








CNMK PS/2 Mouse/Keyboard Emulation Module Application Guide

Description

This module allows full mouse and keyboard emulation using the Crestron CNMK. Unlike many Crestron keyboard emulators, combination key presses (e.g. CTRL-ALT-DEL and ALT-F4) are supported.

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

Signal and Parameter Descriptions

Bracketed signals such as “[signal_name]” are optional signals

DIGITAL INPUTS FOR CNMK MOUSE EMULATOR

DIGITAL INPUTS

computer_mouse_left..... sends scancode for mouse left
computer_mouse_right..... sends scancode for mouse right
computer_mouse_up..... sends scancode for mouse up
computer_mouse_down..... sends scancode for mouse down
computer_mouse_left_click sends scancode for mouse left click
computer_mouse_right_click..... sends scancode for mouse right click

ANALOG INPUTS

This module does not utilize any analog inputs

SERIAL INPUTS

This module does not utilize any serial inputs

DIGITAL OUTPUTS

This module does not utilize any digital outputs

ANALOG OUTPUTS

This module does not utilize any analog outputs.

SERIAL OUTPUTS

computer_mouse\$ tie to crestron CNMK

PARAMETERS

This module does not utilize any parameters.

DIGITAL INPUTS FOR CNMK KEYBOARD EMULATOR

Each digital input that is pulsed sends the corresponding keyboard letter. (ex. When key_a is pulsed the CNMK sends the scancode "a" to the computer.)

Keys such as Ctrl, Alt, and Shift can be "stacked up". The module will not send the scancode for Alt and Ctrl until a letter is pressed. (ex. If pressed in this order, Ctrl, Alt, a, the module will send the scancode for Ctrl, Alt, a after a is pressed.)

Keys: Caps Lock, Num Lock, and Scroll Lock do not have any feedback because a computer does not send back any information stating that these buttons are on. It is recommended that you consider purchasing an application such as the Clever Keyboard Indicator (<http://www.clevercomponents.com>). This application shows on the computers monitor if your caps lock, num lock and scroll lock are on.

DIGITAL INPUTS

key_left_shift_fb.....	feedback for left shift
key_right_shift_fb.....	feedback for right shift
key_left_control_fb.....	feedback for left control
key_left_alt_fb.....	feedback left right alt
key_right_alt_fb.....	feedback for right alt
key_right_control_fb.....	feedback for right control

ANALOG INPUTS

This module does not utilize any analog inputs

SERIAL INPUTS

This module does not utilize any serial inputs

DIGITAL OUTPUTS

This module does not utilize any digital inputs

ANALOG OUTPUTS

case_mode.....	tie to touchpanel for multi-mode buttons
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SERIAL OUTPUTS

computer_keyboard\$.....	tie to crestron CNMK
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PARAMETERS

This module does not utilize any parameters.

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:

ControlWorks CNMK PS2 v1 help.pdf	this help file
ControlWorks CNMK PS2 Emulator Demo v1.smw.....	Crestron demo program
ControlWorks CNMK Mouse Emulator v1.umc.....	Module to be inserted into program
ControlWorks CNMK Keyboard Emulator v1.umc.....	Module to be inserted into program
ControlWorks cnmk keyboard engine v1.usp.....	SIMPL+ needed for modules
ControlWorks CNMK PS2 Emulator Demo TPS5000 v1.vtp	example touchpanel (TPS-5000)
ControlWorks CNMK PS2 Emulator Demo TPS6000 v1.vtp	example touchpanel (TPS-6000)

Revision History

V1 tom@thecontrolworks.com

First release

caleb@controlworks

- Made demo touchpanel and demo program.

2005.02.03

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.

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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.

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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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