



WatchDog Whole Home Dehumidifiers

NXT60, NXT85, + NXT120



Installation and Operation Manual

Read These Instructions Carefully Before Proceeding

www.SeairaGlobal.com

Table of Contents

	Page #
Safety Instructions	3
Warranty Registration	3
How the Dehumidifier Works	4
Dehumidifier Specs	4
Basic Set Up — All Applications	5
Auxiliary Terminals	7
Set Up — HVAC System	8
HVAC Connection Options	9
— Dedicated Return	9
— Bypass Method	10
— Injection Method	10
Set Up — Remote Control System	11
— How to Use a Remote Control	12
Set Up — Standalone Installation	13
— Using the Dehumidifier Display	13
— Indicator Lights on the Display	14
Unit Diagram	15
Maintenance	16
Troubleshooting	17
Warranty	18

Safety Instructions

Read these instructions carefully and completely before continuing with the installation.

Warning

- Install dehumidifier according to all applicable local, state and national codes.
- Connect your dehumidifier to a grounded, dedicated electrical connection that is GFCI protected with 15 amp capacity. Do not use an extension cord or plug adapter.
- The use of any other type of electrical connection will void the warranty.
- Be sure to follow your GFCI manufacturer's maintenance instructions.
- Unless otherwise noted, all maintenance should be done with the unit powered off.

Caution

- Do not insert objects or your fingers into the inlet or discharge of the dehumidifier.
- Do not use water to clean the exterior of the unit. To clean the unit, unplug the dehumidifier and then use a damp cloth to wipe the exterior.
- Your dehumidifier should only be serviced or repaired by a qualified technician.
- Do not stand on the dehumidifier or place objects on it. This unit is not designed for swimming pool applications.

Warranty Registration

Your dehumidifier comes with an extensive warranty. To register your unit, simply fill out and return the warranty form provided in the box or visit our website.

For future reference, write down the model, serial number and date of purchase. This information is necessary for seeking assistance in the future and can be found on the data label on the side of the unit.

Model Number:

Date of Purchase:

Serial Number:

How the Dehumidifier Works

The WatchDog Whole Home dehumidifier is a versatile unit designed to control humidity levels throughout your entire home. When the humidity exceeds your chosen setpoint, the unit activates. The internal fan draws air across the cold evaporator coil, condensing moisture from the air which is then drained away. Finally, the air is reheated across the condenser coil and distributed back into the conditioned space.

Dehumidifier Specs

Model	NXT120	NXT85	NXT60
Capacity (80°F / 60%)	120 ppd	85 ppd	60 ppd
Capacity (73°F / 60%)	89.71 ppd	58.3 ppd	43 ppd
Power Supply	115V / 60 Hz	115V / 60 Hz	115V / 60 Hz
Operating Temp.	33 - 105°F	33 - 105°F	33 - 105°F
Airflow @ 0.0"	225 CFM	201 CFM	196 CFM
Airflow @ 0.2"	190 CFM	162 CFM	158 CFM
Airflow @ 0.4"	150 CFM	106 CFM	102 CFM

Basic Set Up — All Applications

1. Unit Placement

- Place dehumidifier on a level surface.
- *Important: If the unit has been turned or flipped so that the compressor did not remain upright, place on a level surface and wait a minimum of 2 hours before proceeding*
- Do not place the unit directly on a vapor barrier.

2. Drain Installation

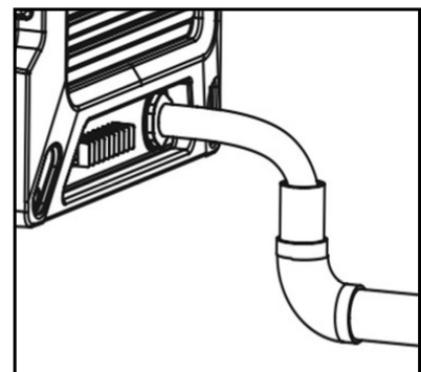
Your dehumidifier comes with a 6' section of drain line and a 3/4" PVC adapter. Choose the method below that best fits your application.

General Requirements

- The drain line must be routed to a suitable drain option (floor drain, sump pump, etc).
- The drain line must flow downwards with **no loops or kinks**.
- Maintain a minimum 1" downward slope per 10' run.

Option 1: Vertical Drop to PVC (Recommended)

This method uses a short run of tubing, then transitions immediately to PVC. This option does not require a trap in most cases.



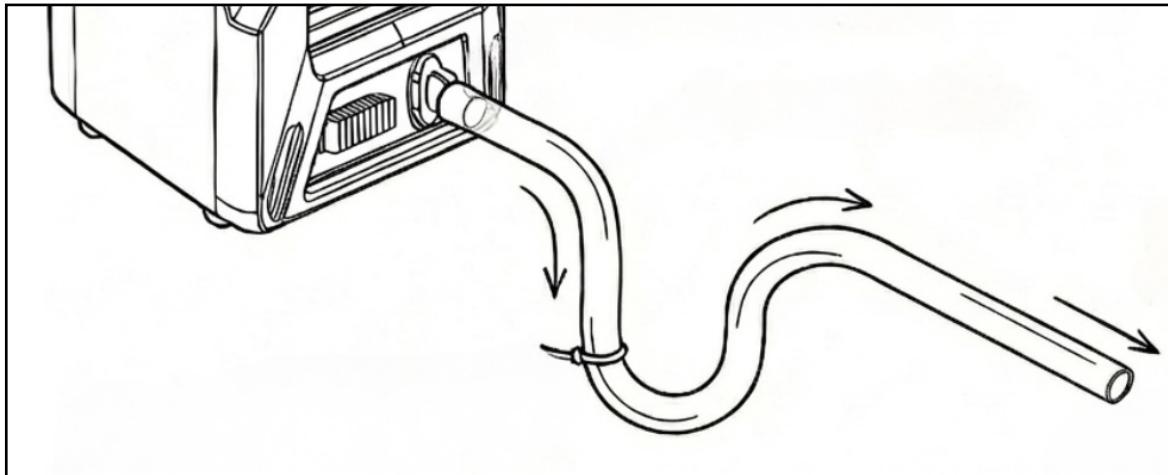
- a. Construct the PVC Assembly: Cut a **6" piece of 3/4" PVC** and insert it into a **PVC elbow**. Attach your **main PVC drain line** (long pipe running to the drain) to the other side of the elbow to create an "L" configuration. Keep the drain line as short as possible.
- b. Prepare the Flexible Drain Hose: Cut the **provided drain hose** to approximately 6" long and slide onto dehumidifier drain port.
- c. Connect the Systems: Insert the open end of the flexible hose into the vertical 6" PVC pipe. Ensure the hose does not extend past the 6" pipe into the elbow fitting. Support PVC so it maintains a downward slope (minimum 1" drop per 10' run).

