





# SG-DEH-70EIP-6 Portable Dehumidifier with Internal Pump Operating Instructions V.121030

## TABLE OF CONTENTS

Package Contents       2         Warranty       2         Safety Instructions       3         Electrical Requirements       4         Installation       4,5         Placement       5         Control Panel       6         Dehumidifier Operation       7         Water Disposing Options       8,9	Usi Ca Tro Err Pro De No
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Installing the Pump Hose	
Using the Dehumidifier	
Care and Maintenance	
Troubleshooting	
Error Codes	
Product Specifications	16
Dehumidifier Facts	
Notes	18-19
Contact Information	Back Cover

## **PACKAGE CONTENTS**

• Dehumidifier • 16 ft. Pump Drain Hose and Connector • Manual

## **1 YEAR LIMITED WARRANTY**

Soleus International, Inc. warrants the accompanying Soleus Air Powered by Gree Dehumidifier 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 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:

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

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 Technical Support and Warranty Service

Please Call (888) 876-5387

Or Write To: Soleus International, Inc., 20035 E. Walnut Dr. N., City of Industry, CA 91789 www.soleusair.com, www.soleusgreen.com, www.greeusa.com

## SAFETY INSTRUCTIONS

### IMPORTANT CAUTIONS FOR USING YOUR DEHUMIDIFIER.



To reduce the risk of fire, electrical shock, injury, or damage to the dehumidifiers, these safety precautions must be followed:

### Safety

- Do not place the power cord or dehumidifier unit near a heater.
- Do not use an electrical outlet near flammable or combustible materials such as gasoline, propane, paint thinners, etc.
- Do not disassemble or modify dehumidifier parts or components. It may cause electric shock and failure.
- Plug in the power cord properly.
- Do not turn the unit on and off by inserting or pulling out the power plug.
- Do not damage the power cord or use an unspecified power cord.
- Do not modify power cord length.
- Do not share the outlet with another appliance.
- Always plug into a grounded outlet. Not grounding unit may cause electrical shock.
- Unplug the unit if it emits strange sounds, odors, or smoke.
- Do not use an electrical outlet if it is loose or damaged.
- Do not operate or plug in unit with wet hands or in a wet environment.
- Ventilate area before operating dehumidifier. Check for the presence of natural gas

or the buildup of other combustible vapors.

- Do not clean the dehumidifier with water. Water may enter the unit and degrade the insulation resulting in an electrical shock.
- If water enters the product, turn off the dehumidifier's power switch, then unplug the unit. Do not plug in unit until it has been inspected by an authorized repair service.
- Because the fan rotates at high speed during operation, always unplug dehumidifier before attempting any recommended maintenance or cleaning.
- Do not block the inlet or outlet. It may cause unit to fail or to operate inefficiently.

- Do not remove plug from outlet by pulling on the cord.
- When not in use, turning the unit off will save energy. Unplug the dehumidifier when not using for long periods of time.
- When removing the filter, be aware that some metal parts may have sharp edges and may cause injury.
- Do not use the water collected in the bucket for drinking purposes. It is not sanitary and could cause illness.
- Do not allow children to play with this product.

### Tips

- Make sure the dehumidifier is the correct size for the area you want to dehumidify. It is not designed to dehumidify the entire house.
- For proper operation, the dehumidifier should only be placed on a level floor.
- Close all doors, windows and other openings to the room. The dehumidifier must operate in an enclosed area to be effective.
- To clean, use a soft cloth; do not use wax, thinners, or strong detergents as they may change the color of the unit or cause surface damage.
- Be sure to replace the bucket properly after emptying to prevent water from collecting on the floor causing damage to some types of flooring.
- Do not put a pet or house plant where it will be exposed to direct air flow. This could injure the pet or plant.
- Operation without filter will cause unit failure. Insert the filter securely. Clean it every two weeks. (See Care and Maintenance section in this manual on page 13).

## **ELECTRICAL REQUIREMENTS**

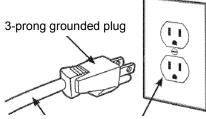
## OBSERVE ALL LOCAL CODES AND ORDINANCES.

DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUND PRONG.

ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE

#### A 115-VOLT 60Hz, AC ONLY, 15A FUSED AND PROPERLY GROUNDED ELECTRI-CAL SUPLLY IS REQUIRED.

A time delay fuse or time delay circuit breaker is recommended. Use a dedicated circuit serving only this appliance.



