DSL-300LX
Heating & Cooling Thermostat with Auto Changeover
OPERATING INSTRUCTIONS

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LENNOX
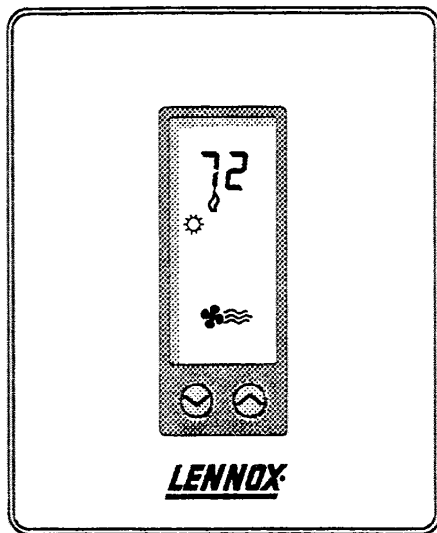
SEE REVERSE FOR INSTALLATION INSTRUCTIONS

Your new Digital Thermostat has been designed to provide accurate control and display of room temperature. In addition, it will also display all relevant information pertaining to your system.

The clearly marked buttons and informative display make it extremely easy to understand and simple to use.

Please take a few moments to read the brief instructions and familiarize yourself with the various functions in order to obtain maximum benefit from this truly unique electronic control.

GENERAL INFORMATION

The thermostat normally displays room temperature, mode of operation and whether Cooling or Heating is currently on. The six buttons on the front of the unit allow complete control of the equipment.

You may select different heating and cooling setpoints for the system to maintain, eg. 70° in heating and 75° in cooling. Raising or lowering the setpoints in heating or cooling is as simple as pushing a button. In addition, you may choose to display the temperature in °F or °C.

The thermostat also allows you to select continuous fan operation (useful when using an air cleaner), or have the fan come on with the equipment.

USER CONTROLS

MODE:
Select the desired mode of operation by pressing the MODE button repeatedly:

※ – controls cooling system only (the word "COOL" is displayed for 5 seconds)

◊ – controls Heating system only (the word "HERE" is displayed for 5 seconds)

◊ ※ – controls both heating and cooling systems (auto changeover) (the word "Auto" is displayed for 5 seconds)

OFF – disables thermostat so equipment will not operate (the word "OFF" is displayed).

Avoid using the OFF mode during extremely cold weather to prevent damage from freezing.

COOLING: ※
Select the temperature you want your equipment to maintain while in the cooling mode by pressing and holding the ⊙ or ⊙ buttons. The temperature setpoint is displayed for 5 seconds.

HEATING: ◊
Select the temperature you want your equipment to maintain while in the heating mode by pressing and holding the ⊙ or ⊙ buttons. The temperature setpoint is displayed for 5 seconds.

FAN: ❅≋
The Fan will come on automatically when the system is operating, but there is no indication of this on the display. To select continuous Fan operation, press the FAN button and the display will show ❅≋ . This is recommended for electronic air cleaners or continuous ventilation requirements.

NOTE: *The thermostat never allows less than 2°F (1°C) difference between the heating and cooling setpoints.*

USER CONTROLS (Cont'd)

OUTDOOR (ODT) BUTTON:
When the outdoor temperature sensor option is connected to your DSL thermostat, you can display the current outdoor temperature by pressing the outdoor button. If the option is not connected, the thermostat will display – – ♠↓ .

DAY/NIGHT BUTTON:
When the DSL thermostat is initially installed, the display will show the ☼ symbol for your day temperature. By pressing the DAY/NIGHT button or closing the CLK1 and CLK2 terminals on the back of the thermostat (installer connected) you may select an alternate or night ☾ temperature. (The DSL thermostat will remember this setpoint.) Simply press the Day/Night button to alternate between temperature settings.

CELSIUS / FAHRENHEIT
Simultaneously press ⊙ and ⊙ to switch between °F and °C temperature display.

