

User's Manual

PLEASE READ ALL INSTRUCTIONS BEFORE USE.

AP 8000

drive[™]

*Alternating Pressure Pump
and Mattress System*

9. Technical Description

Specifications:

Item		Specification					
Model		AP-206000	AP-205000	AP-204000	AP-203000	AP-010101	AP-010102
Power Supply (Note: See rating label on the product)		120V AC 60Hz, 1A (For 120V system) 230VAC 50Hz, 7W (For 230V system)					
Fuse Rating		T1A, 250V (Only applicable to 230V system)					
Cycle Time		8min/60Hz 9.6min/50Hz	5 or 6min*60Hz 6 or 9.6min*/50Hz	5min/60Hz 6min/50Hz	5min/60Hz 6min/50Hz		
Dimension		25.4 x13 x 9.5 (cm) or 21.6cm* 0.8cm* .2(cm)					
Weight		1.6 kg or 3.5 lb					
Environment	• Temperature	Operation:10°C to 40°C (50°F to 104°F) Storage: -15°C to 50°C (5°F to 122°F) Shipping: -15°C to 70°C (5°F to 158°F)					
	• Humidity	Operation: 10% to 90% non-condensing Storage: 10%to 90% non-condensing Shipping: 10 % to 90 % non-densing					
Classification		<ul style="list-style-type: none"> • Class I, Type BF, IPX0 • Applied part: Air Mattress • Not suitable for use in the presence of a flammable anesthetic mixture(No AP or APG protection) 					
Mattress		Specification					
Model		Dimension (LxWxH)	Weight	Pressure Range (mmHg)			
8" Mattress		200x 90 x 20.3(cm) or 78.7" x 35.4" x 8"	5.6 kg or 12.4 lb	30 ~ 50			
5" Mattress		200x 90 x 12.7 (cm) or 78.7" x 35.4" x 5"	5.0 kg or 11 lb	40 ~ 90			
4" Mattress		180x 83 x 10.2(cm) or 70.9" x 32.7" x 4"	4.3 kg or 9.5 lb	50 ~ 105			
Bubble Pad	double bubble	198 x 86 x 12.7 (cm) or 78" x 33.9" x 5"	4.0 kg or 8.8 lb	50 ~ 105 or 100			
	bubble	198 x 86 x 6.4 (cm) or 78" x 33.9" x 2.5"	2.4 kg or 5.3 lb				

*different cycle time is used for different type of mattress.

- 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.

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



Disposal of Electrical & Electronic Equipment (WEEE):

This product should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.



Manufacturer



Authorised representative in the European community

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 also provide following purposes:

- Individual home care setting and long term care of whom suffering from pressure ulcer.
- 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.

8. Troubleshooting

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

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.

6. Storage

- For bladder-type mattress,
 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.
- For bubble-type pad, fold the pad as the original method.

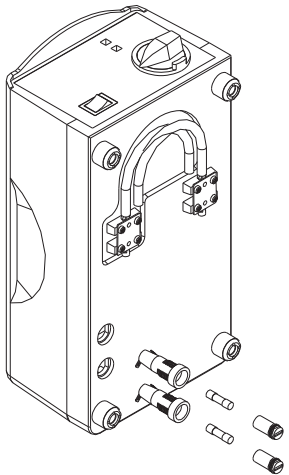
7. Maintenance

7.1 General

1. Check main power cord and plug if there are abrasions or excessive wears.
2. Check mattress cover for signs of wear or damage. Ensure mattress cover and tubes are stubbed together correctly.
3. Check airflow from the air hose. The airflow should alternate between each connector every half-cycle time.
4. Check the air hoses if there is kink or breaks. For replacement, please contact our local dealers.

7.2 Fuse Replacement (only if this feature is available)

*Only applicable to 230V system.

