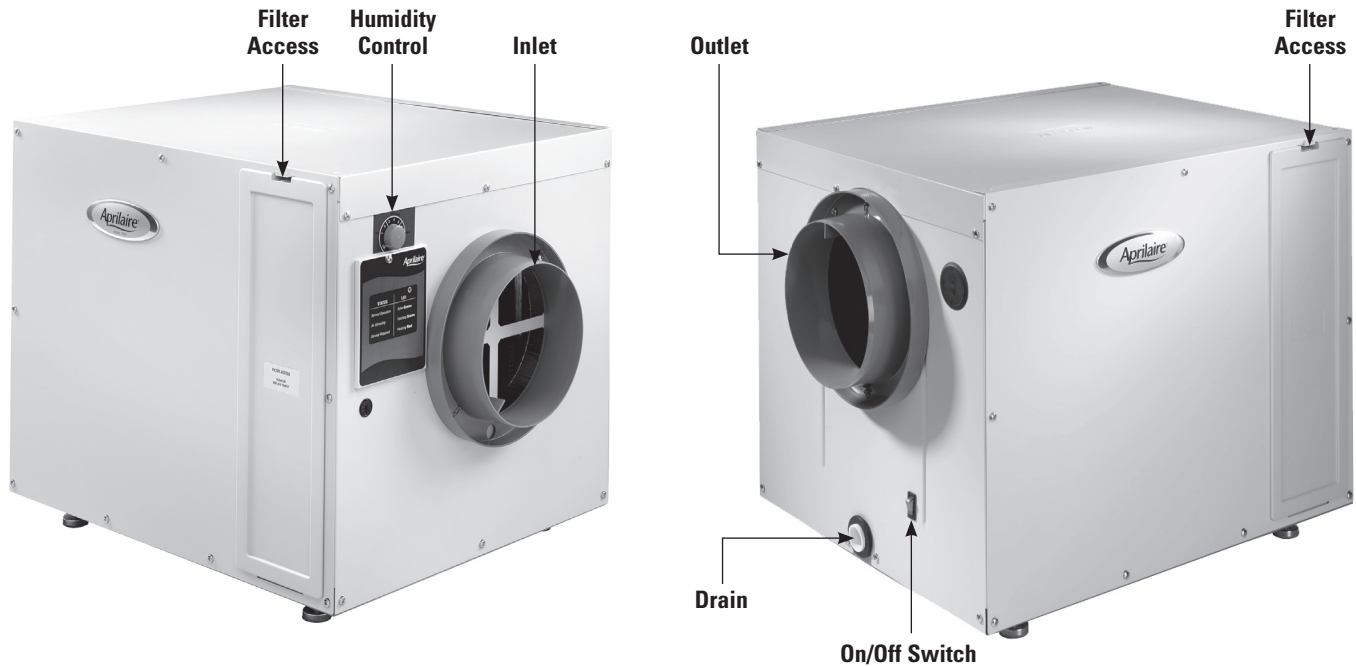


PLEASE LEAVE THIS MANUAL WITH THE HOMEOWNER

Installed by: _____ Installer Phone: _____ Date Installed: _____



Thank you for your purchase of the Aprilaire® Dehumidifier. Your dehumidifier is designed to remove humidity from your home, maintaining the humidity at a comfortable level and reducing the unwanted effects of high humidity. Use your Aprilaire Dehumidifier to control the humidity that comes into the home from opening doors and infiltration (i.e. outdoor air entering through the building envelope). You can reduce the amount of humidity that enters the home by closing windows, doors and/or fireplace flues when the outdoor humidity is high and by drying clothes outside. Whirlpool tubs and saunas will also increase the amount of humidity in the home. Direct exhaust from kitchen vents and bath fans is the best means of controlling humidity due to cooking and showers/baths. Your Aprilaire Dehumidifier is not designed to eliminate or reduce condensation on windows in the winter and works best when the indoor temperature is above 65°F (18°C).