USER CONTROLS (Cont'd)

LIMITED OVERRIDE
When the keyboard is locked, (switch #2 "ON"), the user may override the temperature setpoint for 1 hour by pressing either the ⊙ or ⊙ button. The range of temperature override is +/- 3 °F or °C from the programmed daytime setpoint.

CLOCK TERMINALS (OPTION)
CLK1 – CLK2
Your DSL thermostat is equipped with Remote Clock Terminals. By connecting a remote clock/ timer (DSP-AT or equivalent) the thermostat can be alternated between the Day/Night setpoints automatically.

REMOTE SENSOR (OPTION)
RS1 – RS2 – RS+V
The DSL thermostat is designed to accept the Electronic Remote Sensor which will allow you to locate your thermostat in an area away from view.

POWER FAILURES

Your thermostat is equipped with the latest developments in solid-state electronic technology. Its memory is unaffected by power failures of any duration. No battery is required to maintain your selected setpoints in the event of a power loss. When power is restored, the thermostat will continue operation as if the power had never been off.

TEMPERATURE ACCURACY:
This thermostat will not provide full temperature accuracy until it has been powered for approximately one hour.

WARRANTY

LIMITED ONE YEAR WARRANTY
Lennox warrants to the original purchaser that its product and component parts will be free from defects in workmanship and materials for a period of one year from the date of purchase. Your dealer will provide free replacement of your DSL thermostat upon proof of purchase.

EXCLUSIONS
This warranty does not apply in the event of misuse, abuse or as a result of unauthorized alterations or repairs. Lennox will not be liable for any consequential damages including, without limitation, damages resulting from defects, loss of use, or misuse.

This equipment, if installed in strict accordance with the manufacturer's instructions, complies with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC rules.

THERMOSTAT LOCATION

To ensure proper operation, the thermostat should be mounted on an inside wall in a frequently occupied area of the building. In addition, its position must be at least 18" (46cm) from any outside wall, and approximately 5' (1.5m) above the floor in a location with freely circulating air of an average temperature.

BE SURE TO AVOID THE FOLLOWING LOCATIONS:

- behind doors or in corners where freely circulating air is unavailable
- where direct sunlight or radiant heat from appliances might affect control operation
- on an outside wall
- adjacent to, or in line with, conditioned air discharge grilles, stairwells, or outside doors
- where its operation may be affected by steam or water pipes or warm air stacks in an adjacent partition space, or by an unheated/uncooled area behind the thermostat
- where its operation will be affected by the supply air of an adjacent unit
- near sources of electrical interference such as arcing relay contacts.

THERMOSTAT INSTALLATION

1. Insert a flat blade screwdriver or a coin 1/8" into the slot located in the bottom center of the thermostat case and twist 1/4 turn. When you feel or hear a "click", grasp the case from the bottom two corners and separate from the subbase as shown in the diagram at the right.

   Some models require more force than others when separating due to the number of terminals on the subbase.

2. Swing the thermostat out from the bottom.
3. Lift the thermostat up and off the subbase.
4. Place the rectangular opening in the subbase over the equipment control wires protruding from the wall and, using the subbase as a template, mark the location of the two mounting holes (exact vertical mounting is necessary only for appearance).
5. Use the supplied anchors and screws for mounting on drywall or plaster; drill two 3/16" (5mm) diameter holes at the marked locations; use a hammer to tap the nylon anchors in flush to the wall surface and fasten subbase using the supplied screws. (Do not overtighten!)
6. Connect the wires from your system to the thermostat terminals as shown in the wiring diagrams. Carefully dress the wires so that any excess is pushed back into the wall cavity or junction box. Ensure that the wires are flush to the plastic subbase. The access hole should be sealed or stuffed to prevent drafts from the wall affecting the thermostat.

