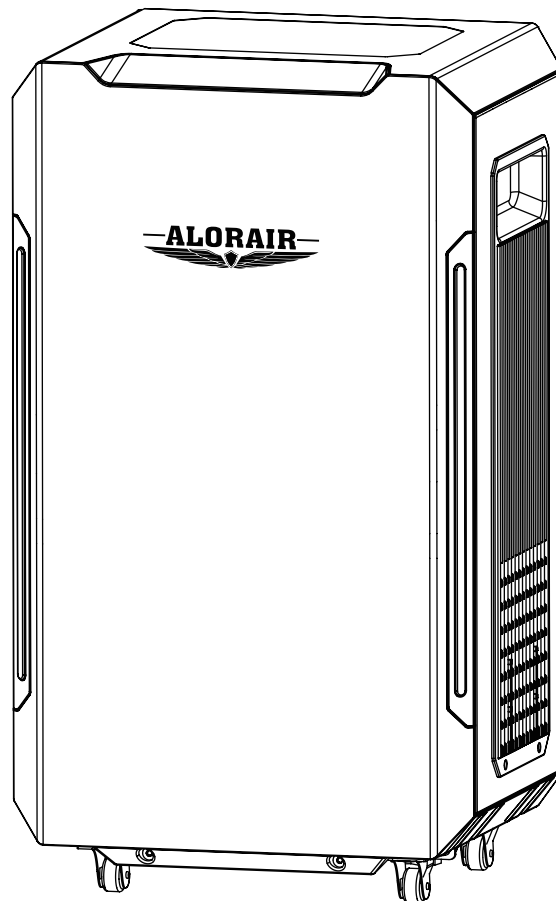




# Sentinel Pro35X Sentinel Pro55X

## Installation & Operations Manual



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Specifications subject to change without notice.

# WARRANTY REGISTRATION

Congratulations on purchasing a new Sentinel Dehumidifier. Your new dehumidifier comes with an extensive warranty plan. To register, simply fill out and return the warranty form provided in the dehumidifier box.

Be sure to note your dehumidifier serial number as you will need it for registration.

## SAFETY NOTES

- The Sentinel Series Dehumidifier must always be connected using a grounded electrical connection (as required for all electrical appliances). If non-grounded wiring is used, all liability reverts to owner and the warranty is voided.
- Sentinel Dehumidifiers should only be maintained and repaired by a qualified technician.
- Sentinel Dehumidifiers are only intended for operation when oriented with the unit sitting on its feet and level. Operating the unit in any other orientation could allow water to flood electrical components.
- Always unplug dehumidifier before moving. If there is a chance that water flooded the dehumidifier, it should be opened and allowed to dry thoroughly before reconnecting to electrical power and restarting.
- To ensure proper operation, neither the inlet nor discharge should be positioned against a wall. The inlet requires a minimum of 6' clearance and the discharge requires a minimum of 36" clearance.
- The best option for proper diffusion of air throughout the room is to have the discharge blowing away from a wall and the inlet pulling air in parallel to a wall.
- Do not insert your fingers or any object into the inlet or discharge.
- All work on the dehumidifier should be done with the unit "off" and unplugged.
- Do not use water to clean the exterior of the machine. To clean unit, unplug from power, then use a damp cloth to wipe exterior.
- Do not stand on the machine or use it as a device to hang clothes.

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## IDENTIFICATION

For reference, write down the model, serial number, and date of purchase for your dehumidifier. This is extremely helpful if you need to seek assistance in the future. The data label on the side of your unit has the key characteristics of your specific machine.

**Model Number:** Sentinel Pro35X / Sentinel Pro55X

**Serial Number:** \_\_\_\_\_ **Date of Purchase:** \_\_\_\_\_

For additional questions concerning your dehumidifier, the following options are available:

- Contact your installing contractor
- E-mail: sales@alorair.com

## ELECTRICAL SUPPLY

Power Supply: 115 V 60 Hz, AC Single Phase

Outlet Requirement: 3-Prong, GFCI

Circuit Protector: 15 Amps

**WARNING:** 240 Volts AC may cause serious injury from electric shock.

To reduce risk of injury:

1. Disconnect electrical power before servicing .
2. Only plug unit into grounded electrical circuit .
3. Do not use an extension cord.
4. Do not use a plug adapter.

## PRINCIPLE OF OPERATION

The Sentinel Series Dehumidifier utilizes its integral humidistat to monitor the conditioned space. When the relative humidity goes above the selected set point, the dehumidifier will energize. Air is drawn across an evaporator coil, which is cooler than the dew point of air. This means moisture will condense out of the air. The air is then reheated through the condenser coil and distributed back into the room.



