



# ADA Suite 8100 Module Application Guide






## Description

This module allows a Crestron processor to control the ADA Suite 8100 via the optional RS-232 built in control port or using the ADA ISO-CAT-2 Converter. A single instance of this module should be used for each room. Some global functionality is included in this module such as 'Party Mode Source' and 'Global All Rooms Off' should only be defined on a single instance of this module usually on the first room. We have also include the ControlWorks ADA TFM-1 FM/AM/WX control module as this tuner is included in the 'standard' Suite 8100 configuration.

If your Suite 8100 includes the optional XM, Sirius or HD Radio Tuner, you may also want to purchase our ADA Tunesuite package of modules for serial control of these optional tuners.

ControlWorks Consulting accepts no responsibility for the accuracy or your usage of data returned by the module.

## Supported Processors

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

DO NOT CONNECT THE ISO-CAT2 INTO ANYTHING WITH THE WRONG SWITCH POSITION!

Using the RS-232 and 4-pin ADABUS connectors to send commands and receive feedback.

Switches 1,2,3 are in the down position.  
Switch 4 is in the up position.

### Serial Settings

Communications Standard RS-232

Baud Rate - 19,200

Data Bits – 8

Stop Bits – 1

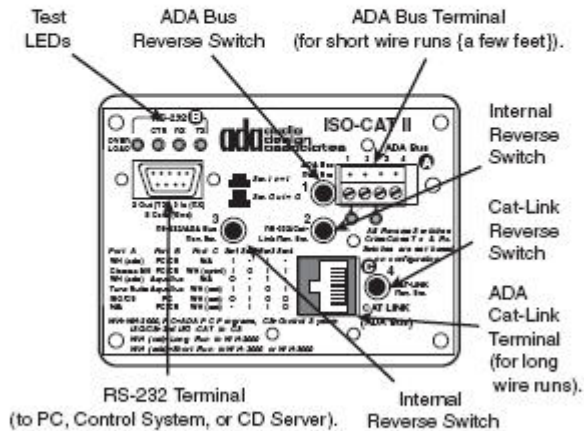
Parity – None

No Hardware or Software Handshaking Required.

Use a **straight-through serial** cable.

## ISO-CAT II - ADA BUS® - CAT-LINK™ - RS-232 I/O

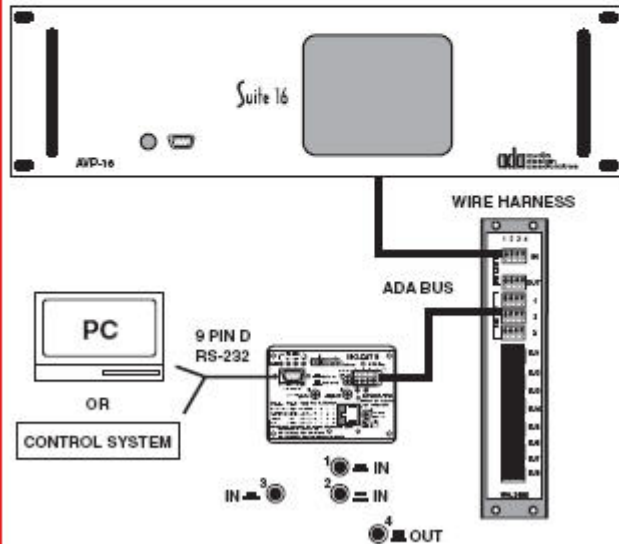
The ISO-CAT II combines the features of the ISO-CAT with microprocessor controlled clear-to-send for more advanced system integration and better integration with the CD Server. The ISO-CAT II also features reverse switches that make it a suitable I/O for a myriad of configurations. LED test indicators also RX, TX, CTS, and Overload.



Use only straight-through 9 pin cables (not criss-cross) for connection to RS-232 port.  
When the ISO-CAT II is in the proper standby (ready) state, all three status LEDs are green.

### Setup #1 - Standard ADA Bus to RS-232

Connection for ADA PC Software Setup or System Integration with a control system (i.e. AMX, Crestron, Lutron, PCs).



