

## General Information

### **Do programmable thermostats really save energy?**

Yes, programmable thermostats can save energy which in turn saves you money on your utility bill. The US Department of Energy states with the proper use of pre-programmed settings, a programmable thermostat can save you about \$180.00 every year in energy costs.

### **What does a thermostat do?**

In the most basic form the thermostat is a temperature controlled on/ off switch. For example if the thermostat is in the heat mode the thermostat will turn on the heat when the room temperature is lower than the set temperature and turn the heat off when the room temperature is higher than the room temperature. When the thermostat is in the cool mode it will turn on the Air Conditioner (if present) when the room temperature is above the set temperature and turn it off when the room temperature is lower than the set temperature.

### **How does a programmable thermostat work?**

A programmable thermostat follows either a preset program or a user-defined program. The program tell the thermostat what temperature to maintain during a given time period. In most programs there are comfort periods and energy save periods. Energy save period are usually used when you are away or a sleep. Comfort periods are for when you are at home and awake.

### **Can a mechanical or manual be replaced with a programmable thermostat?**

Yes, in most case it can. The Rite Temp programmable thermostats are compatible with low voltage (mili-volt to 24 volt) whole house residential systems. The current wiring on your existing thermostat will be used with the new thermostat. Some models are made to be compatible with line voltage heating systems like wall or baseboard heaters. See compatibility chart for details.

### **Can I use a RiteTemp Thermostat with my system?**

Yes, in most case it can. The Rite Temp thermostats are compatible with low voltage (mili-volt to 24 volt) whole house residential systems. The current wiring on your existing thermostat will be used with the new thermostat. We also make units that are compatible with high voltage systems 120 to 240 volts. See compatibility matrix for details.

### **How do I know if I have a Heat Pump?**

If you have a heat pump when your heat is running the unit outside with the fan on top (compressor) will be running also and it will be blowing cold air. To verify that you have a heat pump, look at the labels on the outside portion of your heating/air conditioning unit (if it is a heat pump this is your heat exchanger). Somewhere on the unit it should say "heat pump", if it is a heat pump. Also if you have an "O" or "B" thermostat connection, you may have a heat pump.

### **What is a Heat Pump?**

A heat pump is essentially an air conditioner (A/C) that can work in reverse. An A/C pumps heat out of the house into an outside air exchanger and into the outside air. A heat pump uses very similar equipment and pumps heat from the outside air into the house. The heat pump has a "reversing valve" to go from Cool to Heat. An Air Conditioner gets less efficient in cooling a house as the outside air gets hotter. Similarly, the heat pump gets less efficient as the outside air gets colder.

### **What is Emergency heat for on a heat pump?**

Emergency heat is a common term for secondary heat. On most heat pumps electric heat strips are used to quickly heat up the house. If your heat pump cannot bring the house up to temperature it will engage auxiliary along with heat pump to bring the temperature up quicker. But if it is very cold outside (under 35 degrees) the heat pump is not efficient so, it is best to tell the thermostat to only use the 2<sup>nd</sup> heat source only (emergency heat). This costs more money to run so when the outside temperature increases put the system back in normal heat pump mode. On some units the 2<sup>nd</sup> heat source is not electric. These systems are called dual fuel systems. The 2<sup>nd</sup> stage heat may be a gas, oil or propane furnace.

### **How do I know if I can use a Rite Temp thermostat with my heat pump?**

Rite Temp thermostats are currently available for single stage heat pumps and heat pumps with auxiliary heat. If you have an emergency heat switch and have a W2 wire and/or X2 and/or E wire on your current thermostat, you need a Rite Temp thermostat compatible with heat pumps with 2 stage heat. See compatibility Matrix for compatible models.

### **Will a Rite Temp thermostat control a two-speed blower?**

Yes, but ONLY as a Single speed blower. Use the G1 wire from the blower for low speed all the time or G2 for high speed all the time. Mark and tape off the unused wire.

### **Can I use this in my trailer or motor home for heating and cooling?**

Yes, make sure the thermostat's single/two source power jumper is set for 2 source power (RC and RH separate) and reset the thermostat. Connect the two wires for you 12V heating to RH and W. Connect your two low voltage AC wires to RC and Y. If you have a FAN wire from the AC connect it to G. If you have a two-speed fan control, connect the G1 wire for low speed or the G2 wire for high speed, mark and tape off the unused wire.

**Can I use a Rite Temp thermostat with a two-stage gas, oil, propane or a two stage electric furnace system (W1 and W2)?**

Yes, we make several units that will work with this type of system. Please see compatibility matrix for specific models. You will hook up the first stage of heat (W or W1) to the "W" terminal and the second stage of heat (W2) to the "W2" terminal.

**Will a Rite Temp thermostat work with a three-wire, zoned, hot water system?**

Yes, we make several units that will work with this type of system Please see compatibility matrix for specific models.