## INSTALLATION

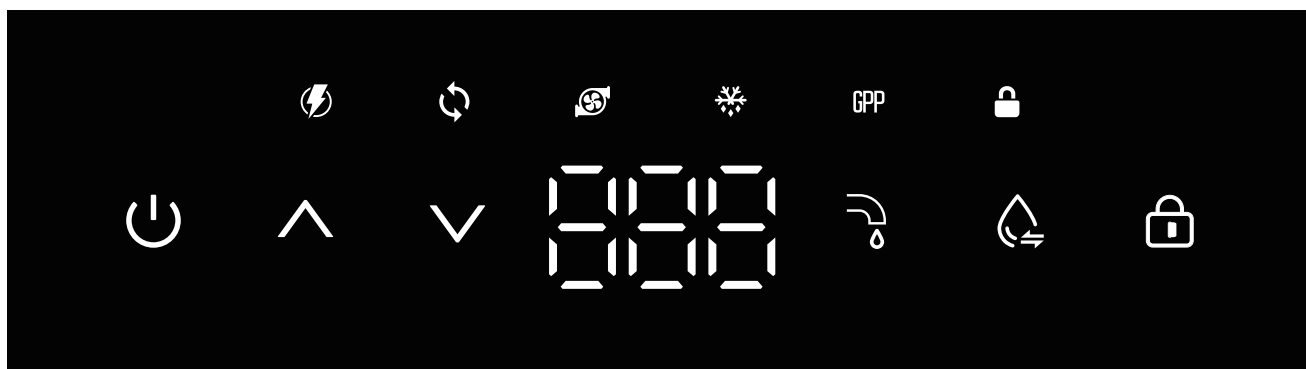
**For optimal performance and safety, please adhere to the following:**

1. The dehumidifier must be installed in a fully enclosed environment to effectively control moisture levels.
2. To ensure proper ventilation, avoid placing the inlet or outlet of the dehumidifier against a wall. Maintain a minimum clearance of at least 15 cm around both the inlet and outlet.
3. For the most efficient dehumidification, position the unit in the center of the room.
4. Dehumidifiers are designed for upright operation near the floor. Ensure the unit is placed in this orientation for proper functionality.

## ENERGY SAVING TIPS

1. Adjust the humidity setting to the highest comfortable level to reduce the amount of time the dehumidifier runs. If it feels humid or “musty”, lower the humidity setting. To save energy, turn off the dehumidifier when you open the windows, just as you would turn off the air conditioner.
2. If you’re going to be away from home for an extended period of time in the summer, set the relative humidity to 55% and set the thermostat to the highest temperature you’re comfortable with in cooling mode. This will keep humidity at a manageable level while minimizing cooling energy consumption.

## BUTTON FUNCTIONS



▲ The dehumidifier conserves energy by automatically entering a low-power mode if not used in the “on” state for some time. In this mode, only the POWER key and display are active. To wake it up, press any key. The unit will beep when the operation is successful.

### 1. POWER Button

- Press to turn the dehumidifier on or off.
- Press to disable the water pump and screen lock functions.

### 2. UP Button

- Press to increase the set humidity or moisture content.

### 3. DOWN Button

- Press to decrease the set humidity or moisture content.

### 4. Display Window

- Shows relative humidity, moisture content, error codes, ambient temperature, and coil temperature.

### 5. GPP Button

- Press to enable or disable the moisture content mode. When this function is activated, all humidity levels are displayed and controlled based on moisture content.

