

**LUMEX®**

**AltaDyne™**

*For The Quality Of Life®*



# Alternating Pressure and Low-Air-Loss Therapy Mattress Replacement System

Model # 753000

**Operators Manual**

## Before you begin...

### **Important**

Before using an Lumex® AltaDyne System, please read and understand this manual and all safety precautions prior to each application.

Only qualified medical service personnel should attempt to repair this device. For assistance contact your local dealer. If additional assistance is needed, contact the Graham-Field Health Products Customer Service department.

Direct (770) 447-1609

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## 1.0 Warranty

The Lumex® AltaDyne Control Unit and mattress are warranted free of defects in material and workmanship for a period of one (1) year.

The Control Unit and Mattress are warranted under the Terms and Conditions of the Graham-Field Health Products warranty in place at the time of purchase. A copy of the warranty is available upon request. Graham-Field Health Products disclaims all implied warranties including, but not limited to, the implied warranties of merchantability and of fitness for a particular purpose.


## 2.0 Symbols

 Attention, consult accompanying documents

 Class II, double insulated equipment

 Type BF equipment

 Dangerous voltage

 Protective earth ground

 Latex Free

## 3.0 Indications for Use

This device is intended to assist in treating and preventing pressure ulcers.

## 4.0 Contraindications

Air support treatment is not recommended when spinal stability is a concern.

## **5.0 Safety Precautions**

Review the following SAFETY PRECAUTIONS prior to using an Lumex® AltaDyne System.

### **WARNING**

- Risk of electric shock. Refer servicing to qualified service personnel.
- Disinfect the Lumex® AltaDyne system between patient installations. Failure to disinfect may risk cross-contamination and infection.
- Disconnect the AC power from the wall outlet before attempting to clean the Control Unit. Do not heat or steam autoclave any component of the system.

### **CAUTION**

- Check patient at least every 8 hours to assure proper system operation.
- Some medical conditions may not respond to treatment of this type. Patient's skin condition should be inspected regularly. Consult physician if any redness or skin breakdown occurs.
- For grounding reliability, plug only into a properly grounded outlet.
- Use minimal layers of sheeting and incontinence pads. Too many layers between the patient's skin and the support surface will reduce the effectiveness of the system.
- Do not pull linens tightly over mattress. Tight sheets can cause "hammocking" and reduce effectiveness of treatment.
- Portable and RF communications equipment can affect medical electrical equipment.
- Make certain all mattress straps are secured to the bed frame to prevent mattress from sliding and causing patient injury.
- The Altadyne mattress is not intended to be AND DOES NOT FUNCTION AS a patient fall device. **SIDE RAILS MUST BE USED WITH THE ALTADYNE MATTRESS TO PREVENT PATIENT FALLS**, unless determined unnecessary based on the facility protocol or the patient's medical needs determined by the facility, **IN WHICH CASE THE USE OF OTHER SUITABLE PATIENT SAFETY MEASURES ARE RECOMMENDED**. When using side rails, the use of side rail pads is strongly recommended. Failure to use a side rail pad may result in patient injury.
- During mattress set-up, insure that all mattress air cells are inflated and that air cells are secured to the mattress base with the snaps located on each side of the air cell. Air cells not properly secured or inflated may result in compromised therapy.
- Insure that the Altadyne mattress properly fits the bed frame on which it is being placed. Using the Altadyne mattress on a larger than 35 inch wide bed frame may result in mattress sliding and patient injury.

## 6.0 Description

A Lumex® AltaDyne System is a portable air flotation system with alternating pressure and low-air-loss. It is designed to provide benefit to patients suffering from or at risk of developing pressure ulcers. The system, consisting of a Control Unit and an Air Flotation Mattress with a cover, is designed to provide pressure management and patient comfort.

### Control Unit

The Lumex® AltaDyne Control Unit, inflates and maintains the mattress, providing alternating pressure and low-air-loss. Non-alternating pressure therapy can also be selected by pressing the "Static" switch. The Pressure Control Knob allows the firmness of the mattress to be adjusted for patient comfort.

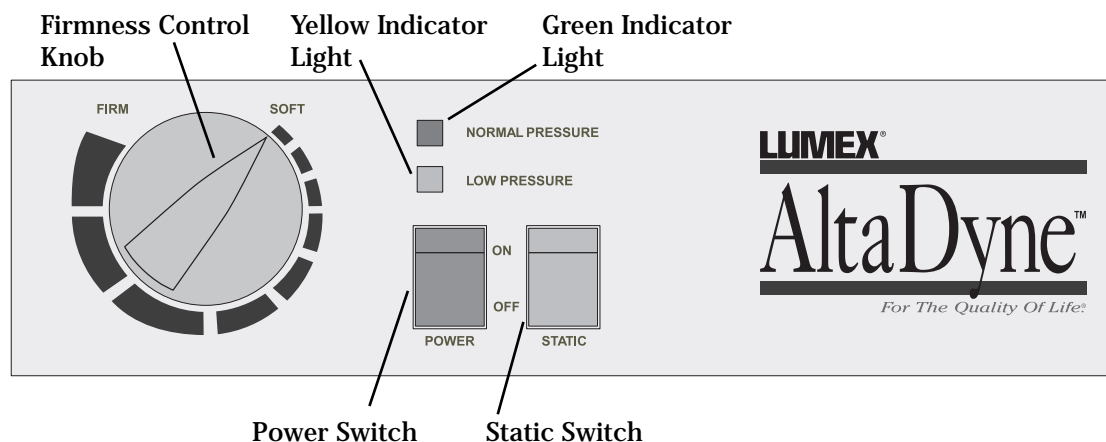
### Air Flotation Mattress

The Lumex® AltaDyne Air Flotation mattresses consist of individual transverse air cells designed for maximum support and pressure distribution.

