

# Portable Air Conditioner, Dehumidifier, Heater and Fan utilizing Heat Pump Technology

**OWNER'S MANUAL** 

Model #: PH1-14R-03 (Reference#: KY-36) PH1-12R-03 (Reference#: KY-34)





Please read owner's manual carefully before operating unit.

# TABLE OF CONTENTS

3
4
5
6
7
10
11
12
12
12
12 12
13
14
16
16
17
17
18
19

## INTRODUCTION

Thank you for purchasing the Soleus Air PH1-14R-03/PH1-12R-03 Portable Air Conditioner and Heater utilizing heat pump technology. This unit is designed to improve indoor living and working comfort by providing cooling, dehumidifying, heating, and ventilation with minimal installation.

This multi-functional unit operates as an air conditioner, dehumidifier, heater, and fan. Unlike traditional portables, there is no bucket to empty. The condensate water is evaporated and removed through the exhaust duct along with the warm exhaust air. When operating as an air conditioner, this unit is designed for spot cooling or cooling a room no larger than 550 square feet with a standard eight foot ceiling height. When using this appliance, always exercise basic safety precautions.

Other air conditioning methods are recommended when the indoor temperature is either below 64°F or above 86°F.

Please complete the following information for future reference. Retain this owner's manual with your sales receipt as a permanent record of your purchase.

Serial Number:			
Date of Purchase:	 		
Place of Purchase:			

#### IMPORTANT SAFEGUARDS

Before installing and using your portable air conditioner and heater, it is important that you read this owner's manual carefully. Store this manual in a safe place for future reference.

This instruction manual is used for guidance and does not form part of a contract. It reserves the right to make technical changes without prior notice.

- 1. Always place the unit on a level surface.
- 2. The appliance shall be installed in accordance with national wiring regulation.
- 3. The unit must be connected to a correctly grounded power supply. For your safety, this unit is grounded through the power cord plug when connected to a grounded wall outlet. Do not use an adapter plug or extension cord.
- 4. Do not install the unit in an area where gas leakage may occur and/or in an explosive atmosphere.
- 5. Do not apply an insecticide or any type of flammable spray on the unit.
- 6. Confirm drainage piping is connected properly.
- 7. Do not start or stop the unit by inserting or pulling out the power plug.
- 8. Do not operate with wet hands.
- 9. Close supervision is necessary when the unit is used near children. The unit in not intended for use by children.
- 10. Do not insert anything into the air outlet. Do not obstruct air inlet or outlet grills.
- 11. Do not expose skin or eyes directly to cool air for a long period of time.
- 12. If an abnormal odor or smoke comes out of the unit, disconnect the unit immediately and contact a qualified service technician. (see page 13)
- 13. When opening the filter cover, do not touch the metal parts in the unit's interior.
- 14. Do not immerse the unit in water or any type of liquid. Do not use the unit in the immediate surroundings of a bath, shower, or swimming pool, or in any other steamy, wet areas.
- 15. When cleaning the unit, always turn the unit off and unplug the power cord.
- 16. Always inspect the power cord for signs of damage before use. If the power cord is damaged, it must be replaced by the manufacturer or a qualified service technician.
- 17. Do not place a plant or allow a pet in the direct path of the airflow to avoid injury.
- 18. Do not put a stove, etc, where it would be exposed to the direct airflow. It may affect combustion.
- 19. Do not sit on the unit or place anything on it.
- 20. Before storing, the water must be drained from the unit and the filters cleaned.

## LCDI POWER CORD AND PLUG

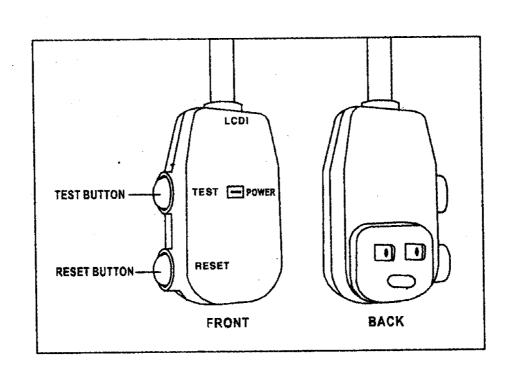
This air conditioner is equipped with an LCDI (Leakage Current Detection and Interruption) power cord and plug as required by US National Electric Code 440.65. This cord consists of a length of shielded flexible cord with no termination on the load side and a LCDI attachment plug on the line side.