Option 2: Extended Flexible Hose

This method uses the full length of the provided hose. Because the hose runs along the floor without an immediate vertical drop, a trap is required to prevent air lock.

- a. Connect the Hose: Slide the provided **6' flexible drain hose** onto the dehumidifier drain connection. Secure with a tie wrap or clamp, if desired.

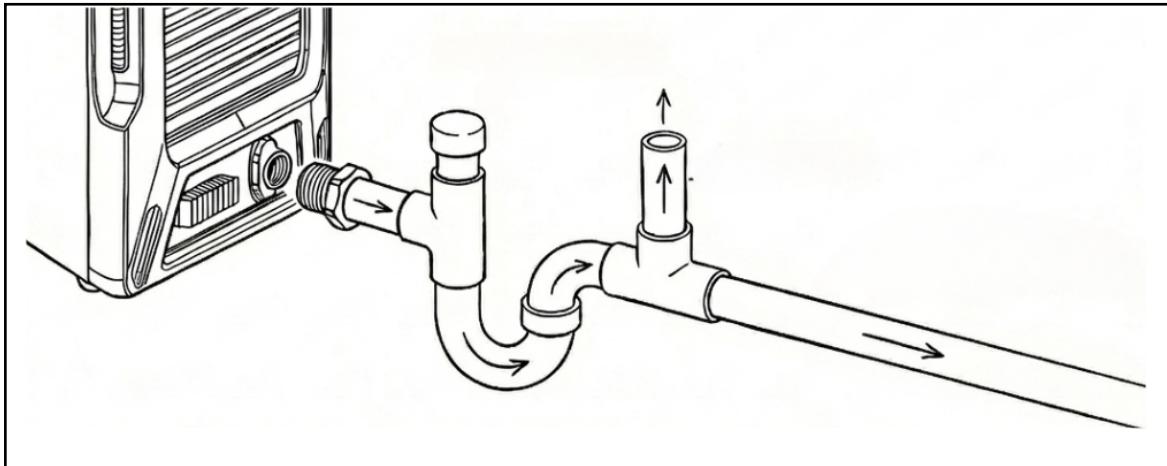
- b. Create a Trap: Form a “U” shape (trap) in the hose approximately 10” away from the unit. The bottom of the trap must be lower than the drain port, and the hose must rise back up slightly before sloping down to the drain. Use a zip tie or tape to help the trap maintain its shape.
- c. Route to Drain: Route the hose to the floor drain or sump pump. Support the line to ensure a continuous downward slope (minimum 1” drop per 10’ run) and verify there are no *upward* loops or kinks after the trap.



Option 3: Hard Pipe (PVC)

This method uses only PVC pipe for a fixed installation. A PVC P-Trap is **required** for this method to prevent air back flow.

- a. Install the Adapter: Apply thread seal tape to the **included 3/4" PVC adapter** and thread it into the dehumidifier drain port. Do not over-tighten.
- b. Install the Cleanout and Trap: Install a **capped 6" PVC pipe** pointing up from the Tee (cleanout). Glue the P-Trap to the other side of the Tee. **Important:** The inlet side of the trap must have a minimum **4" vertical drop**, and the outlet side must have a minimum **2" rise** to create the proper water seal.
- c. Install Vent and Slope: Glue a second **3/4" PVC Tee** after the trap with an **OPEN (uncapped) 6" pipe** pointing up (vent). Run **3/4" PVC pipe** from the vent tee to your drain, maintaining a **1" downward slope per 10' run**.



3. Electrical Power

Plug the dehumidifier into a dedicated 15 amp, GFCI protected outlet.

Auxiliary Terminals

The terminal strip on the dehumidifier allows you to connect external safety switches or condensate pumps. Choose the correct terminals based on your accessory's specifications.

1. **Terminals A5/A6 (Normally Open):** These terminals serve as a safety switch for external accessories with Normally Open contacts.

Troubleshooting (E4) Error Code:

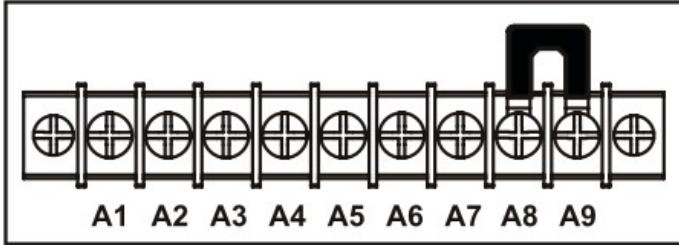
- If an E4 error occurs immediately, remove the wires from the terminal strip and unplug the unit.
- Plug the dehumidifier back in with nothing attached. If the E4 error persists, contact Seaira Global.
- If the error clears, verify that your external device is intended to be **Normally Open**. You may need to use the "Normally Closed" terminals.

