



# HSIM Crestron Module Version 1.4 Application Guide

## Description

This module provides keypad emulation and limited feedback of DSC and Ademco/Honeywell Vista series security panels when using the HouseLogix HSIM. A list of supported security panels can be found at <http://www.houselogix.com/products/hsim-security-adapter.asp>. This module also provides two lines of indirect text mirroring the Ademco/Honeywell Vista keypad text.

NOTE: This module shall not be used as a life safety device.

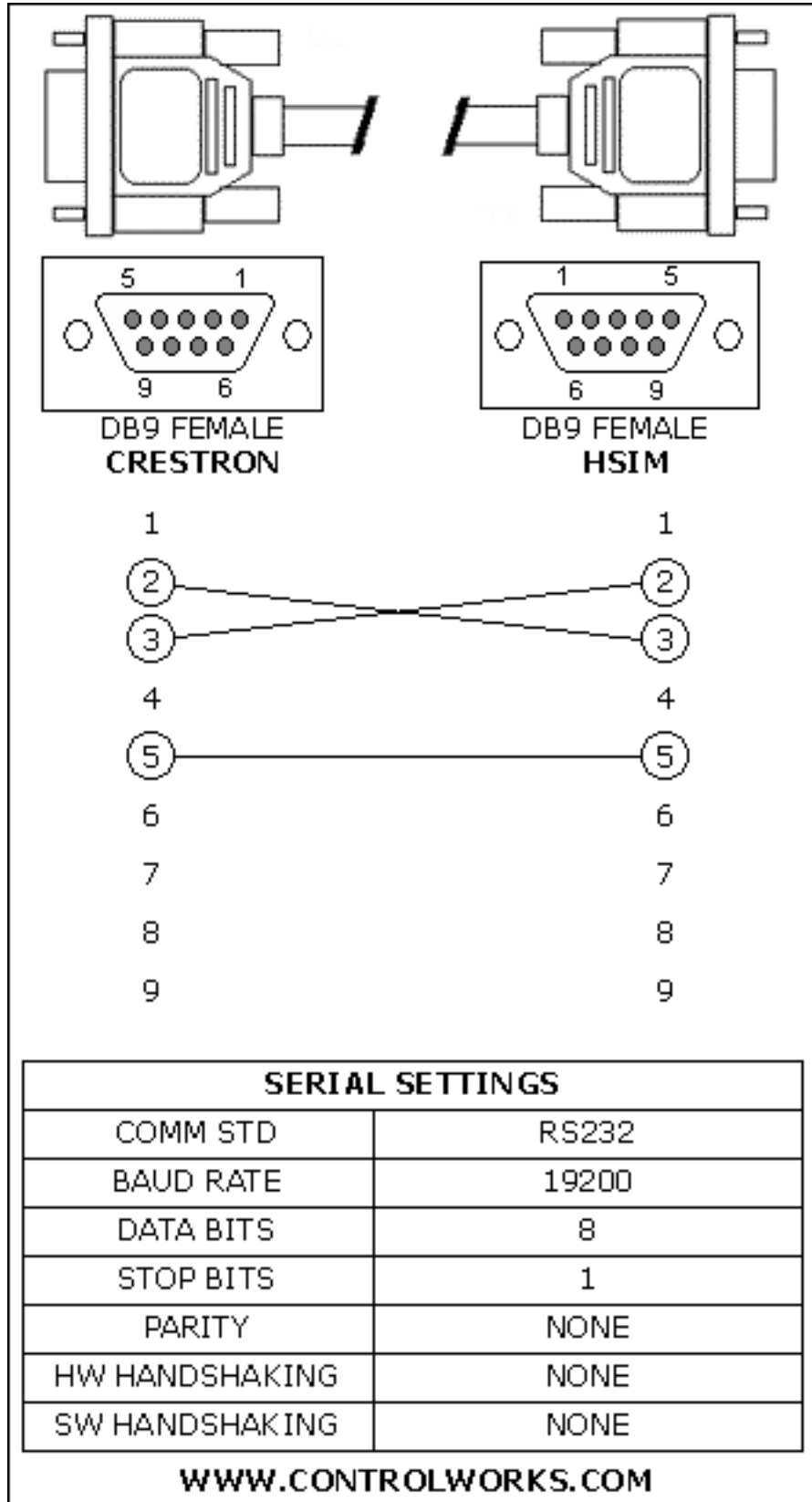
## Supported Processors

This module was designed to run in CNMSX-PRO, 2-Series, or 3-Series processors.

Compatibility			Processor Requirements	
				

## Serial Connection

A "cross-over" cable is used to connect the HSIM adaptor to Crestron.



## Module Application

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Only one HSIM adaptor is allowed per partition.

### Ademco Panels

When using the HSIM Integration Module with a Honeywell panel, the HSIM should be assigned a unique keypad address in the Honeywell panel. The HSIM cannot be configured to an address that is assigned to an existing keypad.

### DSC Panels

The module does not utilize an address for DSC panels. The address parameter can be ignored.