The LCDI power cord and plug will remove the supply source via electrical disconnect (circuit trip) if the nominal current leakage between the cord shield and either load conductor exceeds a predetermined value. The cord will remain de-energized until the devise has been manually reset. This is intended to reduce the risk of a fire in the power cord or combustible materials nearby. The cord shields are not grounded and they must be considered a shock hazards if exposed. The cord shield must not be connected to ground or to any exposed metal.

The test and reset buttons on the LCDI Plug are used to check if the plug is functioning properly. To test:

- 1. Plug power cord into wall outlet
- 2. Press TEST Button, circuit should trip, cutting power to the air conditioner
- 3. Press RESET button for use

If a test is performed and the indicator light remains ON, current leakage has been detected. Do not use the air conditioner or attempt to reset the LCDI Plug. Contact Soleus Air Customer Service for troubleshooting recommendations.



#### WARNING:

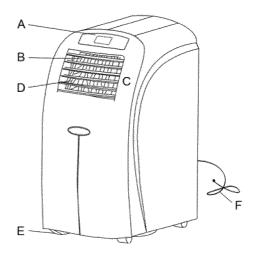
w.

- 1. DO NOT press the TEST button while the air conditioner is operating.
- 2. The TEST and RESET buttons should not be used as "ON" and "OFF" switches.
- 3. The cord and plug are not intended to offer protection to externally connected loads or supply circuits.
- 4. The cord and plug are intended for indoor use only.

## PRODUCT DIAGRAM

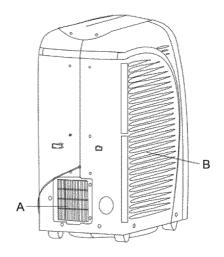
#### **FRONT**

- A. Control panel
- B. Vertical air louvers
- C. Air outlet
- D. Horizontal air louvers
- E. Casters
- F. Cable (power cord and plug)



### **BACK**

- A. Hot air outlet grill
- B. Lower air inlet grill



## **ACCESSORIES**

Flexible exhaust hose with 2 adapters

- 3-piece set
- stretches from 14 1/4" to 60 5/8" (36cm to 150cm)

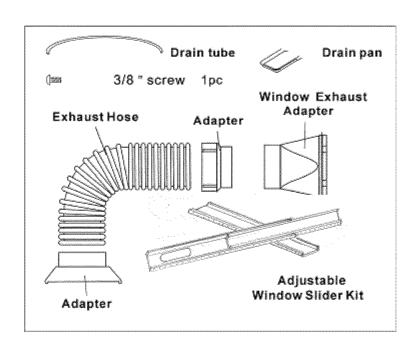
Window exhaust adapter

Adjustable window slider kit

- 3-piece set
- adjusts 33 1/2" to 70" (85cm to 177.8cm)

Drain tube

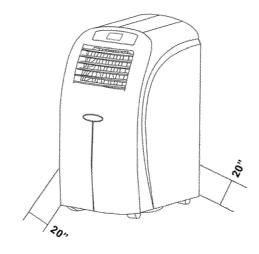
Drain pan



## **INSTALLATION**

#### SELECTING THE LOCATION

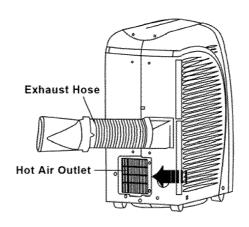
Place the unit in a flat location where the air outlets are not obstructed. Place the unit at least 20" (50cm) away from a wall or other obstacle.