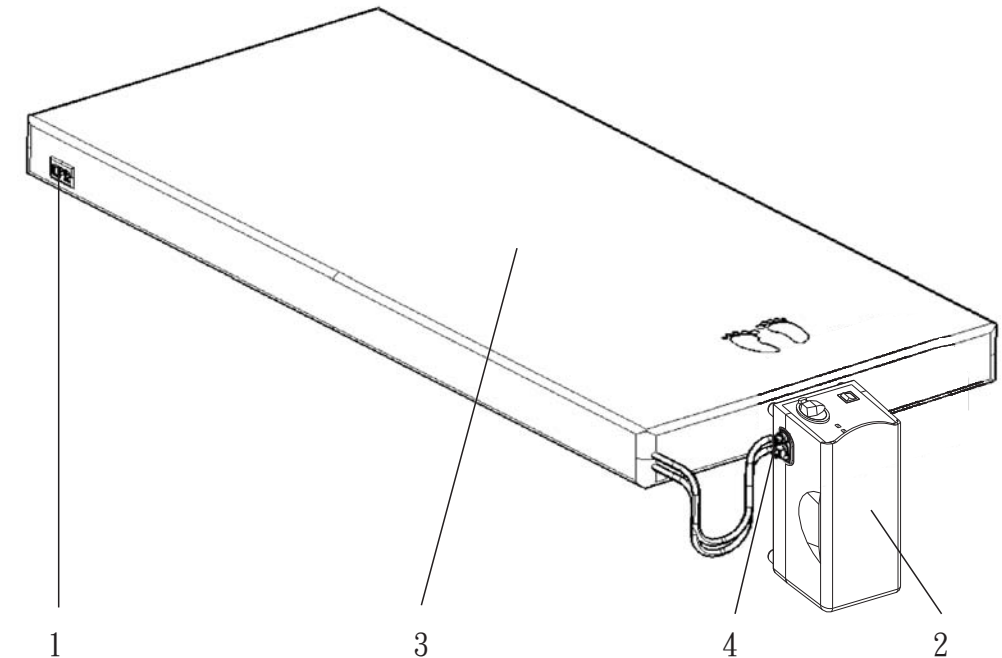


1. Disconnect the plug from mains power when a blown fuse is suspected.
2. Remove the cover of the fuse holder by means of a small screwdriver.
3. Insert a new fuse of the correct rating in, and replace the cover of the fuse holder back. The fuse should be rated as T1A/250V type.

*Applicable with external fused type only.

2. Product Description

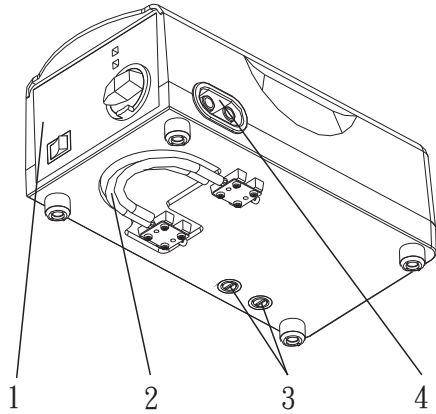
2.1 Pump and Mattress System



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

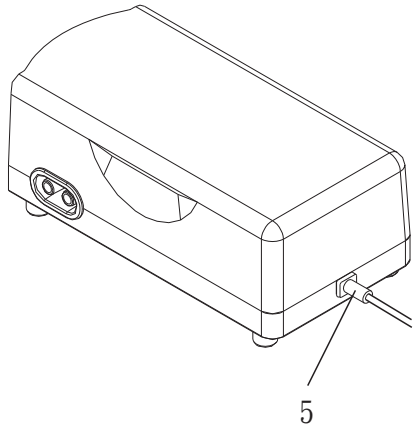
* if this feature is available

2.2 Pump Unit



Front

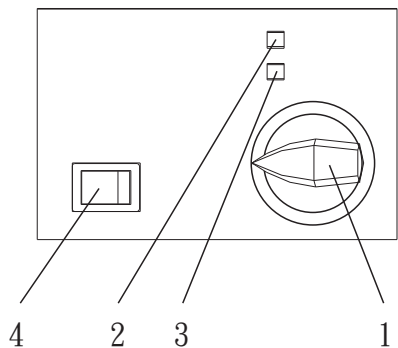
1. Front Panel
2. Mounting Brackets
3. Fuses (if this feature is available)
4. Air Hose Port



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. (if this feature is available)

5. Cleaning


It is important to follow the cleaning procedures before using the machine on human bodies; otherwise, patients and/or doctors may have the possibility of getting infection.

By wiping the pump unit with a damp cloth pre-soaked with a mild detergent, and 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.

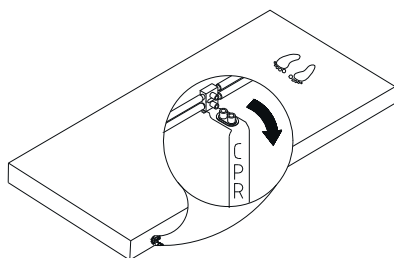
By wiping the mattress with a damp cloth pre-soaked with warm water containing a mild detergent. The cover may also be cleaned using sodium hypochlorite diluted in water.

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.

4.2 CPR (if this feature is available)



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 connected to the pump unit can be disconnected for even faster deflation.