WHOLE HOME DEHUMIDIFICATION

The Aprilaire Dehumidifier controls the humidity level in your entire home. A powerful blower inside the dehumidifier draws air into the cabinet, filters and removes moisture from the air, and then discharges the dry air to the home. Inside the cabinet, a sealed refrigeration system removes moisture by moving the air through a series of tubes and fins that are kept colder than the dew point of the incoming air. The dew point is the temperature at which moisture in the air will condense, much like what occurs on the outside of a cold glass on a hot summer day. The condensed moisture drips into the dehumidifier drain pan to a drain tube routed to the nearest floor drain – no need to empty a tub every day. After the moisture is removed, the air moves through a second coil where it is reheated before being sent back into the home. It is normal for the air leaving the dehumidifier to be warmer than the air entering the dehumidifier.

SETTING THE DESIRED HUMIDITY LEVEL

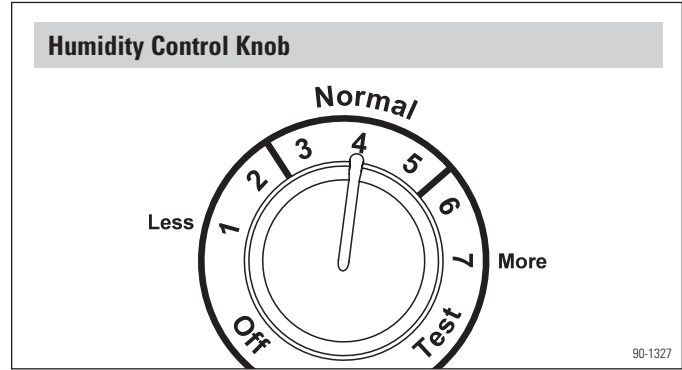
At the inlet side of the unit, a humidity control knob sets the desired humidity level between 1 (less dry, dehumidifier runs less) and 7 (more dry, dehumidifier runs more), or can be used to turn the dehumidifier OFF. The ON/OFF switch on the front of the unit should be left ON and only be used to turn the dehumidifier off when performing maintenance (see page 4 for maintenance requirements).

Set the control at a Normal level, between 3 and 4, when first installed. Allow the dehumidifier to run for 24 hours before deciding if you want to change the setting.

- **If you prefer the air to be more dry**, increase the setting; this will increase the amount of time that the dehumidifier runs.
- **If you prefer the air to be less dry**, decrease the setting; this will reduce the amount of time that the dehumidifier runs.

The settings on the dial can be approximated to relative humidity (RH) using the table to the right.

Your comfort is the best measure of how to adjust your setting. When first installed, your dehumidifier has to remove all the moisture that is initially in your home. The home acts like a sponge so the moisture in the materials of your home is at the same level as the air. After drying the air, the materials of the home will release moisture back into the air until they are again at the same level. As a result, it is not uncommon for the dehumidifier to operate for an extended period when first installed.



Control Knob Setting	Indoor Temperature (°F)			
	65	70	75	80
1		84%	71%	60%
2	86%	73%	61%	52%
3	74%	63%	53%	45%
4	64%	54%	45%	39%
5	55%	46%	39%	33%
6	47%	39%	33%	28%
7	40%	34%	28%	24%

Note: This table is for reference only.

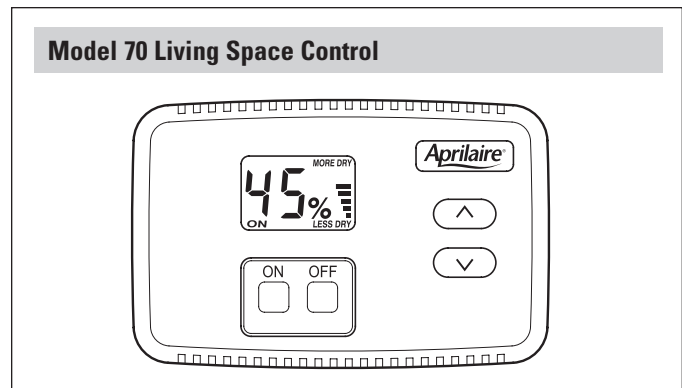
ENERGY SAVINGS TIP

Adjust the setting to be as low as is comfortable to reduce dehumidifier run time – if it feels clammy or smells damp, raise the setting. To save energy, turn the dehumidifier setting to OFF when you open your windows just as you would with air conditioning.

WHEN DOES THE DEHUMIDIFIER TURN ON?