2. **Terminals A8/A9 (Normally Closed):** These terminals serve as a safety switch for external accessories with Normally Closed contacts.

Important: You must remove the factory-installed jumper between terminals A8 and A9 before connecting your accessory.

Troubleshooting (E4) Error Code:

- If an E4 error occurs immediately, disconnect the accessory wires, unplug the unit, and replace the factory jumper.
- Plug the dehumidifier back in with the jumper installed. If the E4 error persists, contact Seaira Global.
- If the error clears with the jumper replaced, verify that your external device is intended to be **Normally Closed**.



Set Up — HVAC System

Important: Check local building codes prior to connecting the dehumidifier to the HVAC system.

This unit automatically detects external controls. Once connected to an external system, the buttons on the dehumidifier's display panel are disabled and no further adjustments on the unit are needed.

1. Wiring Connection

Connect the controls according to **Diagram 1** below.

- **Activation:** The unit activates when it receives a 24VAC input signal to **Terminal #3** and **Terminal #4**.

2. Operation & Display Codes

Once connected, the dehumidifier display indicates the current status:

- **Running ("CC"):** When the HVAC controller calls for dehumidification, the unit turns on. The display reads "CC" (Central Control).
- **Standby ("--"):** When the target humidity is reached, the controller cuts the signal. The unit turns off and the display reads "--".

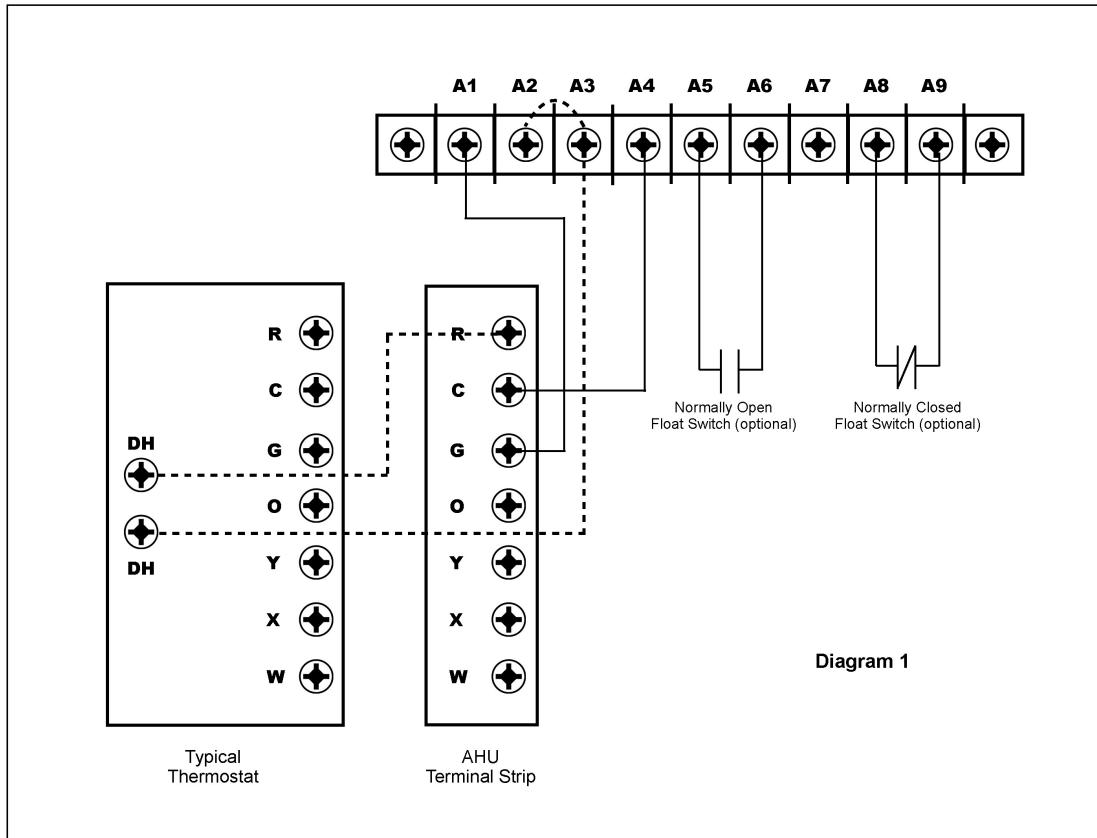
3. Power Protection

In the event of a power outage, the dehumidifier remembers its last state. When power is restored, it will automatically resume operation based on the current signal from the HVAC controller.

4. Optional: HVAC Fan Activation

If you want the HVAC fan to run whenever the dehumidifier is running, follow these steps:

1. Install a jumper wire between **Terminal #3** and **Terminal #2** on the dehumidifier.
2. Connect **Terminal #1** to the HVAC controller (as shown in Diagram 1).



