



Huntleigh
HEALTHCARE

Alphaxcell[®] System



User Manual

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WARNINGS

The cover of this product is non air permeable and may present a suffocation risk. It is the responsibility of the carer to ensure that the user can use this product safely.

Do not use the *AlphaXcell* pump in the presence of flammable gases such as anaesthetic agents.

Possible explosion hazard if used in the presence of flammable anaesthetics.

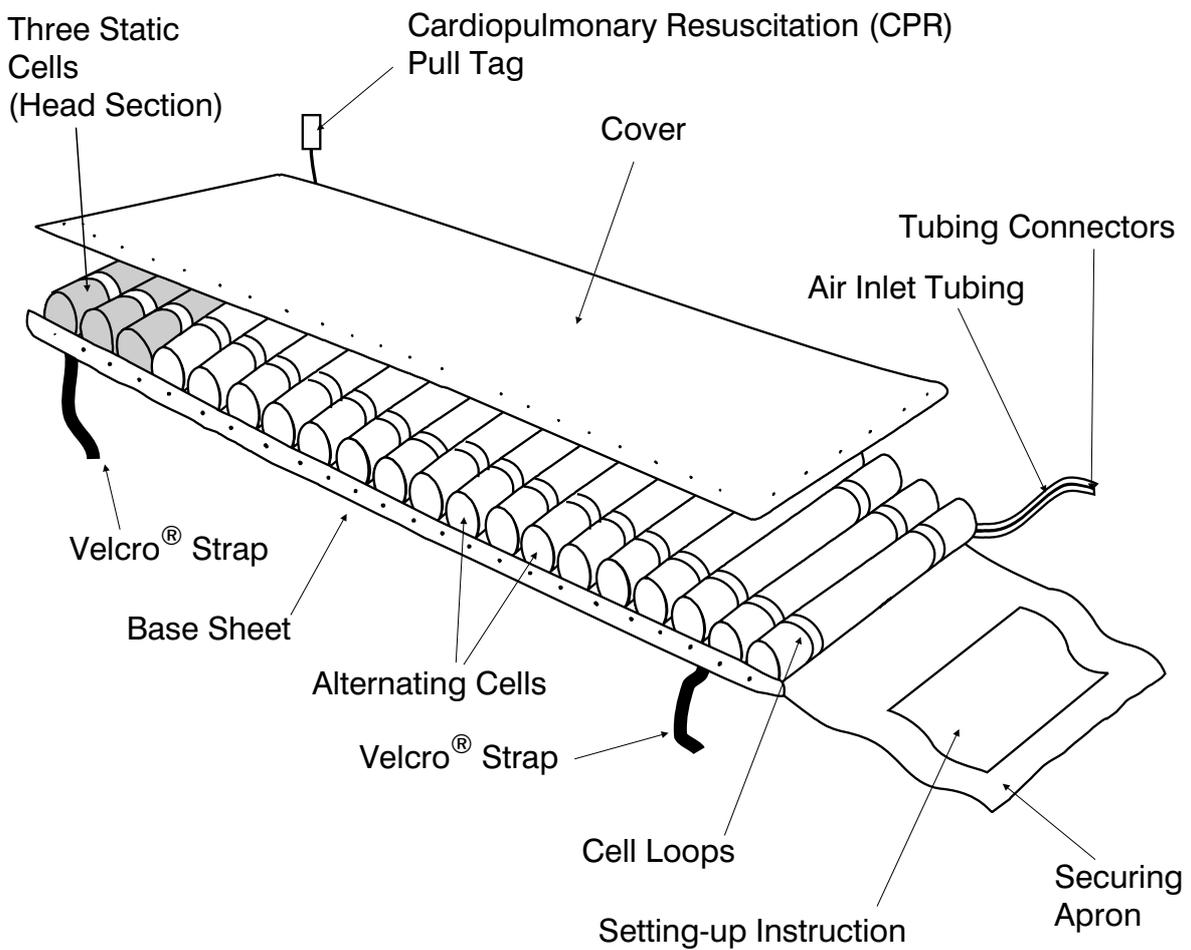
1. Introduction

The **AlphaXcell**[®] system is an alternating pressure relief system which consists of a pump and mattress overlay.