The dehumidifier turns on the first time that the blower in your home heating and cooling system turns on (i.e. air conditioning comes on or you run the fan continuously) within the Cycle Period. Your installing contractor set the Cycle Period when the dehumidifier was first installed; it may be set for once every 30 minutes, once per hour, once every two hours or once every three hours. If the heating and cooling system blower does not turn on within the Cycle Period, the dehumidifier will turn itself on at the end of the Cycle Period. The Cycle Period setting determines how frequently the dehumidifier measures the humidity level in the air; once per hour is usually sufficient to maintain comfort. If you want the dehumidifier to check the humidity level more or less often, contact your installing contractor.

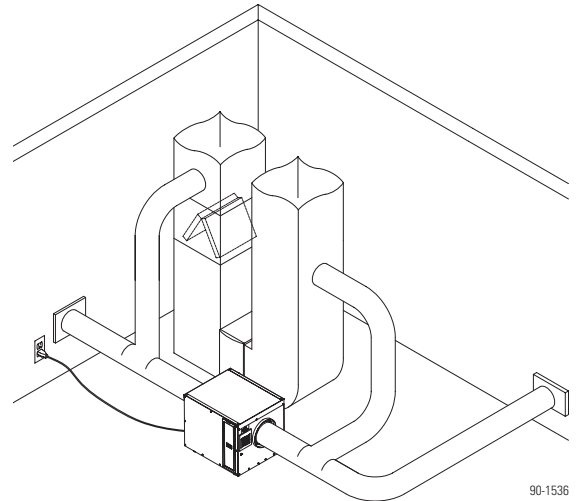
An optional Model 70 Living Space Control can be mounted directly in the home for easy access to the humidity setting. The Model 70 continuously measures the humidity level to turn on the dehumidifier on-demand. Consult your installing contractor for more information about the Model 70 Living Space Control.



OPTIONAL – CONVERTIBLE MODE: WHOLE HOME AND SPOT DEHUMIDIFICATION

The dehumidifier can be installed to dehumidify the whole home and separately dehumidify a spot location such as a basement or crawl space. In this arrangement ductwork connects the dehumidifier to the heating and cooling system and to the spot location. Dampers in the ductwork are opened and closed to direct where air is drawn from and to where it is sent. One example of how this might look is shown to the right (if you are unsure of whether your dehumidifier has been installed for Convertible operation, contact your installing contractor).

If installed in Convertible configuration, the dehumidifier turns on and opens/closes the dampers to dehumidify the whole home the first time that the blower in your home heating and cooling system turns on within the Cycle Period. If not actively dehumidifying the whole home three minutes before the end of the Cycle Period, the dehumidifier will turn on and open/close dampers to dehumidify the spot location. If your dehumidifier is actively drying the whole home at the end of the Cycle Period, spot dehumidification is put off until the next Cycle Period.

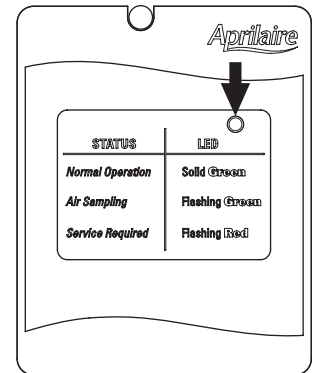


HOW DOES THE DEHUMIDIFIER WORK?

When the dehumidifier turns on, the blower circulates the air for three (3) minutes before measuring the humidity level of the air. The green status light below the control setting flashes when the dehumidifier is circulating the air. If the humidity of the air is higher than the setting, the compressor turns on and the green Status light is lit continuously. The dehumidifier turns off after the humidity level of the air has dropped below the setting.

OPTIONAL – HEATING AND COOLING SYSTEM BLOWER OPERATION

Your installing contractor may have configured the dehumidifier to turn on the heating and cooling system blower when the dehumidifier turns on to allow for improved circulation of the dry air.



90-1561

HOW DOES THE OPTIONAL VENTILATION WORK?

With the ventilation option installed (if you are unsure if this option has been installed, contact your installing contractor), the dehumidifier will bring in outside air for the amount of time set on the Cycle Time adjustment during the set Cycle Period.