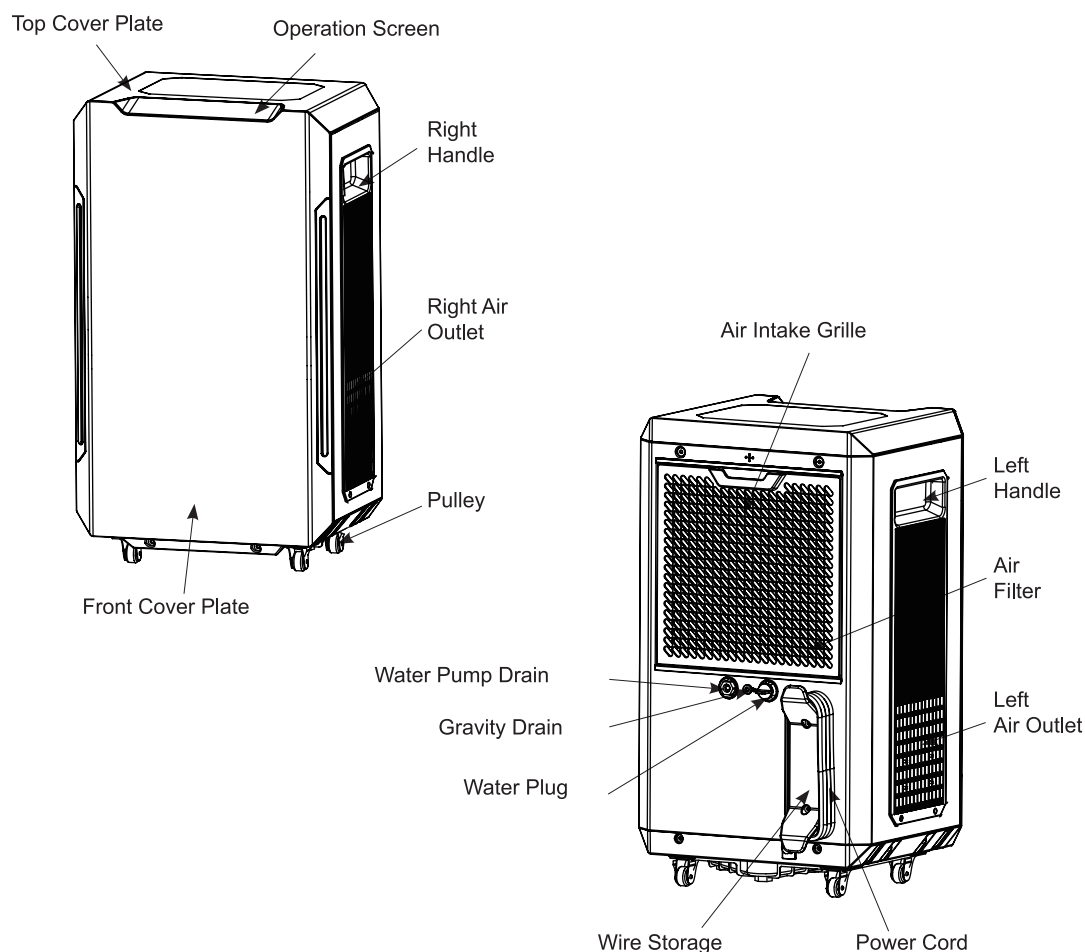
### 6. DRAIN Button

- Press and hold for 3 seconds to enable or disable the water pump function. When the pump function is active, briefly pressing the DRAIN button will initiate a 28-second drainage cycle.

### 7. LOCK Button

- Press and hold for 3 seconds to lock or unlock the screen. While locked, all buttons except LOCK and POWER are disabled.

## FUNCTION DESCRIPTION



▲ *Note: The illustrations in this manual are provided for reference only; the actual appearance and functionality of the product is based on the purchased model.*

### Humidity Dehumidification Setting

#### 1. Entering Humidity Setting Mode

- While the device is powered on, press the “UP” or “DOWN” button to enter the humidity setting mode. The display window will blink slowly, indicating the current set humidity level.

#### 2. Adjusting the Humidity Level

- Within 5 seconds, press the UP or DOWN button to adjust the humidity settings. The available humidity settings range from CO↔25%↔35%...↔75%↔80%↔CO.
- For moisture content, the setting range is (CO↔25%↔35%...↔195%↔200%↔CO). Each button press will increase or decrease the value by 5%.
- Holding the button allows for faster adjustments.

#### 3. Confirming the Setting

- After setting the desired humidity level, release the button and wait for 5 seconds. The

display will stop blinking and show the current detected humidity, indicating that the setting is complete.

## 4. Automatic Operation

- Once the ambient humidity reaches the set level, the device will enter standby mode, with the operation light flashing slowly. If the humidity rises again, the device will automatically resume operation based on the set parameters.

## 5. Continuous Dehumidification Mode Setting

- While the device is powered on, press the “UP” or “DOWN” button to enter the humidity setting mode. Adjust the humidity to “CO” within 5 seconds. After 5 seconds of inactivity, the display will stop blinking and show the current detected humidity. The continuous operation light will turn on, indicating that the setting is complete. In continuous dehumidification mode, the device will operate continuously, regardless of changes in ambient humidity.

## 6. Power Outage Memory Function

- In the event of a power outage while the device is running, it will automatically resume operation in the same mode and settings when power is restored. Note that the compressor has a 3-minute protection delay before it starts operating again. A brief transition of about 3 seconds between fan start and stop is normal. Only the parameters successfully set before the power outage will be remembered, including the set humidity, continuous mode, GPP function, and the water pump function. The screen lock function is not included in the memory feature and will need to be reset manually.

## 7. Humidity Status Display Function

- When the device is off, the display window will show the current ambient humidity. To ensure accurate temperature and humidity readings, the fan will start for 3 minutes every hour during off or standby mode.

## 8. Screen Lock Function

- When the device is powered on, press and hold the LOCK button for 3 seconds. The dehumidifier will emit a beep, and the corresponding lock indicator will light up, indicating that the screen lock function is activated. In this mode, all buttons except the LOCK and POWER buttons are disabled. To unlock, press and hold the LOCK button for 3 seconds. The lock indicator will turn off and all button functions will be restored.

## 9. GPP Function

- By default, the GPP mode is off when the device is powered on. To activate the GPP function, press the GPP button, and the GPP light will turn on. Pressing the GPP button again will deactivate the function. When GPP mode is active, the device will display the current moisture content and operate according to the set moisture content level.

