



# Panacea® AIR APL MATTRESS

## Owner's Manual

*Please keep and refer to this Owner's Manual.*

Thank you for purchasing a Panacea® Air APL Mattress from Direct Supply Equipment & Furnishings®. Please read this entire guide carefully and keep it for future reference. This guide will provide you with instructions, warnings, warranty information, and other important information about your Panacea mattress. Share this information with your housekeeping, nursing and maintenance staff to help ensure the mattress system is cared for properly.

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# Introduction

## Introduction

The Panacea® Air APL Mattress with alternating pressure and limited low air loss is designed to assist in the prevention and treatment of up to Stage IV pressure ulcers for Long Term Care residents. The resident support surface fits most standard healthcare beds, and consists of 20 air cells that run laterally underneath the entire body. The air flotation system aids in pressure redistribution and relief, and helps maintain low interface pressures throughout the surface.

The Panacea Air APL mattress uses a quiet, energy-efficient control unit, which provides alternating pressure and limited low air loss therapy. The inflation levels are designed to maintain low interface pressures throughout the mattress, to redistribute peak interface pressures during the cycle, and to further relieve peak pressure points as the cycle alternates. The low air loss feature helps reduce maceration and further skin breakdown by keeping the skin surface cool and dry.

## Definitions & Symbols

**NOTE:** Indicates a tip.

**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.

**DEVICE:** Your Panacea Air APL Mattress.

**YOU and YOUR:** The facility, community or other entity that has purchased the device.

**WE, US, and OUR:** Direct Supply® Manufacturing, Inc.

 Attention. Read the instructions.



The Air APL™ mattress pump is certified to E223556, UL60601-1 and CAN/USA C22.2 NO.601.1



# Product Description

## **INDICATIONS FOR USE:**

The Panacea Air APL mattress is a flotation therapy mattress that provides pressure management to assist in the prevention and treatment of up to Stage IV pressure ulcers. The alternating pressure mode provided with the Panacea Air APL mattress is indicated for use as a preventive tool against further complications associated with critically ill residents or immobility.

## **Air Cells:**

Air cells provide A-B-A-B alternating pressure therapy. These air cells inflate to height of 6". Specific cells are designed with holes which allow the Panacea Air APL mattress to provide limited low air loss.

## **Safety Air Base:**

A 2"H foam base assures the resident is safe and comfortable in the event of a power failure.

## **CPR VALVE:**

Allows for rapid deflation and is located at the head end of the mattress. See directions for proper use.

## **Cover:**

Top cover – The antimicrobial top fabric is fire resistant, fluid resistant, tear resistant, cleanable, and the two-way stretch cover is replaceable.

Bottom cover – PVC vinyl bottom for durability and easy cleaning.

## **Mattress Height:**

The total pressure-management surface height is 8".

## **Friction/Shear:**

The cover reduces both friction and shear.

## **Replacement Mattress:**

The mattress should be placed directly on an existing healthcare bed frame of an appropriate size.

## **Warranty:**

The mattress warranty is 2 years against manufacturing defects (see warranty for specific details). The control unit warranty is 12 months.

## **Pressure Management:**

This replacement mattress system is designed to provide pressure management for the prevention and treatment of up to Stage IV pressure ulcers.

## **CONTROL UNIT**

### **Power on/off Button:**

Powers the control unit on and off.

### **Firmness Dial:**

Adjusts the pressure within the system.

### **Static button:**

Allows for the alternating pressure functionality to be turned off.

### **Low Pressure Alarm:**

Indicates loss of air pressure.

### **Alarm Silence button:**

Silences the low pressure alarm.

# Product Specifications

**COVER:**

Top Cover: 2-Way Stretch  
Bottom Cover: PVC  
Antimicrobial  
Flame Resistant  
Fluid Resistant  
Tear Resistant

**FIRE RATINGS:**

CA #117 – Panacea Air APL meets California Technical Bulletin 117 requirements  
CA #129 – Panacea Air APL is exempt from this test  
TB603 – Panacea Air APL is exempt from this test  
16 CFR 1633 – Panacea Air APL is exempt from this test

**AIR Cells:**

70 Denier Nylon/Polyurethane

**SIDE PERIMETERS:**

70 Denier Nylon/Polyurethane

**SAFETY AIR BASE:**

2" polyurethane foam wrapped in moisture proof  
polyurethane material

**CONTROL UNIT:**

120V, 60 Hz

**SURFACE SIZES:**

35"W x 8"H x 75"L

35"W x 8"H x 80"L

- ▲ 1. Resident's body cannot exceed the width of the mattress.
- 2. Check the weight capacity of the bed to make sure both the mattress and bed are capable of supporting additional weight.