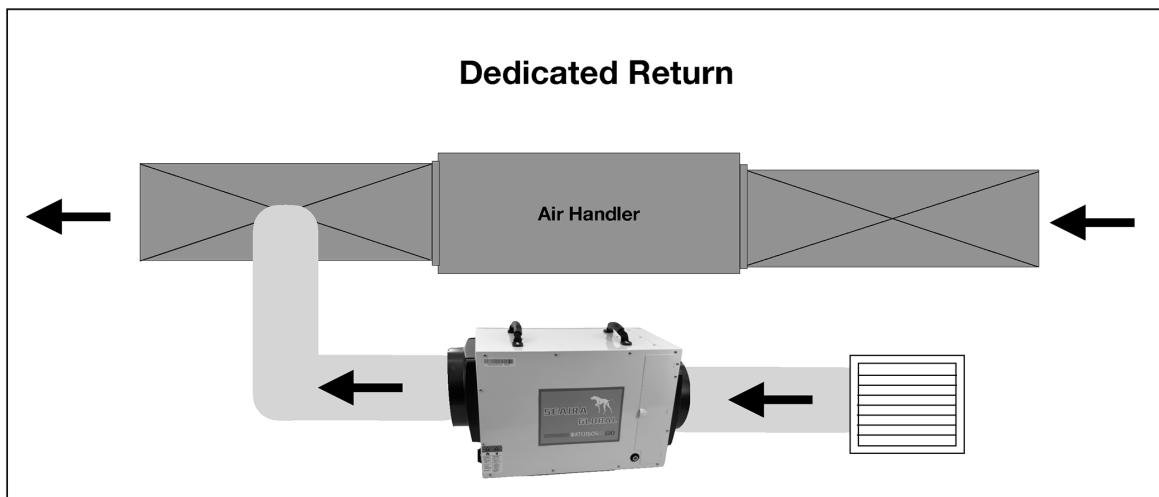
HVAC Connection Options

Option #1 - Dedicated Return

In this setup, the dehumidifier is connected to either the supply side or the return side of the air handler (supply side is shown).

Notes:

- The maximum combined length of ducting for the dehumidifier is 10'.
- The air handler fan should be set up to run while the dehumidifier is running.

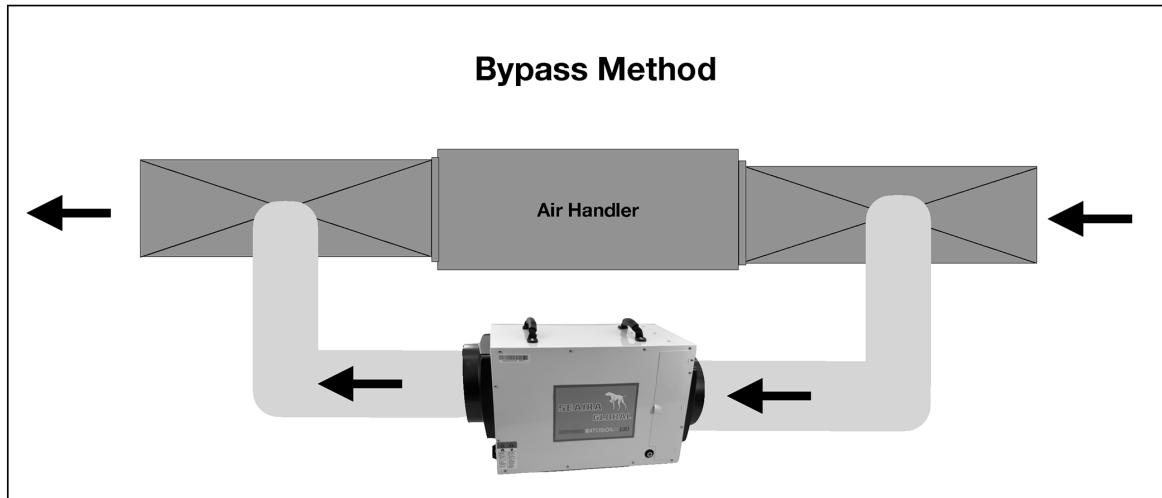


Option #2 - Bypass Method

In this method, some air bypassed the air handler to be conditioned by the dehumidifier.

Notes:

- For this method, you may need a damper to prevent back flow.
- The maximum combined length of ducting for the dehumidifier is 10'.
- The air handler fan should be set up to run while the dehumidifier is running.

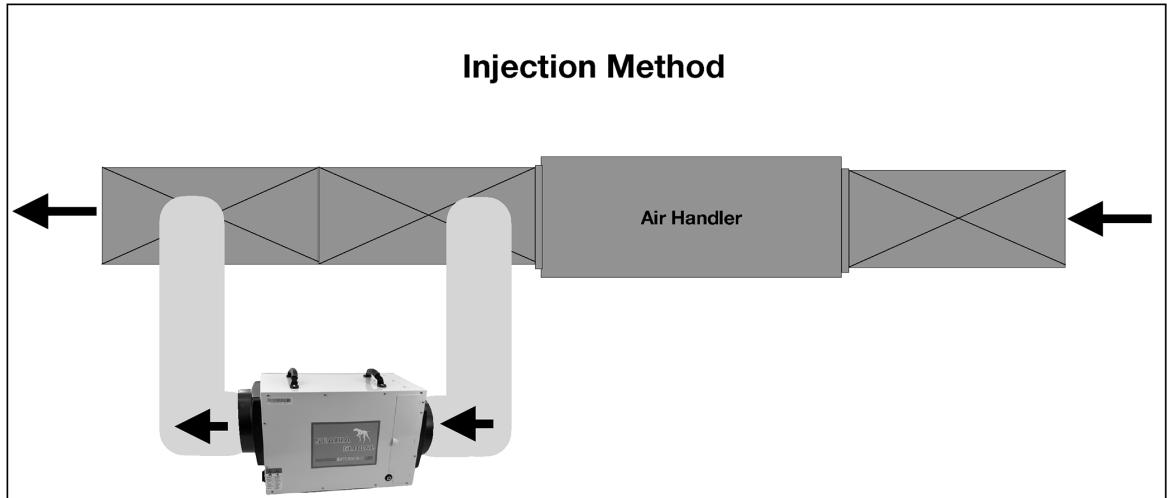


Option #3 - Injection Method

In this setup, both sides of the dehumidifier are connected to the same side of the air handler (either supply or return).

