**SYSTEM COMPATIBILITY:**

This thermostat can be used with most single-stage 24 volt: gas, oil, electric heating and cooling systems, single-stage heat pumps, or gas or oil furnaces.

**Tools you may need:**

- Screwdrivers, wire striper / cutter, and possibly a drill with assorted bits (new installations only).

**Removal of Old thermostat:**

1. Turn off the electricity to all heating and cooling components. Do not turn the electricity back on until all work is completed.
2. Remove the front panel of your old thermostat to expose the wiring connections.
3. Write down the letter printed near each wire terminal that is used, and also the color of each wire that is connected to it. Self-adhesive wire labels are also available.
4. Carefully remove the wires one at a time, and bend them in a manner so that they can be reconnected later. Do not back out the screws all the way; you should be able to feel the wire against the screw at this stage.
5. Loosen the mounting screws for the old thermostat and carefully remove it from the wall.

**Installation of New Thermostat:**

1. Strip wire insulation leaving only 3/8 in. (9.5 mm) bare ends, and clean off any corrosion or dirt present.
2. Fill the wall opening with non-combustible insulation to prevent drafts from affecting the thermostat’s normal operation.
3. Route the wires through the hole opening in the new thermostat base plate, and hold the base against the wall. Try to line up the screw holes from the prior thermostat, and install the mounting screws.
4. If the previous holes cannot be used, hold the thermostat base against the wall so that it appears flush and level (position the base for best appearance) and mark for the new screw holes. Attach the base to the wall using the screws provided (use the supplied plastic anchors if needed when mounting to a solid material such as drywall).

**Wiring Terminal Connections:**

- On the circuit board, there are hardware settings called “jumpers”. Each jumper has 3 metal pins, and a small black cap. The cap is moved to choose whether the jumper is on the top pin or the bottom pin. Changes to these options are recognized every time the heating/cooling mode switch is moved.
- J1 (CTRL): UP = Manual Operation The thermostat operates manually, and only shows the set and temperature. This mode is for systems that do not control their own fans while in HEAT mode.
- J2 (Program): DOWN = Program Operation. Default) The thermostat follows four temperature programs for each day. The programs are set up by selecting the DOWN button to change the time setting, then press NEXT when finished.
- J5 (SCALE): UP = Celsius This setting displays all temperature values in °C degrees. DOWN = Fahrenheit The thermostat displays all temperatures in °F degrees.
- J3 (BATT): UP = None This setting only applies if you are NOT using batteries in the thermostat, and are powering the thermostat entirely from the system (“C” wire terminal). DOWN = Batteries. The thermostat will control the blower fan automatically by itself. Types of systems that would typically use the “Gas” fan setting would be: natural gas furnace, propane furnace, and oil furnace.
- J9 (B): UP = 5V This setting energizes three of the fan relay contacts to energize the following fans in your system: Rheem, Ruud, Goettl, and Bard. DOWN = 0V. This setting energizes one of the fan relay contacts to energize the following fans in your system: Ruud, Goettl, and Bard.

**Temperature Programs:**

- This thermostat has 4 separate program periods for both Heat and Cool mode, they are: MORN, DAY, EVE, and NITE. Each period has a start time, cycle time, and start times and set temperatures.

**Temperature Swing:**

The amount of temperature variation between load-on and load-off is changed by adjusting the swing setting. The default value is 1°F, and the adjustment range is from #1 to #9. A 1°F adjustment will result in a 1°F swing, and an #8 adjustment will result in a 8°F swing. The thermostat’s normal operation depends on the fact that it controls on and off at a 0°F swing. Therefore, if the setting is not at zero, the thermostat will not control on or off at all. When this setting is lower than zero, the thermostat will control on or off at a lower temperature than the current temperature. The setting affects the heating and cooling system’s ability to control the temperature in the room. A setting of 1°F will result in a 1°F swing, and an #8 adjustment will result in a 8°F swing. The thermostat’s normal operation depends on the fact that it controls on and off at a 0°F swing. Therefore, if the setting is not at zero, the thermostat will not control on or off at all. When this setting is lower than zero, the thermostat will control on or off at a lower temperature than the current temperature. The setting affects the heating and cooling system’s ability to control the temperature in the room. A setting of 1°F will result in a 1°F swing, and an #8 adjustment will result in a 8°F swing.

**Temperature Calibration:**

- This thermostat is calibrated at the factory and in most cases, does not need to be adjusted. However, if the calibration needs to be adjusted, you can do so by following the instructions in your instruction manual. If you require assistance, please contact our Technical Assistance department at 800-223-5996 for further information.

