ALORAIR Sentinel HD55P

ALORAIR Sentinel HD55P Crawl Space Dehumidifier User Manual

Model: Sentinel HD55P

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, installation, and maintenance of your ALORAIR Sentinel HD55P Crawl Space Dehumidifier. Please read this manual thoroughly before operating the unit and retain it for future reference.

The ALORAIR Sentinel HD55P is designed to remove excess moisture from various environments, including crawl spaces, basements, storage areas, garages, and commercial spaces. It features a robust design, automatic defrost, and an internal pump for convenient drainage.

Image 1.1: ALORAIR Sentinel HD55P Dehumidifier with included drain hose.

2. SAFETY INFORMATION

Always adhere to the following safety precautions to reduce the risk of fire, electric shock, or injury.

- Ensure the unit is properly grounded.
- Do not operate the unit with a damaged power cord or plug.
- Do not insert objects into the air inlet or outlet.
- Keep the unit away from water sources and flammable materials.
- Unplug the unit before cleaning or performing any maintenance.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Do not use the dehumidifier in areas where standing water is present.

3. PRODUCT OVERVIEW

3.1 Key Features

- **Dehumidification Capacity:** 55 Pints per day (AHAM), 120 Pints per day (Saturation).

- **Coverage Area:** Up to 1,500 sq. ft.

- **Humidity Setting Range:** 25% - 80% Relative Humidity (RH).

- **Automatic Defrost:** Prevents coil freezing in low temperatures.

- **Built-in Pump:** For continuous drainage.

- **Internal Corrosion Protection:** Extends coil lifespan.

- **MERV-1 Filter:** Easy access for maintenance.

- **Compact Design:** Suitable for various installation types.

Image 3.1: Performance specifications and features of the Sentinel HD55P.

3.2 Components

- Main Dehumidifier Unit

- Drain Hose (for pump drainage)

- Power Cord

- MERV-1 Filter (pre-installed)

- Adjustable Leveling Feet

Easy MERV-1 Filter Access

Rare Earth Alloy Tube Evaporator

U.S. COMPANY

Image 3.2: Internal components showing filter access and evaporator.

4. SETUP AND INSTALLATION

4.1 Placement

Position the dehumidifier in a location that allows for adequate airflow around the unit. Ensure there is at least 1 foot (30 cm) of space around the air inlet and outlet. The unit can be placed on the floor or suspended using optional hanging kits (sold separately).

Image 4.1: Compact design allows for flexible installation, including floor and hanging options.

4.2 Drainage Options

The Sentinel HD55P offers two drainage methods: gravity drain and pump drain.

- **Gravity Drain:** For gravity drainage, ensure the unit is placed on a raised surface or the drain outlet is positioned lower than the unit's base. Connect a standard garden hose (not included) to the gravity drain port.

- **Pump Drain:** The built-in pump allows water to be discharged vertically or horizontally up to 19.6 feet (6 meters) away. Connect the provided drain hose to the pump outlet. Ensure the hose is not kinked or blocked.

Image 4.2: Pump drainage system, capable of pumping water up to 19.6 feet.

Image 4.3: Gravity drainage setup with a 6.5 ft drain hose.

4.3 Power Connection

Connect the power cord to a grounded electrical outlet. The unit is designed for 115V/60Hz power supply.

5. OPERATING INSTRUCTIONS

5.1 Control Panel

The control panel allows you to adjust settings and monitor the unit's operation.

Image 5.1: Control panel and key features.

5.2 Setting Desired Humidity

Use the control panel to set your desired humidity level between 25% and 80% RH. The unit will automatically turn on or off to maintain the set humidity.

Image 5.2: Smart humidity detection and control.