Notes:

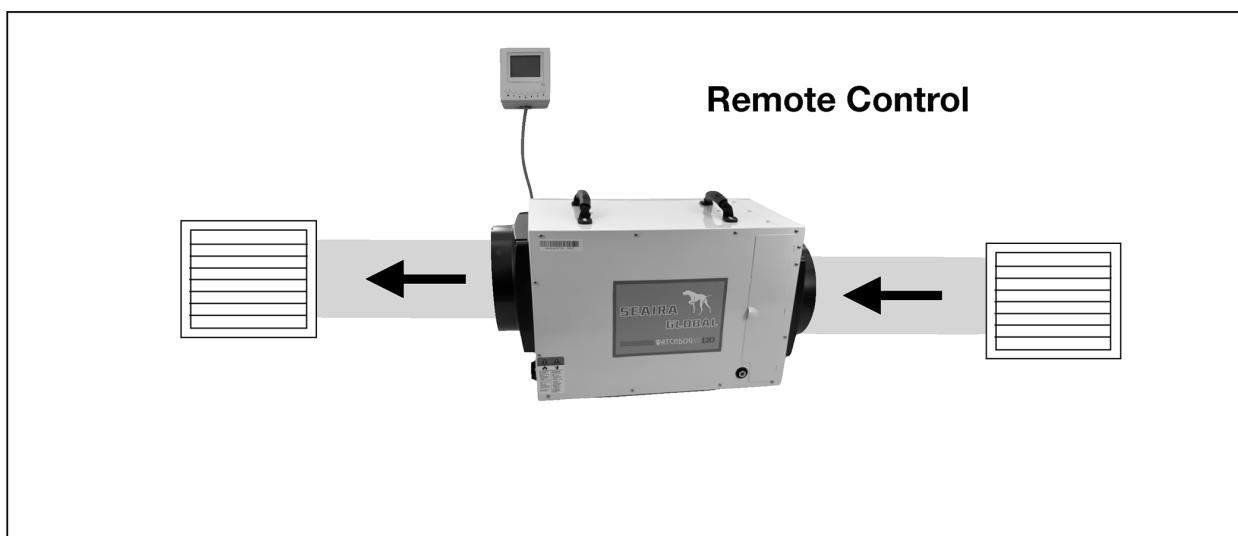
- For this method, you may need a damper to prevent back flow.
- The maximum combined length of ducting for the dehumidifier is 10'.
- The air handler fan should be set up to run while the dehumidifier is running.



Set Up — Remote Control System

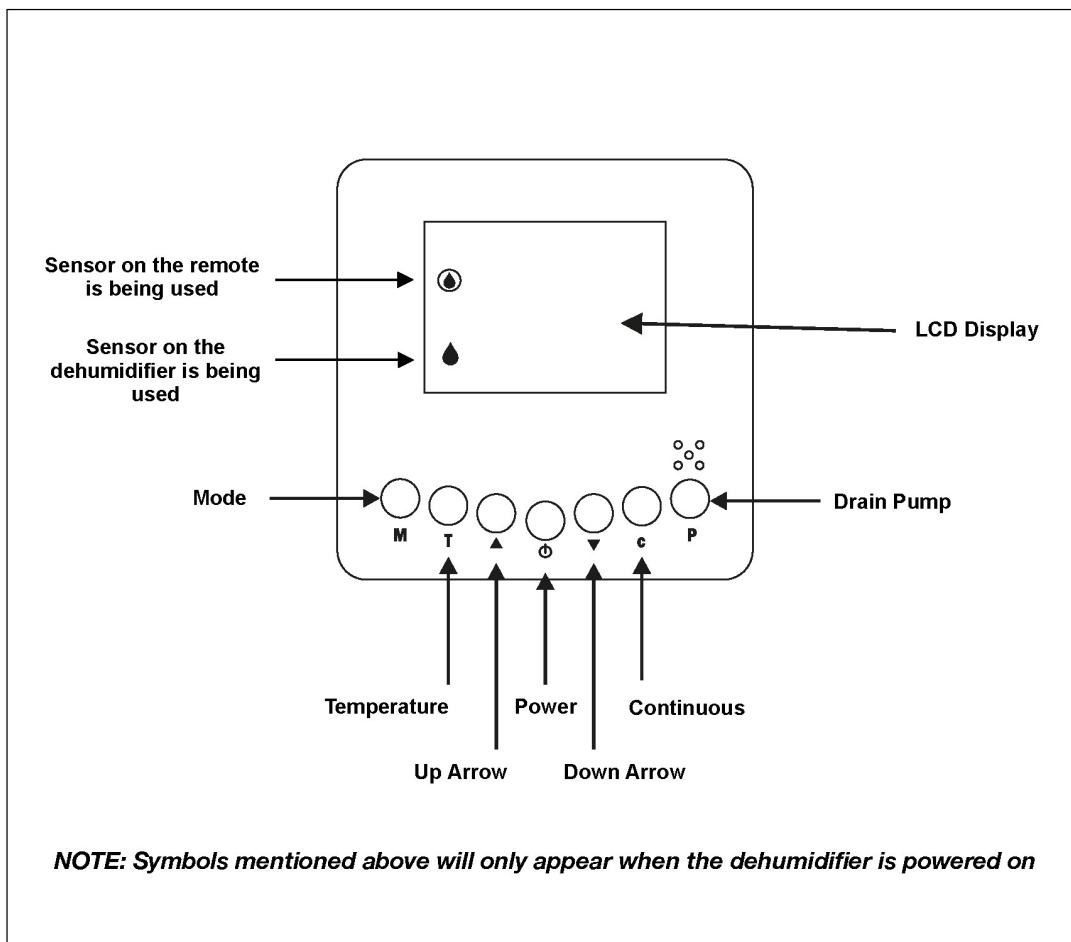
You also have the option to give the dehumidifier independent ducts when you use a wired remote control. The remote connects to the CAT 5 port on the dehumidifier, which is located next to the terminal strip. This is useful if:

1. You install the dehumidifier in one room with the conditioned air ducted into a second room that contains the remote.
 - For this set up, select the ducted option using the “M” (mode) button on the remote.
2. You install the dehumidifier in a crawl space or basement and would like to control the dehumidifier from a different room.
 - For this set up, select the dehumidifier sensor option using the “M” (mode) button on the remote.



