



**OWNER'S MANUAL FOR HEALTHY CLIMATE® WHOLE HOME DEHUMIDIFIER
MODELS HCWH-090-01 (Y1841) & HCWH-135-01 (Y1842)**

⚠ WARNING

**Risk of property damage, injury or death.
Installation, adjustments, alterations, service and maintenance must be performed by a qualified service technician.**

⚠ WARNING

**Electric Shock Hazard. Can cause injury or death.
Disconnect all remote electrical power supplies before servicing. Unit may have multiple power supplies.
Unit must be connected to a grounded power supply in accordance with national and local codes.**



READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

Principle of Operation

The purpose of the Healthy Climate® Whole Home Dehumidifier is to keep humidity in the home at acceptable limits, thus reducing the unwanted effects of high humidity. The dehumidifier gathers data from the HVAC system or from the space it is controlling, measures the condition of the air in the home and decides when to run. An integrated air cycling feature can activate the HVAC blower to cycle air through the home to balance the indoor conditions. The dehumidifier can also operate an optional ventilation damper to bring in outside air.

Operating Instructions

The Whole Home Dehumidifier has three adjustable settings: the dryness setting, the air cycle period and the air cycle time within that period. The dehumidifier dryness can be set from "1" or "LESS" to "7" or "MORE" based on desired comfort level. Most installations should be initially set between "3" and "5" or "NORMAL" setting; however this can be adjusted to your individual needs.

The air cycle period is set using the DIP switches, and the potentiometer is used to set the air cycle time which are both located on the control board under the knob and are set during installation. If the cycle period is set to 1 hour and the cycle time potentiometer is set to 20 minutes, you will get 20 minutes of air cycling every hour. It is important to understand that the air cycling time requirement, 20 minutes per hour in this example, may be satisfied by a heating, cooling, or fan call initiated by your thermostat. If such calls do not satisfy the air cycling requirement, the dehumidifier will initiate a blower call.

Adjusting Dehumidifier Main Control Set Point

Use the main control knob on the outside of the unit to set the dehumidifier dryness setting. Start with a "NORMAL" setting for most installations. Moving the knob clockwise to "MORE" will make conditions drier. Moving the knob toward "LESS" allows for higher moisture levels.

Lennox icomfort Touch® Control (optional)

Refer to the icomfort Touch® Owner's Manual for operation information.

Y2188 Whole Home Dehumidistat (optional)

Refer to the Whole Home Dehumidistat Owner's Manual for operation information.

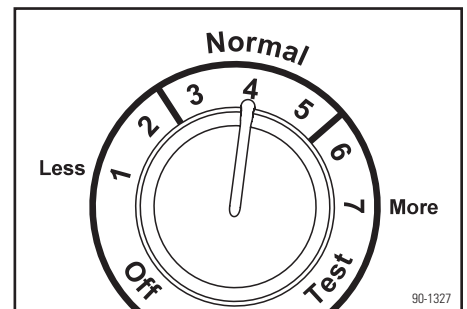


Figure 1. Control Knob Setpoint

Operating Instructions (continued)

Based on the indoor temperature, use **Table 1** to determine the control knob setting to reach the desired RH value. The dehumidifier will work to achieve the values in **Table 1**.

EXAMPLE: At an indoor temperature of **75°F** and a control knob setting of **3 (56°F DP)**, the dehumidifier will work to achieve a **53%** humidity level.

- The %RH values are $\pm 5\%$ and are to be used as a **GUIDE ONLY** for initial set-up.
- Indoor temperature is measured at the inlet to the dehumidifier.

Setting the Air Cycle Period and Cycle Time

The air cycle period and cycle time are set during installation to meet the individual needs of your home. Detailed instructions are laid out in the dehumidifier installation manual.

Table 1. %RH ($\pm 5\%$) Based on Control Knob Setting & Indoor Temperature

Control Knob Setting & Dew Point (DP)	Indoor Temperature			
	65°F	70°F	75°F	80°F
1 – Less, 65°F DP		84%	71%	60%
2 – 60°F DP	86%	73%	61%	52%
3 – Normal, 56°F DP	74%	63%	53%	45%
4 – Normal, 52°F DP	64%	54%	45%	39%
5 – Normal, 48°F DP	55%	46%	39%	33%
6 – 44°F DP	47%	39%	33%	28%
7 – More, 40°F DP	40%	34%	28%	24%

Outdoor Ventilation Option

If a Normally-Closed, Power-Open Damper was installed in the HVAC outside air intake, it will open whenever air cycling is active. This allows outside ventilation air to be included into the air cycling of your indoor air.

Ventilation Control Limits

In a standard installation (VENT-AUTO), your Healthy Climate® Dehumidifier will use measurements of outdoor temperature along with the user adjustable time settings to determine when to ventilate with outdoor air. In Air Cycle/Ventilation mode, the ventilation damper will not bring in outside air if the outside temperature is above 100°F or below 0°F. In VENT-TIMED mode, the ventilation damper brings in outside air based on the time setting only, regardless of temperature.

Maintenance

Air Filter

Under normal circumstances, the filter in the dehumidifier should be cleaned or replaced once a year. A clean filter is necessary to prevent damage to the dehumidifier and allow it to function at full capacity. To remove the filter, first unplug or disconnect power to the dehumidifier, then remove the air filter via the access panel on the side of the dehumidifier. To clean, flush with warm water and a mild detergent solution and allow filter to dry. After a clean/dry or new filter is installed, replace the access panel and reconnect power to the dehumidifier. The replacement filter for the dehumidifier is catalog number Y2181 and is available from your installing contractor or from most other HVAC contractors in your area.

Reinsert the air filter and access door (catalog number Y2181). Access door has a tab at the bottom that must be inserted in the slot below the filter chamber.

Drain

The drain trap or outlet should be checked and cleaned of debris annually by a qualified service professional.

NOTE: The drain trap needs to be primed with water prior to start-up and after extended periods of unit shut down (winter months) to provide for proper water drainage.

CAUTION

**Potential equipment malfunction or damage.
May require repairs and/or void warranty.
Do not use solvents/cleaners on or near the
circuit boards.**

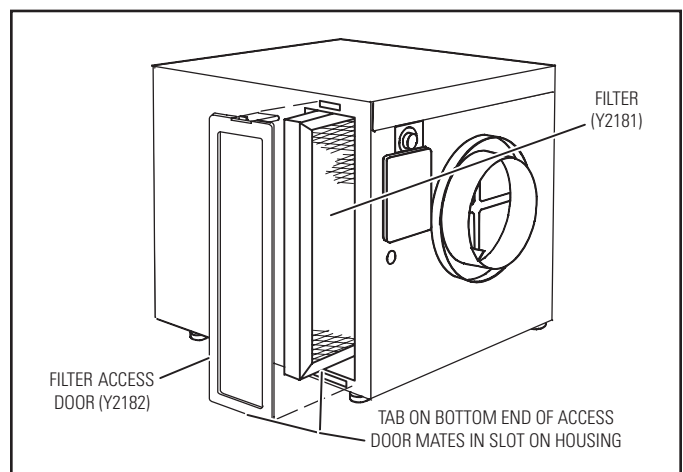


Figure 2. Air Filter Replacement