Your dehumidifier will work with your heating and cooling system blower to satisfy the ventilation requirements that have been set. For example, if the Cycle Time is set for 20 minutes and the Cycle Period for 1 hour, you will get outdoor air introduced to your home for 20 minutes every hour. When your heating and cooling system blower operates the dehumidifier blower will turn on and will open a normally-closed damper in the duct that brings in outdoor air. If it is getting close to the end of the Cycle Period and your heating and cooling system blower has not operated, the dehumidifier will turn on the system blower. Using the 20 minute per hour settings as an example, if the heating or cooling comes on for only 10 minutes, the dehumidifier control will turn on the system blower for the final 10 minutes of the 1-hour cycle period to deliver the required amount of fresh air.

Outdoor air that is brought in will mix with the air circulating through your heating and cooling system. The dehumidifier will continuously monitor the mixed air and if the humidity level gets higher than the setting, it will turn on the compressor to remove the moisture.

An outdoor sensor, if installed with the ventilation option, will monitor the temperature of the outdoor air and if the temperature exceeds 100°F (38°C) or drops below 0°F (-18°C) ventilation will not occur. If the outdoor temperature is between 20°F (-7°C) and 0°F (-18°C), ventilation will only occur when your heating system operates.

MAINTENANCE

CLEAN OR REPLACE THE AIR FILTER

After initial installation, check the air filter after 6 months. If it appears matted with dust, pet hair or other debris, maintain a 6-month cleaning schedule. If it appears clean or lightly loaded, maintain a 12-month cleaning schedule. Replacement filters are Aprilaire Part No. 4510 and can be purchased from your installing contractor.

Filter Cleaning Procedure

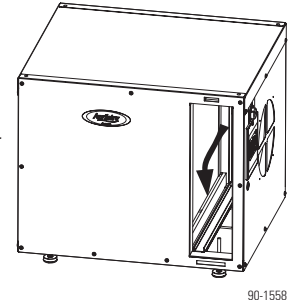
1. Turn the ON/OFF switch OFF.
2. Remove the filter access door from either side of the dehumidifier.
3. Slide the filter out of the dehumidifier.
4. Flush the filter with warm water and a mild detergent solution.
5. Shake off the excess water from the filter.
6. Replace the filter – make sure the filter seats in both the top and bottom filter rails.
7. Replace the filter access door.
8. Turn the ON/OFF switch ON.

CHECK THE DRAIN

The drain should be checked annually to ensure there is no blockage or air lock in the drain system. If the unit is not properly draining, have it checked by a qualified service professional.

Procedure to Check Drain System

1. Turn the ON/OFF switch OFF.
2. Remove the filter access door from either side of the dehumidifier.
3. Slide the filter out of the dehumidifier to expose the evaporator coil.
4. Slowly pour a pint of water into the dehumidifier drip pan near the bottom of the evaporator coil so that the water flows into the drain pan.
5. Check where the drain piping flows into the floor drain. If water does not flow out, the unit is not properly draining.
6. Turn on the ON/OFF switch ON.



90-1558

CAUTION

Do not use spray solvents or cleaners on or near the inlet side of the dehumidifier.
If desired, apply cleaner to a cloth and use to clean the cabinet.

LIMITED WARRANTY

Your Research Products Corporation Aprilaire® Dehumidifier is expressly warranted for five (5) years from date of installation to be free from defects in materials or workmanship.

Research Products Corporation's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any component which is found to be defective within such five (5) year period and which is returned not later than thirty (30) days after said five (5) year period by you to either your original supplier or to Research Products Corporation, Madison, Wisconsin 53701, together with the model number and installation date of the dehumidifier.

THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY YOUR INSTALLER AS CONTRASTED TO DEFECTS IN THE DEHUMIDIFIER ITSELF.

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFORESAID FIVE YEAR PERIOD. RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFORESAID IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT FROM FAILURE TO HAVE THIS UNIT INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTRACTOR. IF THE LIMITED WARRANTY IS VOID DUE TO FAILURE TO USE A QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages so the above exclusion or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARRANTY REGISTRATION

Visit us on-line at www.aprilaire.com to register your Aprilaire product. If you do not have on-line access, please mail a postcard with your name, address, phone number, email address, product purchased, model number, date of purchase and dealer name and address to:

Research Products Corporation, P.O. Box 1467, Madison, WI 53701

Your Warranty Registration information will not be sold or shared outside of this company.

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