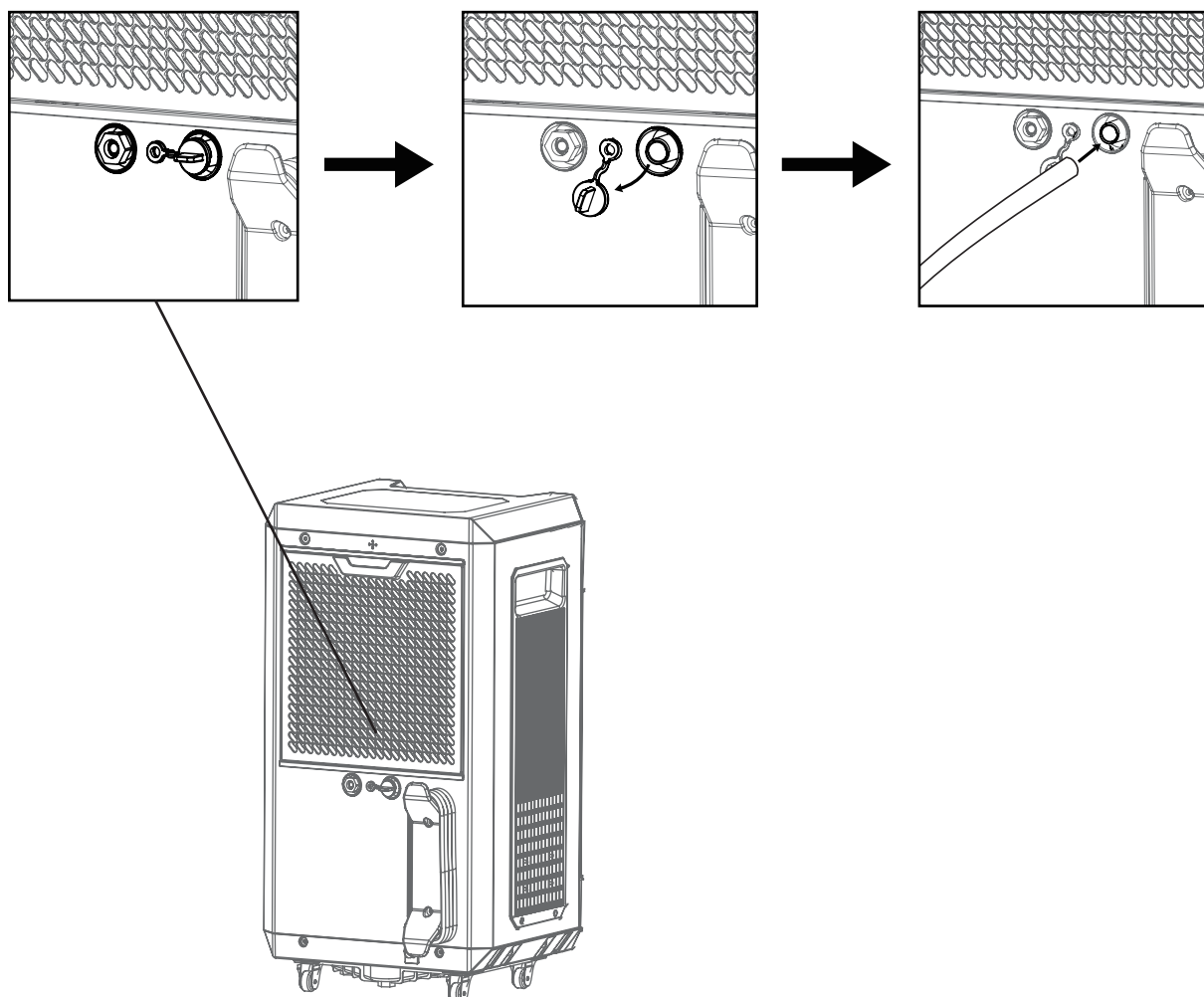
## 10. Defrost Function

- The device is equipped with a defrost function. When the ambient temperature is too low, causing frost to form on the system surface, the device will automatically initiate defrosting. During defrosting, the defrost indicator will remain lit, and the operation light will flash slowly. Once defrosting is complete, the device will automatically return to the previous settings, the defrost indicator will turn off, and the operation light will stop flashing.

## 11. Drainage Function

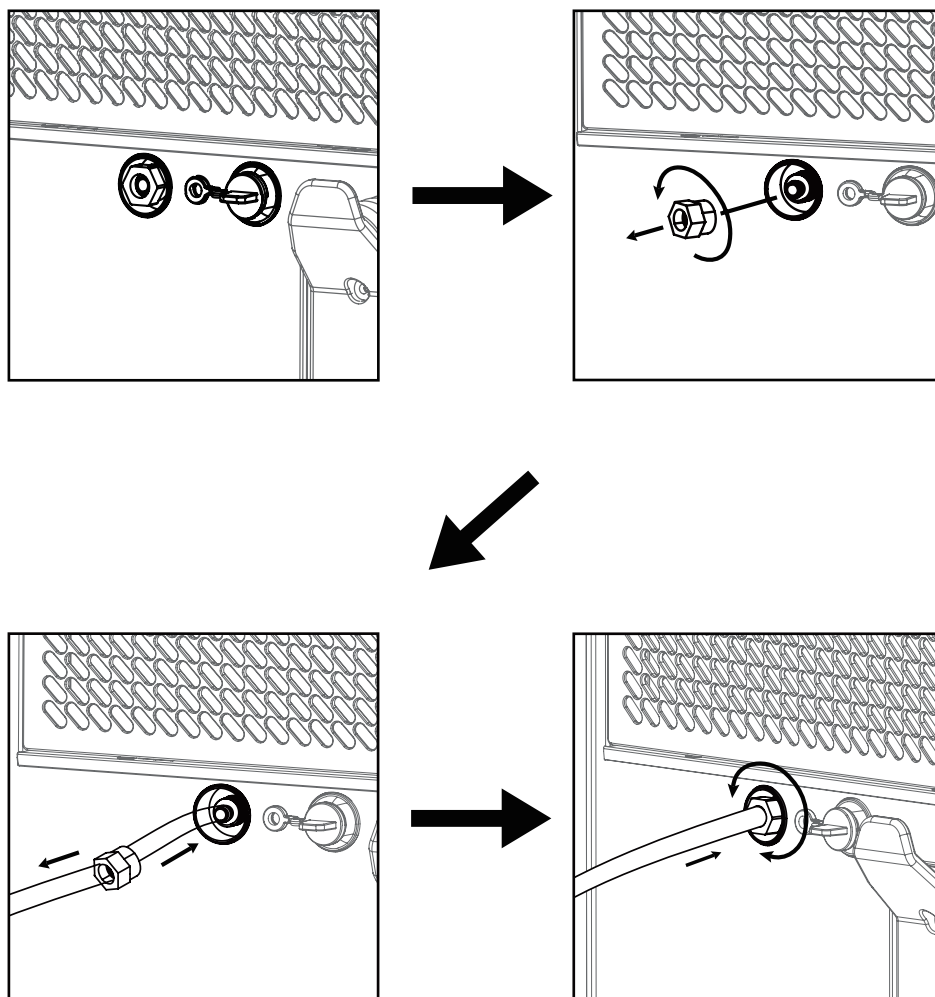
- Using Gravity Drainage:

1. Remove the water plug and empty any remaining water inside the device.
2. Attach the gravity drain hose, ensuring it is securely fastened before turning on the dehumidifier. Ensure that the end of the hose is not higher than the gravity drain outlet.
3. If the dehumidifier emits an alarm and stops working, with the operation light flashing slowly and the display showing an E4 alarm, check if the gravity drain hose is clogged or kinked.
4. Clear any obstructions from the hose to restore proper flow, which will clear the E4 alarm, and the device will resume normal operation.



## 13.Using Water Pump Drainage

1. Plug the gravity drain outlet with the water plug.
2. Unscrew the nut from the water pump drain outlet, insert the hose into the nut, and then screw it tightly onto the water pump drain outlet.
3. Press and hold the DRAIN button for 3 seconds. The dehumidifier will beep, and the water pump mode indicator will light up, indicating that the water pump drainage function is active.
4. In water pump mode, press the DRAIN button briefly to initiate water discharge for 28 seconds.
5. If an E4 alarm occurs, check if the water pump drain hose is clogged or kinked.
6. Clear any obstructions from the hose, which will clear the E4 alarm or turn off the water pump function, allowing the device to resume normal operation.



## MAINTENANCE

▲ **Warning:** Always unplug the power before performing any maintenance.

### 1. Cleaning the Device Exterior

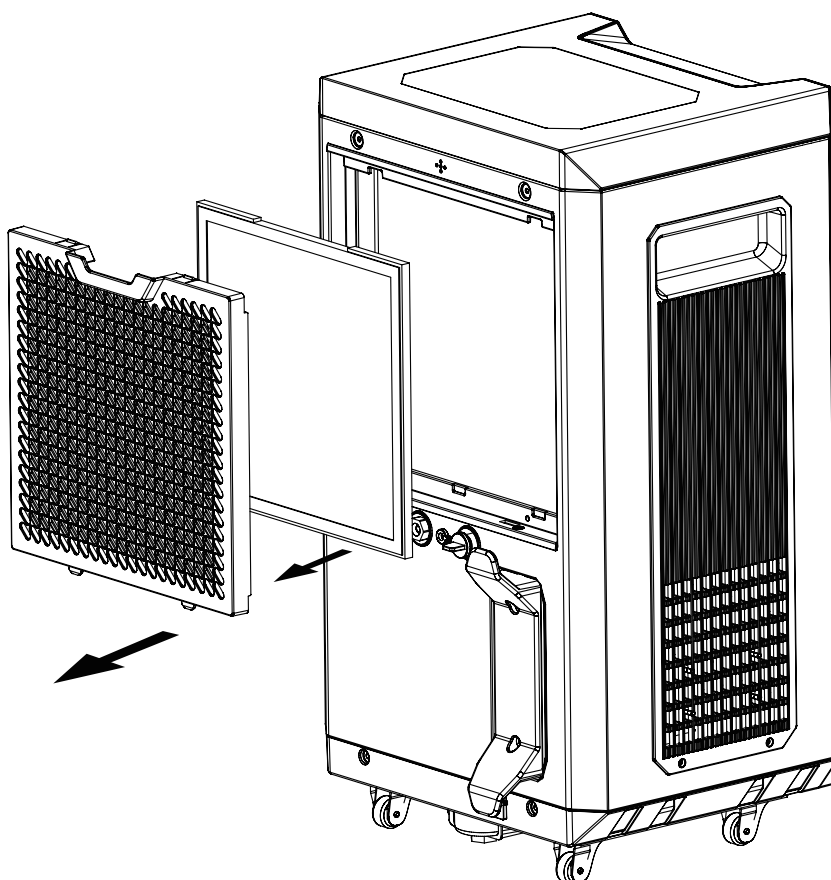
- Wipe the exterior of the device with a soft, damp cloth. Do not use any cleaning agents.

### 2. Coil Maintenance

- Clean the coils once a year using an approved coil cleaner. The cleaner should be self-rinsing and foaming, such as WEB® Coil Cleaner.

