

Infusebox

HAI Thermostat Module v1.9

IMPORTANT - The following are SIMPL+ sub modules within the HAI Temp:

1. HAI Tstat Decoder

On processor startup these modules will output the version of the HAI Thermostat module they are intended to be used in. This is to prevent old sub modules from being with newer versions of the HAI Processor. This information can be viewed during startup through Viewport. The current version is 1.9.

| Information | |
|-----------------------------|---|
| Simple Windows Name | HAI Thermostat |
| Category | HVAC |
| Summary | Designed to handle HAI Thermostats using Omni-Link Protocol. Up to 26 thermostats |
| Supported Processors | 2-Series Crestron Processors |
| Communication | RS232 Baud Rate: 9600 Data Bits: 8 Stop Bits: 1 Parity: N Handshaking: HW – None SW - None |
| SIMPL+ Modules Used | 1. HAI Tstat Decoder |
| SIMPL Modules Used | Must be used with HAI Processor v1.9 or later. |

Input: Digital

| | |
|-------------------------------------|---|
| Tstat_Off | Mode changes to Off when signal goes high |
| Tstat_Cool | Mode changes to Cool when signal goes high |
| Tstat_Heat | Mode changes to Heat when signal goes high |
| Tstat_Auto | Mode changes to Auto when signal goes high |
| Tstat_Fan_Auto | Fan mode changes to Auto when signal goes high |
| Tstat_Fan_On | Fan mode changes to On when signal goes high |
| Tstat_Heat_Setpoint_Up | Heat Setpoint raised 1 degree every press |
| Tstat_Heat_Setpoint_Down | Heat Setpoint lowered 1 degree every press |
| Tstat_Cool_Setpoint_Up | Cool Setpoint raised 1 degree every press |
| Tstat_Cool_Setpoint_Down | Cool Setpoint lowered 1 degree every press |
| Schedule_Edit_Weekday_Wake | Control over Weekday Wake Schedule when signal goes high |
| Schedule_Edit_Weekday_Leave | Control over Weekday Leave Schedule when signal goes high |
| Schedule_Edit_Weekday_Return | Control over Weekday Return Schedule when signal goes high |
| Schedule_Edit_Weekday_Sleep | Control over Weekday Sleep Schedule when signal goes high |
| Schedule_Edit_Weekend_Wake | Control over Weekend Wake Schedule when signal goes high |
| Schedule_Edit_Weekend_Leave | Control over Weekend Leave Schedule when signal goes high |
| Schedule_Edit_Weekend_Return | Control over Weekend Return Schedule when signal goes high |
| Schedule_Edit_Weekend_Sleep | Control over Weekend Sleep Schedule when signal goes high |
| Schedule_Edit_Away | Control over Away Schedule when signal goes high |
| Schedule_Heat_Setpoint_Up | Increases the selected schedule period Heat Setpoint by 1 degree for each press |
| Schedule_Heat_Setpoint_Down | Decreases the selected schedule period Heat Setpoint by 1 degree for each press |
| Schedule_Cool_Setpoint_Up | Increases the selected schedule period Cool Setpoint by 1 degree for each press |

| | |
|------------------------------------|---|
| Schedule_Cool_Setpoint_Down | Decreases the selected schedule period Cool Setpoint by 1 degree for each press |
| Schedule_Hour_Up | Increases the selected schedule period Cool Setpoint by 1 degree for each press |
| Schedule_Hour_Down | Decreases the selected schedule period Hour by 1 degree for each press |
| Schedule_Minute_Up | Increases the selected schedule period Minute by 1 degree for each press |
| Schedule_Minute_Down | Decreases the selected schedule period Minute by 1 degree for each press |
| Schedule_Mode_Cool | Changes the selected schedule period mode to Cool when signal goes high |
| Schedule_Mode_Heat | Changes the selected schedule period mode to Heat when signal goes high |
| Schedule_Mode_Off | Changes the selected schedule period mode to Off when signal goes high |
| Schedule_Mode_Auto | Changes the selected schedule period mode to Auto when signal goes high |
| Schedule_Start | Changes the schedule run mode to Start when signal goes high. When in start mode the scheduler will run at the selected time. |
| Schedule_Suspend | Changes the schedule run mode to Suspend when signal goes high. When in suspend mode the scheduler will NOT run at the selected time. |

Input: Serial

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| Tstat_In | Input from HAI Processor module. You must have this signal connect to receive Thermostat feedback from the HAI controller. |
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Output: Serial

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| To_HAI_Processor | Output from Tstat Module to the HAI Processor module. These signals must be connect for commands to be send to the HAI controller |
| Current_Temp\$ | Serial output of Current Temperature. Digital signal |

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|---------------------------------|---|
| | Poll_Thermostat_Information must remain high for this serial to be updated. |
| Heat_Setpoint\$ | Serial output of Heat Setpoint. Digital signal Poll_Thermostat_Information must remain high for this serial to be updated. |
| Cool_Setpoint\$ | Serial output of Cool Setpoint. Digital signal Poll_Thermostat_Information must remain high for this serial to be updated. |
| System_Mode\$ | Serial output of System Mode. Digital signal Poll_Thermostat_Information must remain high for this serial to be updated. |
| Fan_Mode\$ | Serial output of Fan Mode. Digital signal Poll_Thermostat_Information must remain high for this serial to be updated. |
| Schedule_Mode\$ | Serial output of selected Schedule Period Mode. |
| Schedule_Fan_Mode\$ | Serial output of selected Schedule Period Fan Mode. |
| Schedule_Heat_Setpoint\$ | Serial output of selected Schedule Period Heat Setpoint. |
| Schedule_Cool_Setpoint\$ | Serial output of selected Schedule Period Cool Setpoint. |
| Schedule_Hour | Serial output of selected Schedule Period Hour. |
| Schedule_Min | Serial output of selected Schedule Period Minute. |
| Schedule_Status | Serial output of selected Schedule Period Status. (Started or Suspended) |

Output: Analog

| | |
|---------------|--|
| Current_Temp | Analog output of the selected thermostat current temperature |
| Heat_Setpoint | Analog output of the selected thermostat heat set point temperature |
| Cool_Setpoint | Analog output of the selected thermostat cool set point temperature |
| Status_Mode | Analog output of the selected thermostat status mode. 0 = Off 1 = Heat 2 = Cool 3 = Auto 4 = Emergency Heat |

| | |
|----------|---|
| Fan_Mode | Analog output of the selected thermostat fan mode 0 = Auto 1 = On |
|----------|---|

| Parameters | |
|----------------------|--|
| Tstat Number | The ID of the Thermostat Module instance. (1-26) |
| Temp Display | Displays temperature in Fahrenheit or Celsius |
| Save Location | Save schedule information in either NVRAM or Compact Flash(CF0) or select as NO SCHEDULE |

For support contact Support@infusebox.com

MODIFICATIONS:

11/20/2007: Added analog output values for current temp, set points, system mode, and fan mode.

HAI Thermostat Module v1.20

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HAI Security Module v1.01

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