

DAEWOO AV OVER IP ENC-DIPE-5102 / DEC-DIPD-5102



4K60 4:4:4 /Dante AV-A & AES-67 Encoder

Overview

The DAEWOO DIPX-5000 Series Encoder/Decoder is an affordable yet highly durable encoder wallplate. It incorporates a premium, low-latency 4K60 4:4:4 JPEG 2000 codec, making it well-suited for encoding live video and high-detail content in environments such as classrooms, conference rooms, courtrooms, bars, and similar settings.

The DIPX-5000 models incorporate our Virtual Network USB 2.0 Hub technology, which supports the transmission of full-bandwidth USB 2.0 signals. These models allow USB device signals from up to four decoders to be merged and connected to a single USB host on an encoder. This enables a laptop in a meeting room to connect simultaneously to multiple remote USB devices, such as a camera near the display and an audio DSP located in an equipment closet.

The encoder is equipped with both an HDMI input and a USB-C input, with the USB-C port supporting video transmission as well as USB 2.0 data on a single connector. Additionally, the USB-C port can deliver power up to 60 Watts when an external power supply is connected to the encoder's DC power port.

The ENCODER DIPE-5102 supports Dante AV-A and AES67 standards, which enable interoperability among AVoIP devices on the network. With Dante AV-A compatibility, the DIPX-5000 Series integrates seamlessly with Dante Controller, Dante Domain Manager, and Dante Director. This allows all audio device signal routing, configuration, and IT-level management to be handled through these unified tools.

Features

- 4K60444, HDR, Dolby Vision.
- Dante AV-A and AES67 Capability.
- HDMI eARC, S/PDIF Audio Return
- Flexible Routing: AV, USB, IR, RS232 up to 100m/328f
- Multi-channel Audio up to PCM 7.1, Dolby Atmos, DTS:X
- Fit-in/Stretch-out Video Wall, 180 ° and 270 ° Rotation
- Copper and SFP Ethernet Ports
- HDMI2.0 and HDCP2.2/2.3
- Analog Audio Embedding and De-embedding
- Improved Switching Time
- 1 Frame Latency
- 1 HDMI Loopout

Specifications

VIDEO	
Digital Video Input/Output	HDMI 2.0, USB-C . USB-C Cable must support DP Alt Mode. (ENCODER) HDMI 2.0 (DECODER)
Formats	Dante AV-A, AES-67, HDMI 2.0, HDCP 2.2/2.3 content protection support
HDR	HDR, Dolby Vision
Progressive Input/Output Resolutions	Supports most common resolutions up to 4096 x 2160 See the user manual for a complete list. HDMI and DVI (Progressive) <ul style="list-style-type: none"> • Minimum resolution of 720x480p60 • Maximum horizontal resolution of 4096 or a vertical resolution of 2160 • Common acceptable resolutions include: 720x480p60 – 480p, 720x576@50, 800x600p60, 1024x768p60, 1280x720@60Hz - 720p60, 1600x1200@60Hz, 1920x1080@60Hz - 1080p60, 3840x2160(4:4:4)@60Hz UHD60 aka 4K60, 4096x2160(4:4:4)@60Hz - DCI 4K60
Interlaced Input/Output Resolutions	Supports 1080i60 HDMI and DVI (Interlaced) <ul style="list-style-type: none"> • 1920x1080@50Hz - 1080i50 • 1920x1080@60Hz - 1080i60 <p>Note: Interlaced resolutions will be de-interlaced if scaled on the decoder; otherwise, the interlaced signal will pass through to the display</p>
Color Space	4:4:4
Latency	1 Frame Latency
Note	Jumbo Frames Required
Video Wall Construction	Supported within the DIPX-5000 Series

Specifications

Input Signal Types	HDMI, USB-C (ENCODER) ETHERNET POE(DECODER)
Output Signal Types	Ethernet (ENCODER), HDMI (DECODER)
HDMI Audio Formats	Dante, AES-67
Analog Audio Format	7.1ch PCM, Dolby True HD, DTS HD
Dante Audio Format	Stereo 2-channel
Dante Audio Sample Rate	2-Channel 44.1 kHz, 48 kHz, 88.2 kHz, 96kHz

KEYBOARD AND MOUSE	
Keyboard & Mouse	Connect the decoder to the keyboard and mouse, and an DIPX-5000 Series Encoder will be connected to the PC being controlled.

USB	Connect the decoder to an end device, such as a USB camera, audio, or USB 2.0 device, and an DIPX-5000 Series Encoder to the PC. Supports up to 4 DIPX-5000 connected to a single DIPX5000 Series.
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Latency	<4-ms Scaling adds one frame of latency (17ms at 60fps)
Switching	Near Seamless with Last Frame Hold enabled

BANDWIDTH	
Bandwidth	Approximately 300-850 Mb/s

COMMUNICATIONS	
Ethernet	10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, and Static IP
HDMI and USB-C	HDCP, EDID management

PO PoE+	8-wire RJ45 port 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port Provides network connection, network AV video, and power to the Encoders and Decoders PoE+ power
AUDIO	3.5mm connector, which provides dedicated audio input
HDMI, USB-C	DIPE-5102
HDMI	DIPD-5102

ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C) 10% to 90%
Humidity Heat	RH (non-condensing) Up to ~44
Dissipation	BTU/hr.