



MXnet 1G Evolution II Dante® Encoder (AC-MXNET-1G-DANTE-EV2)

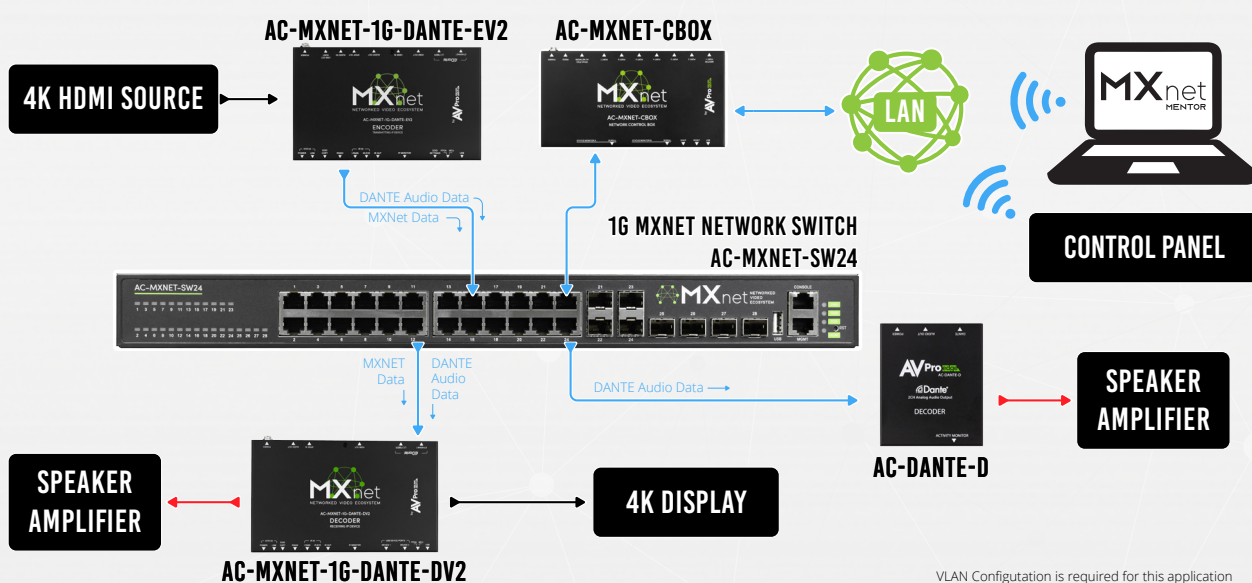
AC-MXNET-1G-DANTE-EV2 adds Dante audio encoding capability to the enhanced video quality of MXnet Evolution II, providing system designers with flexible endpoint options while simultaneously consolidating wiring paths.

Installations that systematically deploy Dante audio but segregate it to an independent network can now simplify long-haul transport cabling into single destination endpoint routes. Encoded Dante streams are ferried from the AC-MXNET-1G-DANTE-EV2 to MXnet EVO II Dante-equipped decoder endpoints, using these as break-out bridges to leapfrog encoded signals closer to Dante-enabled amplifiers and potentially aid in occasionally overcoming Audinate's 100-meter Category cable distance threshold for Dante, while also helping to minimize analog speaker runs. Dante-equipped self-powered speakers may also take advantage of merged centralized stream routes. Imaginative creativity will quickly turn into material and labor savings.

Identical to the non-Dante in baseline configuration and technical profile, the AC-MXNET-1G-DANTE-EV2 retains the cool-running, energy-efficient, chip-top fan-free design characteristics of AVPro Edge's MXNET-1G-EV2 by incorporating Dante I/O software into the operating system chipset, which eliminates the thermal increase from the active device daughter board in previous implementations of Dante across the MXnet ecosystem. The AC-MXNET-1G-DANTE-EV2 and its companion decoder, the AC-MXNET-1G-DANTE-DV2, each securely fit into the same accessory rack holder as standard MXnet EVO II encoders and decoders.



