Super Sentinel Modes of Operation

The SuperSentinel residential electric water heater has three modes of operation. They are:

- Vacation
- Energy Saver
- Performance

Water Heater Set Point (or thermostat setting) can range from 110\(^\circ\)F - 130\(^\circ\)F in the Energy Saver mode and 110\(^\circ\)F - 140\(^\circ\)F in the Performance mode. The max set point is 140\(^\circ\)F unless a temporary configuration setting is changed (allowed for 5 minutes in duration) to allow set point adjustment to 150\(^\circ\)F.

**Vacation mode** – sets the temperature setting to 90\(^\circ\)F. Remains in this mode until manually changed to Energy Saver or Performance.

**Energy Saver** – In this mode, the set point is limited to 130\(^\circ\)F. If there is no demand cycle for the upper or lower element, the set point is decreased periodically until the set point reaches 118\(^\circ\)F. This helps to conserve some energy use. Once demand returns, the set point reverts to the previous user setting.

**Performance Mode** – This is the default mode of the SuperSentinel water heater. When the lower tank thermistor temperature falls below the set point minus differential, the lower heating element is turned on. As the draw continues, once the upper tank thermistor temperature falls below set point minus differential, the lower heating element is turned off and the upper heating element is turned on. The set point temperature remains at what was selected by the user.

So, what does this mean? In Performance Mode, the upper heating element is turned on sooner than in Energy Saver Mode. The upper heating element is better able to heat more hot water faster than the lower element. Shower head flow rates and cold water inlet temperatures make this ‘timing’ an incalculable event.