



MXnet 1G Evolution II Wall Plate Encoder (AC-MXNET-1G-EV2WP)

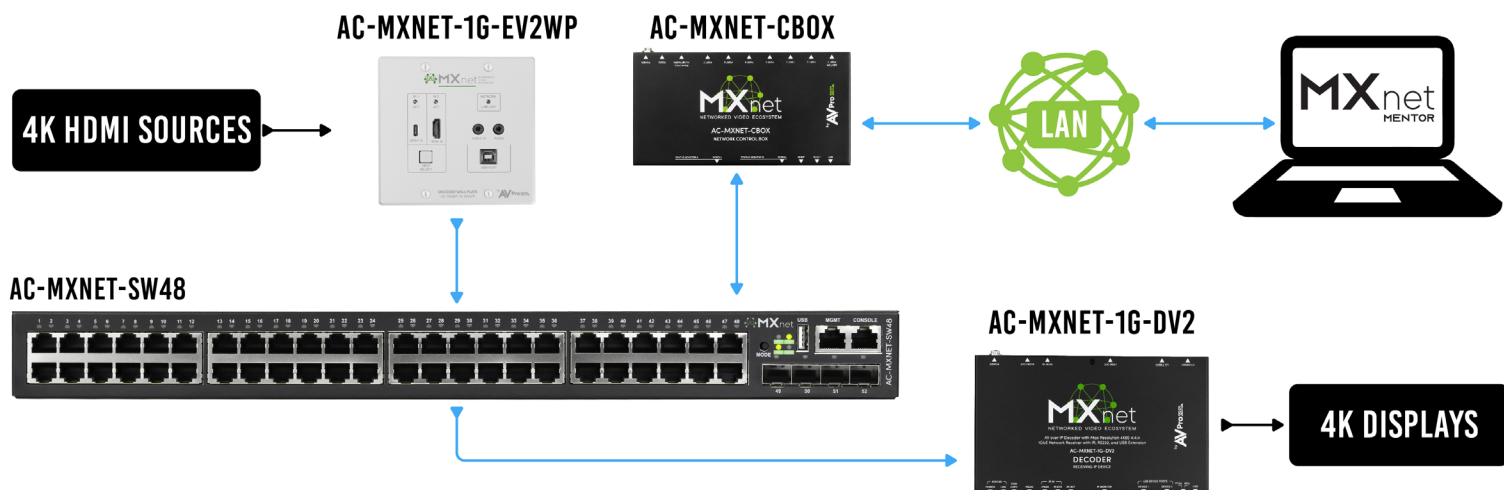
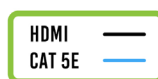
The AC-MXNET-1G-EV2WP is an MXnet Evolution II encoder with selectable switching between the HDMI and USB-C inputs, packaged in an elegant, low-profile wall plate. As a wall-plate version of the AC-MXnet-1G EV2, system encoding may now be placed where it is most convenient. A/V signals are converted into precision multicast data packets, routed to any or all system decoders via category cable (CAT-6A is strongly recommended) tethered to an MXnet PoE network switch, which also powers the unit.

AC-MXNET-1G-EV2WP multicast encodes HDMI content up to 4K/60 fps, including HDR and Dolby Vision, with 8-, 10-, and 12-bit color depth. It is capable of full chroma subsampling, from RGB to 4:4:4, while supporting all 3D immersive audio formats. Proprietary Video and Audio Codecs based on modified M-JEG algorithms manage data in a parsed, flexible manner that minimizes bitrate errors, allocates adequate signal headroom, and optimizes compression for artifact-free, visually lossless image fidelity.

Applications best suited to the AC-MXNET-1G-EV2WP might include installation into a wall adjacent to a desk, creatively flushed into the desktop, or a lectern for religious or performance hall projects. For educational environments, a substitute educator's portable laptop in a locked office and not permanently installed in a system rack may be controlled from the classroom via an AC-MXNET-1G-EV2WP. In governmental or judicial applications, a clean, clutter-free installation is made possible, as is convenient, fool-proof input selection, from the plate-embedded push button switch.



