

Partner: AVPro Edge  
Models: MXNet  
Device Type: Network Switching



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	AVPro Edge MXNet Decoder v2.6
<b>CATEGORY:</b>	AVPro Edge MXNet
<b>VERSION:</b>	2.6
<b>SUMMARY:</b>	<p>This module works in conjunction with the AVPro MXNet CommandProcessor v2.6 module to control one decoder of an Edge MXNet system. The full suite of AVPro MXNet modules includes:</p> <ul style="list-style-type: none"><li>• AVPro MXNet CommandProcessor v2.6</li><li>• AVPro MXNet Encoder v2.6</li><li>• AVPro MXNet Decoder v2.6</li><li>• AVPro MXNet SerialPort v2.6</li><li>• AVPro MXNet IRPort v2.6</li><li>• AVPro MXNet CEC v2.6</li><li>• AVPro MXNet DestinationRouter v2.6</li><li>• AVPro MXNet MultiDestinationRouter v2.6</li><li>• AVPro MXNet VW DecoderAssign v2.6</li><li>• AVPro MXNet VW Layout v2.6</li><li>• AVPro MXNet VW LayoutRecall v2.6</li><li>• AVPro MXNet 10G VW LayoutRecall v2.6</li><li>• AVPro MXNet Matrix PresetRecall v2.6</li><li>• AVPro MXNet Matrix Macro v2.6</li></ul>
<b>GENERAL NOTES:</b>	<p>This module requires one instance of the AVPro MXNet CommandProcessor v2.6 module to register with and one instance of the AVPro MXNet Encoder module v2.6 to handle routing of a single input.</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	4-Series processor, 3-Series processor
<b>SETUP OF CRESTRON HARDWARE:</b>	N/A
<b>VENDOR FIRMWARE:</b>	<p>MXNet 1G Control Box v2.4 MXNet 1G Encoder v3.39 MXNet 1G Decoder v4.21 MXNet 10G Control Box v3.28 MXNet 10G Encoder v1.25 MXNet 10G Decoder v1.25</p>
<b>VENDOR SETUP:</b>	N/A

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## PARAMETERS:

<b>Command_Processor_ID</b>	The unique identifier of the command processor module that this module registers with.
<b>MAC_Address_or_Device_ID</b>	The MAC Address or Device ID (Custom Name) of the decoder used to associate this component with.
<b>Matrix_Destination_Index</b>	The specific index of this decoder to be used on the Destination Router module. (Minimum = 1   Maximum = 256)

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## CONTROL:

<b>Reboot</b>	D	Pulse to reboot the Decoder.
<b>Screen_On</b>	D	Pulse to turn on the Decoder display screen.
<b>Screen_Flash</b>	D	Pulse to flash the Decoder display screen.
<b>Screen_Off</b>	D	Pulse to turn off the Decoder display screen.
<b>OSD_On</b>	D	Pulse to set the on-screen display on. <i>10G does not support this.</i>
<b>OSD_Off</b>	D	Pulse to set the on-screen display off. <i>10G does not support this.</i>
<b>Volume_Level_Up</b>	D	Ramp volume up incrementally while signal is high. <i>1G does not support this.</i>
<b>Volume_Level_Down</b>	D	Ramp volume down incrementally while signal is high. <i>1G does not support this.</i>
<b>Volume_Level</b>	A	Integer value specifies the target volume level to set. Range is 0 to 100. <i>1G does not support this.</i>
<b>Volume_Level_Set</b>	D	Pulse to set the target volume specified by the <b>Volume_Level</b> analog signal. <i>1G does not support this.</i>
<b>Volume_Mute_On</b>	D	Pulse to set the volume to the lowest possible level. <i>1G does not support this.</i>
<b>Volume_Mute_Off</b>	D	Pulse to set the volume to the previous level prior to muting. <i>1G does not support this.</i>
<b>Volume_Mute_Toggle</b>	D	Pulse to alternate the volume mute state between on and off. <i>1G does not support this.</i>
<b>Resolution</b>	A	Analog value specifies the resolution to use from the defined resolution list. Possible values include: 0: passthrough, 1: 720P50, 2: 720P60, 3: 1080P24, 4: 1080P50, 5: 1080P60, 6: 4K30, 7: 4K50, 8: 4K60

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**Hot\_Plug\_Reset**

D Pulse to reset the hot plug on the device.