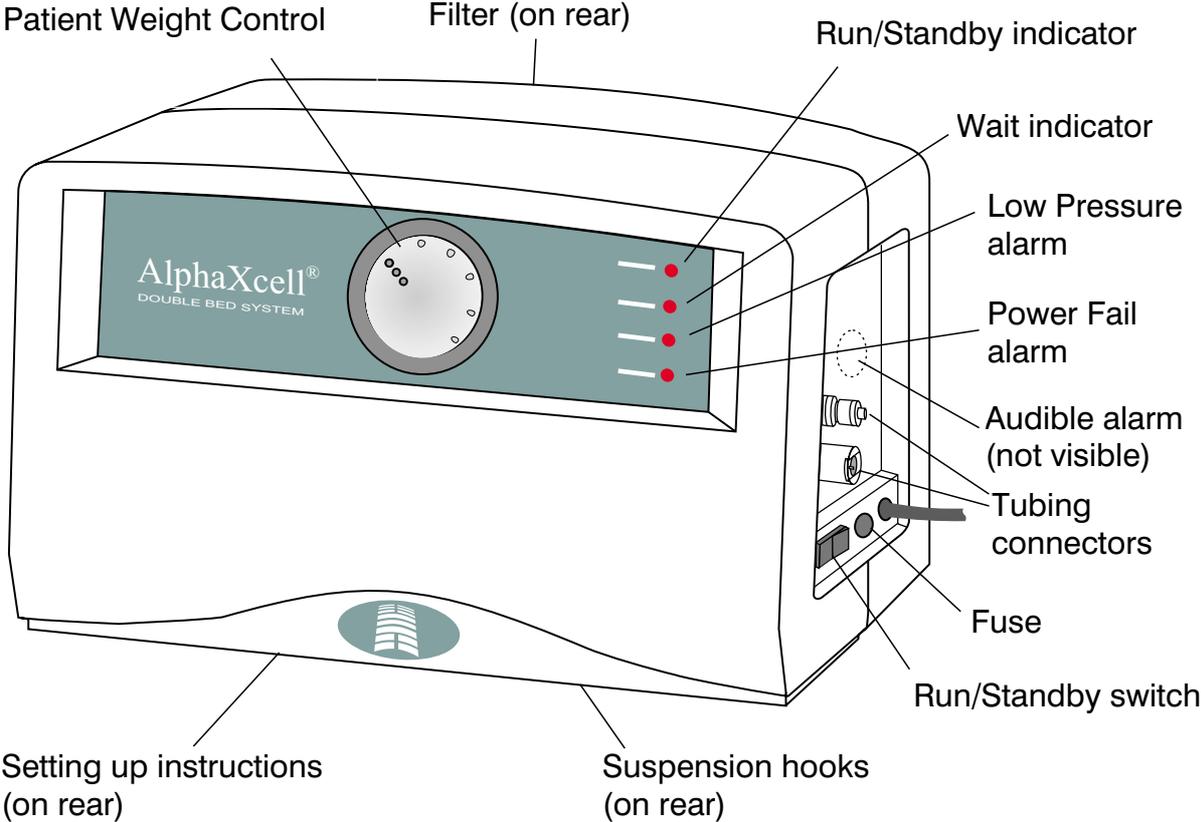
The system can be used on standard hospital and normal domestic beds. Beds can be adjusted or gatched with the **AlphaXcell** system in position.

Product Description

AlphaXcell Overlay



AlphaXcell Pump



2. Clinical Applications

Indications

The **AlphaXcell** system is indicated for patients up to 140kg with a medium risk of pressure ulcer development or with existing pressure ulcers up to and including grade 2 (EPUAP, 1998) ¹.

Contraindications

The **AlphaXcell** system should not be used for patients with unstable spinal fractures.