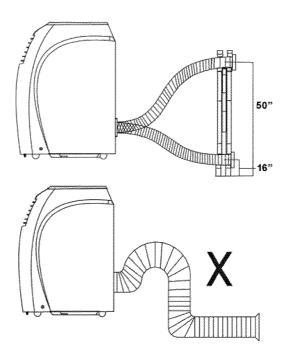
#### MOUNTING THE EXHAUST HOSE

Slide the square end of the exhaust duct over the hot air outlet on the back of the unit.

The exhaust hose should be kept as short and straight as possible. Prevent any sharp bends in the exhaust hose, as this will trap hot exhaust air.



The hot exhaust air can be vented through the wall or out a window. If mounting in the wall, the height of the hole should be 16 to 50 inches (40cm to 130cm).

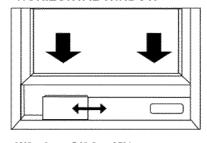


#### WINDOW KIT INSTALLATION

The window kit is designed to fit into most standard vertical and horizontal windows, as well as some sliding glass doors. However, it may be necessary to modify some aspects of the installation process for certain window types.

- Open the window or sliding door and adjust the length of the window kit to fit the opening. If the window kit is not long enough, connect the extra window kit panel to fit the opening. Mark and cut down a single panel of the window kit if necessary.
- 2. Place the window kit between the window and the window frame as shown in the images to the right. Close the window onto the window kit to form a tight seal.
- 3. Attach the exhaust duct adapter to the window kit. Tabs located on the adapter will lock into place securing the adapter to the window kit.

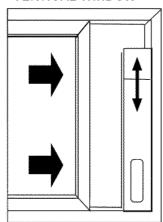
#### HORIZONTAL WINDOW

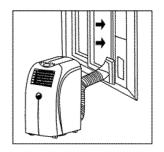




Window Slider Kit Minimum:  $33\frac{1}{2}$ " (85cm) Maximum:  $48\frac{3}{8}$ " (123cm)

#### **VERTICAL WINDOW**





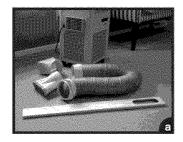
Window Slider Kit Minimum: 33 ½" (85cm) Maximum: 48 ½" (123cm)



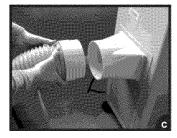
# Installation of the Venting Kit

FOR SINGLE HOSE PORTABLE AIR CONDITIONERS

Innovative products for a cleaner, more comfortable world.



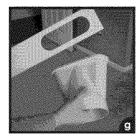


















The venting kit must be installed in order for the unit to work correctly in the air conditioning mode. The venting kit should not be used while the unit is heating or fanning.

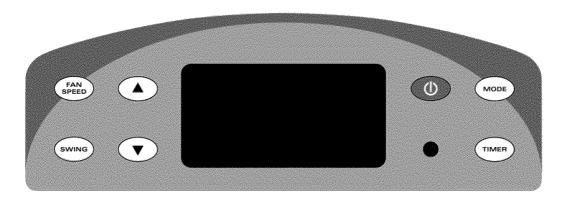
The window kit has been designed to fit into most vertical and horizontal window openings. The window kit can also be used in a sliding door.

- 1. Choose a suitable location, near a grounded electrical outlet and a suitable window or door. Remove packaging and locate components. (figure a)
- 2. Slide the exhaust connector over the discharge opening on the back of the unit. (figure b)
- 3. Connect the exhaust hose to the exhaust connector, aligning the fitted grove. (figure c)
- 4. Open the window or door and adjust the length of the window kit to fit the opening. (figure d) If necessary, mark the kit and cut one end down to properly fit the opening. (figures e & f)
- 5. Attach the window kit adapter to the window kit. (figure g)
- 6. Place the window kit back into the window and attach the exhaust hose to the window kit adapter. (figures h & i) Close the window tightly. (figure j) Your Portable Air Conditioner is now ready to cool!

NOTE: When using the venting system, keep the exhaust hose as straight as possible. The exhaust hose can be shortened, but it is not recommended to increase the length of the exhaust hose. Do not use an extension cord with your portable air conditioner.