The Lumex® AltaDyne mattress measures 80" x 36" x 8" (203cm x 91cm x 20cm) when fully inflated. The air cells are constructed of polyurethane. The mattress cover zips completely around the mattress perimeter. The cover is quilted with spun bonded polyester fiberfill. The cover has straps to hold it securely to the bed frame.

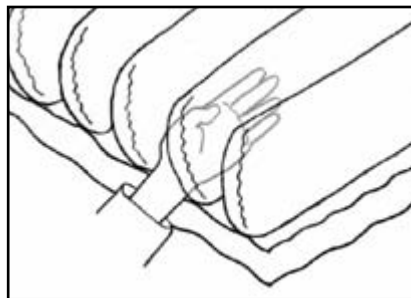
## 7.0 Control Panel

1. LIGHTED ON/OFF switch
2. FIRMNESS CONTROL knob adjusts for patient comfort
3. INDICATOR LIGHTS indicate mattress has reached normal pressure (green light) or that full inflation has not been reached (yellow light).
4. STATIC MODE switch turns off alternating pressure.



## 8.0 Instructions for Use

1. Place control unit on a flat surface or suspend on end of bed using attached hooks.
2. Place the mattress on the bed frame with air hoses at the foot end of the bed. Attach mattress to bed frame with straps.
3. Connect the quick-connect couplings of the mattress air hoses to the mating connectors located on the side of the Control Unit. Check that the hoses are secure by gently pulling. Ensure the hoses are not kinked or tucked under the mattress.
4. Ensure that the power switch is in the OFF position. Plug the power cord into properly grounded outlet.
5. Turn the control unit ON. Set pressure knob to FIRM for each initial inflation. Mattress inflation will begin. The yellow light indicates that the mattress is not yet fully inflated. The green light will automatically light up when the appropriate pressure is reached. The mattress will take approximately 35 minutes for complete inflation.
6. Apply hospital linens and/or incontinence pad over the top of the mattress. Linens should be loose to prevent "hammocking".
7. If alternating pressure is not desired, press the STATIC switch.
8. When green light indicates appropriate pressure is reached, place the patient on the mattress. Adjust the Pressure Control knob to lowest possible setting while maintaining hand check clearance outlined in Step 9.
9. Perform a hand check. A hand check must be performed every 8 hours to ensure that the mattress is properly inflated. To perform the hand check: Unzip cover at the side of the bed as necessary to access the air cells. Using a vertical hand, slide hand between the air cells directly underneath the patient's sacral area. Slide hand under the patient. If four fingers of clearance exist, no adjustment is needed.



If you can feel the patient's body resting on your hand, adjust the pressure control to a higher setting. Wait 10 minutes and repeat the hand check. If the hand check fails, check that the hoses are not kinked or pinched. If repeated hand check fails and hoses are not kinked, contact your dealer or Graham-Field Health Products for further instruction.

### **CAUTION**

- Check patient at least every 8 hours to assure proper system inflation.

## CAUTION

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## 9.0 CPR (Cardio Pulmonary Resuscitation)

To deflate mattress for CPR:

1. Disconnect the quick-connect couplings of the mattress hose from the Control Unit. Mattress will begin deflating.
2. Proceed with CPR procedures after deflating mattress for 20 seconds.
3. If desired, a CPR board can also be used, but is not required for effective CPR.

## 10.0 System Cleaning

### WARNING

- Disconnect the AC power cord from the wall outlet before attempting to clean the Control Unit. Do not heat or steam autoclave any component of the system.

Mattress may be hand washed, laundered or dry-cleaned:

- Hand wash: Wipe down mattress with soap, cold water and a clean cloth. Wipe dry with a clean, dry cloth or hang to dry. Do not bleach. Do not use abrasive cleaners.
- Launder in warm water under 40°C. Do not bleach. Hang to dry.
- Dry-clean: Mattress cover can be dry-cleaned.


*Note: Blood and other bodily fluids must be thoroughly cleaned before applying disinfectants.*

To disinfect mattress: Use an alcohol, iodine or phenolic-based disinfectant.

#### **Control Unit Cleaning:**

Wipe down control unit and power cord with soap, water and a clean cloth. Apply disinfectant, such as 10% chlorinated bleach solution to the entire control unit outer surface.

## 11.0 Specifications, Control Unit

Enclosure Dimensions	11" x 5.5" x 3.5" (28cm x 14cm x 9cm)
Weight	3.3 lb (1.5 kg)
Power Cord	15' (4.6M) #18 AWG minimum, with ground
Overcurrent Protection	Primary 1A, 250V
Input	120 VAC, 60Hz, 1.0A
Operating Ambient Temperature Range	50 to 95°F (16 to 35°C)
Classification	Class I grounded equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
	Type BF equipment 
	UL60601-1, CSA C22.2
	IPX0, enclosed equipment without protection against ingress of water.
	Continuous operation
Electromagnetic Compatibility	Meets EN60601-1-2:2003

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