



*Prevention Through  
Innovation.*

## OPERATION MANUAL

# ATLAS

## SELF ADJUSTING, EQUALIZATION TECHNOLOGY SYSTEM WITH OPTIONAL PUMP AND ALTERNATING PRESSURE

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## IMPORTANT SAFEGUARDS

When using electrical products, especially when children are present, basic safety precautions should always be followed, including the following:

### Danger

To reduce the risk of electrocution:

- Always unplug this product immediately after use.
- Do not use this product in wet conditions.
- Do not place or store product where it can fall or be pulled into a tub or sink.
- Do not place in or drop into water or other liquids.
- Do not reach for a product that has fallen into water or other liquid. Unplug immediately.

### Warning

To reduce the risk of electrocution or injury to persons:

- A product should never be left unattended when plugged in.
- Close supervision is necessary when this product is used by, on, near children or invalids.
- Use this product only for its intended use as described in this manual.
- Do not use attachments not recommended by the manufacturer. 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.
- Keep the cord away from heated surfaces.
- Never drop or insert any object into any opening or hose.
- Do not use outdoors or operate where aerosol (spray) products are being used.
- Connect this product to a properly grounded outlet only.
- Do not disassemble, repair, or rebuild the product without permission, otherwise it may become a fire risk and danger in life. **THIS WILL VOID THE PRODUCT WARRANTIES.** Always contact your service provider for repairs.

### Grounding

Before any connection is made, make certain that this product shall be connected to a grounded plug (three-wire power cord; the three-blade plug) and inserted only into a socket outlet that provides a grounded plug.

## INTRODUCTION

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

### General

The ATLAS Mattress with Alternating Pressure Pump design for prevention, treatment, and management of pressure injuries. The pump is simple to operate and easy to use, constantly providing pressure redistribution and support to users.

The ATLAS pump have been tested and certified for the following standards:

- ❖ CE
- ❖ UL

### Intended Use

The ATLAS mattress with optional pumps are intended to treat and/or reduce the incidence of pressure injuries while optimizing patient comfort. It also provides the following:

- Individual customized setting capability.
- Pain management as prescribed by a ***Physician, Occupational Therapist or Clinician.***

### Contraindication

Patient conditions for which the application of pressure relieving therapy on an Alternation system is contraindicated are as follows:

- Cervical or skeletal traction.
- Unstable spinal cord injuries.

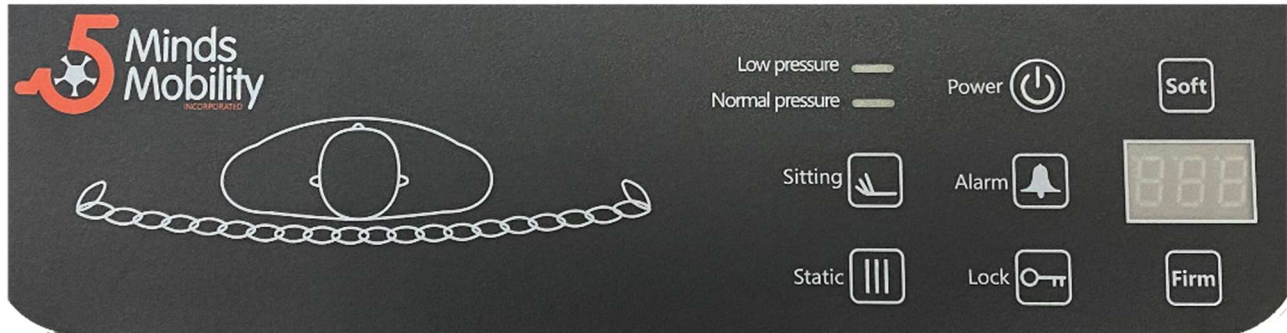
## PACKAGE CONTENTS

Check inside the package. If any of the following items should be missing or damaged, please contact your local dealer or service center for replacement immediately.

1. ATLAS Mattress
2. Operation Manual
3. Air Hose Set
4. ATLAS Pump

## PRODUCT FUNCTION





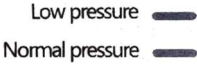


*NOTE: Identify the pump included with the ATLAS Mattress and follow the PRODUCT FUNCTION instructions below for the specific pump.*



## ATLAS PUMP – PRODUCT FUNCTION

### Pump Unit

The functions of the ATLAS pump are described below.