In the case of patients with other unstable fractures, where a moving surface could be harmful, advice should be obtained from the appropriate physician before using the **AlphaXcell** system.



*The **AlphaXcell** system is an aid to the prevention and management of pressure ulcers. If there is no improvement in the patient's condition, specialist advice should be sought.*

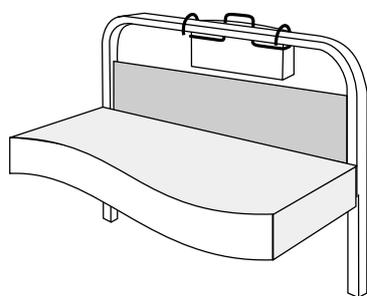
The above are guidelines only and should not replace clinical judgement or experience.

¹ European Pressure Ulcer Advisory Panel (1998). Clinical Practice Guideline, Number 3, AHCPR, US Department of Health & Human Services, 1992.

3. Installation

The system is very simple to set up and the following guidelines may assist you.

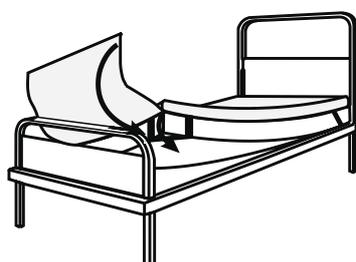
Preparing the *AlphaXcell* Overlay and Pump



1. Remove pump from carton together with overlay and cover. You should have the following items:
 - Overlay
 - Cover
 - Pump
2. Plug the pump power cable into wall socket. Do NOT switch on.
3. The pump should be stood feet down on any convenient horizontal surface or alternatively suspended from the bed foot rail by means of the swing out hooks.
4. Check that there are no protruding bed springs or sharp objects on the base mattress surface.

WARNING

Never use sharp objects or electrically heated underblankets on or under the overlay.

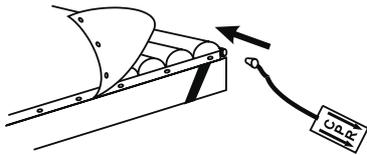


5. Place the *AlphaXcell* overlay on top of the normal mattress with the air feed tubes located near the pump at the foot of the bed, ensuring that the cells of the overlay are uppermost
6. Secure the *AlphaXcell* overlay to the mattress by placing and tightening the four straps under the corners of the mattress. Tuck end flaps under mattress.

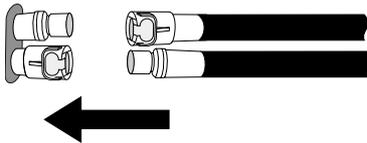
Caution

Do not use the overlay directly on the bed frame.

7. Ensure that the CPR stopper at the head-end is securely inserted.



8. Place the protective cover over the overlay and fix into position with the press studs all around.



9. Connect male and female air feed tubes to appropriate air outlets on the pump unit, ensuring that the tubes are not “kinked” or twisted. Push the connectors in until they click.

10. Switch on the pump unit. All lights on the front panel will momentarily flash. The Run/Standby and Wait indicators will remain illuminated.

11. Allow approximately 25 minutes for the overlay to inflate fully. The amber Wait indicator will go off once the overlay is fully inflated.

12. Place a bed sheet over the overlay and tuck in loosely.

13. Adjust the patient weight control for the appropriate patient weight. Increase the weight by 20 kg when the patient is in the sitting position.

WARNINGS

The weight guide on the pump is only an indication and should not replace clinical judgement.

Ensure that the patient is not bottoming out by unfastening one side of the *AlphaXcell* overlay and sliding a hand underneath the cells. If you can freely put a flat hand under the patient, the overlay is inflated CORRECTLY.