## **CONTROL PANEL AND MULTI-COLOR DISPLAY**

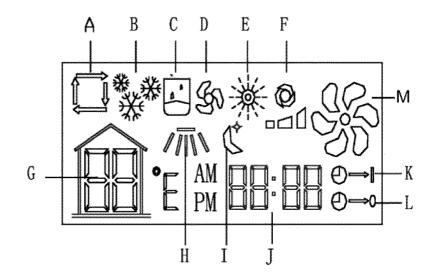
## **CONTROL PANEL**



FAN SPEED Button	During the modes of cooling, heating and fanning, press this button to choose high, medium or low fan speed. In dehumidifying mode, this button is inoperable.
SWING Button	Press this button to oscillate the vertical louvers or to stop oscillation.
✓ Button	This button decreases the room temperature/timer hours.
∧ Button	This button increases the room temperature/timer hours.
Power Button	Press this button to turn the unit on or off.
MODE Button	Press this button to select among the modes of auto, cooling, dehumidifying, fanning, or heating.
TIMER Button	Press this button to turn the timer on/off.

## **MULTI-COLOR DISPLAY**

- A. Auto Mode
- B. Cool Mode
- C. Dehumidify Mode
- D. Fan Mode
- E. Heat Mode
- F. Fan Speed (Low, High, Medium)
- G. Temperature
- H. Swing Mode
- I. Sleep Mode
- J. Clock and Timer
- K. Timer On
- L. Timer Off
- M. Compressor is on



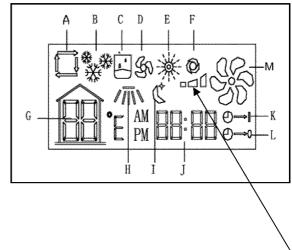
## **CONTROL PANEL FUNCTIONS**

#### **ON/OFF BUTTON**

Starts or stops the unit.

#### **MODE BUTTON**

Press to select the operating mode: Fan Mode Air Conditioning Mode Heating Mode Dehumidifying Mode Auto Mode



#### **FAN BUTTON**

Press to select the fan speed: High, Medium, and Low.

The fan speed can be visually distinguished by the number of the digital air segments (follow arrow above) flow out from the windmill fan image on the multi-color display.

#### **TEMPERATURE**

When in cooling or heating mode, the desired temperature can be selected by pressing the  $\land$  and  $\lor$  buttons. The multi-color display flashes the temperature while it is being set. The multi-color display shows the set temperature when it is not in temperature setting mode.

The multi-color display can show either Celsius or Fahrenheit. Press the  $\land$  and  $\lor$  buttons simultaneously to change the display from Celsius to Fahrenheit or vice versa.

#### **TIMER**

To set the auto start time, press the Timer on button until the multi-color display shows a flashing " $\bullet \bullet \bullet$ ". Press the  $\land$  and  $\lor$  buttons to change the clock to the desired time for the unit to automatically start. To set the auto stop time, press the Timer Off button and the multi-color display will show a flashing " $\bullet \bullet \bullet$ ". Press the  $\land$  and  $\lor$  buttons to change the clock to the desired time for the unit to automatically stop. The light will flash for 3 seconds to activate the timer you programmed.

#### TIME DISPLAY

In the diagram above, the letter "J" points to the adjustable time display. To adjust the time, Press FAN, SPEED and SWING together (at the same time), then press UP to adjust the hours, and press DOWN to adjust the minutes.

#### **SWING**

To start horizontal oscillation, press the Swing button once. 'M' icon will appear on the multi-color display. To stop oscillation, press the Swing button again. Vertical air flow direction can be adjusted manually.

## OPERATION USING THE CONTROL PANEL

#### **COOLING**

- 1. Properly install the exhaust hoses.
- 2. Plug the power cord into a grounded outlet.
- 3. Turn on the unit by pressing the On/Off button on the control panel.
- 4. Press the Mode button until "icon appears on the multi-color display.
- 5. Press the  $\land$  or  $\lor$  buttons until the desired temperature appears on the multi-color display. The temperature ranges from  $61^{\circ}\text{F}$   $88^{\circ}\text{F}$  ( $16^{\circ}\text{C}$   $31^{\circ}\text{C}$ ).
- 6. Select the fan speed by pressing the Fan button.

