Aprilaire Miscellaneous Modules
Module Application Guide

Description

Aprilaire Global Setpoint Send V1

This module is used when it is desirable to send a single setpoint to ALL Aprilaire thermostats in the system. The module allows the user to select either a heat or a cool setpoint and then the desired temperature. The user can then send that temperature to all stats in the system. Obviously any other scheduling function that you have in your program would over-write the temperature sent by this module.

Module Demo Program Description

The demo program "Aprilaire Misc Modules Demo Program.smw" has been provided to demonstrate how a programmer would this module. No demonstration touchpanel has been provided.

Compatibility			Processor Requirements	
2-Series Compatible	CNMSX Compatible	System Builder Compatible	Ethernet NOT NEEDED	Compact Flash NOT NEEDED

Telephone: (+1)440-449-1100 support@controlworks.com http://www.controlworks.com

HVAC 1 zone relay monitor rev1

Module Functionality

This module is used when you need to know what a specific Aprilaire stat's relay states are. It monitors the SNx HVAC=x statement which means that you have to turn on "C1" by sending SN C1=ON then carriage return. Keep in mind that the HVAC statement is delayed from the relay event. The stat will send it within 30s at the most.

Module Demo Program Description

The demo program "Aprilaire Misc Modules Demo Program.smw" has been provided to demonstrate how a programmer would this module. No demonstration touchpanel has been provided.

HVAC 1 zone monitor rev1

Module Functionality

This module is used when you need to know what a specific Aprilaire stat's values are. This module is great for displaying current status on a floorplan. The module will watch incoming strings from the stats and output the various temperatures and modes for just the specified zone.

Module Demo Program Description

The demo program "Aprilaire Misc Modules Demo Program.smw" has been provided to demonstrate how a programmer would this module. No demonstration touchpanel has been provided.

Signal and Parameter Descriptions

Bracketed signals such as "[signal_name]" are optional signals

Aprilaire Global Setpoint Send V1

DIGITAL INPUTS

NUMERIC_KEY_0-9 ..... used for numeric input
NUMERIC_KEY_CLEAR ..... clears the current value
SEND_AS_HEAT_SP ..... send the temperature as "SN SH=xx"
SEND_AS_COOL_SP ..... send the temperature as "SN SC=xx"
SEND_SETPOINT ..... transmits the above string to the stats

ANALOG INPUTS

This module does not utilize any analog inputs

SERIAL INPUTS

This module does not utilize any serial inputs

DIGITAL OUTPUTS

SEND_AS_HEAT_FB ..... feeds back when heat is the selected setpoint
SEND_AS_COOL_FB ..... feeds back when cool is the selected setpoint

ANALOG OUTPUTS

This module does not utilize any analog outputs.

SERIAL OUTPUTS

APRILAIRE_TX$ ..... serial string to tie to com port
KEYPAD_TEXT_FB$ ..... temperature display on keypad

PARAMETERS

Address Tens ..... use a hex value for the first digit of the address. 30h for zero 31h for one, etc
Address Ones ..... use a hex value for the second digit of the address. 30h for zero 31h for one, etc

HVAC 1 zone relay monitor rev1

DIGITAL INPUTS

This module does not utilize any digital inputs

ANALOG INPUTS

tstat_addr ..... drive with an INIT with values 1d to 32d to match the address of the stat you are monitoring

SERIAL INPUTS

hvac$ ..... serial string from the com port

DIGITAL OUTPUTS

fan ..... fan relay is engaged
cool1 ..... first stage cool relay is engaged
heat1 ..... first stage heat relay is engaged
cool2 ..... second stage cool relay is engaged
heat2 ..... second stage heat relay is engaged
rev_heat ..... reversing relay for heating is engaged
rev_cool ..... reversing relay for cooling is engaged

ANALOG OUTPUTS

This module does not utilize any analog outputs.