Power supply cord

Grounded 3-prong electrical outlet

### DO NOT USE AN EXTENSION CORD.

RECOMMENDED GROUNDING METHOD

For your personal safety, this appliance must be grounded. This appliance has a power supply cord with a 3-prong grounded plug. To minimize possible shock hazard the cord must be plugged into a matching grounded electrical outlet that complies with the latest edition of the National Electrical Codes and all local codes and ordinances.

If a grounded 3-prong electrical outlet is not available, it is the personal responsibility and obligation of the customer to have one installed by a qualified electrician.



ELECTRICAL SHOCK HAZARD

- Plug into a grounded 3-prong outlet.
- Do not remove the ground pin from the plug
- Do not use an adapter
- Do not use an extension cord.
- Failure to follow these instructions can result in death, fire or electrical shock.

## INSTALLING YOUR DEHUMIDIFIER

- Install the dehumidifier on a level floor strong enough to support the unit with a full bucket of water.
- For best performance, allow at least 12-18 inches of air space on all sides of the unit for good air circulation.
- Keep all outside doors, windows and other openings closed when operating the dehumidifier. Humid outdoor air will add to the unit's workload.
- Leave the dehumidifier in an upright position for 30 minutes before turning on.

### DEFROST OPERATION

The dehumidifier has a built-in defrost control that senses frost buildup on the evaporator coils.

During defrosting, the compressor will automatically turn off; the fan will continue running to defrost the coils.

### CHOOSING THE PROPER LOCATION

Use the dehumidifier:

- in the basement to help prevent moisture damage.
- in the kitchen, bathroom, and spa/ exercise areas that have excessive moisture.
- to prevent moisture damage anywhere books or valuables are stored.
- during construction or remodeling to reduce drying time for drywall and paint however check and clean filter often.

#### AUTOMATIC SHUT OFF

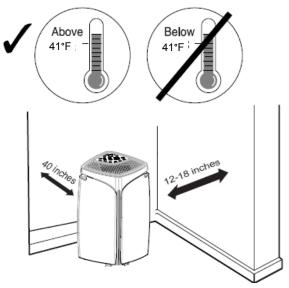
- When the bucket is full, or when the bucket has been removed, the compressor will automatically stop. The fan will continue to blow to dehumidify for 3 minutes. Then the Bucket Full indicator will flash and you will hear a ten second audible alarm.
- The bucket must be placed in the proper position for the dehumidifier to work. The Bucket Full light will flash and the dehumidifier will not run if the bucket is not in the proper position. Dehumidifier settings can not be changed when the bucket is not in its proper position.
- The dehumidifier fan will shut off in 3 minutes, once the desired Relative Humidity (RH) setting is reached, plus or minus 5% RH.

## 

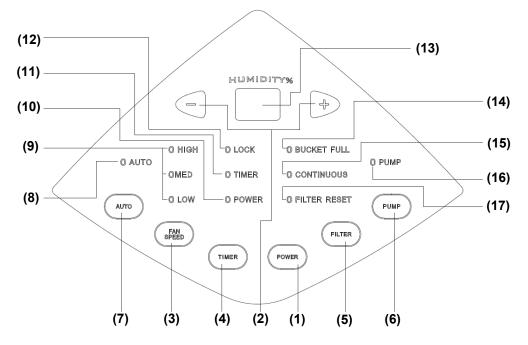
To reduce the risk of fire, electric shock or injury to persons, read the important SAFETY INSTRUCTIONS found on page 3 before operating this appliance.

## PLACEMENT

Allow at least 12-18" of air space on all sides of the dehumidifier and 40 inches of air space from the filters on the back. Do not operate in temperature colder than 41° F. This will prevent frost collecting on the coils.



# CONTROL PANEL



#### POWER ON/OFF (1)

Once the unit is plugged in, the **POWER INDICA-TOR (10)** will light. Pressing the POWER button once will turn the unit ON and illuminate the **digi-***tal* **display (13)**. The fan will operate for 3 minutes to draw air through the dehumidifier to properly sense relative humidity. The display will show the humidity level of the room in 1% increments, down to a minimum of 30%. Pressing the Power button again will turn the display OFF and the unit will cease operating.