**NOTE**: During hot days, the unit will cool off the room most efficiently by setting the temperature at the lowest and the fan speed at the highest. Reducing the length of the exhaust hoses, insulating the exhaust hoses, and keeping direct sunlight to a minimum will also improve the cooling efficiency.

#### **DEHUMIDIFYING**

- 1. Properly install the exhaust hoses.
- 2. Plug the power cord into a grounded outlet.
- 3. Turn on the unit by pressing the On/Off button on the control panel.
- 4. Press the Mode button until the "icon appears on the multi-color display.

**NOTE**: The unit operates at low fan speed during dehumidifying. The unit cools the room slightly during dehumidification.

Keep the windows and the doors closed to aid in the effectiveness of the unit in removing the moisture from the room.

**NOTE**: The unit will not dehumidify when the room temperature is lower than 61°F.

#### **FANNING**

- 1. Plug the power cord into a grounded outlet.
- 2. Turn on the unit by pressing the On/Off button on the control panel.
- 3. Press the Mode button until "" icon appears on the multi-color display.
- 4. Select the fan speed by pressing the Fan button.

NOTE: When the unit is running on fan mode, the exhaust hoses are inoperative and are not required.

#### **HEATING**

- 1. Plug the power cord into a grounded outlet.
- 2. Turn on the unit by pressing the On/Off button on the control panel.
- 3. Press the Mode button until "icon appears on the multi-color display.
- 4. Press the  $\land$  or  $\lor$  button until the desired room temperature appears on the multi-color display. The temperature ranges from 61 °F 88 °F (16 °C 31 °C).
- 5. Select the fan speed by pressing the Fan button. It is recommended to use the low fan speed.

NOTE: When the unit is running on heating mode, the exhaust hoses are required and must be vented outside using the supplied window kit.

#### **AUTO MODE**

- 1. Properly install the exhaust hoses.
- 2. Plug the power cord into a grounded outlet.
- 3. Turn on the unit by pressing the On/Off button on the control panel.
- 4. Press the Mode button until the "icon appears on the multi-color display.
- 5. Press the Fan button to select the fan speed.

During the Auto mode, the unit operates in heating mode when the room temperature is below 68°F. The unit operates in dehumidifying mode when the room temperature is between 68°F - 73°F. The unit operates in cooling mode when the room temperature is above 73°F. You may use the timer with the Auto mode.

#### **SLEEP MODE**

(This mode can only be programmed from the remote control.)

- 1. The air conditioner will need to be in operation.
- 2. Press the Sleep button. The " C " icon appears on the multi-color display.
- 3. The fan motor runs at low speed.
- 4. When in cooling mode, the temperature will increase 1°F per hour during the first two hours. Then the temperature will stay 2°F higher than the originally set temperature for 6 hours. 6 hours later, the unit will shut down.
- 5. When in heating mode, the temperature will decrease 1°F per hour during the first two hours. Then the temperature will stay 2°F lower than the originally set temperature for 6 hours. 6 hours later, the unit will shut down.
- 6. When in dehumidify mode, the temperature will not change.

**NOTE:** If the unit is turned off during cooling, dehumidifying, or heating and then restarted, there will be a 3 minute delay before the compressor will turn back on to prolong the life of the compressor. Once the power recovers and the compressor restarts, the unit will return to the original working mode.

# **REMOTE CONTROL & OPERATION**

The remote control provided with the unit can be used to operate the portable air conditioner. The remote control uses 2 AAA batteries (provided). Install the batteries before using the remote control.

The remote control can be used to do all the operations that can be programmed from the control panel.

The LCD display on the remote control can show either Celsius or Fahrenheit. Press the + and - keys simultaneously to change the display from Celsius to Fahrenheit or vice versa.

