



## **Apollo Healthcare Technologies Limited**

Holme Street, Liversedge, West Yorkshire WF15 6JF Tel: +44 (0) 1924 614567 Fax: +44 (0) 1924 607480 Email: sales@apollo-ht.co.uk www.apollo-ht.co.uk









Due to ongoing research and development, Apollo Healthcare Technologies Ltd, reserve the right to change specifications without prior notice. This will not affect the efficacy of the system. Always consult the user manual for instructions for use.



# APH052 Apollo 5 Plus<sup>™</sup> APH053 Apollo 8<sup>™</sup>





www.apollo-ht.co.uk

## TABLE OF CONTENTS

	PAGE
INSTRUCTIONS	2
INTRODUCTION	3
PRODUCT DESCRIPTION	4
INSTALLATION	6
OPERATION	7
CLEANING	9
STORAGE	9
MAINTENANCE	9
SPECIFICATIONS	11
SAVE THESE INSTRUCTIONS	12

# **INSTRUCTIONS**

#### **DANGER** - To reduce the risk of electrocution:

- 1. Do not place or drop into water or liquid.
- 2. Do not reach for a product that has fallen into water.
- 3. Do not place or store the product where it may fall into water.
- 4. Always unplug this product when not in use.

## WARNING - To reduce the risk of burns, electrocution, fire or injury to Persons:

- 1. Do not block air openings of this unit or place it on a soft surface.
- 2. Do not operate the unit if it has a damaged cord or plug, return the unit or contact a service centre for examination or repair.
- 3. Do not drop or insert any object into any opening or hose.
- 4. Connect the unit to a properly grounded outlet only. See grounding instruction.
- 5. When plugged in, the unit should not be left unattended.
- 6. The unit is only for it's intended use, do not use attachments not recommended by the Manufacturer.
- 7. Close supervision is necessary when this product is used near Children.
- 8. Keep the cord away from heated surfaces.

## **NOTE, CAUTION AND WARNING STATEMENTS:**

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



Class II equipment



Attention! Consult accompanying documents.



Follow operating 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 relative organization for disposal service.

# A. INTRODUCTION

For initial set up and for reference purpose, this manual should be read carefully.

## **A.1 GENERAL INFORMATION**

The unit is for prevention or treatment of pressure ulcers.

The unit has been tested and successfully approved by the following regulation: EN60601-1

EN60601-1-2



#### A.2 INTENDED USE

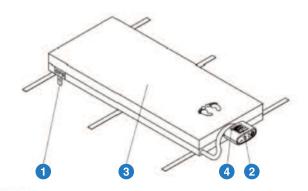
The unit should help prevent and reduce the incidence of pressure ulcers while optimising Patient comfort. It is used for the following purposes:

- 1. For home care and long term care of Patients who may be suffering Pressure Area Care Damage.
- 2. Pressure relief to assist in the prevention of pressure area damage.

NOTE: The unit is not suitable for use around flammable anaesthetic mixture, with air or with nitrous oxide.

# **B. PRODUCT DESCRIPTION**

## **B.1 AIR PUMP AND MATERIALS**



- 1 CPR
- 2 Pump unit
- 3 Mattress System
- 4 Quick Connectors

#### **B.2 PUMP AND MATERIALS**



- 1 Comfort Adjust button (30 200kg)
- 2 Power On/Off button
- 3 Mode button (Alternating/Static)
- 4 Alarm Mute button
- 5 Panel Unlock button
- 6 Fuse
- 7 Air Filter
- 8 Mounting Brackets
- 9 Power Cable Plug