**OPERATING MODES:****Panacea Air APL — Alternating Pressure**

Provides 10 minute loading and unloading cycle designed to maintain low interface pressures throughout the mattress, to redistribute peak interface pressures during the cycle.

**Panacea Air APL — Low Air Loss**

Efficient pump provides continuous 8 lpm airflow to help cool the skin surface. The non-quilted cover maximizes the system's benefits.

# Warnings

Read and follow all directions and warnings before using this product.

## **⚠ WARNINGS**

1. Failure to comply with all directions and warnings may result in injury or death; use only as directed.
2. This product is not suitable for all individuals. Other devices may be required.
3. Inspect the product for damage before each use and do not use it if it appears to be damaged or not functioning properly.
4. Never alter the product in any way.
5. This product is designed for indoor use only within close proximity to skilled caregivers.
6. This device is not designed to operate with residents weighing more than 450 lbs.

**NOTE:** *Resident's body cannot exceed the width of the mattress at any weight capacity.*

**NOTE:** *This product is designed to assist in the prevention and treatment of pressure ulcers and may require other equipment. This may include, but is not limited to:*

1. *Bedrails for repositioning and fall prevention.*
2. *Resident monitoring devices for elopement prevention.*
3. *Other devices as specified by the caregiver.*

## **⚠ WARNING – To reduce the risk of electrocution:**

1. Always unplug this unit immediately after using.
2. Do not operate near water.
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.
6. Do not remove control unit cover. Risk of electrical shock.

## **⚠ WARNING – To reduce the risk of burns, fire or injury to persons:**

1. Use this unit only for its intended use as described in the operating instructions.
2. 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 unit for examination and repair.
3. Keep the cord away from heated surfaces.
4. Never drop or insert any object into any opening or hose.
5. Do not use outdoors.

## **⚠ WARNING**

This device is only a tool to assist with pressure reduction as part of an overall care plan. Failure to comply with all instructions, warnings and precautions or using the product for a purpose other than the recommended use could result in bodily injury or death.

This product is not designed to replace good caregiving practices, including but not limited to:

- Direct resident supervision.
- Adequate care plans and training for staff personnel for entrapment and fall prevention.
- Inspection and testing before use.

# Directions for Use

## Directions for Use

1. Place the Panacea Air APL alternating pressure and low air loss mattress on the bed frame with the hoses exiting at the foot of the bed.
2. Secure the mattress to the bed deck using the black straps attached to the bottom of the mattress. Be sure to only attach the straps to the parts of the bed that articulate and not any stationary parts of the frame.
3. Hang the control unit on the end of the bed using the hangers, or place on a stable horizontal surface.
4. Ensure the air lines are not “kinked” or “twisted”. Connect the mattress to the control unit by pushing the connector into the air ports located on the side of the pump until you hear it “click” securely into place. The mattress operation will not be affected by the hose/connector orientation.
5. Ensure at the electrical power source, if switched, is in an OFF position, then plug in the power cord and switch to ON. The POWER ON lamp is now illuminated.
6. Set the firmness level to the lowest setting and allow approximately 40 minutes for the mattress to fully inflate. A green light next to the Alarm Silence button will indicate when it is fully inflated.
7. After preparing the mattress surface with appropriate linens (not included), place the resident on the mattress.

**LINEN NOTE:** Deep-pocketed sheets are recommended (not included). Multiple layering of linens or under pads beneath the resident can negatively affect the mattress's pressure management capabilities and should be avoided unless recommended by a caregiver.

8. Increase firmness if necessary for resident comfort, support, and immersion into the mattress for optimal pressure redistribution.
  - a) A common method for sizing an air mattress is to check to see if suitable pressure is selected by sliding one hand between the air mattress and the air/foam base under the resident's buttocks. Users should be able to feel the space between their hand and the resident's buttocks with the acceptable range being 25 to 40mm (1" to 1½"). This hand check procedure is issued by AHCPR (Agency for Health Care Policy and Research).
  - b) Adjust the firmness by turning the dial; Counter clockwise for more immersion (if too much space during hand check, too firm) or clockwise for less immersion (not enough space during hand check, too soft)
9. An audio-visual alarm is sounded in the event of low pressure.
  - a) Audio alarm can be muted using alarm silence key
    1. Place the mattress on the bed deck with the external manifold at the foot of the bed.
    2. Hang the pump unit on the end of the bed using the hangers, or place on a stable horizontal surface.
    3. Locate the red and blue connectors halfway down the external manifold. Match each red connector to each blue connector for rotational therapy.



