EV-ENCS-4K-1
4K H.264 Media Encoder

EvertzAV is a division within Evertz Microsystems exclusively focused on offering the most complete end-to-end AV distribution and visualization solutions for the professional AV industry.

Key Features

- Supports a wide range of resolutions for input signals from standard definition to 3840x2160@30Hz, including 1920x1080@60Hz and 1920x1200@60Hz
- Equipped with H.264 and AAC codec technology, high video/audio quality using low bandwidth
- 1x Ethernet output, 1x HDMI input, 1x analog audio output, and 1x RS232 output
- Supports static IP, DHCP, and auto IP
- Supports output rate limits for bandwidth limited networks
- Easy-to-use control using web UI or Telnet API
- 12V DC or Power over Ethernet (PoE)

Integrate with EvertzAV's H.264 Decoder

EV-DECS-4K-1 H.264 Decoder

EvertzAV's EV-ENCS-4K-1 4K H.264 encoder is a live streaming media encoder that interfaces with HDMI signals to deliver media over IP networks. The EV-ENCS-4K-1 encoder can be used with EvertzAV's 4K H.264 EV-DECS-4K-1 decoder (or a third-party decoder) to provide complete end-to-end streaming systems. It features one HDMI input and one Ethernet output for simplified integration into AV systems.

Advanced Media Codec Technology

The EV-ENCS-4K-1 encoder employs standards-based H.264/MPEG-4 AVC encoding and MPEG-2 transport streams, and outputs IP streams that can easily be decoded and viewed on EvertzAV's own EV-DECS-4K-1 decoder or various third-party decoders. The EV-ENCS-4K-1 encoder also supports AAC audio encoding technology – technology that allows you to transport high quality audio signals using minimal bandwidth.

Compatible with Diversified Networks

The EV-ENCS-4K-1 encoder can send media data via multicast or unicast allowing it to operate in many different network environments. Multicast mode saves bandwidth while unicast mode is suitable for common unmanaged switches. Even in networks protected by strict firewalls, the EV-ENCS-4K-1 encoder can activate RTP over RTSP mode to send media data without the need for a new UDP port.

Optimized Controlling Methods

To achieve pairing, you simply need to configure the IP address of the EV-ENCS-4K-1 encoder. The EV-DECS-4K-1 decoder will negotiate with the EV-ENCS-4K-1 encoder and try to obtain the media stream using the most suitable approach. Additionally, the EV-ENCS-4K-1 encoder provides two methods of control: web UI and Telnet API. The web UI enables control through a common web browser while Telnet API enables the devices to be controlled by a third-party system.

EV-ENCS-4K-1 Front

EV-ENCS-4K-1 Rear

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Specifications

Input Video Port	1 x HDMI In
Input Video Type	HDMI 1.4
Supported Input	**HDMI Video:** 640x480[1], 800x600[1], 1024x768[1], 1280x768[1], 1280x800[1], 1280x1024[1], 1360x768[1], 1366x768[1], 1440x900[1], 1400x1050[1], 1600x1200[1], 1680x1050[1], 1920x1200[1], 720x480[1] (480p), 720x576[2] (576p), 1280x720[3] (720p30), 1280x720[2] (720p50), 1280x720[1] (720p60), 1920x1080[2] (1080p24), 1920x1080[3] (1080p25), 1920x1080[3] (1080p30), 1920x1080[2] (1080p50), 1920x1080[1] (1080p60), 1920x1200[1] ,3840x2160[3] **Note:** [1] = 60 Hz, [2] = 50 Hz, [3] = 30 Hz **Chroma Subsampling:** RGB, YCbCr 4:4:4, YCbCr 4:2:2 **Color Depth:** 8 bits **HDMI Audio:** RAW PCM data, 48KHz sps
Input Video Signal	0.5~1.2 V p-p
Input DDC Signal	5 V p-p (TTL)
Video Impendence	100 Ω
Video Encoding Bit Rate	2 Mbps to 30 Mbps (configurable)
Output Video Port	1 x LAN (POE), 10/100/1000Base-T
Output Video Type	H.264/MPEG-4 AVC
Output Video Resolutions	**Video:** Encoding: H.264/MPEG-4 AVC Bitrate: 2Mbps-30Mbps Resolution: 640x480[1], 800x600[1], 1024x768[1], 1280x768[1], 1280x800[1], 1280x1024[1], 1360x768[1], 1366x768[1], 1440x900[1], 1400x1050[1], 1600x1200[1], 1680x1050[1], 1920x1200[1], 720x480[1] (480p), 720x576[2] (576p), 1280x720[3] (720p30), 1280x720[2] (720p50), 1280x720[1] (720p60), 1920x1080[2] (1080p24), 1920x1080[3] (1080p25), 1920x1080[3] (1080p30), 1920x1080[2] (1080p50), 1920x1080[1] (1080p60), 1920x1200[1] , 3840x2160[3] **Note:** [1] = 60 Hz, [2] = 50 Hz, [3] = 30 Hz **Audio:** Encoding: LPCM, AAC Sampling Rate: 48KHz Bitrate: 1.6Mbps (LPCM), ≤240Kbps (AAC) **Delivery:** Encapsulation Format: MPEG-2 transport stream Transmission Format: TS over UDP, TS over RTP Transmission Method: Unicast, multicast, RTP over RTSP Session control: RTSP (SETUP, TEARDOWN, OPTIONS, PLAY, DESCRIBE)
Input Audio Port	1 x HDMI In
Sampling Rate	48 kHz
Output Connectors and Supported Output	1 x 3.5mm 3-pin phoenix connector (unbalanced stereo audio), 1 x RJ45 **Encoding**: Stereo LPCM/AAC **Sampling Rate**: 48KHz **Bitrate**: 1.6Mbps (LPCM), ≤240Kbps (AAC)
Output Audio Port	1 x LAN (PoE), 10/100/1000Base-T
Control Connectors	1 x RJ45 (10/100/1000Base-T Ethernet port), 1 x RS232 (to control peripheral equipment)
Control Method	Web UI, Telnet CLI
IP Address	DHCP/Static/Auto IP
Network Switch	Multicast, IGMP v2
Operating Temperature/Humidity	+32˚F ~ +113˚F (0˚C ~ +45˚C), 10% ~ 90%, non-condensing
Power	12 VDC 1 A or PoE
Power Consumption	7.6W (DC adapter) **Note:** Powered by PoE: 10 W (Min.) for safe operation
Product Dimensions (W x H x D)	8.7in x 5.1in x 1.0in (220mm x 130.2mm x 25mm)
Weight	1.76 lbs (0.80 kg)

Ordering Information

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