- ❖  **Power Key**  
Press Power key on the panel, the pump will start/stop operation.
- ❖  **Auto Firmness Control**  
Press the **Soft** or **Firm** buttons to select the correct user weight while in Static mode. Pressure adjustment setup and display range (**30 - 180 Kbps / 400 Lbs**). Press the buttons firmly for quick adjustments up or down.
- ❖  **Alarm Mute**  
The audible alarm turns on when the mattress pressure is low. Check all hose and connections to the pump and the mattress. The Alarm will also sound in case of a **Power Failure**. Press the button to mute alarm, the LED will also go out once it is disabled.
- ❖  **Static Mode**  
Press to set the mattress in static therapy mode. Both zones inflate together, the Static LED will display “- - “. **The function will revert to alternating mode after 30 minutes.**
- ❖  **Pressure Indicator**  
**Normal:** A visible indicator (**green**) tells the pressure has reached a preset or user- defined level. **Low:** A visible indicator (**orange**) warns the pressure is below a preset or user- defined level.
- ❖  **Lock**  
Locks all functions after 2 minutes. To disable the lock function press and hold the lock buttons for 3 seconds.
- ❖  **Sitting**  
Sitting function provides extra support when the user is in the seated position ensuring that the hip area does not bottom out causing a pressure issue.

## MATTRESS-PRODUCT FUNCTION

The ATLAS Mattress is a self-adjusting air mattress and can be used without a pump, however this manual describes its use with a pump.

The ATLAS mattress has a built-in hose connection for use with a pump located under a vinyl flap on the users left foot area of the mattress.

The ATLAS mattress can be used as a static, self-adjusting mattress by using a manual pump connector



Hose Connection Port

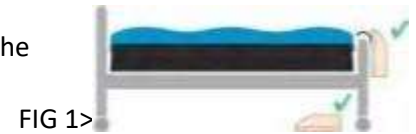
## SYSTEM INSTALLATION

The following describes the procedures for setting up the system for the first time.

- a) Remove all covers, sheets, and mattress from the hospital bed frame.
- b) On the hospital bed, position the ATLAS Mattress on top of bed, printed top cover facing upwards and the hose connection port toward the foot of the bed.

### Pump Control Unit Connection

- a) Position Pump/Control Unit by hanging pump hooks over the footboard of the bed or place unit on the floor under the bed. FIG 1.



- b) Attach one end of the dual air hose set to the pump by inserting into the quick connectors of the Control Unit. Ensure air hoses do not kink between mattress, bed frame and Pump Unit. FIG 2



- c) Attach the other end of the dual air hose to the quick connectors of the mattress hose connection port. The hose connection port is located under a flap at the foot end of the mattress on the patient's left side. FIG 3.



- d) Plug the power cord into an electrical outlet with grounded AC power.

NOTE: Before inserting the plug into the outlet, make sure the voltage is compatible. Also make sure this product is well grounded.

- e) Switch the power button on. Allow up to 20 minutes for full inflation.
- f) Once ready, the indicator of the power key will remain on - lay the user on the bed and select the appropriate comfort level by instructions specific to the pump being used.

## OPERATION

### General

This product is designed to provide maximum comfort to patients. Make sure that you operate this product in a proper way optimizing its value. Here we provide some general information that you should be aware of.

**NOTE:** Please follow instructions below for detailed operating procedure.

**Step 1:** Turn on the power. The indicator of the power key will flash.

**Step 2:** The pump will first default mode upon startup in the Alternating Pressure Mode to begin providing alternating pressure to the ATLAS Mattress. Refer to the specific controls on page 5 & 6 of this manual.

**Step 3:** Refer to the specific pump instructions (page 5 & 6) to enter the patient weight and desired alternating cycle.

NOTE: Press the static mode button from the touch panel to provide a firm surface that makes it easier for the patient to transfer or reposition. The static mode can support the patient by keeping the mattress from bottoming out when the patient is in a sitting position. **The static mode will revert to alternating mode after 20 minutes. Press the Static button again to switch back to alternating mode.**

**Step 4:** During normal operation, the unit will monitor pressure. If the mattress pressure is lower than the set pressure, the pump will automatically inflate the mattress to the set level and then stop.

NOTE: In case there is a bad connection of tubing or any air leakage from the mattress, this will result in a low-pressure condition, and it will activate the alarm within 1 minute. Press the Alarm Mute button to mute the alarm. The alarm LED will continue flashing. Press the Alarm Mute button again to re-enable the audible alarm.

### CPR Function

CPR should be conducted to standard protocol for a standard hospital foam mattress.

### Weight/Pressure Set Up

Users can adjust air flow to the mattress to a desired firmness according to the user's weight or the suggestion from a healthcare professional.

### Low Pressure Warning

When abnormal pressure occurs, the Low-Pressure indicator will come on. For some types of pumps, the alarm will be activated to alert of a low-pressure condition. Check if the connections are secure and correctly installed at the pump and the mattress.