4.3 Pressure Set Up (if this feature is available)

Users can adjust pressure of air mattress to a 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, this indicates the pressure is reached to the desired softness.

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

4.4 Low Pressure Function (if this feature is available)

When an abnormal low pressure occurred, 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.

2. Normal Pressure Indicator

When green LED lights up, the pressure inside of air mattress reaches the preset pressure setting. (if this feature is available)

3. Low Pressure Indicator

When low pressure LED lights up, the pressure inside of air mattress is below normal. Please refer to troubleshooting. (if this feature is available)

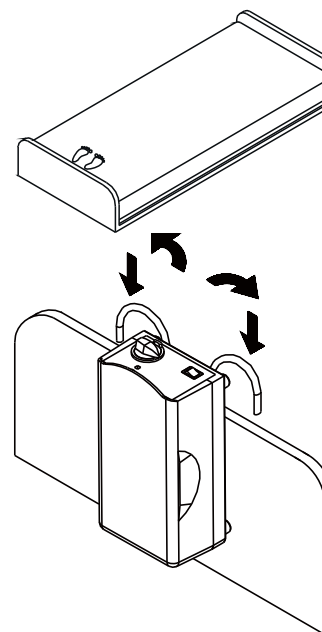
4. Main Power Switch

To turn on/off the pump unit.

3. Installation

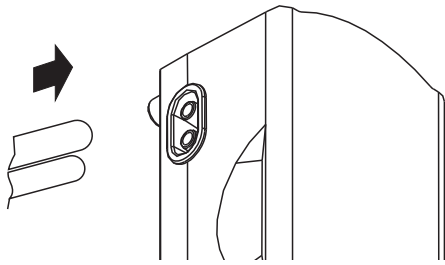
Unpacking the box to inspect for any damage which may have occurred during shipment. If there are any damages, please contact your dealer immediately.

3.1 Pump & Mattress Installation



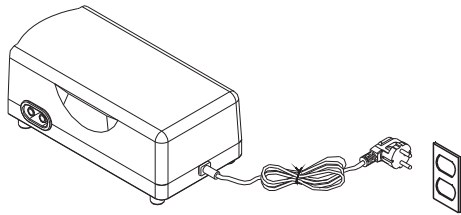
1. Place the mattress or pad on top of the bed frame. Please note for the foot end.

2. Hang the pump onto bed rail (foot-end), and adjust hangers to best upright position of the pump., or place the pump on a flat surface. (if this feature is available)



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

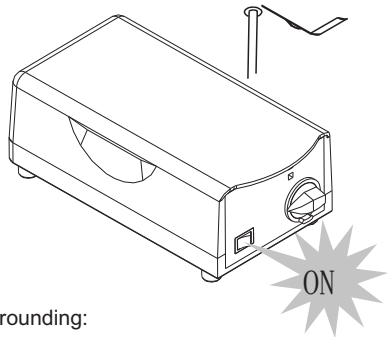
⚠ NOTE: Check and ensure the air hoses are not kinked or tucked under mattress.



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 is also served 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.
(Applied part: air mattress)



5. Then 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.

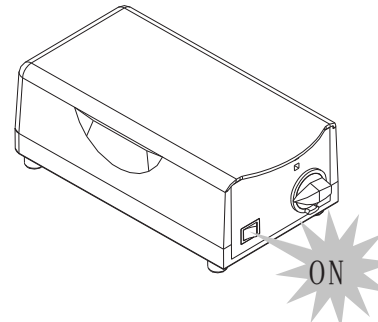
Several installation tips are listed below:

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 position where users/doctors can access easily.

4. Operation

⚠ NOTE: Always read the operating instruction before use.

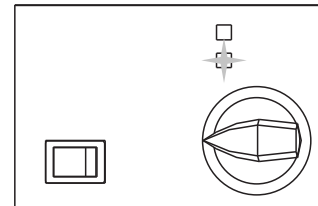
4.1 General operation



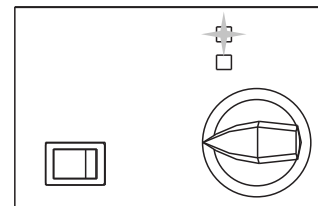
1. Switch on the main power switch.

Pumping

2. The pump unit is to delivering air into mattress.



3. The low pressure indicator (yellow LED) will light up when the mattress is not yet fully inflated. (If this feature is available)



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. (if this feature is available)

⚠ NOTE: Every time when mattress is first setup for use, it is recommended that the pressure knob to be set to "Firm" for the quickest inflation. User can then adjust air mattress to the desired softness afterward.