



**READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE**

**⚠ 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.**

**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, and measures the condition of the home air to decide 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.

# OWNERS MANUAL

## Model HCWH-90 & HCWH-135 Whole Home Dehumidifier

INDOOR AIR QUALITY  
506242-01  
03/09  
Supersedes 02/09

TP Technical Publications  
Litho U.S.A.

**Operating Instruction**

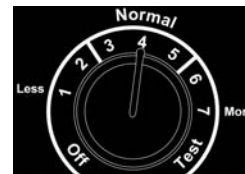
The Whole Home Dehumidifier has three adjustable settings: the dryness setting, the air cycle period and the air cycle time within that period. The dehumidifier dryness can be set from “1” or “LESS” to “7” or “MORE” based on desired comfort level. Most installations should be initially set between “3”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

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 requirement – 20 minutes per hour in this example – may be satisfied by a heating, cooling, or fan call initiated by your thermostat, or if such calls do not satisfy the air cycling requirement, from a blower call initiated by the dehumidifier itself.

**Y2188 Whole Home Dehumidistat (optional)**

If your Whole Home Dehumidifier has the optional dehumidistat installed, refer to the Whole Home Dehumidistat Owner’s manual for operation information.

**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.

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

%RH (± 5%) based on Control Knob Setting & Indoor Temp.					
Control Knob Setting	Indoor Temperature (°F)				EXAMPLE: At an indoor temperature of 75°F with a dehumidifier control knob setting of 3, the dehumidifier will work to achieve an RH value of 53%.
	65	70	75	80	
1 <b>Less</b>		84%	71%	60%	
2	86%	73%	61%	52%	
3 <b>Normal</b>	74%	63%	53%	45%	
4 <b>Normal</b>	64%	54%	45%	39%	
5 <b>Normal</b>	55%	46%	39%	33%	
6	47%	39%	33%	28%	
7 <b>More</b>	40%	34%	28%	24%	

NOTE - %RH values are ±5% and are to be used as a GUIDE ONLY for initial set-up. Indoor Temperature is measured at the inlet to the HCWH-90/HCWH-135.

### 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.

### 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, 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. The ventilation damper will not bring in outside air if the outside temperature is above 100°F or below 0°F.

The ventilation damper will allow outside air to be brought in when the temperature is between 20°F and 0°F only during a heat call. In timed mode, outdoor air is taken based on the time setting only, regardless of temperature.

### Maintenance

**⚠ CAUTION**

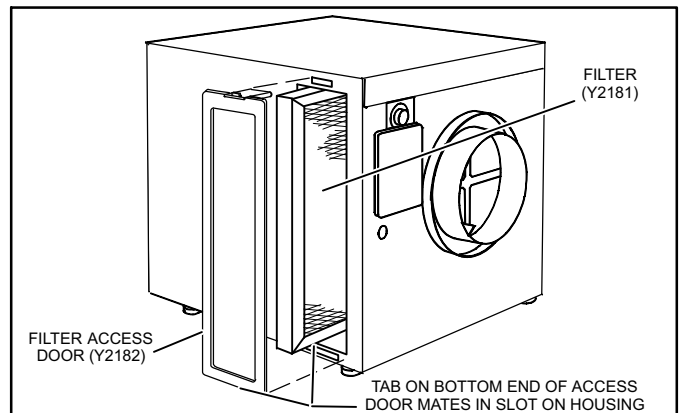
**Potential equipment malfunction or damage. May require repairs and/or void warranty.**

**Do not use solvents/cleaners on or near the circuit boards.**

### 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 detergent solution. After a clean or new filter is reinstalled, 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).*