

Installation Instructions



7 Day Programmable

HVAC SERVICE PARTS™



Model S1-THEU21P7S



Turn off the power to the Heating/Air Conditioning system at the main fuse panel. Most residential systems have a separate breaker for disconnecting power to the furnace.



Remove the cover of the old thermostat and loosen the screws holding the thermostat base or subbase to the wall to lift away.



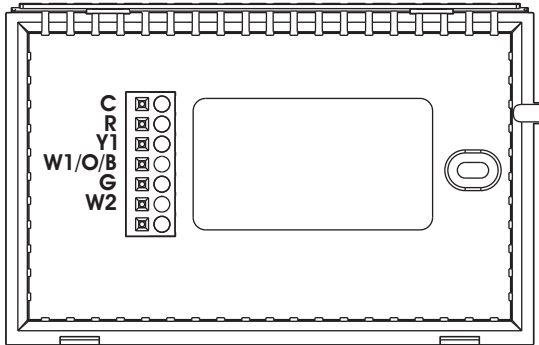
Disconnect the wires from the old thermostat. Tape the ends of the wires as you disconnect them, and mark them with the letter of the terminal for easy reconnection to the new thermostat.

TERMINAL CONNECTIONS

Wire from the old thermostat terminal marked	Function	Install on the new thermostat connector marked
W1, W or H	Gas Furnace	W1/O/B
Y1 or Y	Electric Cool	Y
B	Rev. Valve (Energize to Heat)	W1/O/B
O	Rev. Valve (Energize to Cool)	W1/O/B
W2	Aux. Heat	W2
G or F	Fan	G
Rh, R, M, Vr, A	Power	R
C	Common	C

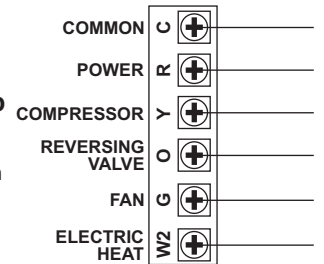
SAMPLE WIRING DIAGRAMS

A COMMON WIRE MUST BE CONNECTED IN ALL APPLICATIONS.



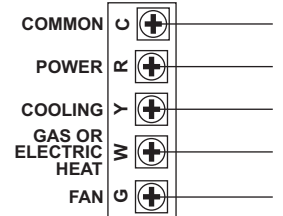
6 Wire, 1 Stage Cool & 2 Stage Heat-Heat Pump O reversing valve.

Residential Heat Pumps, split systems & package units, with auxiliary heat.



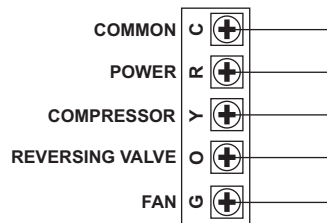
5 Wire, 1 Stage Cool & Heat-Gas or Electric

Residential Gas or Electric Heat, Electric Cool, split systems & package units



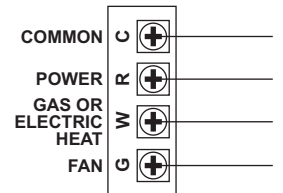
5 Wire, 1 Stage Heat Pump O reversing valve.

Residential Heat Pumps, split systems & package units, with no auxiliary heat.



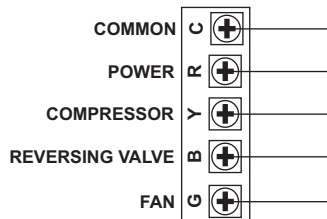
4 Wire, 1 Stage Heat Gas or Electric

Residential Gas or Electric Heat units with a separately controlled fan.



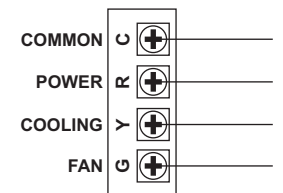
5 Wire, 1 Stage Heat Pump B reversing valve.

Residential Heat Pumps, split systems & package units, with no auxiliary heat.



4 Wire, 1 Stage Cool

Residential Electric Cool units.



- Control up to 2-Heat & 1-Cool
- System Powered
- Backlit Digital Display
- Auxiliary Heat Indicator
- Fahrenheit or Celsius



Installation Instructions



7 Day Programmable



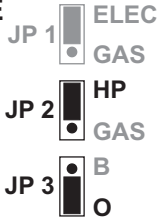
Model
S1-THEU21P7S

JUMPER SETTINGS

HEAT PUMP w/ O REVERSING VALVE

	With Demand
Cooling Mode	Y, G, O
Heating Mode	Y, G, W2*

*W2 will only be active during 2nd stage heating.

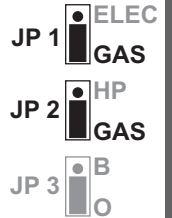


GAS FURNACE w/ ELECTRIC COOL

	With Demand
Cooling Mode	Y, G
Heating Mode	W1, W2*, (G)**

*W2 will only be active during 2nd stage heating.

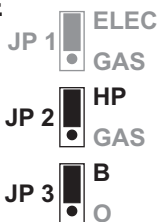
**In this application 24v will not be present at the 'G' terminal as the fan will be controlled by the Gas Furnace.



HEAT PUMP w/ B REVERSING VALVE

	With Demand
Cooling Mode	Y, G
Heating Mode	Y, G, B, W2*

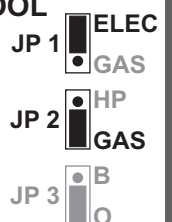
*W2 will only be active during 2nd stage heating.



ELECTRIC STRIP HEAT w/ ELECTRIC COOL

	With Demand
Cooling Mode	Y, G
Heating Mode	W1, G, W2*

*W2 will only be active during 2nd stage heating.



TEST OPERATION



On the thermostat, use the MODE button to place the thermostat into the **HEAT** mode. Press the COOLER or WARMER button until the set temperature is 10 degrees above room temperature. The HVAC unit should energize in the heating mode.

Note: You may need to wait up to five minutes for heating to energize due to the compressor lockout feature.

If your HVAC unit is equipped with 2nd stage strip heat, press the WARMER button once. 2nd stage heating (W2) should energize.



On the thermostat, use the MODE button to place the thermostat into the **COOL** mode. Press the COOLER or WARMER button until the set temperature is 10 degrees below room temp. The HVAC unit should energize in the cooling mode.

Note: You may need to wait up to five minutes for cooling to energize due to the compressor lockout feature.



On the thermostat, use the MODE button to place the thermostat into the **OFF** mode. Press the FAN button to display the **Fan On** icon. The fan should turn on and run continuously.

TROUBLE SHOOTING



SYMPTOM: The Cooling does not attempt to turn on.

CAUSE: The cooling setpoint is set too high or the thermostat is not in the Cool mode.

REMEDY: Consult the Normal Operation section in the Owner's Manual to:

- Lower the cooling setpoint
- Place the thermostat into the Cool mode

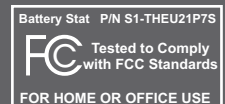


SYMPTOM: The Heating does not attempt to turn on.

CAUSE: The heating setpoint is set too low or the thermostat is not in the Heat mode.

REMEDY: Consult the Normal Operation section in this manual to:

- Raise the heating setpoint
- Place the thermostat into the Heat mode



P/N 88-590
Rev. 1