### Fire Alarm FB, Function Keys, and Life Safety

**CRESTRON EQUIPMENT AND CONTROLWORKS PROGRAMMING IS NOT SUITABLE OR INTENDED FOR LIFE SAFETY PURPOSES AND SHOULD NOT BE RELIED UPON AS A MEANS OF INITIATING AN ALARM OR SUMMONING ASSISTANCE.**

The Function Keys work only if enabled and properly configured by the security system installer. If the security system installer has not enabled and/or configured these features, these inputs to the module will not have any function.

# Signal and Parameter Descriptions

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

## **DIGITAL INPUTS**

reboot_finished .....	Input that should be latched high after program is initialized. See demo program for example.
keypad_0-9,*,#,F1-4 .....	Performs the same action as if you pressed the corresponding key on a security keypad. <b>SEE DISCLAIMER AND WARNING ON PREVIOUS PAGES.</b>

## **ANALOG INPUTS**

This module does not utilize any inputs

## **SERIAL INPUTS**

This module does not utilize any serial inputs.

## **DIGITAL OUTPUTS**

system_ready_fb .....	High when the alarm system is ready to be armed.
armed_away_fb .....	high when the alarm system is armed away.
armed_home_fb.....	high when the alarm system is armed home.
backlight_on_fb .....	high when the emulated keypad backlight is on.
programming_mode_on_fb .....	high when the emulated keypad is in programming mode.
zones_bypassed_fb .....	High when a zone has been bypassed on the security panel.
system_on_ac_power_fb.....	high when the security system is on AC power.
chime_on_fb.....	high when the chime is enabled on the emulated keypad.
alarm_occured_fb .....	high when an alarm occurred when armed previously. <b>SEE DISCLAIMER AND WARNING ON PREVIOUS PAGES.</b>
alarm_bell_on_fb .....	high when the alarm bell is ringing. <b>SEE DISCLAIMER AND WARNING ON PREVIOUS PAGES.</b>
battery_low_fb .....	high when the battery in the security system is low.
entry_delay_on_fb .....	high when the entry delay is active.
fire_alarm_on_fb.....	high when fire alarm on. <b>SEE DISCLAIMER AND WARNING ON PREVIOUS PAGES.</b>
armed_perimeter_only_fb.....	high when armed perimeter only.

## **ANALOG OUTPUTS**

This module does not utilize any analog outputs.

## **SERIAL OUTPUTS**

keypad_text_line1-2\$ .....	Text displayed on the keypad LCD, each line will be exactly 16 characters and is best displayed with a fixed-width font such as Courier New.
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## **PARAMETERS**

Alarm Panel Type .....	Select the type of panel for your installation; Honeywell Ademco/Vista panel or DSC.
HSIM Address .....	Required for Honeywell Ademco/Vista panels. Enter in address assigned to HSIM adaptor in security panel. Value is ignored when panel type is set to DSC.

## 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 440-449-1100. 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 <https://www.controlworks.com/Default.aspx>.

## Distribution Package Contents

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The distribution package for this module should include:

House_Logix_HSIM_v1.2.umc.....	Crestron User Module
House_Logix_HSIM_startup_engine_(ControlWorks)_v1.2.usp	SIMPL+ Module
House_Logix_HSIM_startup_engine_(ControlWorks)_v1.2.ush	Compiled SIMPL+
House_Logix_HSIM_Demo_tsw1050_v1.2.vtp .....	Demo touch panel for TSW-1050 touch panel
House_logix_HSIM_Demo_v1.2.smw .....	Demo program for PRO2 processor
House_logix_HSIM_Help_v1.2.pdf .....	This help file

## Revision History

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V1 caleb@controlworks.com 2013.03.01

-initial release

V1.1 [caleb@controlworks.com](mailto:caleb@controlworks.com) 2015.01.30

-Flipped rx\$ and tx\$.

-Updated help file for incorrect baud rate.

V1.2 [caleb@controlworks.com](mailto:caleb@controlworks.com) 2015.12.16

-resolved issue with address parameter. When replacing old modules, reselect the address in the address parameter to ensure the correct formatting is in place

-added SIMPL+ module to help with responding to configuration values as well as possible configuration items that may not be present in current HSIM firmware.

V1.3 [caleb@controlworks.com](mailto:caleb@controlworks.com)

-resolved issue with 3 series stings coming into a CHANGE input.

V1.4 [caleb@controlworks.com](mailto:caleb@controlworks.com) 2019.04.18

-Added responses for new configuration settings in later HSIMs.

-Fix for API changes that caused buffer overflow notices.

## Development Environment

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This module version 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.

<b>Manufacturer Hardware</b>	<b>Software Version</b>
HSIM	2.2a
<b>Crestron Hardware</b>	<b>Firmware Version</b>
Crestron AV3 Processor	v1.503.3318.24705
<b>Software</b>	<b>Software Version</b>
Crestron SIMPL Windows	4.11.06.01
Crestron Vision Tools Pro-e	6.2.00.03

# ControlWorks Consulting, LLC Module License Agreement

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## 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

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