#### HUMIDITY LEVEL (2)

The humidity level can be set in 5% increments in a range from 35% to 80%. The humidity setting is shown in the **digital display (13)**. When the humidity level of the room reaches the set level, the compressor will stop, but the fan will continue operating for 3 minutes. To set the unit to continuous operation, press the down arrow button until the display shows 35%. Press again and the **display (13)** will show CO. The **Continuous indicator (15)** will light up on the control panel. To leave continuous operation, press the UP arrow. To check the current humidity setting, press the up or down arrow. The display will show and set 5% above or below the current settings.

#### FAN SPEED (3)

Press Fan Speed to toggle between Low, Med, and High fan speeds. Speed will be shown in **FAN SPEED INDICATOR (9)** 

#### **BUCKET FULL INDICATOR (14)**

When the collection bucket is full, the **BUCKET FULL indicator (14)** will light up and you will hear an audible alarm. The audible alarm will last up to ten seconds The dehumidifier will not run until the bucket is removed, emptied and replaced.

#### AUTO MODE (7)

Press the **AUTO button (7)** to select AUTO Mode. When AUTO MODE is selected the unit will automatically choose settings according to the current room humidity level. The **AUTO indicator (8)** will light up when selected. The set humidity level is not able to be changed in this mode.

#### PUMP MODE (6)

Press the **PUMP button (6)** to select Pump Mode. When PUMP MODE is selected the unit will pump the collected water out of the unit. Make sure the pump accessories are connected (refer to pages 10 & 11) prior to using pump mode. When selected the **PUMP indicator (16)** will light up.

#### TIMER - DELAY START/AUTO ON (4)

When the dehumidifier is off, it can be set to automatically turn on in 30 minutes to 24 hours at the previous set mode and fan setting. To set the Auto-on Timer, press the **TIMER (4)** button on the control panel. Each touch of the +/- buttons on the control panel will change the timer setting in 30 min increments (.5 hours). After 10 hours each press of the + button will increase the timer in 1 hour increments. Once the timer is set, press the **TIM-ER (4)** button once more to save the setting. The **TIMER indicator (11)** will light up at this time.

#### TIMER - AUTO SHUT-OFF (4)

When the dehumidifier is on, it can be set to automatically turn off in 30 minutes to 24 hours. To set the Auto-off Timer, press the **TIMER (4)** button on the control panel. Each touch of the +/- buttons on the control panel will change the timer setting in 30 minute increments (.5 hours). After 10 hours each press of the + button will increase the timer in 1 hour increments. Once the timer is set, press the **TIMER (4)** button once more to save the setting. The **TIMER indicator (11)** will light up at this time.

#### FILTER RESET (17)

The **FILTER RESET indicator (17)** will light up when the filter needs cleaning. Remove the filter and clean accordingly. Replace the filter when finished and press **FILTER (5)** to reset the filter indicator.

#### CONTROL PANEL LOCK (12)

To lock the control panel, press the "+" and "-" (2) keys at the same time for 3 seconds. Locking the control panel prevents someone from accidentally changing the settings. When locked, the LOCK indicator (12) will light up. Hold the "+" and "-" (2) keys at the same time again for 3 seconds to unlock the control panel.

#### NOTE:

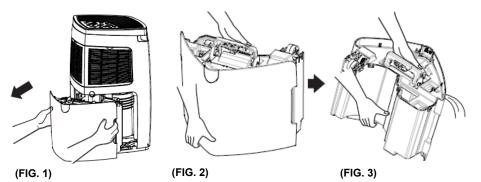
- Once the set humidity level is reached, the compressor will shut off. The fan will continue to run for up to 3 minutes.
- Anytime the compressor stops running for any reason, it will not restart for a minimum of 3 minutes. This is a design feature to protect the compressor from damage.

## WATER DISPOSING OPTIONS

## **OPTION 1: EMPTYING MANUALLY**

- 1. Pull out the bucket, grasping the side handles. (Fig. 1)
- 2. Carry the bucket by grasping the front corner of the bucket with one hand and the back of the bucket with the other hand( Fig. 2)
- 3. Empty the bucket and replace the bucket in the dehumidifier. (Fig. 3)

NOTE: Dehumidifier will not work and settings can not be changed when the BUCKET FULL indicator light is flashing or without the bucket properly installed.



