

Troubleshooting Poor Temperature Regulation

- This page lists problems that may affect the temperature performance of your LUX thermostat with suggested resolutions.
- For more detailed information please refer to the instructions that came with your thermostat.

Model	TX100E
Problem	Resolution
No fan function in heat mode	<p>Move the jumper on the circuit board to its ELECTRIC POSITION for electric heat, then confirm with Fan Test below.</p> <p>Move Fan switch from ON to Auto.</p>
Fan ON continuously	<p>Remove the "G" wire. If fan continues to run, then either the system is mis-wired, or the problem is in the system, not the thermostat.</p>
Indicates incorrect room temperature	<p>Refer to thermostat manual to verify that your set temperature is what you expect it to be. The set temperature is visible by pressing either the up or down button once.</p> <p>Refer to your thermostats manual for calibration. Use this feature to adjust the displayed temperature up to +5°F(3°C) or -5°F(3°C) degrees.</p>
How do I set my thermostat to act as a manual thermostat? How do I remove the programming?	<p>Move the System Mode switch to the OFF position, and then hold down the SET button for approximately 5 seconds until the screen changes.. Scroll to item #02 (programming style). Select option 3 for manual non-programmable mode.</p> <p>Remove thermostat body from the wall, leave the back plate in place. Verify that heating and cooling switch off within a few minutes.</p> <p>Replace the unit's batteries with fresh Duracell® or Energizer® alkaline batteries.</p>
Heats or cools more than 5 degrees past its displayed set temperature	<p>Set unit to heat mode. Adjust set temperature to at least 5 degrees below room temperature. Then adjust set temperature upward one degree at a time. Listen carefully for a soft click from the thermostat. This click should be heard near room temperature.</p> <p>Refer to your unit's manual to decrease the units swing setting to a narrower setting.</p> <p>Verify that your unit's placement and mounting are optimum per the installation section of its manual.</p> <p>Refer to the wiring troubleshooting guide to verify that your thermostat is wired correctly. Insure you</p>

are using the correct wiring diagram for your heating/cooling system.

Note that in Cool Mode the thermostat may not activate a cooling stage until its compressor protection time has elapsed this may be as long as 5 minutes.

Where the wires are coming out of the wall fill the hole with non-combustible insulation or putty to prevent drafts from affecting the thermostat's performance.

Move the jumper on the circuit board to its ELECTRIC POSITION for electric heat, then confirm with Fan Test below.

Refer to the thermostat manual to verify that your set temperature is what you expect it to be. The set temperature can be viewed by pressing the up or down button once.

Replace the batteries with fresh Duracell® or Energizer® alkaline batteries.

Set unit to heat mode. Adjust set temperature to at least 5 degrees below room temperature. Then adjust set temperature upward one degree at a time. Listen carefully for a soft click from the thermostat. This click should be heard near room temperature. Adjust set temperature down one degree at a time. Again listen carefully for a soft click from the thermostat near room temperature.

Refer to wiring to verify that it is wired correctly for your system.

If your system is a low voltage system having 24VAC or less, and you are technically inclined, you may jump terminals as given below to detect a malfunction in your system.

With the power ON at the fuse box, short the "G" wire to the "RH" terminal. The fan should come on immediately and stay on. The rush of air is usually heard.

If the fan does not come on it is an indication that there is a problem with your system. Check any circuit breaker or fuses that feed the 24VAC transformer that powers your system.

To test gas or oil heating systems, remove the "W" wire off its terminal. With the power ON at the fuse box, short the "W" wire to the "RH" terminal for a couple of minutes and the heater should come on and stay on until the wire is removed. If the heating

No heat or cooling when expected

Fan Test

Heat Test

Cooling Test	<p>fails to come on, or comes on and off, the problem is in the system.</p> <p>To test cooling, remove the "G" and "Y" wires. Connect them together with the "RC" for several minutes to observe operation. The system should come on and stay on. If the cooling fails to come on, or comes on and off, the problem is in the system.</p> <p>To test a heat pump system with an "O" wire three wires must be connected together with the power terminal. The power terminal is "RH". With the power ON at the fuse box, connect the "O" and "Y", and "G" wires to the "RH" terminal for a couple of minutes and the unit should provide cool air. Wait at least 5 minutes and repeat this test without the "O" wire. The unit should provide heat.</p>
Heat Pump Test	<p>To test a heat pump system with a "B" wire, three wires must be connected together with the power terminal. The power terminal is "RH". With the power ON at the fuse box, connect the "B" and "Y" and "G" wires to the "RH" terminal for a couple of minutes and the unit should provide warm air. Wait at least 5 minutes and repeat this test without the "B" wire. The unit should provide cool air.</p>
For further assistance:	Contact your HVAC service company or our Technical Assistance Line if not resolved.

Wiring Information and Troubleshooting

- This page provides general guidance for wiring your LUX 24VAC electronic thermostat. For more detailed information please refer to the instructions that came with your thermostat.
- Please make specific note regarding LOW VOLTAGE and LINE VOLTAGE directions. Do not install LINE VOLTAGE wires to a LOW VOLTAGE control. Improper installation of a "C" wire may cause damage to your system.
- Do not install a wire labeled "TC" from the previous thermostat to any of our controls. Installation of a "TC" wire may cause damage to your system.
- Do NOT wire by color of the wire, wire by the LETTER designation to which the wire was attached on the previous control.
- If there were no letter designations on your old thermostat, contact our Technical Assistance Department for assistance.

