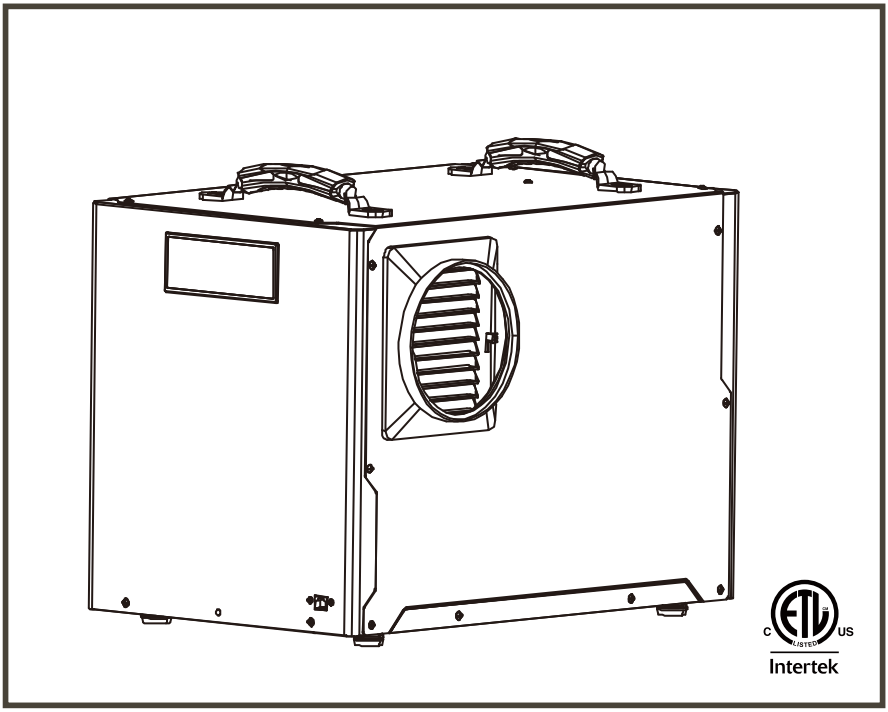
User Manual



Guardian SNS90

Abestorm Solutions INC.

ADD: 8605 SANTA MONICA BLVD#79525 WEST
HOLLYWOOD, California, 90069 USA

E-mail: support@abestorm.com

Note: as we keep upgrading our product, we reserve the right to modify the product without notice in advance.

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Warranty Registration

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

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

Safety Notes

- The Guardian 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 the owner , and the warranty is voided.
- Guardian Dehumidifiers should only be maintained and repaired by a qualified technician.
- GuardianDehumidifiers 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 the dehumidifier before moving it to another location.
- 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 6" clearance.
- For better use of the dehumidifier, both air inlet and air outlet should be facing the open area of the space.
- Do not insert your fingers or any objects 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.To clean the unit, unplug from power, then use a damp cloth to wipe the exterior.
- Do not stand on the machine or use it as a device to hang clothes.

Identification

For future 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 yourunit has the key characteristics of your specific unit.

Model Number: Guardian SNS90

Serial Number:_____ **Date of Purchase:**_____

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

- Contact your installing contractor
- E-mail: support@abestorm.com

Electrical Supply

Power Supply: 115V,60 Hz AC, Single Phase
Outlet Requirement: 3-Prong, GFCI
ircuit Protector: 15 Amp

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 the unit into a grounded electric circuit.
3. Do not use an extension cord.
4. Do not use a plug adapter.

Principle of Operation

The Guardian Series Dehumidifiers utilizes its integral humidistat to monitor the conditioned space. When the relative humidity goes above the selected setpoint, the dehumidifier will energize air is drawn across an evaporator coil, which is cooler than the dew point of the 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

The area to be controlled should be sealed with a vapor barrier. If the unit is installed in a crawlspace, all vents should be sealed.