7. Before the thermostat is re-installed on the subbase, install the optional clock/timer, indoor remote sensor and outdoor remote sensor, if used. Refer to the installation instructions supplied with each option. Also, check the position of the slide switches on the lower left corner on the back of the thermostat.
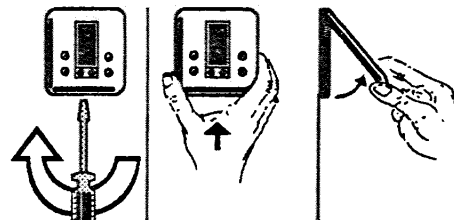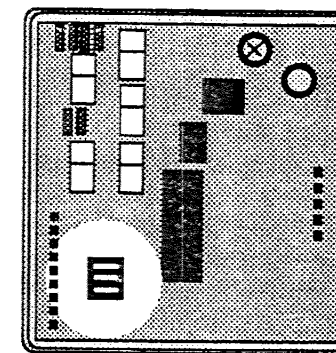

REPLACING THE THERMOSTAT ON THE SUBBASE

1) Position the thermostat on the hinged tabs located at the top of the subbase. (See 3 above)
2) Gently swing the thermostat down and press on the bottom center edge until it snaps in place.

SLIDE SWITCH SETTINGS

Slide switch positions are outlined below.

← OFF   ON →

4 MINUTES (MIN. ON)	2 MINUTES (MIN. ON)
KEYBOARD UNLOCKED	KEYBOARD LOCKED
FAN IMMEDIATE WITH HEAT CALL	FAN ON WITH PLENUM SWITCH

SPECIFICATIONS

Rated Voltage	20-30 Vac, 24 nominal
Rated A.C. Current	.050 Amps to 0.75 Amps continuous per output with surges to 3 Amp Max.
Rated D.C. Current	0 Amps to 0.75 Amps continuous per output with surges to 3 Amp Max.
Control Range	Heating: 38 to 88°F in 1° Steps 5 to 30°C in 1° Steps Cooling: 60 to 108°F in 1° Steps 16 to 40°C in 1° Steps
Thermostat Measurement Range	28 to 124°F or 0 to 48°C
O.D.T. Measurement Range	-50 to 124°F or -48 to 48°C
Control Accuracy	± .5° C At 20°C ± 1°F at 68°F
Minimum Deadband	(between heating and cooling) 2°F or 1°C

NOTE: This thermostat contains electronic circuitry which replaces the conventional mechanical anticipator.
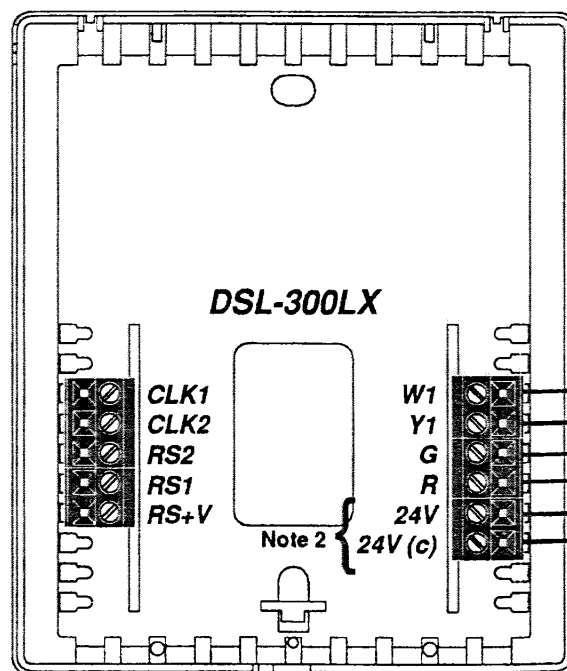
Note 1: If jumper is removed, a dedicated transformer is required at the 'R' terminal to power the loads.

Note 2: This thermostat may be used with 24 Volt DC. The negative side of the DC supply must be wired to the 24V (c) terminal.

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OUTPUT TERMINAL FUNCTIONS

W1	Energizes on a call for first stage heat
Y1	Energizes on a call for first stage cool
G	Energizes the fan circuit
R	Independent Switching Voltage
24 Vac	24 Vac
24 Vac (c)	24 Vac (Common)
CLK1 CLK2	Use with independent remote clock/timer for alternate setpoints
RS2 RS1 RS+V	Use to connect Outdoor Temperature Sensor and/or Indoor Remote Sensor options. Refer to the instructions included with the sensors.