Model	TX100E
Problem	Resolution
ALL	Never connect a low voltage thermostat to line

	<p>voltage.</p> <p>When removing old thermostat, use the wire labels provided to label wires according to their terminal connection and not their color. This is because not all installers adhere to the industry color code standard. Miswiring may damage thermostat, start a fire, void warranty or cause injury.</p>
Wire Color coding	
If unsure how to connect your current wires	Contact our Technical Assistance Line or your HVAC service company.
Two wires control - heat only system	Connect one wire to W and the other to RH leaving in the factory installed jumper wire between RH and RC.
Two wires control - cool only system	Connect one wire to RC leaving in the factory installed jumper wire between RH and RC and the other to Y.
Two wires control heating AND cooling.	Currently no Lux controls are compatible with this system.
Three wires for forced air heat only system, where the previous thermostat did not have a clock or timer	Connect the 24-volt transformer wire to RH. Leave jumper connecting RH to RC. Connect the forced air heat system to W, and the fan wire to G.
Three wires control heating and cooling. One wire operates heat, one operates cooling and the third provides 24 VAC	Connect the 24-volt system power wire to RH. leave the jumper wire connecting RH to RC. Connect the heating wire to W1, and the cooling wire to Y.
Three wires control a cooling only system. One wire operates the compressor, one operates the fan and the third provides 24 VAC	Connect the 24-volt system power wire to RC. Connect the cooling wire to Y and the fan wire to G.
Four wires control a heating and cooling, electric, gas or oil, forced air system that is NOT a heat pump	<p>Connect the 24 VAC transformer wire to RH or RC. Leave jumper wire connecting RH to RC . Connect the heat wire to W, the cooling wire to Y and the fan wire to G.</p> <p>Select either B or O using jumper on circuit board. Connect the reversing valve wire, either B or O, (based on jumper connection) to terminal B/O. Keep jumper wire from RH to RC installed. Connect the 24 VAC wire to RH. Install a second jumper wire (provided) from W to Y . Connect compressor wire to Y and the fan wire to G. From setup menu, select item #06 (system/equipment type) and then option 2 (HP). Set the GAS/ELECTRIC Jumper on the circuit board to the ELECTRIC position.</p>
Four wires control a Single Stage Heat Pump. They were labeled: G, Y, R or RH or RC, and either B or O was used	
Auxillary heat	If your previous thermostat has an auxillary heat

System Power	wire, this model is not compatible with your system. This thermostat is capable of running on system power only, battery power only, or both. This is achieved by connecting the common wire from the system 24V transformer to the "C" terminal of the thermostat.
For further assistance:	Contact your HVAC service company or our Technical Assistance Line if not resolved.

Troubleshooting the Display

- Problems that may be identified from the display of your programmable thermostat are listed here with suggested resolutions.
- For more detailed information please refer to the instructions that came with your thermostat.

Model	TX100E
Problem	Resolution
Display will not change	Peel protective plastic label from display.
Display blurred and unreadable	Peel protective plastic label from display. Press the small round HW_RESET button on the rear of your unit
Blank or fading display	Replace thermostat batteries with fresh AA size Duracell® or Energizer® alkaline batteries. Be sure that they are installed with their polarity (+ and -) correct. Clean battery contacts with a pencil eraser and pry out the spring contact slightly to insure a clean, firm connection.
Display is locked or will not respond	Press the NEXT button 3 times then press the HOLD button once (NEXT-NEXT-NEXT-HOLD). This button sequence locks and unlocks the thermostat. Replace thermostat batteries with fresh AA size Duracell® or Energizer® alkaline batteries. Be sure that they are installed with their polarity (+ and -) correct.
Displays reads "LO BATT"	Replace thermostat batteries with fresh AA size Duracell® or Energizer® alkaline batteries. Be sure that they are installed with their polarity (+ and -) correct. Clean battery contacts with a pencil eraser and pry out the spring contact slightly to insure a clean, firm connection.
Display reads "OVERRIDE"	"Override" appears on the display when the set temperature is raised or lowered from the

Displays wrong room temperature.

You want to change the displayed temperature scale from °F to °C or from °C to °F

Shows "HI" or "LO"

For further assistance:

program temperature. Overrides are terminated at the next scheduled program period when the unit will revert to the program temperature and the "Override" indicator will be extinguished.

See Temperature Regulation.

Move the System Mode switch into the OFF position, and then hold down the SET button for approximately 5 seconds until the screen changes. Scroll to item#1 (temperature scale). Option1 displays temperature in Fahrenheit and option 2 displays temperature in Celsius.

This means Out of Limit. The sensor is reading outside the thermostats display limit. Room temperature will reappear when the temperature returns to normal range. If actual room temp is not below freezing or above 99F/32C degrees, there may be a malfunction. Press the HW RESET button on the circuit board to reset.

Contact your HVAC service company or our Technical Assistance Line if not resolved.