Setting the FR-V model

- Press the *Mode* button. VENT ON will flash.
- Increase or decrease the number of minutes to open the outside air damper while the fan is on. Press *Mode* again. VENT OFF will flash.
- Increase or decrease the number of minutes to close the outside air damper while the fan is on after the VENT ON time has expired.

Testing the AirCycler

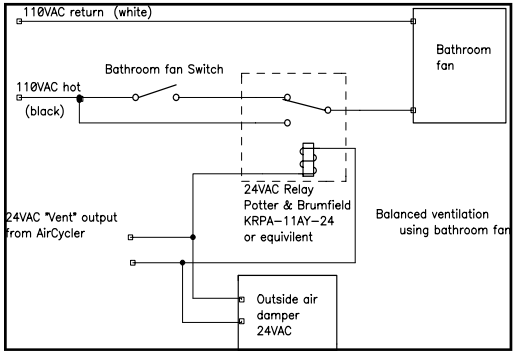
Trained technicians use Test mode to verify or demonstrate the control operation. The test mode will display fan activity in seconds rather than minutes.

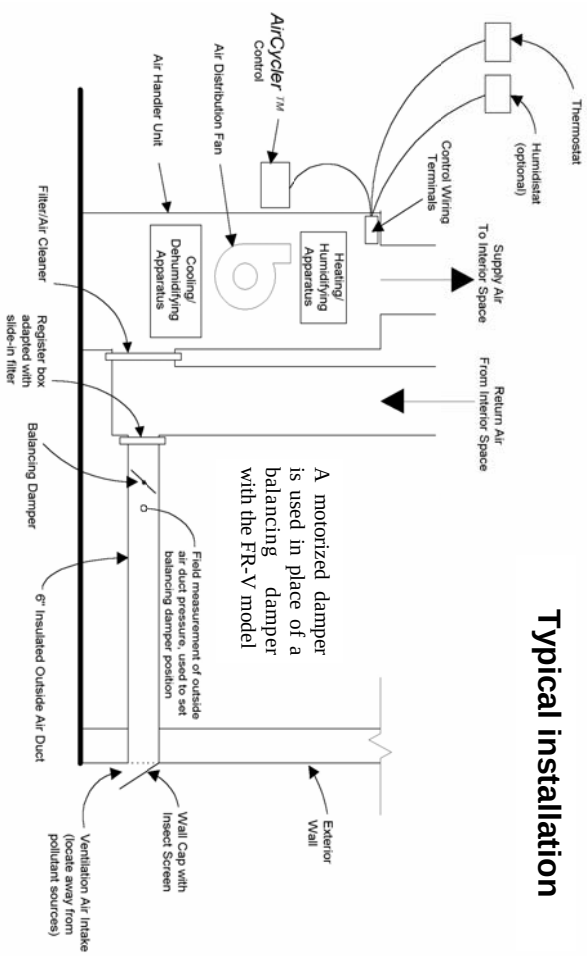
To activate *Test* mode, follow these steps.

- Press the *Mode* button once and then press it again and hold it for six seconds. The display will indicate *Test*.
- Exit *Test* mode and return to *Operating* mode by turning the AirCycler off.
- Hold the *Mode* button for two seconds, then press *Mode* again to turn the AirCycler on.

As a safeguard, the AirCycler will automatically exit *Test* mode after ten minutes.

Visit our website at www.AirCycler.com for





Typical installation

AirCyclers are covered by one or more of the following patents :

U.S. Patents: 5547017, 5881806, 6431268
Canadian Patent: 2245135

www.AirCycler.com

Lipidex Corporation

AirCycler™

FR & FR-V

Improves indoor air quality

The AirCycler improves indoor air quality and comfort by operating a central fan during periods of thermostat inactivity. There are two models: The *Model FR* operates the central fan for a programmable duration if the thermostat has been inactive for a period of time, while the *Model FR-V* adds an output that allows a motorized outside air damper to operate independently of the fan, limiting ventilation air flow.

Controls ventilation inexpensively

The AirCycler enhances the effectiveness of existing ventilation systems -- greatly improving ventilation air distribution in systems without separate ventilation ducts. Because it uses the existing duct system, it is also inexpensive to install. In fact, the AirCycler costs less than an exhaust pickup or supply drop, and complements stand-alone supply, exhaust, heat recovery, energy recovery, and central-fan-integrated systems.