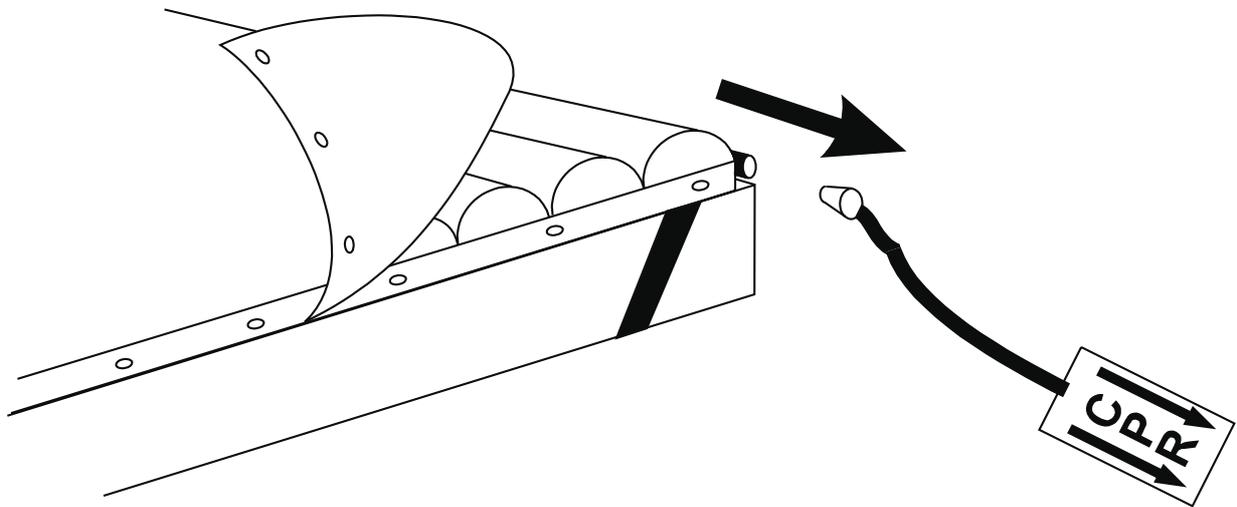
4. CPR Facility

Important

In the event of a cardiac arrest, pull the CPR tag firmly at the head end of the overlay and disconnect the tubeset connectors at the pump.

CPR

Located at the head end of the overlay (on the same side as the tubing set) is a tag labelled CPR. In the event of cardiac arrest, pull this tag for rapid overlay deflation (20 seconds).



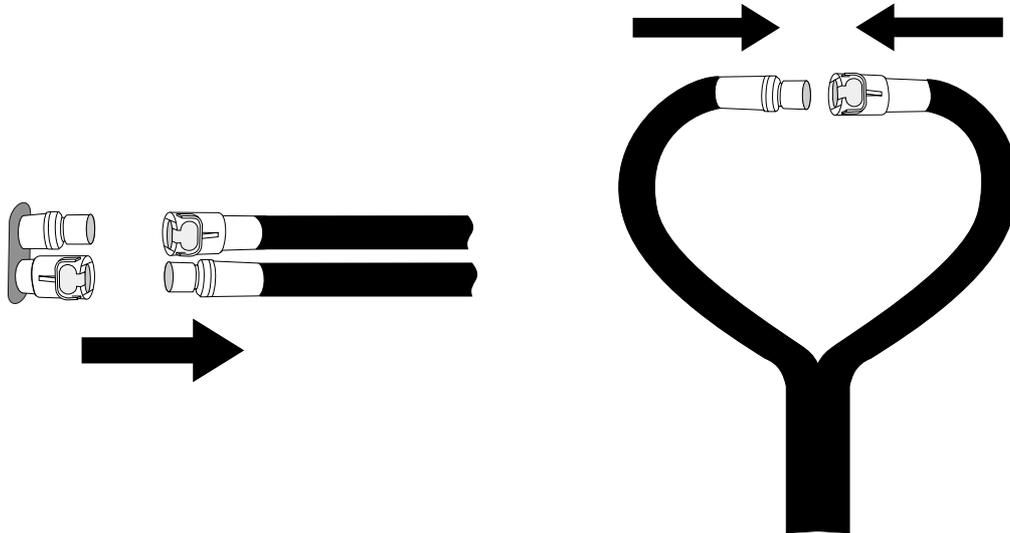
To reinflate the overlay, simply replace the stopper securely, locking connectors onto the manifold and ensuring secure connection of the overlay to the pump.