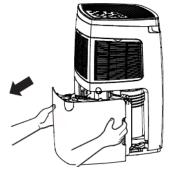
### DO NOT REMOVE THE STYROFOAM IN THE BUCKET

All Soleus Air dehumidifiers are equipped with a reliable Styrofoam float system. The Styrofoam located inside the float in the bucket is essential to the bucket full system working properly. Please do not remove the Styrofoam from the float.

### **OPTION 2: USING THE CONTINUOUS DRAINAGE OPTION**

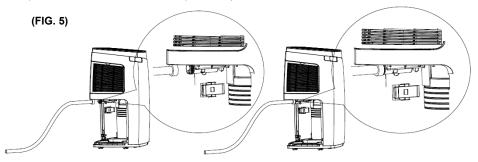
Step 1: Remove the bucket from the unit (Fig. 4)

(FIG. 4)



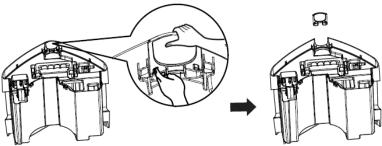
## WATER DISPOSING OPTIONS

**Step 2:** Thread a garden hose (not supplied) onto the drain nozzle. (Fig. 5) The thread standard for garden hoses in the US and its territories is known as GHT or "garden hose thread" which has an outer diameter of 1 1/16 in. (1.0625 inches or 27.0 mm) and a pitch of 11.5 TPI.

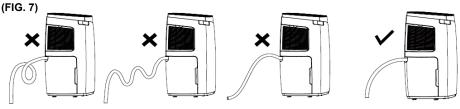


**Step 3:** Remove the drain cover from the back of the bucket prior to seating the bucket in the unit. (Fig. 6)

(FIG. 6)



**Step 4:** Properly insert the bucket into the dehumidifier and thread the hose through the opening left by removing the drain cover. Make sure the hose declines down from the unit and there are no kinks. (Fig. 7)



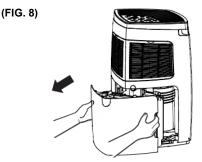
Place unit on even surface

**NOTE**: When removing the drain hose, excess water may spill from the dehumidifier. Use a small pan or bowl to catch the water and prevent it from spilling onto the unit or the floor.

## **INSTALLING THE PUMP HOSE**

#### <u>OPTION 3: USING THE INTERNAL VERTICAL PUMP</u> - Only install when using pump mode! INSTALLING THE INTERNAL PUMP HOSE

**Step 1:** Remove the bucket from the dehumidifier (Fig. 8)



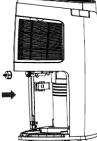
**Step 2:** Remove the pump hose connector from the top of the bucket. It is located to the left of the bucket handle. (Fig. 9)

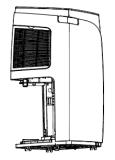
(FIG. 9)



**Step 3:** Thread the pump hose connector onto the drain nozzle that is visible after removing the bucket. (Fig. 10)

(FIG. 10)

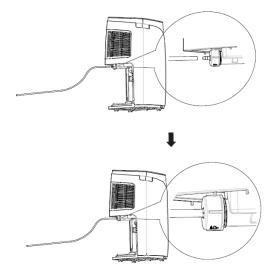




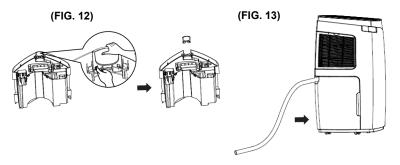
## INSTALLING THE PUMP HOSE

**Step 4:** Insert the pump hose onto the pump hose connector. Push the clamp towards the connector to secure the connection. (Fig. 11).

(FIG. 11)



**Step 5:** Remove the drain cover from the back of the bucket prior to seating the bucket in the unit. (Fig. 12) Place bucket in the dehumidifier for use (Fig.13)



**NOTE:** When removing the drain hose, excess water may spill from the dehumidifier. Use a small pan or bowl to catch the water and prevent it from spilling onto the unit or the floor.

## USING THE DEHUMIDIFIER

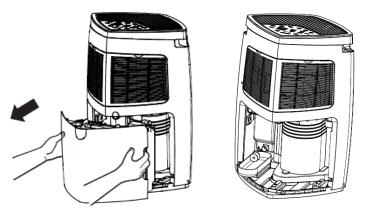
**NOTE:** When installing the pump hose, the unit must be running in PUMP MODE. Water is pumped a maximum of 16 vertical feet. Do not exceed 16 feet for proper operation.