MXNET 1G V2 WITH DANTE CONNECTION DIAGRAM



PRODUCT SPECIFICATIONS

Encoding	
Video Codec	Proprietary Codec based on M-JPEG, Dante
Audio Codec	Proprietary Codec, Dante
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, HDMI 2.0b
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
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
Audio Format (HDMI Loopout)	Same As End-To-End
Embedded Audio	Stereo Analog Audio (3.5 mm jack)
De-Embedded Audio	Balanced Stereo Analog Audio (5-pin phoenix Only) (Audio downmixed to PCM 2Ch)
Ports	
Ethernet	(1) × female RJ45, PoE
SFP	(1) × SFP Slot
HDMI	(2) × HDMI Type A 19-pin, female, one HDMI input, one HDMI loop out
Audio	(1) × 5-pin Terminal Block, Balanced L/R Audio out (downmixed to 2Ch)
	(1) × Toslink Audio Out (Future Audio Return Support Only)
	(1) × 3.5 mm mini stereo jack, Audio in
IR	(3) × 3.5 mm mini-stereo jack, one IR-Pass, one IR-EYE, one IR-out
RS232	(1) × 3 Pin Terminal Block
USB	(1) × USB 2.0 Type-B for USB extension and KVM
	(1) × USB Type-C for MXNet service
Distance	
Ethernet	100 Meters/ 330 Feet over CAT5e and above
SFP and Fiber	1000BASE-SX SFP Transceiver Module
	(MMF, 850nm, 550m, LC, DOM)
	1000BASE-LX/LH SFP 1310nm 10km Transceiver Module
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)
Cooling	Fanless Cooling
Acoustic Noise Level	0dB
Power	
Max Power Consumption	9.7W
PoE (Power over Ethernet)	IEEE 802.3af (15.4W)
Power Supply Unit	Input: AC 120-240V-50/60Hz 0.8A
Dimensions	
Mounting	Rack and furniture mount support
Dimensions (Unit only Width/Depth/Height)	mm: 199.14 x 119.86 x 19.84 inch: 7.84 x 4.72 x .78
Dimensions (Packaged Width/Depth/Height)	mm: 309.88 x 180.09 x 54.10 inch: 12.2 x 7.09 x 2.13
Weight (Unit)	1.41 lbs / .64 kg
Weight (Packaged)	1.87 lbs / .85 kg
Regulatory	CE/FCC/UL
Product Warranty	10 Years

*Specifications subject to change without notice. Mass & dimensions are approximate

KEY BENEFITS

- Proprietary Motion JPEG-based CODEC**
MXnet Evolution II incorporates a proprietary video algorithm that carefully optimizes compression rates per multicast packet size. Genlock is supported, syncing a video source by frame rate to Decoders comprising a video wall for a simul-sync, tear-free appearance.
- Native 4K/60 fps Support**
MXnet Evolution II enables 4K/60 fps 4:4:4 RGB / YCbCr, 10- and 12-bit natively or with dynamic metadata. When not lossless, the advanced encoding/decoding engine applies a limited, ultra-light compression, composing an artifact-free image upon decoding, including Dolby Vision and HDR10+ content.
- High Bitrate Multi-channel Audio Support**
3D immersive audio CODECs such as Dolby Atmos and DTS:X for IMAX Enhanced are now supported.
- USB and KVM Support**
The AC-MXNET-1G-DANTE-EV2 features a USB 2.0 Type-B female Host connection, enabling MXNet Mentor software to configure easy routing for bi-directional USB signals from a designated Host Encoder to a downstream decoder with a connected USB device. USB video downstream processing has been improved and now supports resolutions up to 1920x1080p@30 Hz.
- External Device Light Control**
Light emission from an AC-MXNET-1G-DANTE-EV2 may be controlled via MXNet Mentor. Any status light, including network link LEDs and the OLED Data Window, may be optionally disabled to prevent unwanted distraction, enabling discreet placement where desired. Device lights may also be continuously “flashed” for high visibility when troubleshooting.