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## FEEDBACK:

<b>Is_Initialized</b>	D	Digital high indicates this decoder block has been initialized with the command processor module.
<b>Is_Online</b>	D	Digital high indicates the decoder is online, or not online when the signal is low.
<b>Screen_On_Fb</b>	D	Digital high indicates the decoder front panel display screen is on, or not on when the signal is low.
<b>Screen_Flash_Fb</b>	D	Digital high indicates the decoder front panel display screen is flashing, or not flashing when the signal is low.
<b>Screen_Off_Fb</b>	D	Digital high indicates the decoder front panel display screen is off, or not off when the signal is low.
<b>OSD_On_Fb</b>	D	Digital high indicates the on-screen display is on, or not on when the signal is low, if applicable.
<b>OSD_Off_Fb</b>	D	Digital high indicates the on-screen display is off, or not off when the signal is low, if applicable.
<b>Volume_Level_Fb</b>	A	Integer value indicates the current extracted audio volume, if applicable. Range is 0 to 100. <i>1G does not support this.</i>
<b>Volume_Mute_On_Fb</b>	D	Digital high indicates the volume level is at the lowest possible value, if applicable. <i>1G does not support this.</i>
<b>Resolution_Fb</b>	A	Integer value indicates the currently selected resolution value.
<b>VideoWall_Count_Fb</b>	A	Integer value indicates the number of video wall layouts this decoder is included in.
<b>Hot_Plug_Detect_Fb</b>	D	Digital high indicates the hot plug is detected, or not detected when the signal is low.
<b>Connection_Rating</b>	S	Text value indicates the current connection speed rating.
<b>Resolution_and_Timing</b>	S	Text value indicates the current resolution and FPS. Format example: 3840x2160, 30.
<b>Colorspace</b>	S	Text value indicates the current colorspace reported.
<b>Bit_Depth</b>	S	Text value indicates the current bit depth reported.
<b>HDR_Status</b>	S	Text value indicates the current HDR status ON or OFF.
<b>HDCP_Status</b>	S	Text value indicates the current HDCP status ON or OFF.
<b>Audio_Format_Fb</b>	S	Text value indicates the current audio format reported.
<b>Network_Connection_Fb</b>	S	Text value indicates the current network connection reported.
<b>Device_Id_Fb</b>	S	Text value indicating the device meta data for Device ID.

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<b>MAC_Address_Fb</b>	S	Text value indicating the device meta data for MAC Address.
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## TESTING:

	VC4 v4.0000.00007
<b>OPS USED FOR TESTING:</b>	CP4 v2.8001.00086.01
	CP3 v1.8001.0214.01
<b>SIMPL WINDOWS USED FOR TESTING:</b>	4.2500.04
<b>CRES DB USED FOR TESTING:</b>	219.0500.001.00
<b>DEVICE DATABASE:</b>	200.28000.002.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	1191
<b>SAMPLE PROGRAM:</b>	AVPro Edge MXNet v2.6 Demo.smw

## REVISION HISTORY:

- v1.0 – Initial Release
- v1.1 – Fixed SerialPort transmitted and received data.
  - Made updates to allow a Wallplate Encoder to initialize with this suite.
- v1.2 – Isolated serial communication queue to provide device control responsiveness.
  - Corrected unsolicited data parsing impacting hotplug detected and resolution.
- v2.0 – Added “Offline” functionality.
  - Polling will happen more frequently but will only poll for one component’s states at a time. This prevents serial control from getting backed up behind a global system poll.
- v2.1 – Added volume support for applicable 10G decoders.
  - Added support for 10G videowall support with “10G VW Layout”
- v2.2 - Change 1G video wall input select to new faster API command
- v2.3 – Added CEC support for Encoders.
- v2.4 – Added Matrix PresetRecall and Matrix Macro module.
- v2.5 – Added video preview urls to encoder module.
- v2.6 – Reconnect time increased from 30 seconds to 90 seconds.