

**LUMEX®**

**AltaDyne™**

*For The Quality Of Life*

# Alternating Pressure Overlay

Model # 14025



# Operators Manual

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# IMPORTANT SAFEGUARDS

## READ ALL INSTRUCTIONS BEFORE USING

### **DANGER - To reduce the 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 into 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 the 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 by, on, or near children or invalids.
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 dropped into water. Return the product to a service center for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never block the air openings of this product or place it on a soft surface, such as a 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 -** Indicate 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



"BF"symbol, indicate this product is according to the degree of protecting against electric shock for type BF equipment.



Grounding terminal



Attention, should read the instructions !

# 1. Introduction

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

## 1.1 General Information

The system is a high quality and affordable mattress system suitable for bed sore treatment and prevention of pressure ulcers.

The system has been tested and successfully approved with the following standards:

1. **For US:**  
UL 1431
2. **For Europe:**  
EN 60601-1  
EN 60601-1-2  
EN 55011 Class B  
EN 61000-3-2  
EN 61000-3-3  
IEC 801-2  
IEC 801-3  
IEC 801-4  
IEC 801-5

## 1.2 Intended Use

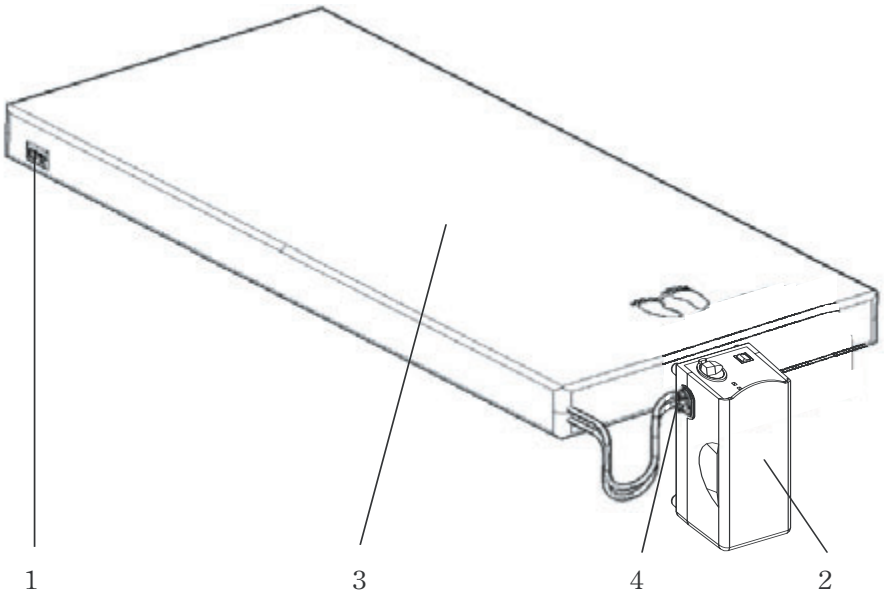
This product is intended to help and reduce the incidence of pressure ulcers while optimizing patient comfort. It is also useful for the following purposes:

- Individual home care setting and long term care of those suffering from pressure ulcers.
- Pain management as prescribed by a physician.

**⚠ NOTE : Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.**

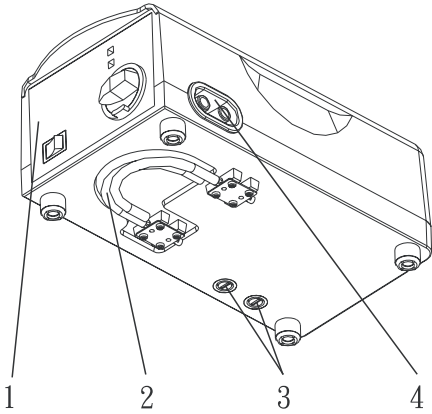
## 2. Product Description

### 2.1 Pump and Mattress System



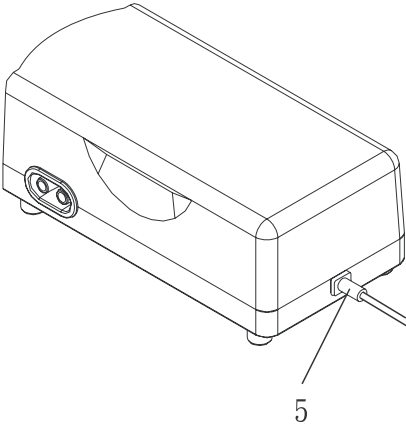
1. CPR\*
2. Pump unit
3. Mattress System or Bubble Pad System
4. Quick Connectors

