style-type: none">• Ensure the connector is in the correct position• Make sure the connector is tightly secured – a click should be heard/felt when the connector is secure.
Large airflow from air bladders	<ul style="list-style-type: none">• This is normal as the system has a high airflow and numerous air loss holes in all bladder/air cells.

If your problem cannot be resolved using the above information, please contact Park House Healthcare.

9. Technical Description

Product Code		PA6970
Pump		Specification
Power Supply (refer to rating label on the product)		AC220-240V50/60Hz, 3.0A (for 230V system)
Fuse rating		T3A / 250v (for 230v system)
Dimension		15.8cm x 38cm x 26.8cm
Weight		5.5 kg
Environment	Temperature	Operation: 10 C to 33 C (50 F to 91 F) Storage: -15 C to 50 C (5 F to 122 F) Shipping: -15 C to 70 C (5 F to 158 F)
	Humidity	Operation: 10% to 90% non-condensing Storage: 10% to 90% non-condensing Shipping: 10% to 90% non-condensing
Classification		<ul style="list-style-type: none"> • Class I Type BF, IPX0 • Applied Part: Air Mattress • Not suitable for use in presence of a flammable anaesthetic mixture (No AP or APG protection) • Continuous operation
Mattress		Specification
Dimension (L x W x H)		200cm x 90cm x 20.3 (25.4) cm
Weight		7.5 kg
Maximum Patient Weight		200 kg / 31.5 stones

Please contact Park House Healthcare for further technical documents.



NOTE: The specification is also suitable for other areas operating with the same power supply.

10. Guarantees and Warranties

10.1 Pump Unit

All new pumps have a guarantee for a period of 2 years following the date of dispatch.

10.2 Mattress

All new mattresses have a guarantee for a period of 2 years following the date of dispatch.

10.3 Guarantee

Park House Healthcare guarantees to repair or place any equipment issued to its customers, which is found to be faulty during the relevant guarantee or warranty period.

Park House guarantees are subject to following conditions:

- a) That the equipment has been used for the purpose for which it was intended
- b) That the usage has been on "fair wear and tear" basis.
- c) That the Company's cleaning / disinfection guidelines have been followed.
- d) That the Company's maintenance guidelines have been followed.
- e) That maintenance has been carried out by a Park House Healthcare approved engineer.

10.3 Warranty

Extended warranties can be purchased from Park House Healthcare, for more information contact Customer Service on 0845 0600 333.

10.5 Claims relating to Guarantee and Warranty

In the event of a fault being discovered within the warranty period, the customer must notify Park House Healthcare at the earliest opportunity.

If upon inspection, Park House Healthcare accepts liability it shall inform the customer of its reason for declination and provide the customer with an estimate on either the repair or replacement cost.

Park House Healthcare reserves the right to alter or amend this document without prior notice.