1. *When the CPR stopper is removed, the low pressure alarm will activate on the pump. To cancel the alarm, switch the pump OFF then ON again.*
2. *Ensure that the pump is connected to the power supply and switched on.*

5. Patient Transport

The patient may be transported on the **AlphaXcell** overlay by disconnecting the tubes from the pump and cross connecting them immediately.



The pressure in the two sets of cells will equalise and the patient will continue to be supported (with the overlay static) for up to 60 minutes with the patient in the supine (lying) position.



To obtain the maximum use of the transport facility ensure that the patient remains in the supine position and the overlay is put in transport mode when all cells are inflated.

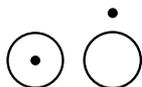
6. Controls, Indicators and Alarms

Controls

Pressure Control

This is situated on the front panel and is adjusted by the carer to suit the weight of the patient.

Run/Standby Switch



This is situated on the side panel of the pump and is used to activate the unit and reset the alarm. Mains isolation should be performed by switching the pump to standby (○) and then removing the mains plug from the socket.

Indicators

Power On |

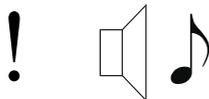
A light on the front panel indicates that the pump is running.



Wait

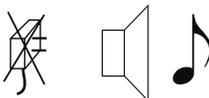
When the overlay is being inflated the amber **Wait** indicator will remain illuminated until the overlay is correctly inflated.

Low Pressure



In the event of low pressure in the overlay, the red **Low Pressure** alarm will start flashing and an audible alarm will sound. The pitch of the alarm will increase at 60 second intervals.

Mains Fail



In the event of mains failure, the red alarm indicator will start flashing and an audible alarm will sound. The pitch of the alarm will increase in time. If the power supply is returned the audible alarm will stop, but the alarm light will remain illuminated until the system is reset (UK only).

Alarm

Alarm Reset

When the cause of the alarm has been resolved, the pump needs to be reset. This can be achieved by **switching the pump to Standby and back to Run** using the Run/Standby switch on the side panel.

Self Test

Every time the pump is switched on all indicator lights will illuminate for approximately two seconds. During this period, the system self tests its circuits.

7. Cleaning, Deflation and Storage

Cleaning

Huntleigh Healthcare products are manufactured to the highest quality standards. It is therefore important to follow the specified cleaning instructions.

Caution

Do not use phenol based cleaning solutions.

Overlay Cover

The overlay and cover can be cleaned while on the bed using hot water and mild household detergent. If the overlay or cover is heavily soiled (i.e. blood spillage, urine, etc.) it can be wiped down using a hypochlorite 1,000 ppm solution.

The cover can be washed and thermally disinfected in a washing machine. Recommended maximum temperature is 80°C.

Pump

WARNING

Switch off the electrical supply to the pump and disconnect the power cord from the mains supply before cleaning and inspection.

The pump casing should be cleaned using a soft cloth dampened with a mild household detergent. If the pump is heavily soiled (i.e. blood spillage, urine, etc.), the pump can be wiped down with a 1,000 ppm hypochlorite solution.



For complete laundering instructions refer to Huntleigh Healthcare Infection Control guidelines.

Deflation and Storage

To deflate the overlay, switch the pump off and disconnect from power supply. Disconnect the tube connectors by pressing the metal snap lock connectors and pull the male and female connectors apart. Pull the CPR tag. All the air in the overlay will now be expelled. Starting at the head end, the overlay can now be rolled or folded for storage.

8. Troubleshooting Guide

WARNING

Electrical equipment may be hazardous if misused. The pump's case back should only be removed by authorised technical personnel.