There is a small backup water tank inside the dehumidifier. When using PUMP mode the backup water tank fills up and then water is pumped out of the dehumidifier when full.

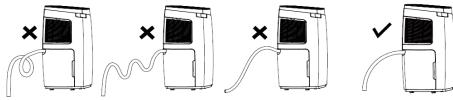
When the unit is not in use for an extended time, it is necessary to drain any excess water from the backup tank.

DRAINING EXCESS WATER IN BACKUP TANK:

- 1. Remove the bucket from the dehumidifier
- 2. Locate a small pan or bowl to collect the water (not supplied).
- 3. Pull the plug from the backup tank and allow the water to drain into the pan or bowl.



**NOTE**: When using continuous drainage option, make sure the garden hose is clear of any obstructions and drains downward. Improper installation or use of hose may result in water filling up the bucket and causing the unit to shut off. Empty the water bucket if shut off occurs due to bucket full condition.



Place unit on even surface

## **CARE AND MAINTENANCE**

### CLEANING THE AIR FILTER

After 250 hours of operation the **FILTER RESET** indicator will light up to remind you to clean and change the air filter.

It is recommended to periodically check the filter for excess dirt even if the **FILTER RESET** indicator is off.

- 1. To remove the air filter, press the two filter tabs and pull the filter holders away from the back of the unit.
- Remove the filter and clean with warm, soapy water. Rinse and allow the filter to dry before placing back in the unit.
- Place the filter back into dehumidifier. Plug unit back into outlet, power the unit on and press and hold the FIL-TER key up to 5 seconds on the control panel to reset the filter setting.

**NOTE:** DO NOT place the filter in a dishwasher

<u>CAUTION:</u> DO NOT operate the dehumidifier without a filter. Doing so may cause a unit failure.



 Disconnect power supply cord from receptacle before performing any maintenance.

### **CLEANING THE EXTERIOR**

Clean the cabinet using a damp cloth and a mild detergent. Do not use bleach or abrasives.

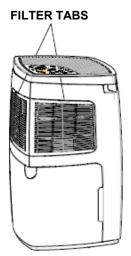
### **CONTROL PANEL**

Wipe down the control panel with a dry cloth.

### **CLEANING THE BUCKET**

Every few weeks, clean the dehumidifier bucket. Partially fill the bucket with clean water and mild detergent. Swish the mixture around in the bucket, empty and rinse. Replace the bucket when finished

**<u>NOTE</u>**: Do not place the bucket in a dishwasher.





# TROUBLESHOOTING

Problem	Possible Causes	Solutions
Dehumidifier does not start.	The dehumidifier is un- plugged.	Make sure the dehumidifier's plug is pushed completely into the outlet.
	The fuse is blown / cir- cuit breaker is tripped.	Check the house fuse / circuit breaker box and replace fuse or reset breaker.
	Dehumidifier has reached the user set humidity level or the bucket is full.	The dehumidifier automatically turns off when either condition occurs. Change to a lower setting or empty the water bucket and replace properly.
	Bucket is not in the prop- er position.	The bucket must be in place and securely seated for the dehumidifier to operate.
	Power Failure.	There is a protective time delay (up to 3 min.) to prevent tripping of the compressor overload. For this reason, the unit may not start normal dehumidification for 3 min. after it is powered back on.
Dehumidifier is not operating as Intended.	Not enough time allowed for unit to remove mois- ture.	When first installed, allow at least 24 hours to achieve the desired humidity level.
	Airflow is restricted.	Make sure there are no curtains, blinds, or furniture blocking the side or back of the de- humidifier.
	Dirty filter.	See the <b>Cleaning The Air Filter</b> section on page 13.
	The user set Humidity Level may not be set low enough.	To reduce moisture, press the down arrow button to lower the percent humidity desired in the room, or set the dehumidifier to <b>CO</b> for continuous operation.
	Doors and windows may not be closed tightly.	Check that all doors, windows, and other openings are securely closed.
	Water is not draining through drain hose	Make sure the drain is placed below the drain connector nozzle to allow gravity to drain the water (Refer to Gravity Drain Hose section in this manual).
	Room temperature is too low.	Moisture removal is best at higher room tem- peratures. Lower room temperatures will re- duce the moisture removal rate. This model is designed to operate at temperatures above 41°F.
Filter Indicator is lit.	Filter needs to be cleaned every 250 hours of use.	Once filter has been cleaned, press the FIL- TER button for 3 seconds to turn the filter indicator off.

