

SIMPLWINDOWS NAME: RCS Single Set Point Thermostat Control

CATEGORY: HVAC

VERSION: 1.0

SUMMARY: Provides control and status of an RCS TH15 thermostat with a single set point via RS485 or RS232

GENERAL NOTES: This module provides control for an RCS TH15 thermostat. The feedback is true feedback. The set point up/down inputs are connected to oscillators inside the module. The set point updates after each change. All other button presses will request status on release. The poll input will request the status once. An oscillator can be connected to the poll input. It is recommended to only poll while a page is showing that requires thermostat information. The thermostat does not update the Crestron automatically.

CRESTRON HARDWARE REQUIRED: ST-COM
CNXCOM
CNXCOM-2

SETUP OF CRESTRON HARDWARE: RS-485 or RS-232
Baud Rate - 9600
Parity - None
Data Bits - 8
Stop Bits - 1

VENDOR FIRMWARE: Version 3.2

VENDOR SETUP: The system was tested at Crestron with the Termination jumper ON.

CABLE NUMBER:

Crestron DB9F	RCS Bare Wire
RS-485	
Pin 1 & 9	R-
Pin 4 & 6	T+
RS-232	
Pin 2	Tx
Pin 3	Rx
Pin 5	GND

CONTROL:

Set_Point_Up/Down	D	Press to change the set point. Holding will cause the set point to change until released.
Set_Point	A	Input for setting the set point to a preset value. The lower limit appears to be 40 Degrees F.
Send_Set_Point	D	Press to send to set point value at the Set_Point input.
Poll	D	Press to get a status update. Use an oscillator to get constant updates. A recommended oscillator time is 15 seconds.
Fan_Mode_Off/On	D	Press to change the fan mode. An update will automatically be requested.
Mode_*	D	Press to change the heat mode. An update will automatically be requested.
From_Device\$	S	Serial data string to be routed from a 2 way RS485 com port.
Address==31h	P	Address of thermostat to control in hex.

Max is 39h.

FEEDBACK:

Temperature_Fb	A	Analog signal representing the current temperature. Should be routed to a digital meter on a touch panel.
Set_Point_Fb	A	Analog signal representing the current set point. Should be routed to a digital meter on a touch panel.
Outside_Temperature_Fb	A	Analog signal representing the current outside air temperature. Should be routed to a digital meter on a touch panel.
Fan_Mode_Off/On_Fb	D	Indicates the current fan mode.
Mode_*_Fb	D	Indicates the current heat mode.
To_Device\$	S	Serial data string to be routed to a 2 way RS485 com port

OPS USED FOR TESTING: 5.12.26x.upz (X-Gen)
3.015.cuz (2-Series)

COMPILER USED FOR TESTING: SimplWindows Version 2.03.12

SAMPLE PROGRAM: RCS Thermostat Demo

REVISION HISTORY: None