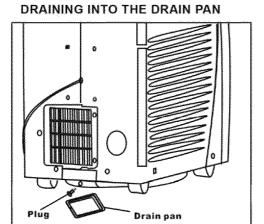


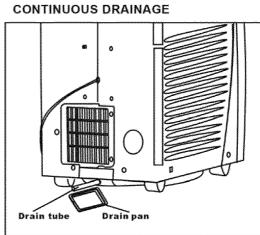
#### WATER DRAINAGE

When the unit is in cooling mode, unwanted water is extracted from the air. Most of this water is used to cool the unit and make it run more efficiently. When the unit is used in extremely humid environments, water will collect in a water container at the bottom of the unit. When the water container is full, the compressor will stop but the fan will continue to run.

When the water container is full, the unit will display 'FULL' on the control panel until the tank is emptied. To resume operation, empty the water container according to the following steps:

- 1. Turn the unit off. Do not move the unit when the water container is full.
- 2. Place the drain pan accessory under the drainage port at the back of the unit.
- 3. Remove the rubber plug from the drain hole. The condensate water will drain out automatically. When the drain pan is full, replace the rubber plug into the drainage hole to stop the water flow. Empty the drain pan. Repeat until all the water is emptied.
- 4. Once the water container has been emptied, replace the rubber plug into the drain hole firmly. Do not allow the water to drip continuously into the drain pan, as it might easily overflow.





NOTE: In heating mode, the drain pipe accessory must be used to empty the water container.

- 1. Remove the rubber plug and keep for future use.
- 2. Connect the drain tube accessory to the drain hole. Place drain pan at end of drain tube; water will drain out automatically during operation.

## **MAINTENANCE**

Always turn off and unplug the unit before cleaning to avoid electrical shock.

#### **CLEANING THE HOUSING**

Wipe the surface of the unit with a soft, damp cloth. Do not use abrasive chemicals or detergents to clean the surface of the unit, as the unit may become scratched or damaged.

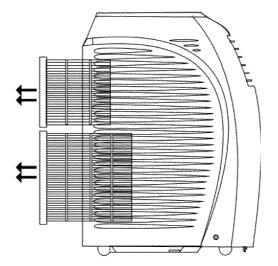
Avoid direct exposure to sunlight as this may change the surface color.

#### **CLEANING THE FILTER**

Slide the filters out from the side of the unit.

Immerse the filter gently in warm water with a mild detergent. Rinse thoroughly and dry before replacing.

An unclean air filter reduces air volume. The filter should be cleaned every two weeks.



#### **END OF SEASON STORAGE**

Turn off and unplug the unit.

Drain all condensate water from the water container.

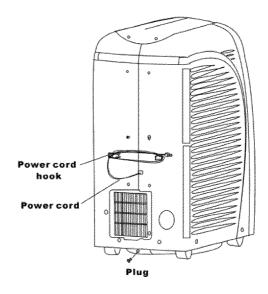
Turn the unit to fan mode for a couple of hours to completely dry out the inside.

Clean the filter.

Wrap the cord around the cord hooks.

It is recommended that the unit be packed in its original carton for storage.

Store in a dry location.



# **TROUBLESHOOTING**

Before seeking repair or service, please check the following:

PROBLEM	POSSIBLE CAUSE	REMEDY
	Is the unit plugged in?	Securely plug the power cord into the wall outlet.
Unit does not operate or	Is the main power supply on?	Reestablish the main power supply.
only runs in fan mode.	Is the water container full indicator light on?	Empty the water container.
	Is the timer set?	Change timer settings.
	Is the air inlet or outlet blocked?	Clear the blocking.
Cooling efficiency is not satisfactory.	Is there any other heat source in the room?	Move the heat source.
	Are the air filters dirty?	Clean the air filters.
	Is the temperature setting suitable?	Change the temperature setting.
	Is the fan speed set at low?	Increase the fan speed.
Unit is noisy or vibrates.	Is the machine positioned unevenly on a level surface?	Place the unit on a level surface.
The unit starts and stops frequently.	Is the voltage from the power source correct?	Use a proper power source.
	Is the exhaust hose positioned incorrectly?	Position the exhaust hose correctly and keep the exhaust hose straight as possible.