How to Use a Remote Control

1. **On / Off Power Button:** Press the on / off button and the machine will start running. Press the button again to turn the machine off.
2. **Up / Down Arrows:** Use the Up and Down arrow buttons to adjust the humidity level.
3. **Mode Button:** Use the Mode button to switch which sensor you are using: the sensor on the dehumidifier or the sensor on the remote control
4. **Temperature Button:** The Temperature button changes the temperature reading on your remote. The remote comes standard in Celsius. Press this button once and it will switch to Fahrenheit.
5. **Continuous Button:** Press this button to switch the unit into continuous mode. "Cont" will appear on the display to indicate continuous mode.
6. **Drain Pump:** Pressing the pump button will remove water from the pump reservoir, so the unit can be safely moved or stored. *THIS FUNCTION IS ONLY AVAILABLE ON PUMP MODEL DEHUMIDIFIERS.*



Set up - Standalone Installation

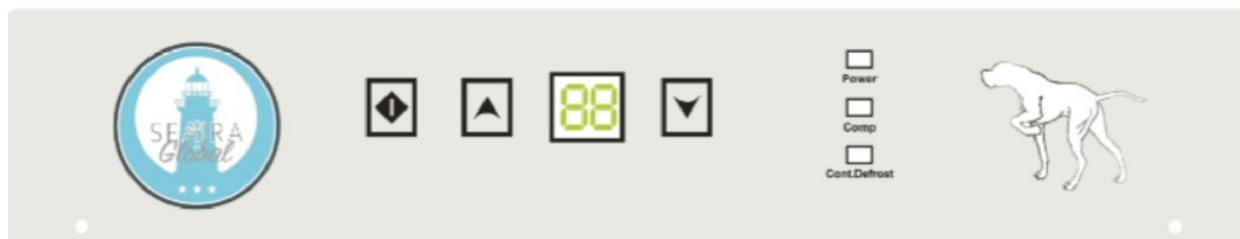
It is also possible to use the dehumidifier without any ducting.

General Requirements

- **Surface:** Place the dehumidifier on a level surface. Do not place the unit directly on a vapor barrier
- **Clearances:** You must maintain a minimum of **12 inches** of clearance at the inlet and **36 inches** of clearance at the discharge.
- **Orientation:** For the best air diffusion, place the unit so a side panel faces the wall.

Using the Dehumidifier Display

Note: While connected to the HVAC system, display functions on the dehumidifier will not work.



1. Power Button

- a. Use this button to turn the machine on and off.
- b. Press once to turn the machine on. You will hear two beeps and the  light will illuminate green (solid or flashing depending on mode).
- c. Press the power button a second time and you will hear one beep as the machine shuts down. Note that there is a 1 minute fan delay.

2. Arrow Buttons

- a. Use the up and down arrows to set the desired set point on the display screen. 
- b. The set point can be any number between 36% - 90%. When the indoor humidity is higher than the set point, the machine will operate.
- c. Keep in mind that the displayed humidity levels are approximate (+/- 5%).

3. Continuous Mode

- a. To set the machine to run continuously, regardless of humidity, simply use the down arrow to set the humidity below 36%.
- b. The continuous light will illuminate green and the display will show “CO”.
- c. To switch back to normal humidistat operation, use the arrows to move the set point above 36%.

Indicator Lights on the Display

1. Humidity Display Screen

- a. When the unit is powered on, this screen shows the current humidity of the space.
- b. When setting the desired humidity level, the screen will show the set point. After a brief delay, it will revert to the current humidity of the space.

2. Power Indicator Light

- a. This light indicates that the unit is properly powered on and ready to operate.
- b. Always make sure the unit is “off” prior to performing any service, unless otherwise indicated.
- c. If the humidity is above the set point, the light will be solid green, and the machine will operate.
- d. If the humidity is below the set point, the unit will be in standby mode and the light will be flashing.