WARNING: Do not install your dehumidifier in a corrosive environment. Some liquid vapor barriers dry via “solvent evaporation".Always make sure that the barrier is completely dry and the area is thoroughly

Step #1:Place dehumidifier on a level surface.

Do not place the unit directly on the vapor barrier.For example , use blocks or pavers to create a level surface.

If the unit is handled in such a manner that the compressor did not remain in the upright position, you will need to place it on a level surface, then wait a minimum of 2 hours before turning “on".

Step #2: Set Up Drain Line

The included drain line attaches to the unit via a compression type fitting on the discharge end of the unit.To attach drain line, remove the compression nut and slide it over the end of the hose to be attached to unit. Slide compression nut side of hose over the insert on the compression fitting completely. Tighten compression nut.

Step #3: Plug unit into 15 amp grounded circuit.

Key Functions



1. Power Key

- Use this button to turn the dehumidifier on and off. Press once to turn the machine on. You will hear one beep and the ○ light will illuminate green.Press the power button a second time and will hear one beep as the machine shuts down. Note that there is a one-minutefan delay on shutdown.

2. Arrow Buttons

- Use the up and down arrow buttons to set the desired humidity setpoint on the display screen.

88 The setpoint can be any number between 36-90%.Creating a setpoint means that when the indoor humidity is lower than the setpoint,the machine will stop automatically. Conversely, when the indoor humidity is higher than the set level, the unit will operate. NOTE:The humidity levels displayed are approximate only (+/-5%).

3. Continuous Mode ○cont. efrost

- To switch into a continuous mode, simply use the down arrow key to set the humidity below 36%.At this point the Cont.light should illuminate green on the display board to indicate you have successfully switched to continuous mode.The display screen will show "Co".
- When set to continuous, the dehumidifier will run constantly, regardless of the humidity level until you turn the unit o ffor switch back to normal humidistat operation. If you would like to switch back to normal humidistat operation, simply move the setpoint above 36%.

4. Central Control

- This mode is not applicable on the Guardian SNS90.
- Central Control light should be o ffat all times when not connected to the AC.

5. Manual Drain Button

- For extended storage or movement of the machine, press the "Drain”button to remove water fro mthe integral pump's reservoir.

6. Pump Trouble Warning

- When the pump reservoir water level is too high, the high water sensor will activate to prevent over-flow.When this occurs, the dehumidifier will stop the compressor automatically and the display will show “E4".After a 1 minute delay, the fan motor will turn o ffand the machine will not operate until the problem is resolved.To reset the unit after an“E4” error, check the pump to verify it is functioning, then unplug the unit for two minutes.

Indicator Lights

1. Humidity Display Screen 88

- The display screen has two functions:

  1. When the unit is powered on, it shows the humidity of the space.
  2. While setting the desired humidity level, the screen will show the set humidity. After a brief delay, the display will revert to current humidity level.

2. Power Indicator Light Power

- This light indicates that the unit is properly powered on and ready to operate. Always make sure the unit is “off” prior to the performing any service.
- When the power light is blinking, it means that the unit has reached the humidity setpoint.

3.Continuous Mode/AutoDefrost Light Cont. Defrost

- When this light illuminates green, it indicates that the dehumidifier is set to the continuous operation mode.
- When the light glows red, it means the unit is in auto defrost mode and clearing the evaporator coil of any ice buildup.

4. Compressor Light Comp

- When the compressor light glows red, it indicates the compressor has been initiated but is currently warming up.
- Once the compressor light switches to green, it indicates the compressor is in working status.

Remote Control Instructions

Guardian Dehumidifiers can be controlled that using an optional remote accessory.The Guardian Remote Control connects to your Guardian Series Dehumidifier via a 25' CAT 5 cable.The Remote control contains an integrated sensor that gives you multiple options for remotely controlling your unit, in addition to monitoring the conditions surrounding the dehumidifier.

One application for the remote control is to install the dehumidifier in one room with the conditioned air ducted into a second room that contains the remote. For example, the dehumidifier could be installed in a laundry room and ducted into a living room. The remote would then be mounted in the living room so the remote sensor can control the humidity and provide easy controls for the user.