## 2.2 Pump Unit



### Front

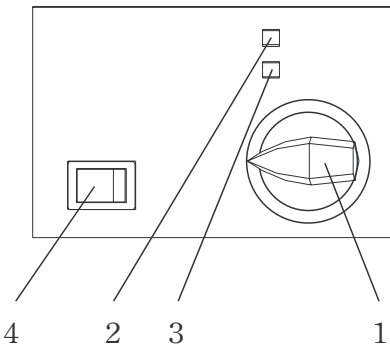
1. Front Panel
2. Mounting Brackets
3. Fuses
4. Air Hose Port



### Rear

5. Power Cord

## 2.3 Front Panel



### 1. Pressure Adjust Knob

Pressure adjust knob controls the air pressure output. When turning clockwise, the output pressure will increase. Vice versa for decreasing air pressure. Please consult your physician for a suitable setting.

**2. Normal Pressure Indicator**

When green LED lights up, the pressure inside of air mattress has reached the preset pressure setting.

**3. Low Pressure Indicator**

When low pressure LED lights up, the pressure inside of air mattress is below normal. Please refer to troubleshooting.

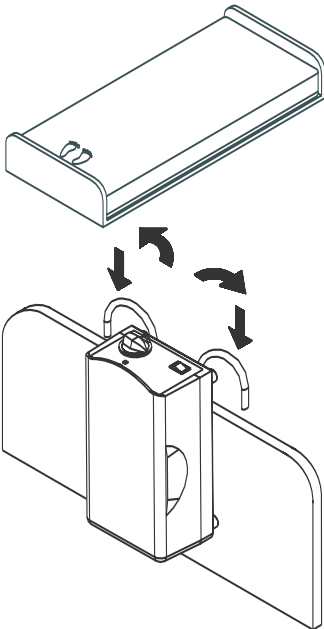
**4. Main Power Switch**

To turn on/off the pump unit.

**3. Installation**

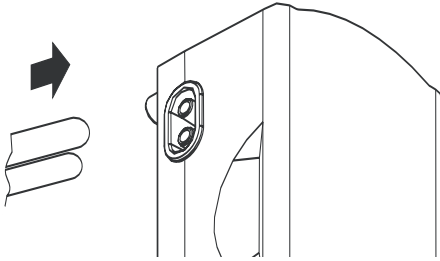
Unpacking the box to inspect for any damage which may have occurred during shipment. If there are any damages, please contact your dealer immediately.

**3.1 Pump & Mattress Installation**



1. Place the mattress or pad on top of the bed frame. Please note the foot end.

2. Hang the pump onto bed rail (foot-end), and adjust hangers to best upright position for the pump, or place the pump on a flat surface.



3. Connect air hose from air mattress to the pump unit.

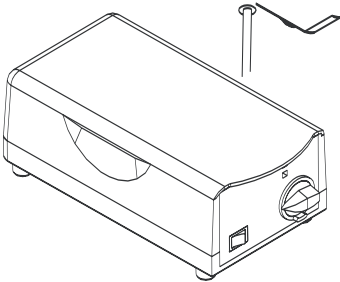
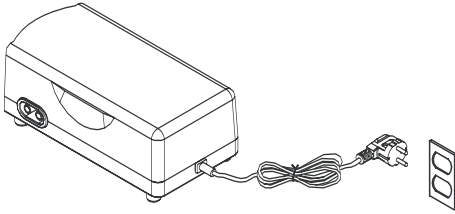
**⚠ NOTE:**  
Check to ensure the air hoses are not kinked or tucked under mattress.

4. Plug the power cord into electrical outlet.

**⚠ NOTE:**  
1. Make sure the pump unit is suitable for the local power voltage.

2. The plug also serves to disconnect the device.

**⚠ CAUTION:**  
The pump can only be applied to the mattress recommended by the manufacturer. Do not use it for any other purpose.



5. Turn the main power switch to ON position.

### Grounding:

Before any connection to the output connectors is made, the unit shall be connected to a protective earth conductor via the three-core main cable: the mains plug shall be inserted only into a socket outlet provided with a protective earth contact. The protective action shall not be negated by the user of an extension cord without protective conductor.

Several installation tips are listed below:

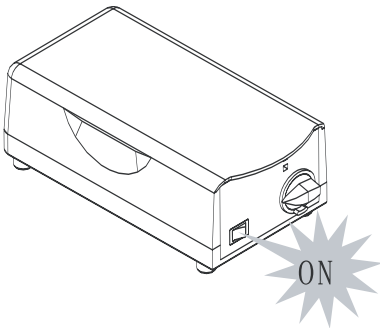
After installation, the extra length of the power cord, if any, should be neatly arranged to avoid any tripping accidents. The equipment should be firmly placed at a position where users/doctors can access it easily.