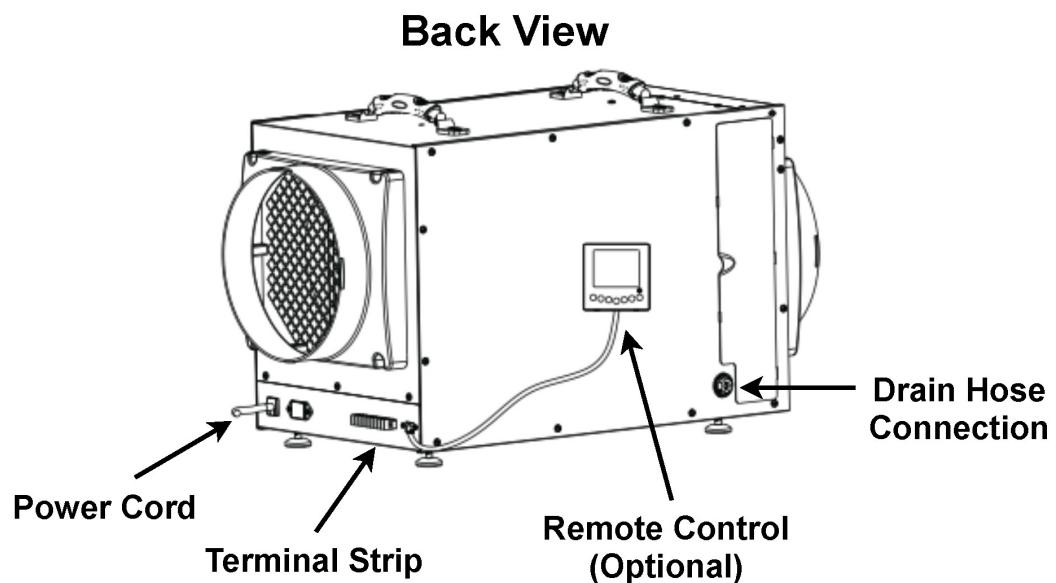
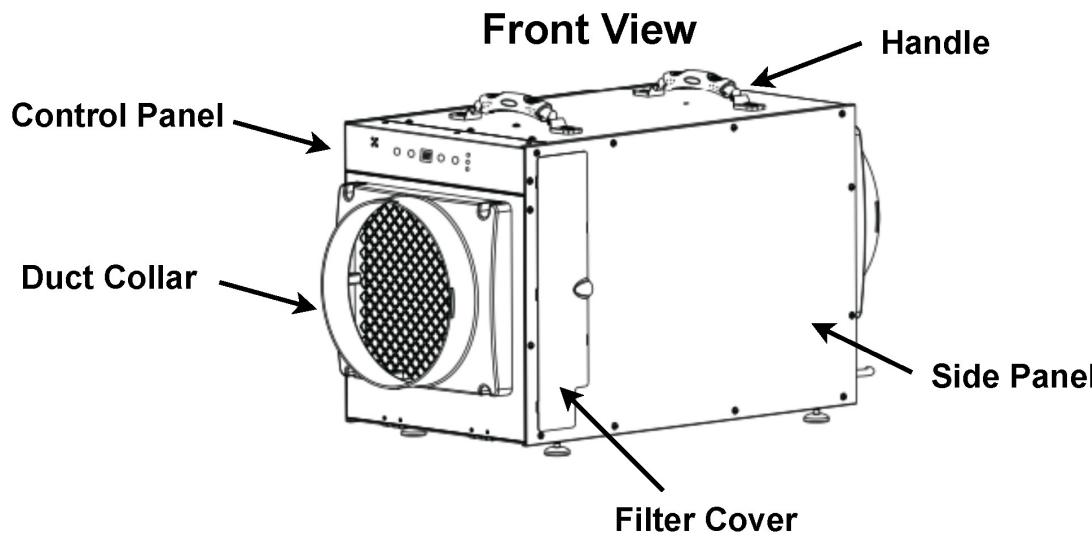
3. Continuous Mode / Auto Defrost Light

- a. When this light illuminates green, it indicates that the dehumidifier is in continuous mode.
- b. When this light illuminates red, it means the unit is in auto defrost mode and is cleaning the evaporator coils of ice buildup.

4. Compressor Light

- a. When the light illuminates red, it indicates the compressor has initiated but is still warming up.
- b. Once the light switches to green, it means the compressor is operating normally.

Unit Diagram



Maintenance

Warning: Always unplug the dehumidifier before performing any maintenance.

Cleaning the Exterior

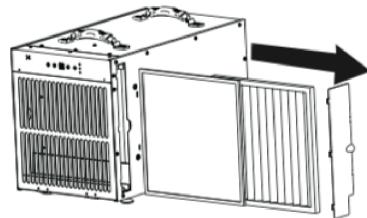
Use a soft, damp cloth to clean the exterior of the unit. Do not use soap or solvents.

Coil Maintenance

At least once per year, spray the coils with an approved coil cleaner. The coil cleaner should be a self-rinsing, foaming cleaner, such as WEB® Coil Cleaner.

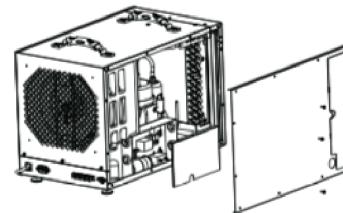
Filter Maintenance

1. Lift off one of the filter doors and set aside.
2. Slide out both filters (pre-filter and MERV-10).
3. Clean the filters using a vacuum cleaner or replace, as needed.



Electrical Access

1. Remove the screws on the side panel
2. Remove the screw on the control board cover



Cleaning the Drain Tray

Complete approximately once per year, depending on the environment.

- Unplug the dehumidifier.
- Mix a 16 ounce solution of vinegar (4 ounces vinegar + 12 ounces water), or bleach
- 1 ounce bleach + 15 ounces water).
- Remove the filter so you have access to the drain tray.
- Pour the cleaning solution into the drain tray at the base of the coils. If any cleaning
- solution gets on the coils, flush with water.
- Allow solution to soak for 15 minutes.
- Pour in 32 ounces of clean water to flush out the drain line.