Another useful application for the remote control is if the dehumidifier is in an area that's difficult to access on a regular basis. For instance, if your dehumidifier is installed in your crawl space, the remote could be mounted in your living space or garage.This provides you with an easy way to monitor the dehumidifier.

1. On/O ff(Power)Button

Press the onlo ffbutton and the machine will start running (one beep). Press the button again to turn the machine off.

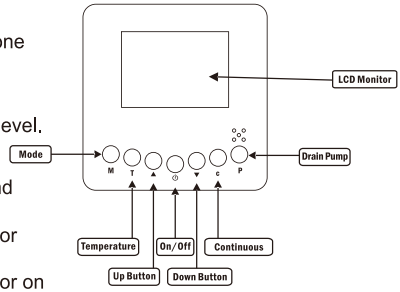
2. Up Button ▲ / Down Button ▼

Use the Up and Down arrow buttons to adjust the humidity level.

3. Mode M

Use the Mode button to switch between dehumidification and a ducted application.

- The symbol on the display board indicates the sensor on the remote control is being utilized.
- The symbol on the display board indicates the sensor on the dehumidier is being utilized.



4. Temperature

Press the temperature button to display the current temperature on the screen.Press the button again to turn of the display.

5. Continuous c

Press this button to switch the unit into continuous mode. cont. will appear on the display to indicate continuous mode.

6. Drain Pump P

Use this button if the unit will not be in use for an extended period of time.Pressing the drain pump button will remove water from the pump reservoir, so the unit can be safely moved or stored.

NOTE: The symbols mentioned above will only appear when the dehumidifier is powered on.

Operating Instructions

1. Start the machine

Press the power key to turn the machine on.

2. Adjust Settings

Use the up and down arrow keys to adjust your desired setpoint (typically 50-55%).

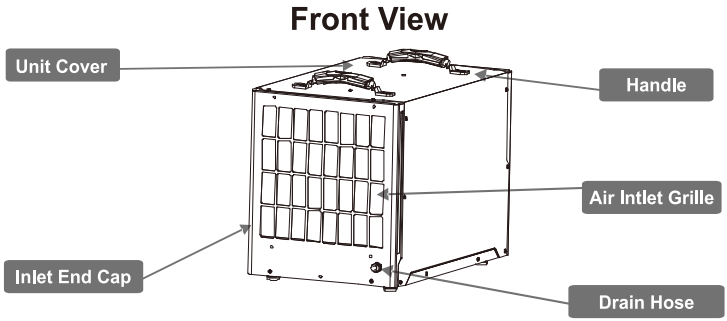
3. Stop the machine

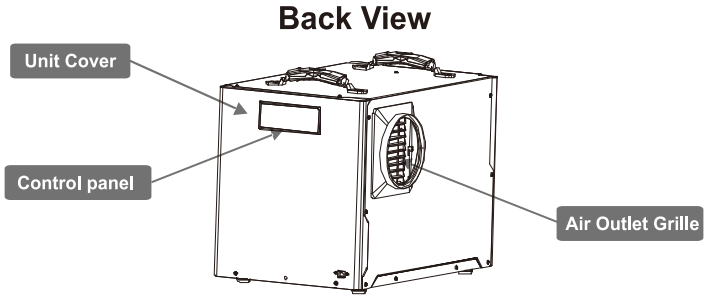
Press the power key again and the machine will stop. Note the fan will continue to operate for 1 minute after the unit has shut off. NOTE: Do not disconnect the power cord to force the machine to stop.Always use the power button.

4. Water Drainage

The Guardian SNS90 has both automatic and manual draining. During normal operation, the Guardian SNS90 will automatically drain as required. If you would like to store or move the machine, you may press the drain button to drain the water from the pump reservoir. The drain will operate for 28 seconds each time the button is pushed. It may be necessary to push the drain button more than once to completely empty the reservoir.