5.3 Automatic Defrost

The unit features an automatic defrost system. When ambient temperatures are low, the unit will initiate a defrost cycle to prevent ice buildup on the coils. During this cycle, the compressor pauses while the fan continues to run, allowing frost to melt. Normal operation resumes once defrosting is complete.
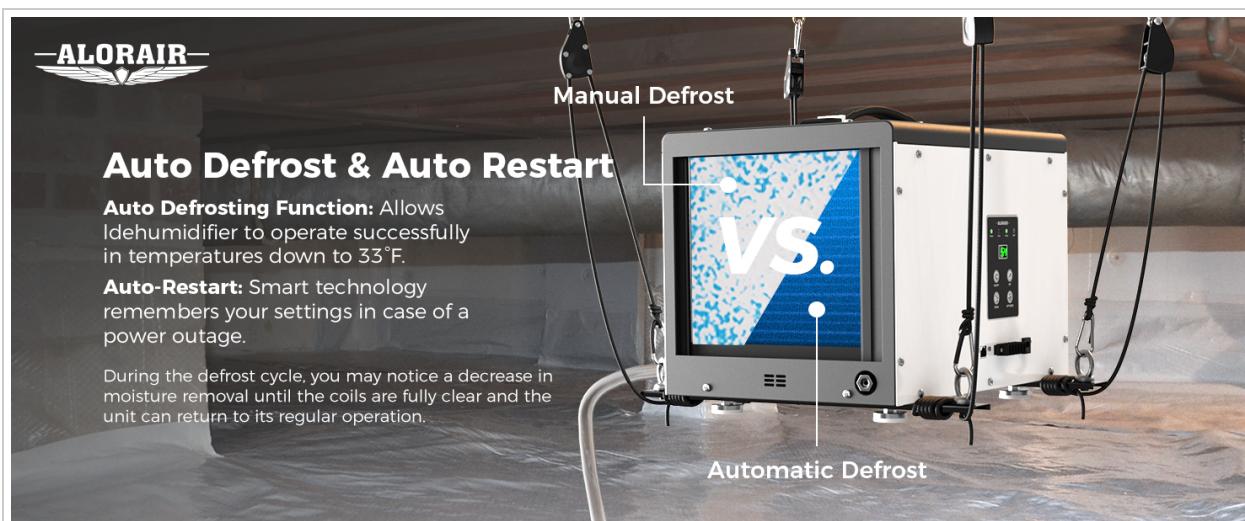

Image 5.3: Auto Defrost and Auto Restart functionality.

5.4 Optional Remote Control

An optional remote control system (sold separately) can be connected via a 25-foot CAT 5 cable, allowing for remote monitoring and control of the dehumidifier without direct access to the unit.

Optional Hanging Kits

It helps to reduce noise and vibration while the basement dehumidifier is operating when properly installed.

No transfer of noise or vibration to the floor above, and getting lower space back is comfortable.

Image 5.4: Optional remote control for convenient operation.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your dehumidifier.

6.1 Filter Cleaning and Replacement

The MERV-1 filter should be checked and cleaned regularly, typically every 3 months, or more frequently depending on air quality. A clean filter protects internal components from dust and maintains efficiency.

- To access the filter, open the filter cover on the side of the unit.

- Remove the filter and clean it with a vacuum cleaner or rinse it with warm water. Allow it to dry completely before reinserting.

- Replace the filter if it is damaged or cannot be cleaned effectively.

Image 6.1: Easy access for MERV-1 filter maintenance.

6.2 Coil Cleaning

The dehumidifier's coils are treated with internal corrosion protection. However, periodic inspection and cleaning of the coils may be necessary to ensure efficient heat transfer. Consult a qualified technician for deep coil cleaning if required.

6.3 Drainage System Maintenance

Periodically check the drain hose for kinks, blockages, or debris. Ensure the pump (if used) is functioning correctly and the drain line is clear to prevent water backup.

7. TROUBLESHOOTING

If you encounter issues with your dehumidifier, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not turn on	No power supply; Power cord not plugged in; Circuit breaker tripped.	Check power connection; Reset circuit breaker.
Unit runs but does not dehumidify	Air filter clogged; Coils frozen; Room temperature too low; Humidity setting too high.	Clean or replace air filter; Allow unit to defrost; Ensure room temperature is above 33°F (1°C); Lower humidity setting.
Water leakage	Drain hose kinked or blocked; Drain connection loose; Unit not level.	Inspect and clear drain hose; Secure drain connections; Adjust leveling feet.
Unit is noisy	Unit not level; Obstruction in fan; Loose components.	Adjust leveling feet; Check for obstructions; Contact support if noise persists.

8. SPECIFICATIONS

Feature	Specification
Brand	ALORAIR
Model Name	Sentinel HD55P
Dehumidification Capacity (AHAM)	55 Pints per Day
Dehumidification Capacity (Saturation)	120 Pints per Day
Coverage Area	Up to 1,500 sq. ft.
Humidity Setting Range	25% - 80% RH
Operation Mode	Comfort
Special Features	Automatic Defrost, Built-In Pump
Number of Speeds	2
Product Dimensions (L x W x H)	17.64 x 11.69 x 11.85 inches (448 x 297 x 301 mm)
Item Weight	44 Pounds (20 kg)
Color	Black

Image 8.1: Product dimensions and weight.

9. WARRANTY AND SUPPORT

9.1 Limited Warranty

Every ALORAIR Sentinel HD55P dehumidifier comes with a 5-year limited warranty. This warranty covers:

- **6 Month Parts and Labor:** Includes shipment charges for replacement parts or unit.
- **1 Year Parts and Labor:** Excludes shipment charges to send the defective product back for repair or replacement.
- **3 Year Parts and Labor:** Coverage for refrigeration system only.
- **5 Year Compressor and Coil:** Specific coverage for these components.

For detailed warranty information, please refer to the official ALORAIR website or contact customer support.

9.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact ALORAIR customer support. Our professional team is ready to assist you.

You can also refer to the official User Manual (PDF) for additional information.