S Squared Innovations Inc.



S2USB485 USB to RS-485 and RS-232 Converter

Introduction

This is an overview of a quick test procedure to ensure that the S2USB485 is properly configured for use with HVACPro.

Assumption

It is assumed that the user has already installed the S2USB485 and has configured the S2USB485's COM port to either COM1 or COM2. This is a requirement for HVACPro, as HVACPro can only select one of these two ports.

Quick Test Procedure

- 1. Ensure that the S2USB485 is connected and its driver is installed
- 2. Run HVACPro
- 3. Select the Menu Option "Action", then "Controller Information"

📑 Johnson Controls - HVAC PR	0	- 🗆 ×
File Download Upload Commission	Action Options Help	
	Controller Information	CIDEL COD
Q/A INPUTS	VAV Box Flow Test	SIDELOOP
Current Question/Answer Path	Collect VAV Diagnostics VMA Balancer Tool	
	VAV Flow Deadband Recalculate Flow Tuning Parameters	
	Import AHU DOS Config	
	Reset Controller	
4		
Date: 09/30/15	Time: 7:04:	:44 AM

Device Type = Unnamed Application = Unnamed Filename = c:\PROJECTS\JCI\VMA\CONFIG*.cfg

4. Next Select "Single Device"

Controller Information	×
Controller Options	
Single Device	
C All Devices on the N2 Bus	
2.4	
OK Cancel	

5. Next Select the S2USB485's Port (COM1 = Port 1, COM2 = Port 2), Bus Type "N2 Bus", and the N2 address can be anything for now. At this point ensure that the S2USB485's N2 connector is not connected to anything. We are simply doing a test to verify that the S2USB485's Widnows Driver is installed and that HVACPro is correctly communicating with the S2USB485 device.

Controller Information		×
Comm. Port-	Bus Type	1
C Port 1	C Zone Bus	
Port 2	• N2 Bus	
N2 Device /	Address 🕄	
ОК	Cancel	

6. You should receive the following Dialog box with a "Communication Failure" Error. This is fine, as it simply indicates that HVACPro is unable to communicate with a device a the entered N2 address.

roller Information	
NO 1 11	
N2 Address:	
Use Addr. Switches:	
Device Type:	
Firmware Revision:	
Config Saved As:	
Hardware Model:	
Communications	
Bus Type: N2 Bus	Comm Port: 2 😱
COMMUNICATIO	ONS FAILURE 🛛 🧏
	1000 1000 1000 1000 1000 1000 1000 100
	xit
	XII

7. Now, as this Dialog Box is displayed you should see the S2USB485's Red LED/Light Flashing. A red light flashing means that the system is transmitting data (if a green light is flashing means you are receiving data). The Red and Green lights are on the side of the enclosure between the N2 and DB9/RS232 connectors. The LEDs are not super bright and so you may need to slightly cover the lights in brightly lit areas. If you see the red light flashing then you know that the S2USB485 has been installed correctly and is communicating correctly with HVACPro. At this point you know all is fine.

8. If you now connect the S2USB485's N2 connector to the field device and repeat step (5) above, but this time enter the correct N2 address of the Field device, you should see a combination of Red and Green flashing lights. If you do not then the problem could be:

- a. Your N2 bus wiring from the S2USB485 to the Field controller is incorrect or is shorted
- b. The Entered N2 address for the field device is incorrect
- c. The field device is not powered or has a defective N2 interface
- d. The S2USB485's N2 Interface is faulty or damaged.

9. Lastly if at the start of this quick test you are seeing just the Green LED flashing, then this means that you are trying to connect to a N2 bus that already has a Supervisory controller. This is a problem, as there can only be one Supervisory controller connected to a N2 Bus. When HVACPro is connected to the N2 bus, it becomes the Supervisory controller and so it will conflict with the existing Supervisory controller and thus will be unable to connect to your N2 field controller(s).