Guardian SNS90 Diagram





Dehumidifier Storage

If the unit will be stored for an extended period of time, complete the following steps:

1. Turn o ffthe unit and allow it to dry.
2. Wrap and secure the power cord
3. Cover filter mesh.
4. Store in a clean, dry space .

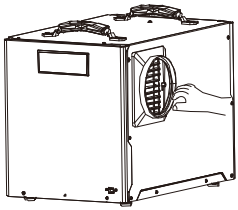
Ducted Applications

Ducting the dehumidifier allows the unit to be in one room while conditioning an adjacent room. The supply grille is designed for 6" flex ducting. Be sure to secure the ducting with a tie wrap. Also, keep in mind that the supply ducting can be screwed into an adapter if necessary.

Ducting Installation

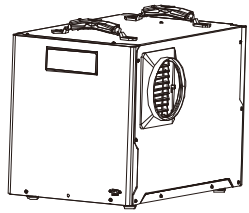
- Maximum length for ducting= 6'

Note: The supply duct adapter is standard on all units.



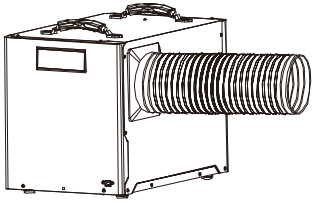
Removing Duct Adapter

If it is necessary to remove the adapter, place hand at bottom of the adapter and use your hands to lift out and down.This will remove the cover hooks from the machine.



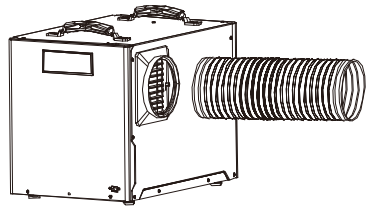
Installing Duct Adapter

To install adapter, line it up with holes on the side of the unit and push it up from the base of the adapter.



Flex Duct Installation

Rotate the flex duct counter-clockwise.



Flex Duct Removal

Rotate flex duct clockwise or remove wire tie.

Troubleshooting

Symptom	Cause	Solution
Machine Won't Run	Power Supply	Verify that there is power to the outlet and that the plug is properly installed in an outlet.
	Room Temperature Over 105°F (Display HI) or Below 33°F (Display LO)	The unit is outside the operating temperature range. Modify the room conditions so the temperature is between 33°F-105°F and operationwill commence.
Low Air Flow	Air Inlet or Outlet is Blocked	Clear the blockage from inlet or outlet.
Loud Noise	Machine Is Not Level	Move the dehumidifier to flat, firm ground.
Trouble Code E:1	E1=Humidity Sensor Issues	Check to ensure that wire is connected at both ends. If no issues are visible, the sensor may be faulty.
Trouble Code E: 4	Pump has failed	Verify that the pump is working. If so, unplug the unit for two minutes, then restart.
Trouble Code: HI or LO	Room Temperature Over 105°F or Below 33°F(Display Lo)	The unit is outside the operating temperature range. Modify the room conditions so the temperature is between 33°F -105°F and operation will commence. If room is not outof temperature range, replace faulty the sensor.
E3 Error Code	Abnormal Coil Temperature	Contact Your Installer for Assistance

Pump Alarm- Trouble Code E4

If a pump alarm is shown on the display, complete the following steps:

1. Reset the unit by disconnecting the power cord and then reconnecting it.
NOTE: UNIT WILL NOT FUNCTION UNTILTHE ERROR CODE HAS BEEN CLEARED.

2. Manually check to see if the pump is operational by pressing the drain button. Check if the pump ener-gizes and de-energizes properly.Additionally, check to see if any water purged from the system.