## **ERROR MESSAGES**

Diagnostic system indicators appear if any of the following interrupts operation of the unit. The unit may require simple maintenance or repair by a qualified service technician.

CODE	DIAGNOSIS	ACTION	
FAULT E1	Faulty room temperature sensor	Contact customer service for repair or service.	
FAULT E2	Faulty inside sensor.	Contact customer service for repair or service.	
FAULT E3 Internal frost in the unit.		Wait for unit to defrost	
FAULT E4	Unit malfunctions.	Contact customer service for repair or service.	

## **TECHNICAL SPECIFICATIONS**

MODEL		PH1-14R-03 (Reference#: KY-36)	PH1-12R-03 (Reference#: KY-34)
Cooling Capacity		14,000 BTU/Hr	12,000 BTU/Hr
Heating Capacity		14,200 BTU/Hr	12,200 BTU/Hr
Dehumidifying Capacity		65 pts/day	63 pts/day
Power Consumption	Cooling	1390 W	1340 W
	Heating	1180 W	1090 W
Air Flow Volume		328CFM	280CFM
Power Source		115 V / 60 HZ	115 V / 60 HZ
Rated Current	Cooling	12 A	11.7 A
	Heating	9.8 A	9.5 A
Sound Pressure Level		<49 db(A)	<49 db(A)
Weight		80 lbs	80 lbs
Dimensions		14.4 W x 22.4 D x 30.5 H inches	14.4 W x 22.4 D x 30.5 H inches
Refrigerant		R22	R22

## **DISCLAIMER**

ALL INFORMATION AND THE TECHNICAL SPECIFICATIONS PRESENTED IN THIS USER'S MANUAL ARE THE PRESENTATION OF THE MANUFACTURER. SOLEUS INTERNATIONAL HAS NOT CONDUCTED INDEPENDENT TEST TO THE INFORMATION AND THE SPECIFICATIONS PRESENTED HEREWITHIN.

#### WARRANTY

#### **One Year Limited Warranty**

Soleus International Inc. warrants the accompanying Soleus Air PH1-14R-03/PH1-12R-03 to be free of defects in material and workmanship for the applications specified in its operation instruction for a period of ONE (1) year from the date of original retail purchase in the United States.

If the unit exhibits a defect in normal use, Soleus International Inc. will, at its option, either repair or replace it, free of charge within a reasonable time after the unit is returned during the warranty period.

As a condition to any warranty service obligation, the consumer must present this Warranty Certificate along with a copy of the original purchase invoice.

#### THIS WARRANTY DOES NOT COVER:

- 1) Damage, accidental or otherwise, to the unit while in the possession of a consumer not caused by a defect in material or workmanship.
- 2) Damage caused by consumer misuse, tampering, or failure to follow the care and special handling provisions in the instructions.
- 3) Damage to the finish of the case, or other appearance parts caused by wear.
- 4) Damage caused by repairs or alterations of the unit by anyone other than those authorized by Soleus International Inc.
- 5) Freight and Insurance cost for the warranty service.

ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY ARE LIMITED TO ONE-YEAR DURATION OF THIS EXPRESS LIMITED WARRANTY. **SOLEUS INTERNATIONAL INC.** DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND IN NO EVENT SHALL SOLEUS INTERNATIONAL INC'S LIABILITY EXCEED THE RETAIL VALUE OF THE UNIT FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY WITH RESPECT TO THIS UNIT.

This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover used, salvaged, or refurbished products.

As some states do not allow the limitation or exclusion of incidental or consequential damages, or do not allow limitation on implied warranties, the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For Warranty, Technical Support, Customer Service, Missing or Defective Parts Please Call (888) 876-5387

Or Write To: Soleus International Inc. 9451 Telstar Ave. El Monte, CA 91731 USA www.soleusair.com