For more detailed instructions, visit www.SeairaGlobal.com

Troubleshooting

Symptom	Cause	Solution
Display is Blank	Poor Connection	Make sure power cord is plugged in
	Power Outage	Reset power
No Airflow	Filter is Dirty	Clean the filter(s)
	Air Inlet or Outlet is Blocked	Clear the blockage
E1 Error Code	Humidity Sensor or Communication Error	Check that the sensor wire is connected at both ends. If no issue, the sensor may be faulty
LO Error Code	Room Temperature is below 33°F	Increase room temperature so it's within operating range. If issue persists, check the sensor
HI Error Code	Room Temperature is above 105°F	Decrease the room temperature so it's within operating range. If issue persists, check the sensor
Tripped GFCI Outlet or Breaker	Not a Dedicated Circuit	Identify all sources connected to outlet and confirm source of trip. If it is dehumidifier, contact technical support. If not, move dehumidifier to dedicated circuit for future use.
	Defective GFCI	Replace outlet
	Dirt, Dust, or Moisture on Outlet	Clean or replace outlet
	Lightning or External Electrical Surge	Reset or replace breaker/GFCI, as needed
Note: Dehumidifier will not function until error code is cleared.		

Warranty

All warranty benefits apply to the original owner only. Warranty cannot be transferred or assigned.

5 YEARS (FROM DATE OF PURCHASE): Seaira Global warrants the dehumidifier will operate free of defects in workmanship and materials. At its discretion, Seaira Global will repair or replace any malfunctioning components, free of charge (excluding transportation costs)

CUSTOMER RESPONSIBILITIES: In order to take advantage of the warranty service, the customer must do the following:

1. Customer must provide normal care and maintenance (including, but not limited to cleaning filters, coils and pumps)
2. Removal and re-installation of unit is the sole responsibility of owner.
3. If customer cannot return unit to Seaira Global, all costs associated with shipment are borne by the customer. In addition, all ancillary charges related to shipments, including but not limited to palletizing, wrapping, labeling, and pickup are associated with customer.
4. If shipped, customer is responsible for all risk of loss or damage.

WARRANTY PROCEDURE:

1. Customer must mail in warranty registration card to Seaira Global. If no card is submitted, warranty period will begin the day the shipment left the warehouse.
2. If warranty service is necessary, customer must contact Seaira Global Tech Support by phone 910-660-0962 to receive a Return Authorization (RA) number.
3. Once an RA has been issued, it is the customer's job to bring the unit to a Seaira Global. If this is not an option, shipping will be arranged to bring the unit back to the Seaira warehouse (at the expense of the customer).
4. After the unit has been received by Seaira Global, an initial inspection will be completed, if it is determined to be an invalid warranty claim (see exclusions below), unit will only be completed after receiving payment from customer for all associated costs.
5. If unit is defective, the necessary parts will be repaired or replaced and the unit will be available for pickup at Seaira Global or returned via shipment (at customer's expense). Keep in mind that work is only done during normal working hours. After being repaired, all units are required to go through a rigorous testing process prior to being returned to customer.
6. Once a part is repaired and the dehumidifier is returned, the original warranty period still applies (no extensions).

EXCLUSIONS:

DAMAGE DUE TO THE FOLLOWING IS NOT COVERED UNDER WARRANTY

1. ACTS OF NATURE- INCLUDING BUT NOT LIMITED TO:

- Flooding
- Fire
- Water damage
- Hurricane/storm damage

2. IMPROPER USAGE- INCLUDING BUT NOT LIMITED TO:

- Pool/spa/tub applications
- Misuse, abuse, or tampering whether intentional or accidental
- Improper installation or design
- Improper voltage
- Lack of normal care
- Failure to follow instructions

3. CORROSION

4. FREEZING

5. ANY ADDITIONAL COSTS DUE TO CHANGES IN LAWS OR BUILDING CODES

6. FREIGHT CHARGES

7. ANY COSTS DUE TO LOST PROFIT OR DELAY

8. DAMAGE TO PROPERTY

9. CAUSE BEYOND CONTROL

10. CONSUMABLE PARTS, INCLUDING BUT NOT LIMITED TO:

- Filters
- Batteries
- Power cords
- Valves
- Switches
- Rubber parts

11. APPLICABLE LAW AND VENUE

ALL ASPECTS OF THIS AGREEMENT SHALL BE INTERPRETED BY AND UNDER THE LAWS OF THE STATE OF NORTH CAROLINA. ANY LITIGATION, ENFORCEMENT OF ARBITRATION, OR LITIGATION RELATED TO SHALL BE BROUGHT IN THE APPROPRIATE COURT IN NEW HANOVER COUNTY, NORTH CAROLINA.

12. DIRECT, INDIRECT, COLLATERAL OR INCONSEQUENTIAL DAMAGES OF ANY KIND

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. SEAIRA GLOBAL'S TOTAL LIABILITY, REGARDLESS OF NATURE OF CLAIM SHALL NOT EXCEED ORIGINAL PURCHASE PRICE OF THE PRODUCT. IF A PRODUCT OR COMPONENT IS REPLACED WHILE UNDER WARRANTY, THE APPLICABLE WARRANTY PERIOD SHALL NOT BE EXTENDED BEYOND THE ORIGINAL WARRANTY TIME PERIOD.

THE FOREGOING SHALL CONSTITUTE THE TOTAL LIABILITY OF SELLER IN THE CASE OF DEFECTIVE PERFORMANCE OF ALL OR ANY OF THE EQUIPMENT OR SERVICES PROVIDED TO BUYER. BUYER AGREES TO ACCEPT AND HEREBY ACCEPTS THE FOREGOING AS THE SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OR ALLEGED BREACH OF WARRANTY BY SELLER.

ANY DISHONESTY OR FRAUD IN CONNECTION WITH SEAIRA GLOBAL WARRANTY THOROUGHLY VOIDS ALL WARRANTY POLICIES. SEAIRA GLOBAL EXPRESSLY RESERVES THE RIGHT TO PURSUE LEGAL ACTION IN THE EVENT OF DISHONESTY, FRAUD, OR ATTEMPTED FRAUD.