## 4. Operation

⚠ **NOTE:** Always read the operating instructions before use.

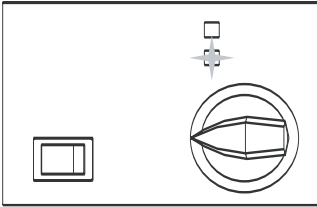
### 4.1 General Operation



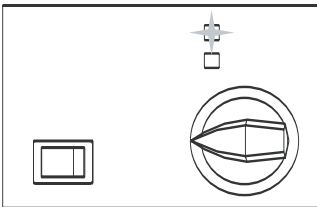
1. Switch on the main power switch.

# Pumping

2. The pump unit is designed to deliver air into the mattress.



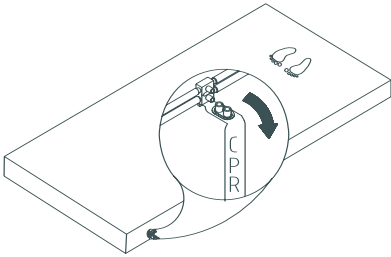
3. The low pressure indicator (yellow LED) will light up until the mattress is fully inflated.



4. When the appropriate pressure is reached, the low pressure indicator (yellow LED) will go off and normal pressure indicator (green LED) will light up automatically.

⚠ **NOTE:** When setting mattress up for use, it is recommended that the pressure knob be set to “Firm” for the quickest inflation. User can then adjust air mattress to the desired softness afterward.

## 4.2 CPR



When there is an emergency to perform CPR on the patient, quickly pull the CPR valves to release air from mattress. The CPR valves are located at the head-end, right-hand-side of the mattress. The air hose on the pump unit can be disconnected for even faster deflation.

## 4.3 Pressure Set-Up

Users can adjust pressure of air mattress to desired softness by adjusting the pressure knob. Please consult your physician for a suitable setting.

Patient can lie on the mattress after Normal Pressure indicator lights up, which indicates the pressure is reached to the desired pressure.

**⚠ NOTE: Check to see if pressure is suitable by sliding one hand between the deflated air cells and the patient to feel the patient's buttock. Users should be able to feel the minimum contact.**

## 4.4 Low Pressure Function

When abnormal low pressure occurs, the Low Pressure indicator (yellow LED) will light up. Check to ensure all connections are connected properly and that they are correctly installed as per installation instructions. The Low Pressure indicator will light up until the low-pressure fault condition is resolved.

**⚠ NOTE: If the pressure level is consistently low, check for any leakage (tubes or connecting hoses). If necessary, replace any damaged tubes or hoses. Or contact local qualified dealer for repair.**

## 5. Cleaning

It is important to follow the cleaning procedures before use.

By wiping the pump unit with a damp cloth pre-soaked with a mild detergent. Keep it away from dust. If other detergent is used, choose one that will have no chemical effects on the surface of the plastic case of the pump unit.

**⚠ CAUTION: Do not immerse or soak pump unit.**

The cover may also be cleaned using a 10% solution of sodium hypochlorite (bleach) diluted in water.

All parts should be air dried thoroughly before use.

**⚠ CAUTION: Do not use phenolic based product for cleaning.**

**⚠ CAUTION: After cleaning, dry the mattress without direct exposure of sunlight.**

## 6. Storage

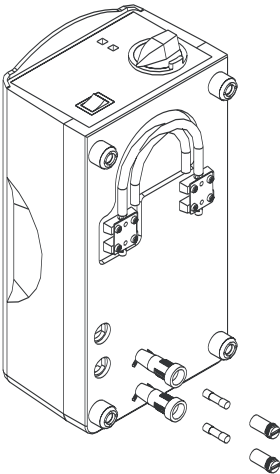
1. To store, lay the mattress out flat and upside down.
2. Roll from the head end towards the foot end.
3. Foot-end strap can then be stretched around the rolled mattress to prevent unrolling.

## 7. Maintenance

### 7.1 General

1. Check main power cord and plug for abrasions or excessive wear.
2. Check mattress cover for signs of wear or damage. Ensure mattress cover and tubes are attached.
3. Check airflow from the air hose. The airflow should alternate between each connector every half-cycle time.
4. Check the air hoses for kinks or breaks. For replacement, please contact your local dealer.

### 7.2 Fuse Replacement



1. Disconnect the plug from main power when a blown fuse is suspected.
2. Remove the cover of the fuse holder by means of a small screwdriver.
3. Insert a new fuse of the correct rating, and replace the cover of the fuse holder.

The fuse should be rated as T1A/250V type.