**My Mobile home has a manual Heat/cool switch separate from my thermostat. Can I use a Rite Temp thermostat?**

Yes. Connect the two wires to RH and W and leave the thermostat in the Heat position all the time. The thermostat becomes a temperature controlled on /off switch. If the thermostat control's seems backwards, re-connect the two wires to RC and Y and leave the thermostat in the cool position all of the time.

**Can I use a Rite Temp thermostat in my trailer or motor home?**

Yes, we make several units that will work. Please see compatibility matrix for specific models. Then just follow the installation instructions for your heater and Air Conditioning system type (Propane, gas, elect etc)

**Can I use a Rite Temp thermostat with a two stage cooling system?**

Yes, we make several units that will work with this type of system Please see compatibility matrix for specific models.

### **Can I use a Rite Temp thermostat with a Zoned forced air heating and cooling system?**

Yes, most zoned forced air systems have a master control board which controls the baffles in the forced air system to allow heat or cool into the areas calling for it. This allows different areas of the house to be at different temperatures as a function of that area's own thermostat using a single heating and cooling system.

The selection of heat or cool is made by the master controller. If you wish to use Rite Temp thermostats at the remotes you must remember to make sure all thermostats are in the same mode either heat or cool.

Some zoned forced air systems master controllers use both B and O and some use just one of the letters. Be sure it is a forced air zoned system before connecting both the O and B. Some of the brands of zoned forced air controllers are Durazone, Trol-A -Temp and Comfort Zone.

For more information on hooking up these types of system please contact support at 877-505-2353 or [support@ritetemp-thermostats.com](mailto:support@ritetemp-thermostats.com)

### **Do Rite Temp thermostats work with all types of fuel and heating systems?**

Yes, any 2 wire, low voltage, or milli-volt heating system can be used with a Rite Temp thermostat. This includes all 2 wire hydronic (hot water) heating systems, regardless of fuel types. If you have a 3 wire hydronic (hot water) heating system please see compatibility matrix for the correct thermostat model.

### **Can I use a Rite Temp thermostat with my swamp cooler?**

Yes and No. It depends on the swamp cooler. Some of these units are high voltage and others are low voltage. If the unit is low voltage in most cases it will work and be connected like any air conditioning system, i.e. RC, Y and G (sometimes G2). If there is a two speed fan, connect just the G fan wire to the thermostat's G terminal for low or both fan wires (G and G2) to the thermostat's G terminal for high fan. Our 6002 is a line voltage thermostat that can do heat or cool and would work fine with swamp coolers particularly the large roof mounted type.

### **Can I use a Rite Temp thermostat with my baseboard electric heat?**

Yes, we make units that will work with 120 to 240 volt as system with a maximum of 16 amps. See compatibility matrix for specific models.

### **I have a separate humidistat do you make a thermostat that will allow me to combine the humidistat and the thermostat in to one unit?**

Yes, Rite Temp makes a thermostat that can also control the humidity. It is the 6080.

### **Do any Rite Temp thermostats also control humidity?**

Yes, you can control humidity by using a Rite Temp thermostat equipped with a built in humidistat (Model 6080). If you have an existing humidifier, with an external humidistat it can be hooked up. You have 2 modes of operation to choose from. The first is to only turn on the humidifier when the heat is running and the humidistat is calling for humidity. Two to have the humidifier and fan run any time it is calling for humidity regardless of whether the heat is on or not.

You can also use the thermostat for de-humidifying with your air conditioner. This is very useful in hot moist climates. You again have two options. First you can set it to only turn on the AC when both the humidifier and the thermostat are calling for AC. The other option is to set it to turn on the AC when either the thermostat or the humidistat is calling for AC.

### **Can a programmable thermostat be programmed to fit my schedule even if there is an Energy Star program per installed?**

Yes, the Rite Temp programmable thermostat gives you the flexibility to change the existing program to fit your specific needs. Easy-to-understand instructions are included to help you change the program and with the copy function it is quick and easy to make the changes.

### **I was told to get a thermostat with “short Cycle delay”, what is that?**

All Rite Temp thermostats with cool capability have a built in approximately 5 minute short cycle delay from the time a compressor turns off until the thermostat will turn it back on. This is to prevent compressor stall. The delay is not present if the thermostat is turned from cool to off and back to cool or heat to off and back to heat and also if you do not have a C wire attached to the thermostat and there is a power outage. However, if you have a C wire attached and there is a power outage it will have a delay.

### **Is it important to level the new Rite Temp thermostat?**

No, RiteTemp thermostat are all digital and do not require leveling.

### **Is there someone I can contact if I have a question about the installation or operation of my RiteTemp thermostat?**

Yes, RiteTemp offers a US-based technical support staff to help you with any questions you may have. Technical assistance is available over the phone at 877-505-2353 or Via Email at [support@ritetemp-thermostats.com](mailto:support@ritetemp-thermostats.com)