# TROUBLESHOOTING (Cont.)

Problem	Possible Causes	Solutions
Dehumidifier runs too much	The area to be dehumidi- fied is too large.	The capacity of your dehumidifier may not be adequate for the room size.
	Doors and windows are open.	Close all doors and windows to the outside.
Frost appears on the coils	The dehumidifier has re- cently been turned on or the room temperature is below 41°F.	This is normal. Frost will usually dis- appear within 60 minutes.
Controls cannot be set	The compressor will turn off and the fan will auto- matically continue to run for approximately 3 minutes at a fixed setting.	This is normal. Wait approximately 3 minutes until this automatic process finishes, then the fan control can be set to the desired level.
Fan Noise	Air is moving through the unit.	This is normal.
Water on the floor	Hose connection may be loose.	Check the hose connection. See the Drainage Section on page 8.
	Hose is attached but not draining into a drain	Disconnect the hose if using the bucket or place the hose near a drain.
Unit is discharging warm air		Normal: Compressor and electric motor discharge nominal heat.
Water does not drain through the dehumidifier drain hose	Check the drainage con- nector and hose on the dehumidifier. Is it installed correctly?	Re-install the dehumidifier drainage connector and hose according to the manual.
	Check the drain hose for kinks or obstructions.	Flatten the hose or remove blockage.
Water does not drain through the pump drain hose	Check the pump drain hose on the pump. Is it installed correctly?	Re-install the pump drain hose ac- cording to the manual.
	Check the pump drain hose for kinks or obstructions.	Flatten the hose or remove blockage.

# **ERROR CODES**

Error Code	Error Type	Possible Cause	Corrective Action
F1	Ambient Temperature Sensor Malfunction	1. Sudden Change in the surround-	<ol> <li>Unplug the dehumidifier.</li> <li>Check the surrounding area for possible reasons for sud- den temperature changes.</li> </ol>
F2	Pipe Temperature Sensor Malfunction	ing temperature.	<ol> <li>Wait 2 hours before plugging the dehumidifier back in for normal operation.</li> <li>If the "Error" is still indicated,</li> </ol>
L1	Malfunction of Humidity Sensor		please contact customer service. Call 1-888-876-5387

# PRODUCT SPECIFICATIONS

ITEM #	SG-DEH-70EIP-6
Moisture Removal per 24 hours	70 Pints per day (32.9 Liters per day)
Power Consumption (W)	745 Watts
Bucket Capacity	15 Pints
Power Source	115 V / 60 HZ
Rated Current (Amps)	6.6 A
Sound Pressure Level dB (L/M/H)	45/47/49 dB(A)
Net Weight	47.4 lbs
Dimensions (W x D x H)	13.75" x 13.75" x 24.25"
Energy Star	Yes

## RECOMMENDED HUMIDITY LEVELS ACCORDING TO ENERGY STAR

- Spring/Summer: 30% 50%
- Fall/Winter: 30% 40%

## WARM AIR EXHAUST IS NORMAL

During operation your dehumidifier will exhaust warm air from the side of the unit. This is normal operation.

### EMPTYING THE BUCKET

The more moisture your dehumidifier removes from the air, the more often you may have to empty the bucket (unless you are using the continuous drainage option). The number of times the bucket will be emptied depends on the dehumidifier model.

Model	Pints of moisture re- moved per every 24 hour period	Maximum number of times to empty the bucket when operating at full capacity during a 24 hour period
SG-DEH-70EIP-6	70 Pints	Up to 5 times

## LESS MOISTURE BEING REMOVED OVER TIME IS A GOOD THING!

Using a dehumidifier will cause your area to maintain a more comfortable humidity level. Over time, this humidity level will become more and more stable. Due to the stable humidity level in the area, the dehumidifier will need to remove less and less moisture over time.

Please do not be concerned if the dehumidifier is removing less moisture from the air or the bucket is taking longer to fill up. This is a direct result of your dehumidifier creating a more stable humidity level in your area.

## DON'T REMOVE THE STYROFOAM IN THE BUCKET!

All Soleus Air dehumidifiers are equipped with a reliable Styrofoam float system. The Styrofoam located inside the float in the bucket is essential to the bucket full system working properly. Please do not remove the Styrofoam from the float.

# NOTES

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# NOTES




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