### 3. Cleaning the Filter

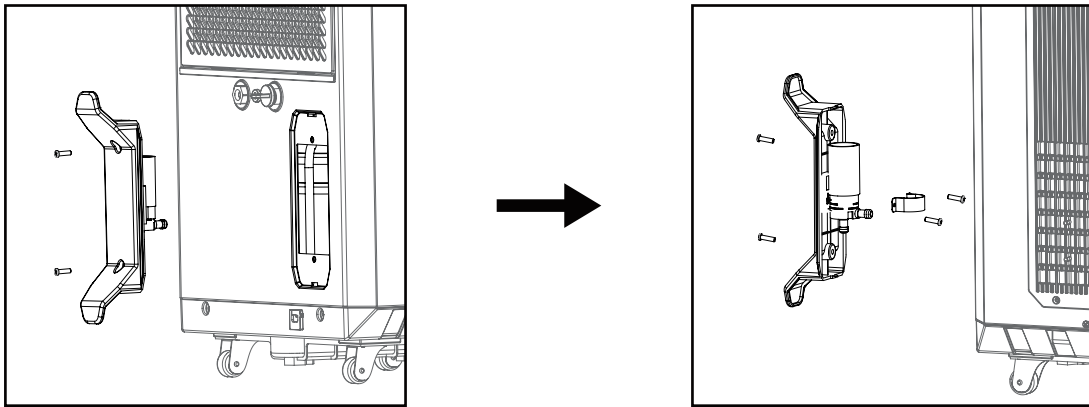
1. Remove the filter from the air intake grille from the back of the machine.
2. Clean it with a vacuum or rinse it with warm water (do not use any cleaning agents).
3. After cleaning, let the filter air dry in a shaded area before reinstalling it in the machine.





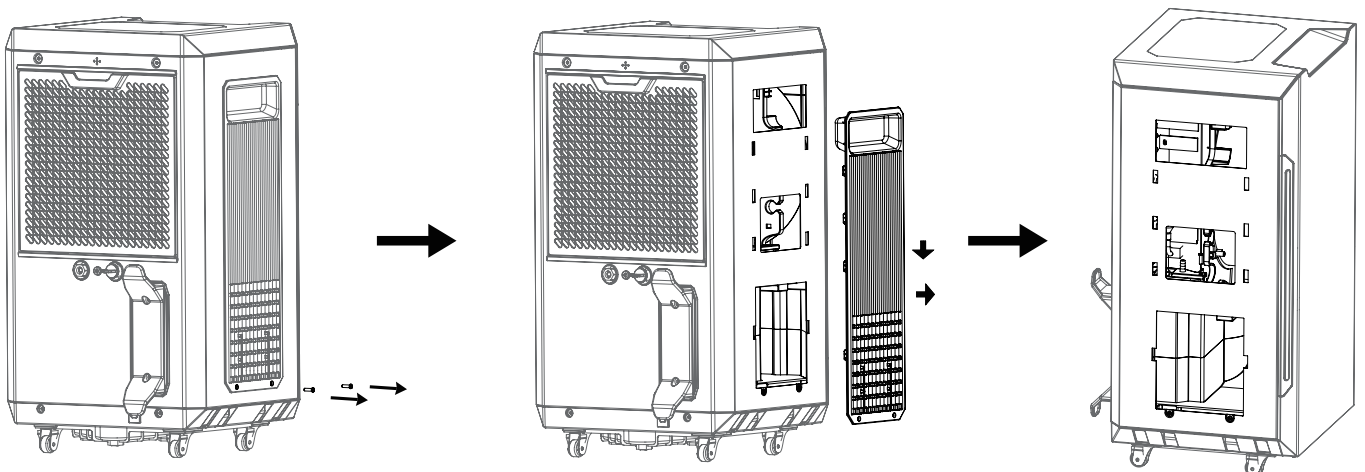
## 4.Replacing the Water Pump

1. Drain the water from the dehumidifier, unplug the power, and remove the power cord from the cord wrap.
2. Use a Phillips screwdriver to remove the two screws from the cord wrap and take out the water pump.
3. Unscrew the two screws from the water pump clamp with a Phillips screwdriver.
4. Disconnect the water hose and electrical connectors from the water pump to remove it.
5. Install the new water pump by following the steps in reverse.