4. Connect the end of the external manifold to the alternating pressure pump. The mattress operation will not be affected by the hose orientation. Ensure the air lines are not “kinked” or “twisted.”
5. Ensure the electrical power switch on the side of the pump is in the OFF position then plug in the power cord. Change the ON/OFF switch from the OFF position to the ON position. The POWER ON lamp should now be illuminated.
6. Allow the mattress 45 minutes to inflate fully.
7. After preparing the mattress surface with appropriate linens (not included), place the resident on the mattress. Initially set the PRESSURE CONTROL knob to Low. Increase if necessary for resident comfort. LINEN NOTE: Deep-pocketed sheets are recommended (not included). Multiple layering of linens or under pads beneath the resident can negatively affect the mattress’s pressure management capabilities and should be avoided unless recommended by a caregiver.

**⚠ CAUTION:** Be careful not to puncture the mattress with needles or sharp instruments. This may result in loss of integrity of the cover or internal air system.

**⚠ NOTE** – This product is only one element of care in the prevention and treatment of pressure ulcers by medical professionals and skilled caregivers to assist in the treatment and prevention of pressure ulcers. This product is not designed to and cannot replace good caregiving practices and treatment, including but not limited to:

- Appropriate nutrition and hydration, frequent positioning, routine skin assessment, wound treatment, infection control, and other generally accepted standards of care and prevention
- Adequate training for and precautions by staff personnel for bed entrapment
- Selection of an appropriate bed system to use with the product and proper maintenance and use of the product
- Testing of the product before each use

# Transportation & CPR

## Transportation

1. Disconnect the hose from the pump and quickly place the cap over the end of the hose to prevent air loss.
2. Check the fit of the cap for leaks.
3. Verify the red CPR valve at head-end of the mattress is closed and no air is escaping.
4. Remove pump from bed/footboard.

You may now transport the resident while in bed. A properly sealed mattress will continue to support a resident for approximately one hour without power. It is not possible to provide an exact time because it is dependant upon on the resident's weight. Reattach the pump as soon as possible to restore mattress performance.

**⚠ WARNING:** DO NOT attempt to use the mattress as a carrying device, as it is not designed to carry a resident's weight unsupported.

## CPR

The standards for life support recommended by the American Heart Association for performing CPR recommend a hard level surface for performing CPR, moving the person to the floor if possible. If unable to move the resident to another surface to perform CPR, place a crash board underneath the resident and follow appropriate CPR procedures.

To deflate the mattress for CPR function, rotate the red CPR valve to the open position. The CPR valve is located at the head section of the mattress. The control unit should be turned off and/or removed to prevent the mattress from re-inflating during CPR.

In case of emergency, use a scissors or knife to cut the hose and/or the air cells in the mattress.

# Cleaning

## Cleaning and Disinfecting

### Mattress

Only the outer cover requires cleaning and maintenance. Disassembly of the mattress for cleaning of internal components is not recommended. Approved products for cleaning the cover include standard hospital-approved tuberculocidal disinfectants such as quaternary ammonia, germicidal phenols, or soap and water (Lysol IC Quaternary Cleaner Disinfectant; Proctor & Gamble Clean Quick Liquid Quaternary Sanitizer; Q-128 Quaternary Disinfectant). Use products in dilutions as specified on the manufacturer's label. **DO NOT USE BLEACH.** For soils or stains, wipe fabric clean with neutral suds and lukewarm water. For hard-to-clean spots, use standard liquid household/vinyl cleaners with a soft-bristle brush. **DO NOT USE HARSH SOLVENTS OR CLEANERS.**

### Control Unit

**⚠ WARNING** – Before attempting to clean the control unit, turn off unit and disconnect the power cord from the power source.

**DO NOT** heat, steam autoclave or immerse the control unit in liquids.

1. The following germicidal detergents / disinfectants are recommended by the EPA as hospital disinfectants.  
Hi-Tor Germicidal Detergent  
Huntington Laboratories, Inc.  
Indiana EPA #303-91
2. Follow the preparation instructions provided with the germicidal detergent/ disinfectant solution to prepare the required amount of disinfectant solution or mild detergent solution.
3. Pour required amount of the germicidal solution into a spray bottle.
4. Using a brush or cloth, wipe off dust. If necessary, spray the exterior of the top and the bottom enclosures, power cord and the cord plug with the prepared disinfectant or detergent solution. Using a damp cloth, wipe down the sprayed surface cleanly.

**NOTE:** *Do not spray excess amount of solution on the control unit.*

5. Once the control unit is clean, wipe down the unit, the power cord and the cord plug with a clean, dry cloth.
6. Place the control unit to dry in a cool and dry area for an hour before operating the unit again. If the control unit is not used immediately, place the control unit in a plastic bag and store it in a storage area.

# Preventive Maintenance & Storage

## **Preventive Maintenance**

It is important to periodically test the Panacea Air APL mattress control unit to verify the proper functionality. Lack of regular maintenance can result in poor or reduced resident support.