**NOTE:** If the pressure is consistently low, open the zipper and confirm that all hoses are properly connected to the mattress and the pump. Then check for any noticeable leakage or holes in the tubing. If necessary, contact your local dealer to replace any damaged tubes or hoses.



## CLEANING

In this section, we describe the procedures to clean and decontaminate the pump. It is important to follow these procedures before using the system again. The cleaning task is required at least once a week to maintain personal hygiene.

### Pump Unit and Hose Set

- DO NOT immerse or soak the pump in any water or fluids.
- Check for external damage and move the pump to the cleaning area.
- Place the pump on a work surface and spray or wipe the outside of the case with quaternary ammonium solution.
- DO NOT spray any cleaning solution directly on the surface of the pump.
- DO NOT use a Hypocarbonate or Phenolic based cleaning solution as this may cause damage to the case.
- Allow the solution to incubate for 10 minutes or accordingly as stated by the cleaning product instructions.
- Wipe the case with a clean cloth. Make sure all areas are clean (top and bottom, both sides).
- Spray cloth with cleaning solution and clean faceplate. DO NOT allow excess cleaning solution on the faceplate or control panel. (If solution gets inside, damage will occur.) Allow the surface to thoroughly dry after cleaning.
- After the pump is thoroughly cleaned and dried, proceed to plug in the pump and test to see if it runs normally.
- Unplug the pump and store with proper identification tag.
- Avoid long exposure to sunlight.

### Mattress

Washing and Disinfection General Guidance:

- Because of the variety of laundry equipment, chemicals, and conditions in use, you should pre-test cleaning of the cover with your agent of choice to ensure compatibility.
- Routine Care: Surface wipe with neutral detergent and lukewarm water. Rinse thoroughly with water and dry thoroughly.
- Disinfection: Surface wipe the cover with quaternary solution or 1:10 bleach/water mixture according to recommended protocols. Avoid over saturation and ensure the surface does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting. Wipe up excess disinfectant after the recommended kill time has elapsed. Thoroughly rinse the surface of the mattress with clean water using a clean cloth. Allow the surface to completely air dry prior to use. Phenolics may be used for the vinyl bottom of the cover only
- Storage: When not in use, mattress should be stored vertically in a controlled climate room.

## ENVIRONMENT REQUIREMENTS

### Operating Conditions

- Ambient Temperature: 41°F~104°F
- Relative Humidity: 15%~90%, non-condensing
- Atmospheric pressure: 700hPa to 1013hPa

### Storage and shipping conditions

- Ambient temperature: -13°F~158°F
- Relative Humidity: 10%~90%, non-condensing
- Atmospheric pressure: 700hPa to 1013hPa

### Handling

- Lay the mattress out flat.
- Do not fold, crease, or stack the mattress.

## MAINTENANCE

### General

- Check the power cord and plug to see if there are abrasions or excessive wear.
- Check the mattress cover for signs of wear or damage. Ensure the mattress hose connection port is free from damage.
- Plug in the pump unit and check the airflow from the hose connection port. The airflow should alternate between ports every half-cycle time.
- Check the air hoses to see if there are any kinks or breaks. For replacement, please contact your local agent or Service Provider.
- Check the pump unit and make sure both power indicators are off when the switch is turned off.

### Low pressure

- Examine if there is any air leakage between the pump and the mattress connections or from the air mattress tubes:
- Check connectors are fully connected by confirming an audible click when inserted. If there is any disconnection, please reconnect it.
- Check the air tubes. Ensure each has no holes or cuts.
- If low pressure conditions continue, please contact your local agent or Service Provider.

## SPECIFICATIONS

**Mattress** Weight Limit: 400 lb. Width: 35" Length 80" Depth: 7"

### **ATLAS Pump**

Power Supply:	120V 60Hz
Power:	7 W
Fuse Rating:	1A/ 250V
Dimensions:	10" L X 3" W X 5" H
Weight:	7 Lbs
Pressure Range:	30mmHg-60mmHg
Cycle Time:	10 min.

## LIMITED WARRANTY

Your 5 Minds Mobility product is warranted to be free of defects in materials and workmanship for 18 Months Non-Prorated from the date of purchase for the original consumer purchaser.

This device was built to exacting standards and carefully inspected prior to shipment. This Non-Prorated 18 Month Warranty is an expression of our confidence in the materials and workmanship of our products and our assurance to the consumer of years of dependable service.

This warranty does not cover device failure due to owner misuse or negligence, or normal wear and tear. The warranty does not extend to non-durable components, such as rubber accessories, casters, and grips, which are subject to normal wear and need periodic replacement.

If you have any questions about your device or this warranty, please contact an authorized 5 Minds Mobility dealer.