

Lennox
HVAC Zone Control
Model LZP-2
Owner's Manual

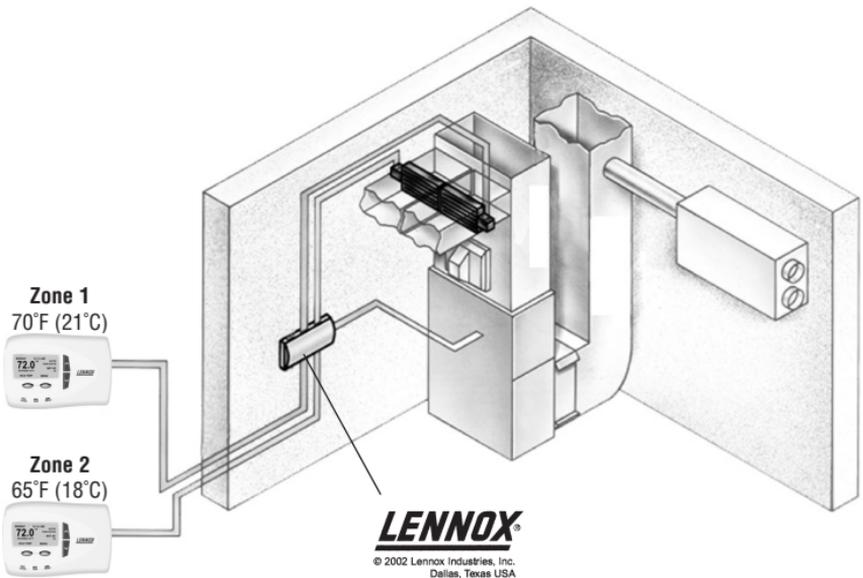
LENNOX[®]

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Overview

The Lennox LZP-2 Zone Control System has been designed to increase comfort in your home. It's able to do this because it solves the problem caused by various areas of the home gaining and losing heat at different rates. Unlike conventional heating and air conditioning systems, LPZ-2 Zone Control knows, at any given time, which areas (zones) of your home require conditioned air. With this information, the Zone Control automatically directs the conditioned air to the zones that require it. Because of this, you will be able to increase the comfort level throughout the home.

The components that make up the Zone Control System are: thermostats, a Control Panel, air control dampers, and heating and cooling equipment as shown in the illustration below. The Control Panel is typically located on an inside wall, most likely near your heating and air conditioning equipment. The dampers are located inside your air ducts in such a way that each zone can be independently controlled. Thermostats, placed in each zone, are directly connected to the Control Panel.



The above illustration shows a typical two zone control system.

The Model LPZ-2 was designed to work with your **single-stage or self-staging heat/cool equipment** (for example a furnace and an air conditioner).

Basic Operation

Your Zone Control System will allow you to increase your comfort by directing conditioned air to separate areas (zones) based on each zone's thermostat setting. To operate this system, just set or program each zone's thermostat to your desired comfort set points. When there is a heating or cooling call from any zone, the appropriate heating or cooling equipment will be turned on. The dampers to zones not requiring heating or cooling will close and the conditioned air will be directed to the calling zone (s) until the thermostat is satisfied.

Your zone control system is designed to direct conditioned air only to the rooms served by that zone's thermostat. However, due to the open design of today's homes, it may not be possible to maintain drastic temperature differences between zones. Closing interior doors is a good way to reduce the air exchange between zones and increase the temperature difference between them.

The following sections describe how to make Heating and Cooling calls.

Heating Operation

To start heating:

1. Set your thermostat to the Heat mode. Depending on the thermostat, this is accomplished by either manually moving a switch to the Heat position or digitally selecting Heat mode with a push button. Consult your thermostat Owner's Manual for details.
2. Adjust the thermostat set point to a temperature higher than the displayed room temperature so that a Heat call is initiated. Again, consult your thermostat Owner's Manual for details on how to do this properly.

When you have correctly initiated a Heat call, the Lennox LPZ-2 Zone Control Panel will start your heating equipment. If the equipment does not come on right away it may be due to

the minimum-off time delay. Four minutes must elapse after the last furnace cycle before it can come on again. This built in feature ensures that the furnace does not cycle too frequently, which can reduce the life of your furnace.

Cooling Operation

1. To start cooling: Set your thermostat to the Cool mode. Depending on the thermostat, this is accomplished by either manually moving a switch to the Cool position or digitally selecting Cool mode with a push button. Consult your thermostat Owner's Manual for details.
2. Adjust the thermostat set point to a temperature lower than the displayed room temperature so that a Cool call is initiated. Again, consult your thermostat Owner's Manual for details on how to do this properly.

When you have correctly initiated a Cooling call, the Lennox LPZ-2 Zone Control Panel will start your cooling equipment. If your air conditioning does not come on right away it may be due to the minimum-off time delay. Four minutes must elapse after the last air conditioner cycle before it can come on again. This built-in feature ensures that the air conditioner does not cycle too frequently, which can reduce the life of your equipment.

Damper Operation

When the Lennox Zone Control Panel receives a call and turns on the appropriate equipment, it also automatically closes the dampers that serve the non-calling zones and opens those in the calling zones. When all calls are satisfied, the Control Panel initiates a purge cycle during which time the dampers maintain their last position. After this purge all dampers open.

Fan Operation

The Model LZP-2 Lennox Control Panel allows you to control fan operation from any zone. Dampers in zones not calling for fan will close. If continuous fan operation is desired in all zones, the fan must be turned on at the thermostat in both zones.

Turning the System Off (All Models)

In order to shut off the system and prevent the Lennox LPZ-2 Zone Control Panel from turning on your equipment, you need to set ALL of your thermostats to the OFF mode.

Depending on your thermostats, this is done manually with a slide switch on your thermostat's sub-base or with a digital push button. Consult the Owner's Manual for your particular thermostat.

If leaving the home for a long period of time, set the thermostats to the Heat mode and adjust the set point to a temperature that will prevent freezing in all areas of the home. It is not recommended to turn off all thermostats for extended periods in climates where freezing temperatures may occur.

Thermostat Replacement

Not all thermostats will work for all systems. If you need to replace a thermostat, call the Lennox dealer that installed your system. Certain types of thermostats, known as power robbing thermostats, could cause unintended operation and should never be used. You can tell if a thermostat is power robbing by looking to see if it does not have a wire connection terminal labeled C (common). Power robbing thermostats do not have a C terminal. Only thermostats with a C terminal should be installed.

Maintenance

Once your Lennox Zone Control System is properly installed, there is no maintenance required to the control panel components. Standard heating and cooling equipment maintenance is required.

