



Partner: Key Digital Model: KD-MSW8x4

**Device Type: Digital Video Processor** 



GENERAL INFORMATION			
SIMPLWINDOWS NAME:	Key Digital KD-MSW8x4.umc		
CATEGORY:	Video Processor and Switcher		
VERSION:	1.0		
SUMMARY:	This module contains the RS-232 commands to interface with a FAT BOY Series Key Digital KD-MSW8x4.		
GENERAL NOTES:	Besides remote control with real-time feedback over RS-232 through a Crestron processor and Touch Panel, you can remotely control the Key Digital KD-MSW8x4 functions through the rear – panel RS-232 connector, using Crestron's Toolbox in console mode or by using Hyper Terminal or other compatible interface. Set your RS-232 connection to 4,800 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. To input a number, there must be a blank space between operator and operand. After you change video source to Key Digital KD-MSW8x4 using an 'CCxy' command, you need to wait for 5 seconds before sending another RS-232 command. Whenever the video mode changes, the video processor needs to be initialized. During initialization, the CPU doesn't listen to the RS-232 port.  Pressing factory defaults button will reset unit's memory. Inputs for every output will be 1, unit address will be 16, video mute interval will be 240 ms and all video mutes will be disabled (unmated). Address 16 uses CC commands. If you change the address of the unit by CCA01-15 command, you will need to change all "CC" serial strings in the SIO symbol of the module to the actual address number of the unit ("CC41" would become "1241" if unit id was 12). In this way, you could write codes to control multiple units with one Crestron control system on different com ports.  After each button press except factory default, the real feedback is displayed. In addition, the unit may be polled for real feedback every 15 seconds by default by putting a "1" on the Poll_Enable signal name.		
CRESTRON HARDWARE REQUIRED:	Series-2 Processor and/or X-generation Processor and C2I-COM, ST-COM		
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 4,800 Parity: N Data Bits: 8 Stop Bits: 1		
VENDOR FIRMWARE:	Unknown		
VENDOR SETUP:	None		
CABLE DIAGRAM:	CNSP-121		





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CONTROL:		
To_Device\$	S	The serial string sent to the unit
Input_x_y	D	Pulse to switch Video/Audio Input y to Output x
Video_Format_RGBHV	D	Pulse to switch Video Format to RGBHV
Video_Format_YPbPr	D	Pulse to switch Video Format to YPbPr
Front_Panel_Enable	D	Pulse to enable front panel buttons
Front_Panel_Disable	D	Pulse to disable front panel buttons
IR_Enable	D	Pulse to enable IR remote buttons
IR_Disable	D	Pulse to disable IR remote buttons
Factory_Defaults	D	Pulse to set to factory defaults
Video_Mute_x_Enable	D	Pulse to set each of the 4 outputs to be Video muted. If $x = 5$ , all outputs will be muted. Note: Mute 5 is All
Video_Mute_x_Disable	D	Pulse to set each of the 4 outputs to be Video unmuted. If x = 5, all outputs will be unmuted. Note: Mute 5 is All
Video_Fade_No_Mute	D	Pulse to set Video fade time to no mute
Video_Fade_x_ms	D	Pulse to set Video fade time to x where x = 28 ms, 40 ms, 80ms, 120 ms, 160 ms, 240 ms, 320 ms, 400 ms, and 600 ms





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coquenos.	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. Serial Pace Time defaults to .26 seconds. Place a 1 here to poll the unit for status. <b>Note:</b> Most of the time polling is <i>unnecessary</i> because unit sends back a discrete status code for every command sent when pressed from a button or sequence.
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		sequence.
FEEDBACK:		
From_Device\$	S	The serial return string from the unit
Input_x_y_Fb	D	Displays status of Video/Audio Input y to Output x
Video_Format_RGBHV_Fb	D	Displays status Video Format is set to RGBHV
Video_Format_YpbPr_Fb	D	Displays status Video Format is set to YPbPr
Front_Panel_Enable_Fb	D	Displays status of Front Panel buttons enabled
Front_Panel_Disable_Fb	D	Displays status of Front Panel buttons disabled
IR_Enable_Fb	D	Displays status IR remote buttons enabled
IR_Disable_Fb	D	Displays status of IR remote buttons disabled
Video_Mute_x_Enable_Fb	D	Displays status of Video Mutes enabled (muted). Note: Mute 5 is All
Video_Mute_x_Disable_Fb	D	Displays status of Video Mutes disabled (unmuted). Note: Mute 5 is All
Video_Fade_No_Mute_Fb	D	Displays status of Video Mutes fade time of 0
Video_Fade_x_ms_Fb	D	Displays status of Video Mutes fade time of x where $x$ = 28 ms, 40 ms, 80ms, 120 ms, 160 ms, 240 ms, 320 ms, 400 ms, and 600 ms
PARAMETERS:		
poll time in seconds	Р	Valid range for real-time polling of unit is 1s to 30s Note: To inhibit polling put a zero on driving signal name Poll Enable





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TESTING:	
OPS USED FOR TESTING:	PRO2 Cntrl Eng [v3.137 (Release)]
COMPILER USED FOR TESTING:	SIMPL 2.06.20 Compiler V. 2.00.34
SAMPLE PROGRAM:	Key Digital KD-MSW8x4 Demo
REVISION HISTORY:	V. 1.0