#### **B. 3 FRONT PANEL**



- 1. Comfort (weight) setting indication lights. Adjust the comfort button through the weight settings from 30KG to 200KG, according to the patient's weight. The weight settings should only be used as a comfort setting and as a guide in conjunction with a qualified Clinicians advice for each individual user.
- 2. Fault indication light. If the pump detects low pressure in the mattress or the pump requires a service, this light will illuminate Orange, an audible constant beep alarm will also sound. Once the issue has been rectified press the Alarm Mute Button in order to return the pump to normal operation.
- 3. Panel lock out light. After 2 minutes if no buttons have been pressed on the pump, the panel automatically locks-out. This light will illuminate to show that the panel has locked-out. To unlock the panel, hold down the panel unlock button for 2 seconds. The light goes out and an audible beep will sound.
- 4. Alternating/Static indicator lights. Depending on whether the alternating or static function has been selected, the corresponding light will illuminate. Pressing the mode button will switch between alternating and static. As a safety feature, the pump automatically switches to alternating from static after a period of 30 minutes.
- 5. Alarm mute button. When either the fault or power failure alarms are triggered, pressing this button will temporarily silence the alarm whilst the issue is fixed.
- 6. Power failure alarm indicator light. If the power is lost to the pump this light will illuminate Red and a constant beep alarm will sound. Once the power is restored to the pump the light and alarm will stop.
- 7. Power on/off indicator light. When the pump is turned on by pressing the power button, this light will illuminate green. When the button is pressed again to turn off the pump or if there is a power failure, the light will go out.

## C. INSTALLATION

After delivery check the system for any damage which may have occurred during transit. If damaged in any way contact your supplier immediately.

#### C1 PUMP AND MATTRESS INSTALLATION



- 1. Place air mattress on top of the bed frame/platform. Please ensure foot sign is at the bottom of the bed.
- 2. Hang the pump onto the foot end bed rail and adjust the hangers to a suitable position for the pump. Alternatively, the pump may be placed on a flat surface.
- 3. Connect the air hose connectors from the mattress to the pump unit. Make sure the connection is completely secured.
- $ilde{m{\Lambda}}$  NOTE: Ensure the air hoses are not kinked or tucked under the mattress.
- 4. Plug power cord into electrical socket.
- NOTE: 1. Make sure the pump is suitable for the power voltage 2. Removing the plug will disconnect the system
- ACAUTION: The pump can only be used for the mattress recommended by the Manufacturer. Do not use for any other purpose.
- 5. Press the power button to turn the pump on.

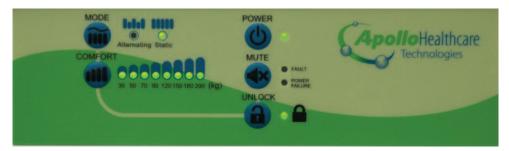
 $\epsilon$ 

# D. OPERATION



NOTE: Always read the manual before use.

#### **D.1 GENERAL OPERATION**

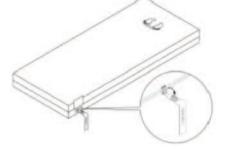


- 1. Insert the supplied power cable into the side of the pump and the plug into a suitable power supply and press the power on button.
- 2. Wait for 20-30 minutes (depending on the mattress) for the mattress to be fully inflated by the pump.
- 3. The pump will automatically be set to alternating mode and on the lowest comfort setting. Static mode can be selected if desired and the comfort setting can be increased. The alternating or static light will continue to flash until the mattress reaches the pressure chosen.
- 4. Adjust the comfort setting to the most comfortable level for the Patient, without the mattress bottoming out. The pressure in the mattress will slowly increase or decrease to the required level after the alternating or static light has stopped flashing.

 $\triangle$  NOTE: It is recommended that the comfort setting be set to maximum (200KG) for the quickest inflation of the mattress for every first inflation or new use, the user can then adjust the comfort setting to the desired level after the mattress has fully inflated.

## D.2 CPR

This is for emergency use to deflate air from the mattress. Disconnect the air tubes from the mattress for even faster deflation.



#### **D.3 PRESSURE SET UP**

Press the comfort button to cycle through the different weight settings until the green LED on the desired weight is illuminated.

The alternating or static LED will flash until the pressure in the mattress reaches the desired setting.