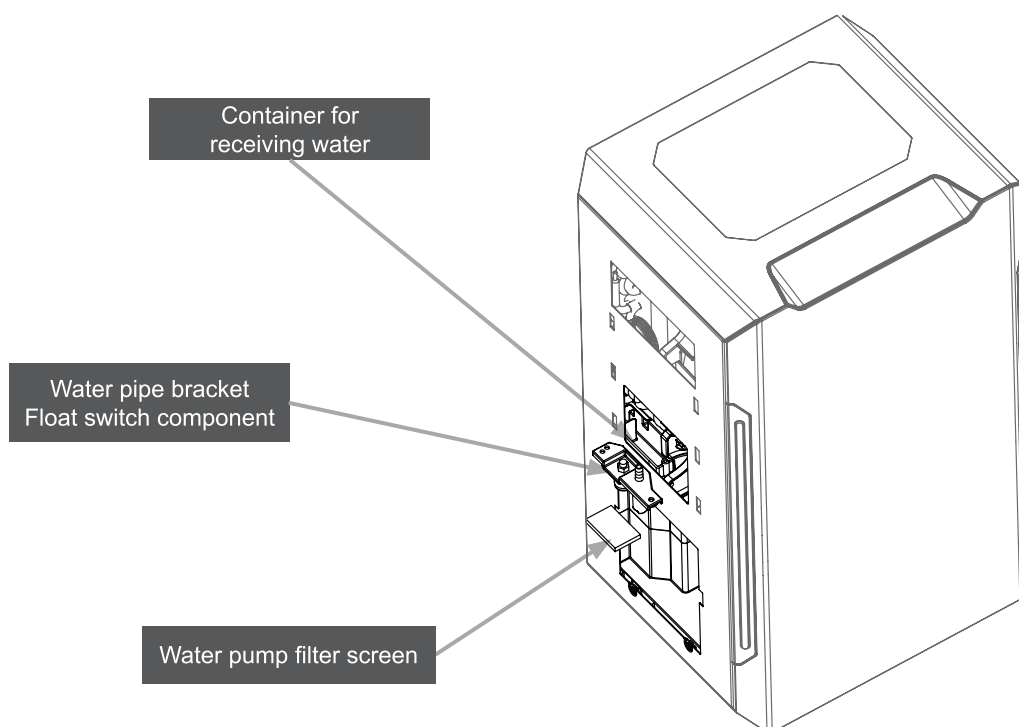


## 5.Cleaning the Water Pump Filter and Drip Tray

1. Drain the water from the dehumidifier and unplug the power.
2. Use a Phillips screwdriver to remove the two screws below the left air outlet, then slide down the handle to reveal the access port.
3. Remove the screw securing the water hose and float switch bracket. Take out the hose bracket and float switch assembly, and clean them with water.
4. Rinse the water pump filter and drip tray with water.
5. After cleaning, reassemble the parts by following the steps in reverse.

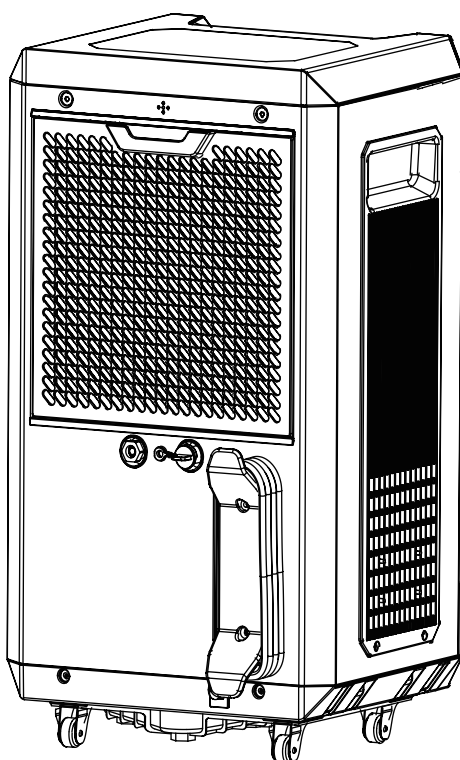






## 6. Dehumidifier Storage

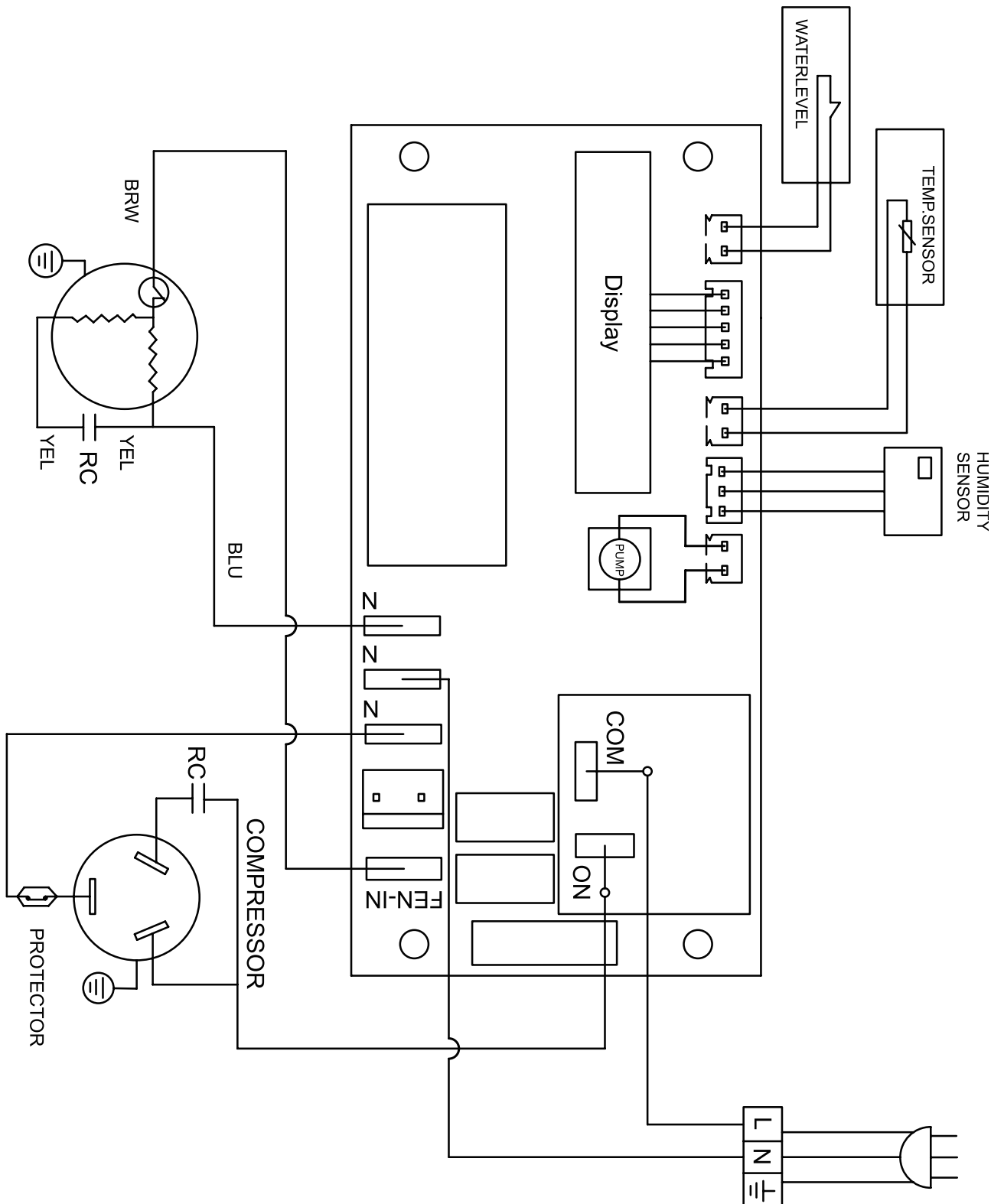
- If the device will be stored for an extended period, follow these steps:
  1. Turn off the device and let it dry completely.
  2. Wrap the power cord around the cord wrap and store the drainage hose properly.
  3. Store the device in a clean, dry place.