3. Replace the hoses and/or pump, if maintenance alone isn't sufficient.

Guardian SNS90 Spare Parts

ALL Guardian Models-Parts	
Part#	**Description**
G-100	Remote Control Package (cable+remote)
G-101	Remote Control
G-102	Remote Control Cable,25'
G-103	Return Duct Collar Accessory
G-106	Duct Kit Assembly(W-103+W-100)
G-107	Fiexible Supply Duct,72"
G-108	Main Control Board
G-109	Display Board
G-110	G-110
Guardian SNS90-Parts	
Part#	**Description**
G-900	Fan Motor
G-901	Remote Control
G-902	Fan Capacitor
G-903	Compressor
G-904	Compressor Capacitor
G-905	Coil Assembly
G-907	Condensate Pump Assembly
G-908	RH/Temperature Sensor Cable
G-909	Display Cable
G-910	CAT 5 Prot Internal Cable
G-911	Foot, Adjustable
Guardian SN S90-Filters	
Part#	**Description**
G-915	Fan Motor
G-916	Filter Assembly(Cassette+Prefilter)
G-902	MERV-8 Filter
G-917	HEPA Filter
G-919	Carbon Filter

Limited Warranty

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

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

1 YEAR(FROM DATE OF PURCHASE): Abestorm warrants the dehumidifier will operate free of defects in workmanship and materials. At it's discretion,Abestorm will repair or replace any malfunctioning components, free of charge (excluding transportation costs).

3 YEARS (FROM DATE OF PURCHASE):Abestorm warrants the refrigeration circuit (compressor,condenser and evaporator)will operate free of defects in material or workmanship. At its discretion, Abestorm will replace defective parts, including factorylabor or refrigerant. This does not include transportation.

5 YEARS (FROM DATE OF PURCHASE): Abestorm warrants the compressor,condenser, and evaporator will operate free of any defects in material or workmanship.At its discretion, Abestorm willrepair or replace the defective parts. This does not includelabor, transportation, or refrigerant.

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 the unit is the sole responsibility of the owner.

3. the If customer cannot return the unit to the certfied repair center,all costs associated with freight shipment are borme by the customer. In addition, all duties related to freight shipments, including but not limited to palletizing, wrapping. labeling, andpickup are associated with the customer.

4. If shipped, the customer is responsible for all risk of loss or damage.

Abestorm Warranty Steps:

1. Once goods are received,customers must log in to www.Abestorm.comto fill out the Varranty Registration form and submit it toAbestorm company. We will receive your purchasing and installation information and save it. If no warranty registration is sent to us, the warranty period will begin the day the shipment left the warehouse. Please be sure torecord serial # and date of installation. You will need this information to receive the RA number.

2. If warranty service is necessary, customers must contact Abestorm Tech Support by support@abestorm.com, or local technicalservice phone to receive a Return Authorization (RAnumber). Once an RA has been issued, customers should bring the unit to acertified repair center. Abestorm will arrange the shipping to bring the unit back to the Abestorm warehouse (at the expense ofthe customers) if customers are not available.

3.After the unit has been received by Abestorm(whether at a repair center or the warehouse),Abestorm will ave an initial inspection.Ifit is determined to be an invalid warranty claim (see exclusions below), customers have to pay for all associated repair costs andshipping costs for units repair.

4. Customers can pick up the unit after repair at their own expense for shipping. Units will ave rigorous testing before sending iback to customers.

5. If the unit can no longer be fixed , and itis in the warranty period and determined to be a valid claim, we will ship the customer anew unit within the same year warranty from the date of replacement.

6.After parts are repaired or replaced by Abestorm the original warranty period continues to apply untilitmeets its deadline.No extensions to the original warranty period.

ABESTORM

WARRANTY REGISTRATION CARD

ORDER NUMBER: _____

return to:
Abestorm solutions

MODEL: _____ **SERIAL #:** _____

INSTALLER: _____ **REGISTRATION DATE:** _____

NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

PHONE #: _____ **EMAIL:** _____

- If you have any questions, please feel free to contact us at **(888)276-9833** or visit **www.abestorm.com**
- Register your unit for warranty using this link: **https://www.abestorm.com/service-warranty**


ABESTORM