The AirCycler smoothes out temperature, humidity, and air quality variations from room to room, and improves the air comfort level throughout your home without the continuous operation of a central fan.

Assures steady ventilation

The AirCycler assures steady ventilation and does so economically by drawing distributing outside air through the home. A “smart logic” system operates the fan only if it has been inactive for a certain period of time. For a balanced system, outside air can be balanced with a relay that simultaneously operates an exhaust fan. A motorized air damper can also be added to seal off the ventilation duct when the central fan is not on. The *FR-V model* can limits ventilation flow by closing the outside air damper if the fan has been on for a specified period of time.

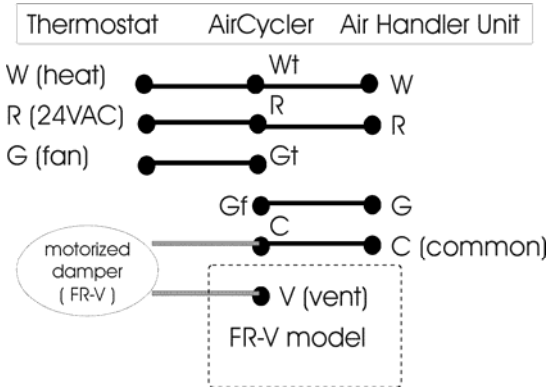
INSTALLING YOUR AirCycler

The AirCycler's unobtrusive design allows you to install it anywhere in your home. It can be installed near a thermostat, for example, or out of view near the air handler unit.

The AirCycler is powered with 24 VAC from the air handler. The heat line, (W) is wired in parallel to the thermostat and air handler. The fan control line (G) should be wired in series, or broken by, the AirCycler. The *Model FR-V* has a separate 24VAC output terminal for a motorized outside air damper.

All settings are saved in non-volatile memory therefore no batteries are needed to retain settings during power outages of any duration.

Please note: Disconnect power to the central air handling unit before installing the *AirCycler*. Failure to do so could cause personal injury and harm electrical components.



wiring diagram

Setup

Three buttons on the face of The AirCycler control the entire setup process:
the *Mode* button (the square box),
the *Increase* button (the up arrow),
and the *Decrease* button (the down arrow).

Operating Mode

Once installed and powered, the AirCycler will automatically enter *Operating Mode*.

- The factory settings provide 20 minutes of *fan off* time followed by 10 minutes of *fan on* time, with the LCD display indicating the current fan activity.
- If the thermostat activates heating, cooling, or constant fan operation, the display will read "ON"
- Otherwise, the display will read "fan off," showing the time remaining until the fan is activated. Once activated it will read "fan on" and time remaining.

The *Model FR-V* has additional settings for outside air damper cycling.

- Factory settings provide 10 minutes of *vent on* time followed by 20 minutes of *vent off* time, with the LCD display indicating the current fan and damper activity.
- If the fan is on and the damper is open, the display will read "vent on" and indicate the time remaining until the damper closes.
- If the fan is on and the damper is closed, the display will read "vent off" and indicate the time remaining until the damper opens again.

Turning the AirCycler off
Should you choose to turn the AirCycler off during extended vacation periods or when windows are open, follow these steps.

- Begin in normal *Operating* mode.
- Press and hold the *Mode* button for two seconds to turn the AirCycler off. All thermostat functions will continue to operate normally.
- To turn the AirCycler back on, press the *Mode* button.

Menu Mode

Changing the fan's operation time

- Press the *Mode* button once to enter menu mode. FAN ON will flash on the display.
- To change the fan's operation time, use the *Increase* or *Decrease* buttons.
- Set the number of minutes between 1 and 199, or select "*un*" for unlimited operation. This allows the fan to operate continuously after the FAN OFF delay has expired following a cooling or heating cycle.

Setting the delay

- To set the delay after the last heating, cooling, or fan operation, press the *Mode* button again. FAN OFF will flash on the display.
- As above, set the number of minutes between 1 and 199, or select "*un*" for unlimited operation.

Note: In humid climates, the FAN OFF time should be at least 6 minutes. This avoids moisture re-evaporation from the coil and condensation in cold supply ducts.