#### **D.4 LOW PRESSURE INDICATION FUNCTION**

Once the mattress has reached the desired comfort setting, should the pump detect low pressure in the mattress the fault LED will light up Orange and an audible constant beep will sound. Check that the connector is fully inserted and that the CPR valve on the mattress is fully closed.

NOTE: If the pressure remains at LOW PRESSURE, check for any air leakage (cells, air tubes and connectors) If necessary, replace any damaged parts. Or contact the supplier for further assistance.

#### **D.5 STATIC MODE**

If required, the mode button can be pressed to place the mattress into static. The pressure inside the cells will be inflated to the same comfort setting and the alternating function will be suspended. Pressing the mode button again will return the mattress back to alternating mode. As a safety feature the pump will AUTOMATICALLY switch back to alternating after a period of 30 minutes in static mode.

## **D.6 ALARM MUTE**

When low pressure is detected due to a fault both alarm LED will light and audible alarm will sound. By pressing the alarm mute button, this will temporarily mute the audible alarm until the fault is rectified. Should the fault remain unresolved after 5 minutes, the alarm will sound again, the alarm LED light will remain on until the problem is solved. Contact your equipment provider or technician should the problem persist.

## E. CLEANING

Ensure the system is thoroughly cleaned between Patient use. Wipe the air pump with a damp cloth pre-soaked with a mild detergent and keep it dust free.



**A** CAUTION, do NOT soak the pump.

Wipe the mattress with a damp cloth pre-soaked with warm water (not to exceed 60° C) containing a mild detergent. Keep the Mattress dust free. The cover may also be cleaned using Sodium Hypochlorite diluted in water. All parts should be air dried thoroughly before use. The mattress cover may also be washed in the washing machine at a temperature not exceeding 95° C. See printed washing instructions on the cover.



## **A** DO NOT USE PHENOLS



Always dry the Mattress without direct exposure to sunlight.

# F. STORAGE

- 1. For storage fully deflate the mattress.
- 2. Roll the Mattress from head end downwards.
- 3. Store in a cool dry place.



NOTE: DO NOT FOLD OR STACK THE MATTRESS.

# G. MAINTENANCE

## **G.1 GENERAL**

- 1. Check the main power cord and plug are not excessively worn or cut.
- 2. Make sure mattress cover, inner cells and air tubes are assembled correctly.
- 3. Make sure all the cells are alternating correctly.
- 4. Check all tubing is not kinked or broken. If replacements are required, contact your supplier.

#### **G.2 FUSE REPLACEMENT**

- 1. Firstly unplug the pump from the mains.
- 2. Remove the cover of the fuse with a cross head screwdriver.
- 3. Insert a new fuse of the correct rating and replace the cover. The fuse should be rated as T1A/250V and CE approved.

#### **G.3 AIR FILTER REPLACEMENT**



- 1. Remove the air filter cover, located at the back of the pump.
- 2. Replace the filter and replace the cover.
- 3. Replacing the air filter regularly is recommended.