## ERROR CODES

Error Codes	Issue	Solution
E1	Humidity Sensor Malfunction	Replace the humidity sensor.
L0	Ambient temperature $\leq 2^{\circ}\text{C}$	Automatically resumes when temperature $>2^{\circ}\text{C}$ .
H1	Ambient temperature $\geq 39^{\circ}\text{C}$	Automatically resumes when temperature $<39^{\circ}\text{C}$ .
E3	Defrost Malfunction	Check for system leaks.
E4	Drainage Malfunction	Check if the drainage outlet is clogged; check if the float switch is stuck.
E5	Coil Temperature Sensor Malfunction	Check for system leaks; if none, check the sensor for defects.

## CIRCUIT DIAGRAM



## LIMITED WARRANTY

This limited warranty starts from the date of purchase. AlorAir Solutions Inc. Warrants to the original purchaser that this AlorAir product is free from manufacturing defects in material or workmanship for the limited warranty period of:

**Six (6) Month parts and labor.** This includes the shipments charges for replacement parts or unit.

**One (1) year parts and labor.** This does not include the shipment charge to send the defective product back to be repaired or replaced.

**Three (3) years parts and labor on Refrigeration System ONLY (Compressor, Condenser, and evaporator).** Transportation cost, not included.

**Five (5) years parts on Refrigeration System ONLY(Compressor, Condenser, and evaporator).** Transportation cost, not included.

This limited warranty is valid only on products purchased from the manufacturer or AlorAir authorized dealer and operated, installed, and maintained according to the instructions included in this user guide or furnished with the product. AlorAir Solutions Inc will not provide in-home service during or after the warranty period. You may be responsible for the shipping charge to bring the product to the manufacturer for service.

To receive warranty service, the purchaser must contact AlorAir at 888-990-7469 or [sales@alorair.com](mailto:sales@alorair.com). A proof of purchase or order number is required to receive warranty service. During the applicable warranty period, a product will be repaired or replaced at the sole option of AlorAir.

**IMPORTANT NOTICE:** Keep the item's packaging in case warranty service is required.

In the event that the product is sent for repair without explicit guidance from our customer service team, AlorAir shall not assume responsibility for any associated repair costs.

## LIMITED WARRANTY EXCLUSIONS

This limited warranty covers manufacturing defects in materials or workmanship encountered in normal household, commercial or noncommercial use of this product and shall not cover the following:

- Damage occurs in uses for which this product was not intended for.
- Damage caused by unauthorized modification or alteration of the product.
- Cosmetic damage including scratches, dents, chips, and other damage to the product's finishes.
- Damage caused by abuse, misuse, pest infestation, accident, fire, floods, or other acts of nature.
- Damage caused by incorrect electrical line current, voltage, fluctuations, and surges.
- Damage caused by failure to perform proper maintenance of the product.

The use of this product in SPA or a room with OUTDOOR POOL invalidate or voids limited warranty.







## WARRANTY REGISTRATION CARD

**Return To:**  
**AlorAir Solutions**

**ORDER NUMBER:** \_\_\_\_\_

**MODEL:** \_\_\_\_\_ **SERIAL #:** \_\_\_\_\_

**INSTALLER:** \_\_\_\_\_ **INSTALLATION DATE:** \_\_\_\_\_

**NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**PHONE #:** \_\_\_\_\_ **EMAIL:** \_\_\_\_\_

- ▶ If you have any questions, please feel free to contact us at [888-990-7469](tel:888-990-7469) or visit [www.alorair.com](http://www.alorair.com)
- ▶ Register your unit for warranty using this link: [www.alorair.com/page/Warranty--Warranty-registration](http://www.alorair.com/page/Warranty--Warranty-registration)
- ▶ Warranty Registration <https://www.alorair.com> or scan [this barcode](#) to direct you to the warranty registration website.

