

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



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	AVPro Edge MXNet Encoder v2.1
<b>CATEGORY:</b>	AVPro Edge MXNet
<b>VERSION:</b>	2.1
<b>SUMMARY:</b>	<p>This module works in conjunction with the AVPro MXNet CommandProcessor v2.1 module to control one encoder of an Edge MXNet system. The full suite of AVPro MXNet modules includes:</p> <ul style="list-style-type: none"><li>• AVPro MXNet CommandProcessor v2.1</li><li>• AVPro MXNet Encoder v2.1</li><li>• AVPro MXNet Decoder v2.1</li><li>• AVPro MXNet SerialPort v2.1</li><li>• AVPro MXNet IRPort v2.1</li><li>• AVPro MXNet CEC v2.1</li><li>• AVPro MXNet DestinationRouter v2.1</li><li>• AVPro MXNet MultiDestinationRouter v2.1</li><li>• AVPro MXNet VW DecoderAssign v2.1</li><li>• AVPro MXNet VW Layout v2.1</li><li>• AVPro MXNet VW LayoutRecall v2.1</li><li>• AVPro MXNet 10G VW LayoutRecall v2.1</li></ul>
<b>GENERAL NOTES:</b>	<p>This module requires one instance of the AVPro MXNet CommandProcessor v2.1 module to register with and one instance of the AVPro MXNet Decoder module v2.1 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>	MXNet 1G Control Box v2.34 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
<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 encoder used to associate this component with.
<b>Matrix_Source_Index</b>	The specific index of this encoder to be used on the Matrix Router module. (Minimum = 1   Maximum = 256)

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**CONTROL:**

<b>Reboot</b>	D	Pulse to reboot the encoder.
<b>Screen_On</b>	D	Pulse to turn on the encoder display screen.
<b>Screen_Flash</b>	D	Pulse to flash the encoder display screen.
<b>Screen_Off</b>	D	Pulse to turn off the encoder display screen.
<b>Volume_Level_Up</b>	D	Ramp volume up incrementally while signal is high. <i>Wallplate encoders do not support this.</i>
<b>Volume_Level_Down</b>	D	Ramp volume down incrementally while signal is high. <i>Wallplate encoders do not support this.</i>
<b>Volume_Level</b>	A	Integer value specifies the target volume level to set. Range is 0 to 100. <i>Wallplate encoders do 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>Wallplate encoders do not support this.</i>
<b>Volume_Mute_On</b>	D	Pulse to set the volume to the lowest possible level. <i>Wallplate encoders do not support this.</i>
<b>Volume_Mute_Off</b>	D	Pulse to set the volume to the previous level prior to muting. <i>Wallplate encoders do not support this.</i>
<b>Volume_Mute_Toggle</b>	D	Pulse to alternate the volume mute state between on and off. <i>Wallplate encoders do not support this.</i>
<b>Audio_Source</b>	A	Integer value specifies the audio source value to use from the defined list. 1: HDMI 2: Analog 3: Auto  <i>10G does not support this.</i>
<b>EDID</b>	A	Integer value specifies the EDID value to use from the defined EDID lists.  <u>1G Devices</u> 1: 1080P_6CH, 2: 1080P_3D_2CH, 3: 1080P_3D_6CH,

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- 4: 4K30Hz\_3D\_2CH.
- 5: 4K30Hz\_3D\_6CH,
- 6: 4K30Hz\_3D\_8CH,
- 7: 1080P\_2CH\_HDR,
- 8: 1080P\_6CH\_HDR,
- 9: 1080P\_3D\_2CH\_HDR,
- 10: 1080P\_3D\_6CH\_HDR,
- 11: 4K30Hz\_3D\_2CH\_HDR or 4K60Hz\_3D\_2CH\_HDR.
- 12: 4K30Hz\_3D\_6CH\_HDR or 4K60Hz\_3D\_6CH\_HDR,
- 13: 4K30Hz\_3D\_8CH\_HDR or 4K60Hz\_3D\_8CH\_HDR,
- 14: 1920X1200\_2D\_2CH\_HDR.
- 15: User\_EDID

10G Devices

- 0: 1080P\_2CH,
- 1: 1080P\_6CH,
- 2: 1080P\_3D\_2CH,
- 3: 1080P\_3D\_6CH,
- 4: 4K30Hz\_3D\_2CH,
- 5: 4K30Hz\_3D\_6CH,
- 6: 4K30Hz\_3D\_8CH,
- 7: 4K60Hz\_3D\_2CH,
- 8: 4K60Hz\_3D\_6CH,
- 9: 4K60Hz\_3D\_8CH,
- 10: 1080P\_2CH\_HDR,
- 11: 1080P\_6CH\_HDR,
- 12: 1080P\_3D\_2CH\_HDR,
- 13: 1080P\_3D\_6CH\_HDR,
- 14: 4K30Hz\_3D\_2CH\_HDR,
- 15: 4K30Hz\_3D\_6CH\_HDR,
- 16: 4K30Hz\_3D\_8CH\_HDR,
- 17: 4K60Hz\_3D\_2CH\_HDR,
- 18: 4K60Hz\_3D\_6CH\_HDR,
- 19: 4K60Hz\_3D\_8CH\_HDR,
- 20: 1920X1200\_3D\_2CH\_HDR

**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 encoder block has been initialized with the command processor module.
<b>Is_Online</b>	D	Digital high indicates the encoder is online, or not online when the signal is low.
<b>Screen_On_Fb</b>	D	Digital high indicates the encoder front panel display screen is on, or not on when the signal is low, if applicable.
<b>Screen_Flash_Fb</b>	D	Digital high indicates the encoder front panel display screen is flashing, or not flashing when the signal is low, if applicable.
<b>Screen_Off_Fb</b>	D	Digital high indicates the encoder front panel display screen 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.
<b>Volume_Mute_On_Fb</b>	D	Digital high indicates the volume level is at the lowest possible value, if applicable.
<b>EDID_Fb</b>	A	Integer value indicates the currently selected EDID. See EDID for list of values.
<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: 3840x2160p/30Hz
<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.
<b>MAC_Address_Fb</b>	S	Text value indicating the device meta data for MAC Address.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	VC4 v4.0000.00007 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 v2.1 Demo.smw
<b>REVISION HISTORY:</b>	<p>v1.0 – Initial Release</p> <p>v1.1 – Fixed SerialPort transmitted and received data. – Made updates to allow a Wallplate Encoder to initialize with this suite.</p> <p>v1.2 – Isolated serial communication queue to provide device control responsiveness. – Corrected unsolicited data parsing impacting hotplug detected and resolution.</p> <p>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.</p> <p>v2.1 – Added volume support for applicable 10G decoders. – Added support for 10G videowall support with “10G VW Layout”</p>