9 10

# H. SPECIFICATIONS

Air pump		Specif	ication	
Power Supply AC 120V 50/60 Hz, 0.1A 8W				
AC 230V 50/60 Hz, 0.06A 11W		V		
Fuse Rating		T1A, 250V		
Cycle time		9.6 minutes		
Pump Dimension (L x W x H) 27 x 13.		27 x 13.3 x 9cm		
Pump Weight 2.38kgs				
Temperature	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)			
Liviloninent		Operation: 10% to 90% non-condensing		
	Humidity	Storage: 10% to 90% non-condensing		
		Shipping:10 % to 90% non-condensing		
Classification		Class II, Type BF, IPX1		
		Applied Part: Air Mattress		
		DO NOT USE IN THE PRESENCE OF A FLAMMABLE		
		ANESTHETIC MIXTURE ( NO AP OR APG PROTECTION )		
		·	· · · · · · · · · · · · · · · · · · ·	
	attress	Specif	ication	
	attress s Height	·	· · · · · · · · · · · · · · · · · · ·	
Mattres		Specif	ication	
Mattres Dimension	s Height	Specif APH052 - 7" or 17.5cm	ication APH053 - 8" or 20cm	
Mattres Dimension Mattres	s Height (L x W x H)	Specif APH052 - 7" or 17.5cm 198 x 88 x 17.5cm	APH053 - 8" or 20cm 198 x 88 x 20cm	
Mattres Dimension Mattres System Pre	s Height (L x W x H) s Weight	Specif APH052 - 7" or 17.5cm 198 x 88 x 17.5cm 4.1kgs	198 x 88 x 20cm 5.18kgs	
Mattres Dimension Mattres System Pre	s Height (L x W x H) s Weight ssure Range	Specif APH052 - 7" or 17.5cm 198 x 88 x 17.5cm 4.1kgs 30 - 80 mmHg	198 x 88 x 20cm 5.18kgs 30 – 80 mmHg	
Mattres Dimension Mattres System Pre	s Height (L x W x H) s Weight ssure Range	Specif APH052 - 7" or 17.5cm 198 x 88 x 17.5cm 4.1kgs 30 - 80 mmHg 200 kg	198 x 88 x 20cm 198 x 88 x 20cm 5.18kgs 30 - 80 mmHg 200 kg 1st LED : 30~40 kg 2 <sup>nd</sup> LED : 50~60 kg	
Mattres Dimension Mattres System Pre	s Height (L x W x H) s Weight ssure Range	Specific APH052 - 7" or 17.5cm  198 x 88 x 17.5cm  4.1kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg	198 x 88 x 20cm 198 x 88 x 20cm 5.18kgs 30 - 80 mmHg 200 kg 1st LED: 30~40 kg 2nd LED: 50~60 kg 3rd LED: 70~80 kg	
Dimension  Mattres  System Pre  Maximi	s Height (L x W x H) s Weight ssure Range um load	Specific APH052 - 7" or 17.5cm  198 x 88 x 17.5cm  4.1kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg	198 x 88 x 20cm  198 x 88 x 20cm  5.18kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3nd LED : 70~80 kg  4th LED : 90~110 kg	
Dimension  Mattres  System Pre  Maximi	s Height (L x W x H) s Weight ssure Range	Specification   APH052 - 7" or 17.5cm  198 x 88 x 17.5cm  4.1kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3rd LED : 70~80 kg	198 x 88 x 20cm  198 x 88 x 20cm  5.18kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3nd LED : 70~80 kg  4th LED : 90~110 kg  5th LED: 120~140 kg	
Dimension  Mattres  System Pre  Maximi	s Height (L x W x H) s Weight ssure Range um load	Specification APH052 - 7" or 17.5cm  198 x 88 x 17.5cm  4.1kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3rd LED : 70~80 kg  4th LED : 90~110 kg	198 x 88 x 20cm  198 x 88 x 20cm  5.18kgs  30 - 80 mmHg  200 kg  1st LED: 30~40 kg  2nd LED: 50~60 kg  3rd LED: 70~80 kg  4th LED: 90~110 kg  5th LED: 120~140 kg  6th LED: 150~170 kg	
Dimension  Mattres  System Pre  Maximi	s Height (L x W x H) s Weight ssure Range um load	Specifical APH052 - 7" or 17.5cm  198 x 88 x 17.5cm  4.1kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3rd LED : 70~80 kg  4th LED : 90~110 kg  5th LED: 120~140 kg	198 x 88 x 20cm  198 x 88 x 20cm  5.18kgs  30 - 80 mmHg  200 kg  1st LED : 30~40 kg  2nd LED : 50~60 kg  3nd LED : 70~80 kg  4th LED : 90~110 kg  5th LED: 120~140 kg	

NOTE: If necessary, please ask your supplier for further technical documents

# **SAVE THESE INSTRUCTIONS**

It is **NOT** recommended to repair or replace the unit, unless this is by qualified personal. To reduce the risk of shock or electrocution do not change or modify the cord or plug in any way.



For further technical support please visit www.apollo-ht.co.uk

11 12