MXNET CONNECTION DIAGRAM



PRODUCT SPECIFICATIONS

Encoding	
Video Codec	Proprietary Codec based on M-JPEG
Audio Codec	Proprietary Codec
Latency	16ms@60Hz
Ultra Low Latency Mode	2-4ms@60Hz
Streaming Protocols	TCP, UDP, IP, IGMP-V2
Copy Protection	HDCP 2.2 and earlier
Video Input/Ingestion	
Signal Type	DVI 1.0 (ingested, outputs as HDMI), HDMI 2.0b, DisplayPort 1.2 via USB-C alt-mode
Video Resolution	720p@50/60Hz; 1080p@24, 50 & 60Hz; 4K@50/60Hz 4:4:4*; 4K@30Hz 4:4:4; 4K@60Hz 4:2:0; 4:2:2 4K@24Hz 4:2:0/4:2:2 [Ultrawide Support]
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0, RGB RGB
Bit Depth per Color	1080p 8-,10-,12-bit, 4K 8-,10-,12-bit
Visually Lossless	4096x2160p@60Hz (8-bit) 4:4:4 or RGB; 3840x2160p@60Hz (12-bit) 4:2:2 Dolby Vision; 3840x2160p@60Hz (10-bit) 4:2:2 HDR10/HLG; 1920x1080p@60Hz (12-bit)
Audio	
Audio Format (end to end)	PCM 2, 5.1, 7.1 Channel, Dolby Digital 5.1 Channel, Dolby Digital Plus, DTS 5.1 Channel, DTS-ES, DTS-HD High Resolution, DTS-HD Master Audio, Dolby Atmos
Embedded Audio	Stereo Analog Audio (3.5 mm jack)
Communication/Control of External Devices	
USB	HID-Compliant; USB 2.0 (bandwidth limited to 120Mbps)
HDMI	HDCP 2.2, EDID Management, CEC
Ports	
Ethernet	(1) x female RJ45, PoE
HDMI	(1) x HDMI Type A 19-pin, female, one HDMI input
Audio	(1) x 3.5 mm mini stereo jack, VGA Audio Input
RS232	(1) x 3.5 mm female jack
USB	(1) x USB 2.0 Type-B for data (1) x USB-C for MXnet service (1) x USB-C for video input and data
Distance	
Ethernet	100 Meters/330 Feet over CAT5e and above
Environmental	
Operating Temperature	23 to 125°F (-5 to 51°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Operating Humidity	5-90% RH (No Condensation)
Power	
Max Power Consumption	6.7W
PoE (Power over Ethernet)	IEEE 802.3af (15.4W)
Dimensions	
Mounting	Wall and furniture mount support
Dimensions (Unit Only Width/Depth/Height)	mm: 92.08 x 53.98 x 109.54 inch: 3.625 x 2.125 x 4.3125
Dimensions (Unit + Faceplate Width/Depth/Height)	mm: 115.89 x 57.15 x 115.89 inch: 4.5625 x 2.25 x 4.5625
Dimensions (Packaged Width/Depth/Height)	mm: 153.99 x 130.18 x 85.73 inch: 6.0625 x 5.125 x 3.375
Weight (Unit + Faceplate)	1.03 lbs / 0.47 kg
Weight (Packaged)	1.23 lbs / 0.56 kg
Product Warranty	10 Years
Specifications subject to change without notice. Mass & dimensions are approximate	

KEY BENEFITS

- **Native 4K/60 fps Support** – Supports video bandwidth as great as 4K/60 fps, 4:4:4, RGB/YCbCr, 8-,10- and 12-bit, natively or with dynamic metadata. A proprietary, advanced M-JPEG algorithm applies limited, ultra-light compression to signals exceeding the lossless threshold. When decoded, the result is an artifact-free image, including Dolby Vision and HDR10+ content.
- **High Bitrate Multi-channel Audio Support** – 3D immersive audio, including Dolby Atmos and DTS:X for IMAX Enhanced, is supported through the HDMI input.
- **Improved Preview Thumbnail** – Though remotely located from a rack hosting the CBOX and MXnet Mentor, the AC-MXNET-1G-EV2WP will generate a 1024 x 576-pixel thumbnail for HDMI video sources.
- **Single Cable Solution** – The USB-C input supports both USB 2.0 data and DisplayPort alt-mode video. This allows a user to connect a compatible USB-C equipped computer to the encoder and simultaneously share video content and connect to any USB peripherals in a system such as a touchscreen or camera through one connection.
- **Device Light Control** – Status LEDs on the AC-MXNET-1G-EV2WP may be extinguished by MXnet Mentor control, preventing unwanted distraction in close proximity installations or when visibility is not desired. When troubleshooting, the lights may be flashed like chassis-based MXnet ecosystem devices for rapid detection.
- **RS-232 Control Routing** – Control signal routes, mapped in MXnet Mentor software, direct commands to downstream EVO II decoders through the AC-MXNET-1G-EV2WP.