1. The air filter for the control unit should be checked routinely for signs of dirt or contamination. The frequency for replacing depends on the air quality.
2. The air filter is accessible from the outside of the pump; it is approximately two inches by one inch covered by a plastic cover.
3. As the filter is white, the need to replace dirty filters is apparent because they will darken in color due to the collection of dirt. Simply remove the plastic cover, remove the filter and replace with a new filter.
4. Replace the plastic cover.

## **Storage**

1. Always store the support surface flat on a clean, level surface.
2. Avoid storage of other equipment on top of the support surface.

# Troubleshooting Guide

## **Mattress will not inflate or if every other cell is not inflating:**

- Disconnect the control unit and make sure air is flowing from the open ports. This is done by disconnecting the control unit from the mattress and physically feeling the air blowing out from one port and then the other. It may take several minutes to switch from one port to the other depending on the control unit's cycle time. If the control unit is not blowing air out of the ports, call for service.
- Check to make sure the control unit is on.
- Check to make sure the control unit is properly connected to the mattress.
- Check to make sure the red CPR release valve is closed.
- Open mattress and inspect the internal connections to make sure each individual air cell is properly connected and not leaking. If a defect is discovered, call for repair or replacement of defective component.
- Visually inspect each air cell to make sure there are no cuts, punctures or tears in the material with the exception of the low air loss holes designated by the white circles on the air cells. If a defect is discovered, call for repair or replacement of defective component.
- Check to make sure there are no kinks or leaks in the internal and external hoses. If a defect is discovered, call for repair or replacement of defective component.

## **Mattress is soft and will not get firm or Low Pressure Alarm is sounding:**

- Check control unit to make sure it is on and functioning properly. If the control unit is not functioning, call for service.
- Inspect the air filter to make sure it is clean. The filter is located on the back of the control unit near the upper left corner. The filter should be white in color and free of dust or other debris. If the filter is not clean, replace with a new filter.
- Visually inspect each air cell to make sure there are no cuts, punctures or tears in the material with the exception of the low air loss holes designated by the white circles on the air cells. If a defect is discovered call for repair or replacement of defective component.

**NOTE:** *The pressure in the mattresses lowers when the weight of the resident is removed from the mattress. The alarm will sound until the pump re-establishes the pressure level. In this situation wait about 5 minutes and check it again.*

## **Control unit is not working:**

- Check to make sure the control unit is plugged into a live electrical socket.
- Make sure the control unit is turned on.
- Check the external fuses to make sure the fuses are in good condition. **Make sure the control unit is unplugged from the power source.** Locate the fuses on the side of the control unit near the on/off switch. Unscrew the fuse cap and inspect the fuse to see if the filament, small wire inside of the glass tube, is broken. If the filament is broken, install new fuse and reinsert the fuse cap. Be sure the replacement fuse is of the same voltage and amperage as the previous fuse.

# Limited Warranty

We offer to you, as the original purchaser, a warranty for the Panacea® Air APL mattress. Our warranty applies for the limited warranty period stated below. If any device or device part listed below is defective in material or workmanship during the applicable limited warranty period, we will repair or replace it at our cost. Please note that the decision to repair or replace a device or device part will be at our discretion. Our warranty applies only if the device is properly maintained by the original purchaser for normal, indoor use and does not cover normal wear and tear, modification of the device, or damage caused by abuse, improper use, failure to maintain, use which exceeds the published device limitations, or the combination of any device with another product. In addition, our warranty does not cover fading, characteristics or natural variations in fabric, texture, colorfastness, stains, spills or exposure to chemicals, odors, heat or light. In certain cases, we may provide you repair or adjustment instructions and/or replacement parts and ask you to perform a repair or adjustment or replace a defective part.

Our warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Please note that our limited warranty period begins when we ship the device to you. The limited warranty period and our obligations under the warranty end once you transfer the device to someone else or at the end of the applicable limited warranty period identified below, whichever is earlier.

<b>Product/Part</b>	<b>Warranty Period &amp; Coverage (Parts)</b>	<b>Anticipated Usable Device Life</b>
Electrical Components	12 months	3 years
Mattress	2 years	5 years
Cover	1 year	1 year

Anticipated Usable Device Life is based on normal use with proper maintenance, cleaning and storage. You should still inspect, monitor and care for the device as described in this guide, as the device may need to be replaced sooner than anticipated in particular situations.

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# Customer Service

Our promise to you is that you will have a convenient and easy ordering experience, receive a quality mattress and enjoy outrageous customer service. If you have any questions about the mattress you have purchased or would like to request warranty service, please contact: **Direct Supply Equipment & Furnishings®**, 1-800-634-7328, 6767 N. Industrial Road, Milwaukee, WI 53223, [SalesSupport@DirectSupply.com](mailto:SalesSupport@DirectSupply.com)



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