## 8. Troubleshooting

| Problem   | Solution   |
|---|--|
| Power is not ON   | <ul style="list-style-type: none"><li>• Check if the plug is connected to main power.</li><li>• Check if there is any blown fuse.</li></ul>  |
| Alarm is on<br>(audible & visual)                               | <ul style="list-style-type: none"><li>• Check if the connection between air tube connector to pump unit is tightly secured.</li><li>• Check if the CPR is sealed.</li><li>• Check if there are any leakage on air cells.</li><li>• Check if all tubing connections along mattress are secured.</li></ul> |
| Patient is bottoming out  | <ul style="list-style-type: none"><li>• Pressure setting might be inadequate for the patient, adjust pressure to higher level and wait for a few minutes.</li></ul>  |
| Air Mattress is not secured                                     | <ul style="list-style-type: none"><li>• Check if all the snap buttons or straps of mattress are all securely fastened.</li><li>• Check if the mattress is fixed to the bed frame by elastic straps.</li></ul>  |
| No air produced from some air outlets of the air tube connector | <ul style="list-style-type: none"><li>• This is normal during alternating mode. Air outlets take turn to produce air during preset cycle time.</li></ul>   |

If your questions can't be answered with above information, it might require a technician to take care the problem. Please contact your local agent directly.

## 9. Technical Description

### Specifications:

| Item   |   | Specification   |                       |
|--|---|---|-----------------------|
| Power Supply<br><small>(Note: See rating label on the product)</small> |   | 120V AC 60Hz, 1A (For 120V system)<br>230VAC 50Hz, 7W ( For 230V system)  |                       |
| Fuse Rating  |   | T1A, 250V   |                       |
| Dimension  |   | 25.4 x13 x 9.5 (cm) or 21.6cm 1 0.8cm 9 .2(cm)  |                       |
| Weight   |   | 1.6 kg or 3.5 lb  |                       |
| Environment  | Temperature                                 | Operation:10 C to 40 C (50 F to 104 F)<br>Storage: -15 C to 50 C (5 F to 122 F)<br>Shipping: -15 C to 70 C (5 F to 158 F)   |                       |
|  | Humidity                                    | Operation: 10% to 90% non-condensing<br>Storage: 10%to 90% non-condensing<br>Shipping: 10 % to 90 % non-densing   |                       |
| Classification   |   | <ul style="list-style-type: none"> <li>• Class I, Type BF, IPX0</li> <li>• Applied part: Air Mattress</li> <li>• Not suitable for use in the presence of a flammable anesthetic mixture(No AP or APG protection)</li> </ul> |                       |
| Mattress   |   | Specification   |                       |
| Model  | Dimension (LxWxH)                           | Weight  | Pressure Range (mmHg) |
| 5" Mattress Overlay  | 200x 90 x 12.7(cm)<br>or 78.7" x 35.4" x 5" | 5.0 kg<br>or 11 lb  | 40 ~ 90               |

### NOTE:

1. Consult the distributor or EU representative for further technical documents
2. The specification is also suitable for other areas operating with same power supply.
3. Mattress dimension and weight is measured without foam; the manufacturer reserves the right to modify the specification without notice.

# SAVE THESE INSTRUCTIONS

## GROUNDING INSTRUCTIONS

This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord that has a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

### **DANGER-improper use of the grounding plug can result in a risk of electric shock.**

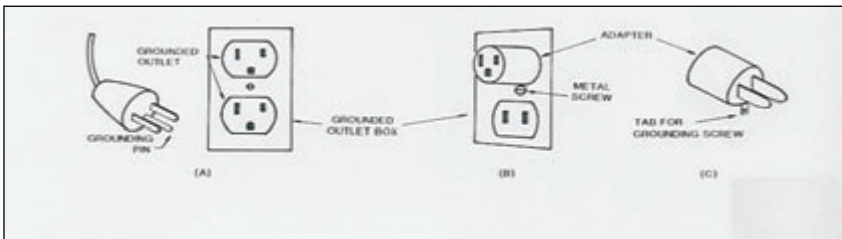
If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.

**Note** -The following instruction applies for 120V system only:

This product is for use on a nominal 120 V circuit and has a grounding plug that looks like the plug illustrated in figure B, in figure A as below. A temporary adapter, which look like the adapter illustrated in figure B and C, may be used to connect this Plug to a 2-pole receptacle as shown in figure B if a properly grounded outlet is not available. The temporary adapter should be used only until properly grounded outlet (figure A) can be installed by a qualified electrician. The green colored rigid ear, lug, and like extending from the adapter must be connected to a permanent ground such as properly grounded outlet box cover. Whenever the adapter is used. It must be held in place by the screw.

If is necessary to use an extension cord, use only a 3-wire extension cord that has a threeblade grounding plug, and a 3-slot receptacle that will accept the plug on the product. Replace or repair a damaged cord.



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