Problem	Possible Cause	Action
Overlay not inflating.	<ol style="list-style-type: none"> 1. CPR stopper not inserted. 2. Tubes kinked. 3. Pump not switched on. 4. No pump output. 5. Tubes not correctly fitted. 	<p>Check</p> <p>Check</p> <p>Check</p> <p>Check. See <i>Pump not operating</i> below</p> <p>Check</p>
Consistent Low Pressure Alarm .	<ol style="list-style-type: none"> 1. CPR stopper not inserted. 2. Tubes not correctly fitted. 3. Leakage. 	<p>Check</p> <p>Check</p> <p>Check</p>
The Wait indicator does not go off	<p>CPR stopper not inserted.</p> <p>Tubes not correctly fitted.</p> <p>Leakages</p>	<p>Check</p> <p>Check</p> <p>Check</p>
The Mains Fail indicators (audible and visual) are active.	<ol style="list-style-type: none"> 1. A mains power failure has occurred. 2. The power cord has been removed from the wall socket 	<p>Check</p> <p>Check</p>
The Mains Fail indicator remains constantly illuminated but there is no audible alarm (UK only).	There has been a mains power failure but power has been restored (UK only).	Check if electrical plug is correctly fitted, and if pump is running correctly.
Pump makes a lot of noise and/or is causing lot of vibration.	System damaged or dirty.	Call Service Engineer for maintenance.
Pump not operating	<ol style="list-style-type: none"> 1. Pump Run switch not on. 2. Plug not inserted correctly. 3. Fuse Blown. 4. Technical failure. 	<p>Switch on</p> <p>Check</p> <p>Replace with same type and rating.</p> <p>Call Service Engineer for maintenance.</p>
All indicators remain illuminated on initial switch-on.	Internal fault.	Call Service Engineer for maintenance.



*Ensure pump alarms are reset by operating the **Run/Standby** switch after the fault has been corrected.*

9. Warranty and Service

Huntleigh Healthcare's standard terms and conditions apply to all sales. A copy is available on request. These contain full details of warranty terms and do not limit the statutory right of the consumer.

For service, maintenance and any questions regarding this, or any other Huntleigh Healthcare product, please contact:

Huntleigh Healthcare Ltd
310-312 Dallow Road
Luton
Bedfordshire, LU1 1TD

Tel : 01582 413104

Fax : 01582 459100

or your local distributor.

10. Technical Data

Pump Model Number:	ALX01 (UK), ALX08 (Aus.), ALX09 (other)
Size:	248 x 160 x 116 mm
Weight:	2.75 kg
Cycle Time:	10 minutes
Rated Voltage:	220-240V
Rated Frequency:	50Hz
Rated Input Power:	14 VA
Protection Class:	Class II, type BF  Not protected against the ingress of water.
Equipment Symbols:	 Indicates unit is Class II double insulated against electric shock.  Refer to user manual. REF: Model number SN: Serial number  Alternating current  Standby. Note: unit is not isolated from mains supply!  Run  Fuse, rated F500mA
Rated For:	Continuous consumption
Tested To:	BS5724 : Part 1 IEC 601-1 V.D.E. 0750: Teil 1

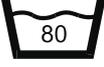
Environmental Conditions

Operating

Temperature range: +10°C to +40°C
Relative humidity: 30% to 75%
Atmospheric pressure: 700hPa to 1060hPa

Storage

Storage temperature range: -40°C to +70°C
Relative humidity: 10% to 100% (non-condensing)
Atmospheric pressure: 500hPa to 1060hPa
Environmental Protection: Please dispose of this unit in accordance with local regulations.
Overlay Model No.: ICT20
Size: 204cm x 86cm (81½ x 33 inches)
Inflated Cell Height: 11.4cm (4½ inches)
Cell Material: Polyurethane

Cleaning Symbols:		wash at 80° C
		do not iron
		do not use phenol-based products
		do not tumble dry
		wipe surface with damp cloth
	 1000ppm NaOCl NaDCC	use solution diluted to 1000ppm



Huntleigh

HEALTHCARE



A Pyramid of Care® Product

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