# Signal And Parameter Descriptions

Bracketed signals such as "[signal\_name]" are optional signals

## DIGITAL INPUTS

Room_off .....	Pulse to turn this room off
Room_input_1-8.....	Pulse to select the rooms input
Room_volume_up.....	Hold signal high to raise the room volume
Room_Volume_down.....	Hold signal high to lower the room volume
[Room_input_up] .....	Pulse to select the next input
[Room_input_down] .....	Pulse to select the previous input
[Room_mute_toggle] .....	Pulse to toggle the rooms mute function
[Room_mute_on] .....	Pulse to set the room mute on
[Room_mute_off] .....	Pulse to set the room mute off
[Room_volume_store_1-4] .....	Pulse to store the current volume level
[Room_volume_recall_1-4] .....	Pulse to recall the stored volume level
[Room_loudness_toggle] .....	Pulse to toggle the rooms loudness feature
[Room_bass_up] .....	Hold signal high to raise the bass level
[Room_bass_down] .....	Hold signal high to lower the bass level
[Room_bass_flat] .....	Pulse to set the bass level flat
[Room_midrange_up] .....	Hold signal high to raise the midrange level
[Room_midrange_down] .....	Hold signal high to lower the midrange level
[Room_midrange_flat] .....	pulse to set the midrange level flat
[Room_treble_up] .....	Hold signal high to raise the treble level
[Room_treble_down].....	Hold signal high to lower the treble level
[Room_balance_left] .....	Hold signal high to shift the balance left
[Room_balance_right] .....	Hold signal high to shift the balance right
[Room_balance_center].....	Pulse to set the balance to center
[Room_on_with_preset_1].....	Hold signal high to turn room on with preset 1
[Room_limiter_toggle] .....	Pulse to toggle the limiter feature
[Room_in_party_mode_1-4] .....	Pulse to toggle room in or out of a party mode
[Room_tone_store_1-4] .....	Pulse to store the current tone value
[Room_tone_recall_1-4].....	Pulse to recall the stored tone value
[Room_all_tone_flat] .....	Pulse to reset all room tone values to flat
[Room_poll].....	Pulse to force a room update
[Global_all_rooms_off] .....	Pulse to turn off all rooms
[Global_engage_party_mode_1-4] .....	pulse to engage a global party mode

## ANALOG INPUTS

[Global\_source\_party\_mode\_1-4} ..... Use an Analog Initialize to set the source for party mode. Valid range is from 01-08.

## SERIAL INPUTS

Ada\_suite\_8100\_rx\$ ..... Route to RX\$ of your COM Serial Driver

## DIGITAL OUTPUTS

[Room_off_fb]	High when room is off
[Room_on_fb]	High when room is on
[Room_input_1-8_fb]	High to indicate the rooms current input
[Room_mute_fb]	High when the rooms mute is on
[Room_loudness_on_fb]	High when the rooms loudness feature is on
[Room_bass_flat_fb]	High when the rooms bass is set to flat
[Room_midrange_flat_fb]	High when the rooms midrange is set to flat
[Room_treble_flat_fb]	High when the rooms treble is set to flat
[Room_balance_center_fb]	High when the rooms balance is set to center
[Room_on_with_preset_1_fb]	High when rooms is set to turn on with preset 1
[Room_limiter_on_fb]	High when rooms limiter feature is set to on
[Room_in_party_mode_1-4]	High to indicate that the room is in a party mode
[All_rooms_off_fb]	High to indicate all the Suite 8100 rooms are off

## ANALOG OUTPUTS

[Room_volume]	Indicates the current room volume
[Room_volume_pre1-pre4]	Indicates the stored volume for each volume preset

## SERIAL OUTPUTS

ada_suite_8100_tx\$	Route to the TX\$ of your COM Serial Driver
[Room_vol\$]	Indicates the current room volume
[Room_volume_pre1\$-pre4\$]	Indicates the stored volume for each volume preset
[Room_bass\$]	Indicates the current room bass level
[Room_mid\$]	Indicates the current room midrange level
[Room_treb\$]	Indicates the current room treble level
[Room_balance\$]	Indicates the current room balance position

## PARAMETERS

Room number	Enter the corresponding room number to control. Valid room numbers are 01 thru 08.
Room max volume	Enter the maximum allowable room volume. Valid range from 01 to 80.
Source 1-8 input trim	Use the drop down box to select the amount of input attenuation for each source. A value of 00 equals no input attenuation and is the default setting.

## Support

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This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email [support@controlworks.com](mailto:support@controlworks.com) or call us at 440-729-4640. 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

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The distribution package for this module should include:

ADA_Suite_8100_v1.umc .....	Crestron User Module for Suite 8100.
ADA_Tune_Suite_TFM-1_v2.umc .....	Crestron User Module for FM/AM/WX tuner.
ADA_Suite_8100_Demo_Program_v1.smw .....	Demo program for Crestron PRO2 processor.
ADA_Suite_8100_Receiver_XPANEL_v1.vtp.....	Demo touchpanel for Crestron PRO2 processor
ADA_Suite_8100_Receiver_TPS-4500_v1.vtp.....	Demo touchpanel for Crestron TPS-4500
ADA_Suite_8100_v1_help.pdf .....	Help file for the ADA Suite 8100

# Revision History

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Version 1 – [lee@controlworks.com](mailto:lee@controlworks.com)

Initial release

## Development Environment

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Version 1 of this module was developed on the following hardware and software. Different versions of hardware or software may or may not operate properly. If you have questions, please contact us.

### Hardware

Crestron PRO2 firmware version	v3.155.1240 – Build 20070424:1
Crestron TPS-4500 firmware Version	v2.002.0

### Software

Crestron SIMPL Windows	Version 2.08.38
Crestron Vision Tools Pro-e	Version 3.7.1.7
Crestron Database Version	18.8.3
Crestron Symbol Library	Version 486
Crestron Device Library	Version 486

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## **Definition**

Software refers to all files provided as a part of a project for use with Crestron hardware including, but not limited to: all network devices, CNX generation platforms, 2-series platforms, Ethernet devices and the Crestron line of wired and wireless Touchpanels, as well as any future hardware that may support the use of these files.

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