**Lock Code:**

- The lock code is used to prevent unauthorized tampering of your thermostat. You may either: press NEXT for at least 4 seconds to lock the thermostat using your new lock code, or press the LOCK switch for at least 4 seconds to unlock the thermostat and delete the lock code. The lock code is used to prevent unauthorized tampering of your thermostat. You may either: press NEXT for at least 4 seconds to lock the thermostat using your new lock code, or press the LOCK switch for at least 4 seconds to unlock the thermostat and delete the lock code. The lock code is used to prevent unauthorized tampering of your thermostat. You may either: press NEXT for at least 4 seconds to lock the thermostat using your new lock code, or press the LOCK switch for at least 4 seconds to unlock the thermostat and delete the lock code.

**Limited Warranty:**

If this unit fails because of defects in materials or workmanship within three years of the date of original purchase, LUX will, at its option, repair or replace it. This warranty does not cover damage by misuse, abuse, or alteration, or failure to follow the installation procedures. Warranties are limited in duration to three years from the date of original purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Cautions & Warnings:**

- The battery replacement should be replaced at LEAST once per year (or sooner, if “LOW BAT” symbol appears in the lower left portion of the display screen). The batteries are located on the back of the circuit board, and can be accessed by removing the front panel of the thermostat. When installing new batteries, we recommend using only brand new Energizer® or Duracell® batteries. Please observe the polarity markings shown in the battery compartment to ensure proper installation. When finished, line up the front of the thermostat to the base, and firmly press the front panel against the wall.
If replacing an old thermostat that has a mechanical clock, there may be two wires labeled as "C" for the clock power. Remove the factory installed RH-RC jumper wire from the new thermostat terminals. Connect the heating transformer system, and there are separate 24 volt power wires coming from both the heating equipment and cooling equipment. Your wiring connections should be the same as diagram #3 above, with the exception of the RH and RC wires. Remove the factory installed RH-RC jumper wire from the new thermostat terminals. Connect the heating system power wire (usually RH or R-1) to the LUX "RH" terminal, and the cooling system power wire (usually RC) to the LUX "RC" terminal.

When connecting the cables to the thermostat, connect the transformer to the "C" terminal, and the thermostat to the "B" terminal. If the thermostat is a 2-wire system, connect the RH and RC wires to the "RH" and "RC" terminals, respectively. If the thermostat is a 3-wire system, connect the RH and RC wires to the "RH" and "RC" terminals, respectively, and connect the "C" wire to the "C" terminal. If the thermostat is a 4-wire system, connect the RH, RC, and "C" wires to the "RH", "RC", and "C" terminals, respectively.

Replace the old thermostat with a new one, and connect the new thermostat to the "RH" and "RC" terminals. Connect the "C" wire to the "C" terminal. Connect the heating transformer system, and there are separate 24 volt power wires coming from both the heating equipment and cooling equipment. Your wiring connections should be the same as diagram #3 above, with the exception of the RH and RC wires. Remove the factory installed RH-RC jumper wire from the new thermostat terminals. Connect the heating system power wire (usually RH or R-1) to the LUX "RH" terminal, and the cooling system power wire (usually RC) to the LUX "RC" terminal.

For Heat Pump systems, use either the "O" terminal or the "B" terminal, but not both. If an "O" and a "B" wire are both present, "B" is likely a system common and may be connected to the "C" terminal. Connecting system common power to this thermostat’s "B" terminal may damage the thermostat, and also your system. The backup wire going to the "C" terminal is optional, and is not required to operate heating or cooling. This is used for powering the thermostat from the 24 Volt system, and may not be present in your specific application.

For replacing an old thermostat that has a mechanical clock, there may be tag wires labeled as "C" for the clock power. Remove these wires and do not connect them to the "C" terminal of the thermostat. Your wiring connections should be the same as diagram #3 above, with the exception of the RH and RC wires. Remove the factory installed RH-RC jumper wire from the new thermostat terminals. Connect the heating system power wire (usually RH or R-1) to the LUX "RH" terminal, and the cooling system power wire (usually RC) to the LUX "RC" terminal.

If your current wiring configuration has both an "RC" and "Rh" wire, this typically means that you have a two-transformer system, and there are separate 24 volt power wires coming from both the heating equipment and cooling equipment. Your wiring connections should be the same as diagram #3 above, with the exception of the RH and RC wires. Remove the factory installed RH-RC jumper wire from the new thermostat terminals. Connect the heating system power wire (usually RH or R-1) to the LUX "RH" terminal, and the cooling system power wire (usually RC) to the LUX "RC" terminal.