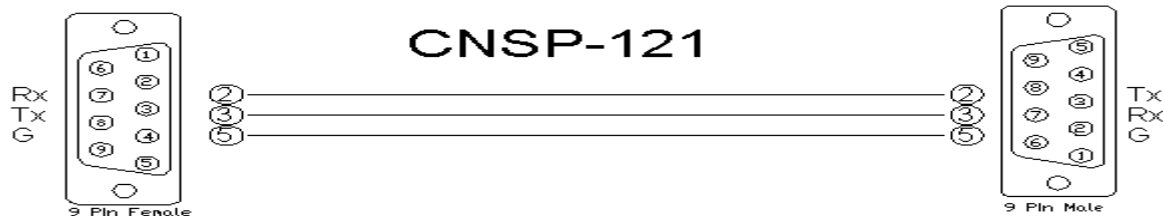


Partner: Key Digital
Model: HDMI 4x1
Device Type: Digital Video Switcher
and Processor



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Key Digital HDMI4x1.umc
CATEGORY:	Switcher
VERSION:	1.0
SUMMARY:	This module contains the RS-232 commands to interface with a Key Digital HDMI 4x1 Switcher.
GENERAL NOTES:	Besides remote control with real-time feedback over RS-232 through a Crestron processor and Touch Panel, you can remotely control HDMI4x1 functions through the rear – panel RS-232C connector, using Crestron’s Toolbox in console mode or by using Hyper Terminal or other compatible interface. Set your RS-232C connection to 19200 baud, 8 data bits, 1 stop bit, and no parity. When creating command strings, make sure to insert sufficient time delays before each command. Test all of your command strings to determine the proper time delay between commands.
CRESTRON HARDWARE REQUIRED:	Series-2 Processor and/or X-generation Processor and C2I-COM, ST-COM
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 19200 Parity: N Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	2.8
VENDOR SETUP:	Straight through RS-232 (pin to pin) cable required
CABLE DIAGRAM:	CNSP-121



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CONTROL:

From_Device\$	S	The serial return string from the unit
To_Device\$	S	The serial string sent to the unit
Power_Off	D	Powers unit off/standby
Power_On	D	Powers unit on from standby mode
Input_1	D	Switches Video Input to 1
Input_2	D	Switches Video Input to 2
Input_3	D	Switches Video Input to 3
Input_4	D	Switches Video Input to 4
Mute_Audio_Off	D	Un-Mutes Audio
Mute_Audio_On	D	Mutes Audio
Factory_Default	D	Sets Unit to Factory Defaults
Set_Output_Resolution_Same_With_Input_Resolution	D	Sets Output Resolution to match Input Resolution
Output_CSC_YPbPr	D	Sets Output Color space to YPbPr
Output_CSC_RGB	D	Sets Output Color space to RGB
Input_CSC_YPbPr	D	Sets Input Color space to YPbPr
Input_CSC_RGB	D	Sets Input Color space to RGB
Output_Resolution_1920x1080p	D	Sets resolution to 1920x1080 progressive
Output_Resolution_1920x1080i	D	Sets resolution to 1920x1080 interlaced
Output_Resolution_1400x1050p	D	Sets resolution to 1400x1050 progressive
Output_Resolution_1280x768p	D	Sets resolution to 1280x768 progressive

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Output_Resolution_1368x768p	D	Sets resolution to 1368x768 progressive
Output_Resolution_1280x720p	D	Sets resolution to 1280x720 progressive
Output_Resolution_1920x540p	D	Sets resolution to 1920x540 progressive
Output_Resolution_720x480p	D	Sets resolution to 720x480 progressive
Output_Resolution_720x480i	D	Sets resolution to 720x480 interlaced
Output_Resolution_640x480p	D	Sets resolution to 640x480 progressive
Poll_Enable	D	Enables polling of the status to the unit for monitoring changes at the unit in real-time (set to every 15 seconds in the module) Put a zero here to inhibit polling if unit is never going to be switched manually in the rack. Poll time defaults to 15 seconds. Serial Pace Time defaults to .26 seconds.

FEEDBACK:

Power_Off_Fb	D	Real-time feedback for Power Off
Power_On_Fb	D	Real-time feedback for Power On
Input_1_Fb	D	Real-time feedback for Input 1
Input_2_Fb	D	Real-time feedback for Input 2
Input_3_Fb	D	Real-time feedback for Input 3
Input_4_Fb	D	Real-time feedback for Input 4
Mute_Audio_Off_Fb	D	Real-time feedback for Muting Off
Mute_Audio_On_Fb	D	Real-time feedback for Muting On
Set_Output_Resolution_Same_With_Input_Resolution_Fb	D	Real-time feedback for Native Resolution matching inputs
Output_CSC_YPbPr_Fb	D	Real-time feedback for output of color space
Output_CSC_RGB_Fb	D	Real-time feedback for output of color space
Input_CSC_YPbPr_Fb	D	Real-time feedback for input of color space

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Input_CSC_RGB_Fb	D	Real-time feedback for input of color space
Output_Resolution_1920x1080p_Fb	D	Real-time feedback for Resolution
Output_Resolution_1920x1080i_Fb	D	Real-time feedback for Resolution
Output_Resolution_1400x1050p_Fb	D	Real-time feedback for Resolution
Output_Resolution_1280x768p_Fb	D	Real-time feedback for Resolution
Output_Resolution_1368x768p_Fb	D	Real-time feedback for Resolution
Output_Resolution_1280x720p_Fb	D	Real-time feedback for Resolution
Output_Resolution_1920x540p_Fb	D	Real-time feedback for Resolution
Output_Resolution_720x480p_Fb	D	Real-time feedback for Resolution
Output_Resolution_720x480i_Fb	D	Real-time feedback for Resolution
Output_Resolution_640x480p_Fb	D	Real-time feedback for Resolution

PARAMETERS:

poll time in seconds	P	Valid range for real-time polling of unit is 1s to 30s Note: To inhibit polling put a zero on driving signal name
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TESTING:

OPS USED FOR TESTING:	PRO2 Cntrl Eng [v3.137 (Release)]
COMPILER USED FOR TESTING:	SIMPL 2.06.20
SAMPLE PROGRAM:	Key Digital HDMI 4x1 Demo
REVISION HISTORY:	V. 1.0