SERIAL OUTPUTS

This module does not utilize any serial outputs

PARAMETERS

This module does not utilize any paramaters

HVAC 1 zone monitor rev1

DIGITAL INPUTS

This module does not utilize any digital inputs

ANALOG INPUTS

tstat1_addr..... drive with an INIT with values 1d to 32d to match the address of the stat you are monitoring

SERIAL INPUTS

hvac$ ..... serial string from the com port

DIGITAL OUTPUTS

This module does not utilize any digital outputs

ANALOG OUTPUTS

temp1..... current zone temperature
sp_heat1 ..... current zone heat setpoint temperature
sp_cool1..... curretn zone cool setpoint temperature

SERIAL OUTPUTS

mode1 ..... current system mode (off, heat, cool, auto)
fan1..... current fan mode (auto, on)

PARAMETERS

This module does not utilize any paramaters

Support

This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email support@controlworks.com or call us at 440-449-1100. ControlWorks normal office hours are 9 AM to 5 PM Eastern, Monday through Friday, excluding holidays.

Before calling for support, please ensure that you have loaded and tested operation using the included demonstration program and touchpanel(s) to ensure that you understand the correct operation of the module. It may be difficult for ControlWorks to provide support until the demonstration program is loaded.

Updates, when available, are automatically distributed via Email notification to the address entered when the module was purchased. In addition, updates may be obtained using your username and password at http://www.thecontrolworks.com/customerlogin.aspx.

Distribution Package Contents

The distribution package for this module should include:

hvac 1 zone monitor rev1.usp
hvac 1 zone monitor rev1.ush
hvac 1 zone relay monitor rev1.usp
hvac 1 zone relay monitor rev1.ush
Aprilaire Global Setpoint Send V1.umc
Aprilaire Misc Modules Demo Program.smw
Aprilaire_Misc_Modules_v1_help.pdf

ControlWorks Consulting, LLC Module License Agreement

Definitions:
ControlWorks, *We*, and *Us* refer to ControlWorks Consulting, LLC, with headquarters located at 701 Beta Drive, Suite 22 Mayfield Village, Ohio 44143-2330. *You* and *Dealer* refer to the entity purchasing the module. *Client* and *End User* refer to the person or entity for whom the Crestron hardware is being installed and/or will utilize the installed system. *System* refers to all components described herein as well as other components, services, or utilities required to achieve the functionality described herein. *Module* refers to files required to implement the functionality provided by the module and may include source files with extensions such as UMC, USP, SMW and VTP. *Demo Program* refers to a group of files used to demonstrate the capabilities of the Module, for example a SIMPL Windows program and VisionTools Touchpanel file(s) illustrating the use of the Module but not including the Module. *Software* refers to the Module and the Demo Program.

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Provision of Support
We provide limited levels of technical support only for the most recent version of the Module as determined by Us. We do not provide support for previous version of the module, modifications to the module not made by Us, to persons who have not purchased the module from Us. In addition, we may decline to provide support if the Demo Program has not been utilized. We may withdraw a module from sale and discontinue providing support at any time and for any reason, including, for example, if the equipment for which the Module is written is discontinued or substantially modified. The remainder of your rights and obligations pursuant to this license will not be affected should ControlWorks discontinue support for a module.

Modification of Software
You may not decrypt (if encrypted), reverse engineer, modify, translate, disassemble, or de-compile the Module in whole or part. You may modify the Demo Program. In no event will ControlWorks Consulting, LLC be liable for direct, indirect, incidental or consequential damages resulting from You modifying the Software in any manner.

Indemnification/Hold Harmless
ControlWorks, in its sole and absolute discretion may refuse to provide support for the application of the Module in such a manner that We feel has the potential for property damage, or physical injury to any person. Dealer shall indemnify and hold harmless ControlWorks Consulting LLC, its employees, agents, and owners from any and all liability, including direct, indirect, and consequential damages, including but not limited to personal injury, property damage, or lost profits which may result from the operation of a program containing a ControlWorks Consulting, LLC Module or any component thereof.

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