

AVMATRIX®

4K60 HDMI ⇌ FULL NDI ENCODER & DECODER

Effortless 4K60 HDMI and Full NDI conversion.

Model No.:

DE21-4K PRO



HDMI / NDI Bidirectional Conversion



Full Bandwidth NDI

4K60



LCD Screen with Tally Indicator

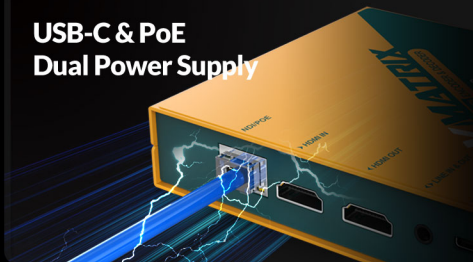


Touch-panel & Web Control



Audio Embedding
De-embedding

USB-C & PoE Dual Power Supply



Bracket Design Optional





HDMI  NDI

High Bidirectional Transfer

HDMI/ FULL NDI Bidirectional Conversion

Enables high-bandwidth two-way conversion between 4K HDMI and full NDI. It encodes 4Kp60 HDMI to full NDI or decodes 4K full NDI to HDMI. With HDMI in/out, it loops the encoded feed for monitoring or outputs the decoded video via HDMI.

*Encoding and decoding functions are mutually exclusive and cannot be used simultaneously.

A green sports car, possibly a Porsche Carrera GT, is shown from a front-facing perspective, driving on a racetrack at night. The car's headlights are on, and it is surrounded by a misty or smoky atmosphere. In the background, large, stylized text reads '4K 60Hz'. The racetrack has yellow and white markings, and the stands are visible in the distance.

4K 60Hz

Next-Level NDI Conversion

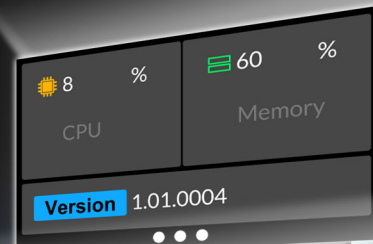
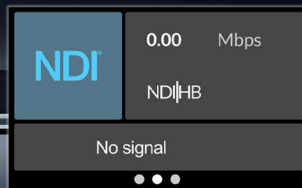
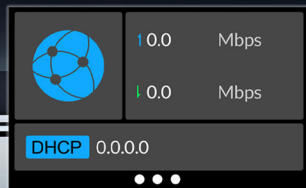
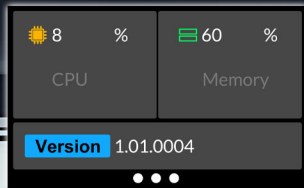
4Kp60 with pro-grade 4:2:2 video

Featuring professional-grade Full NDI encoding technology, it supports encoding and decoding of video up to 4Kp60 resolution. Full YCbCr 4:2:2 chroma-subsampled video streaming is supported, meeting the demands of high-end production.

Intuitive Status Display

LCD Screen with Tally Indicator

Features a LCD display showing real-time tally lights, network status, bitrate and key parameters. The intuitive interface with buttons enables quick adjustments even in fast-paced production environments.



Dual Power Options

PoE & USB-C Power Supply

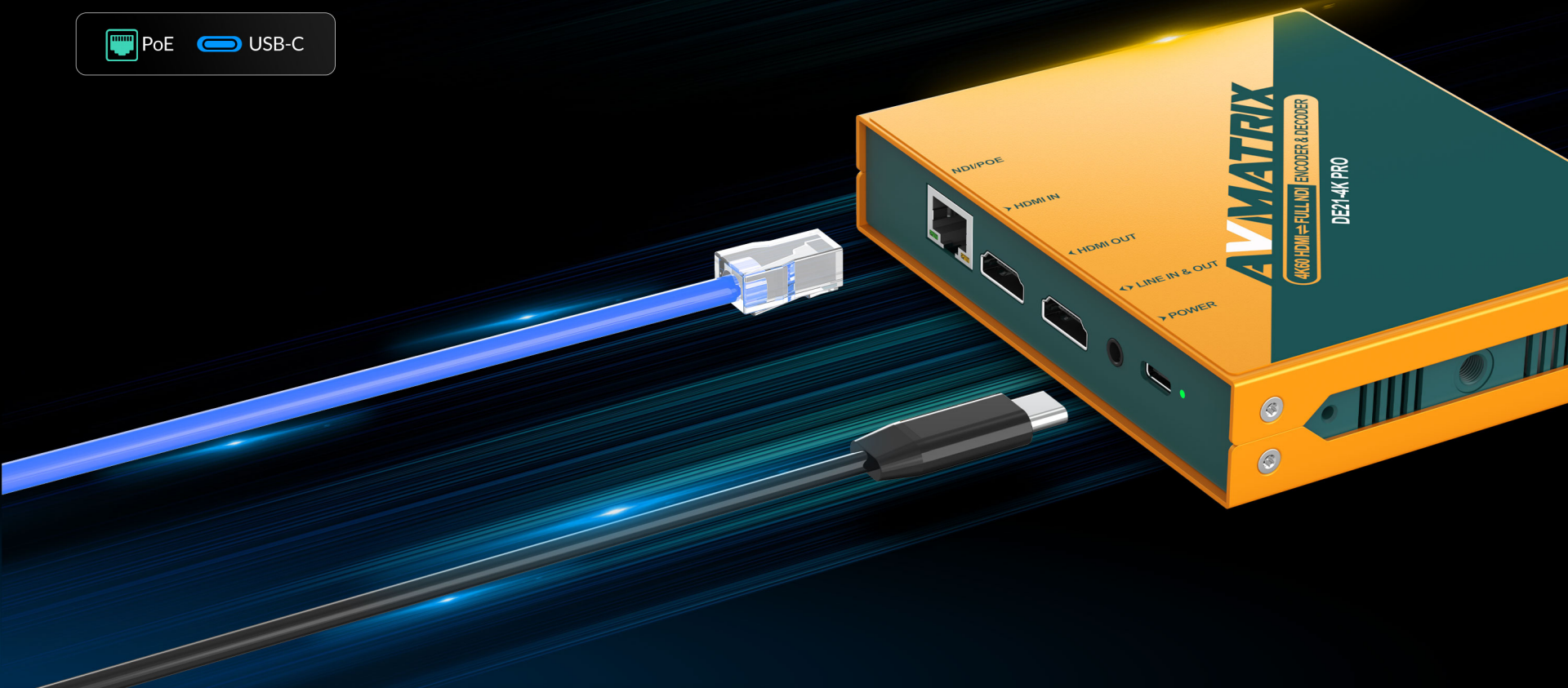
Support both Power over Ethernet (PoE) and traditional USB-C power supply. This dual capability empowers users with flexibility and convenience, allowing users to choose the most suitable power source based on their specific requirements.



PoE



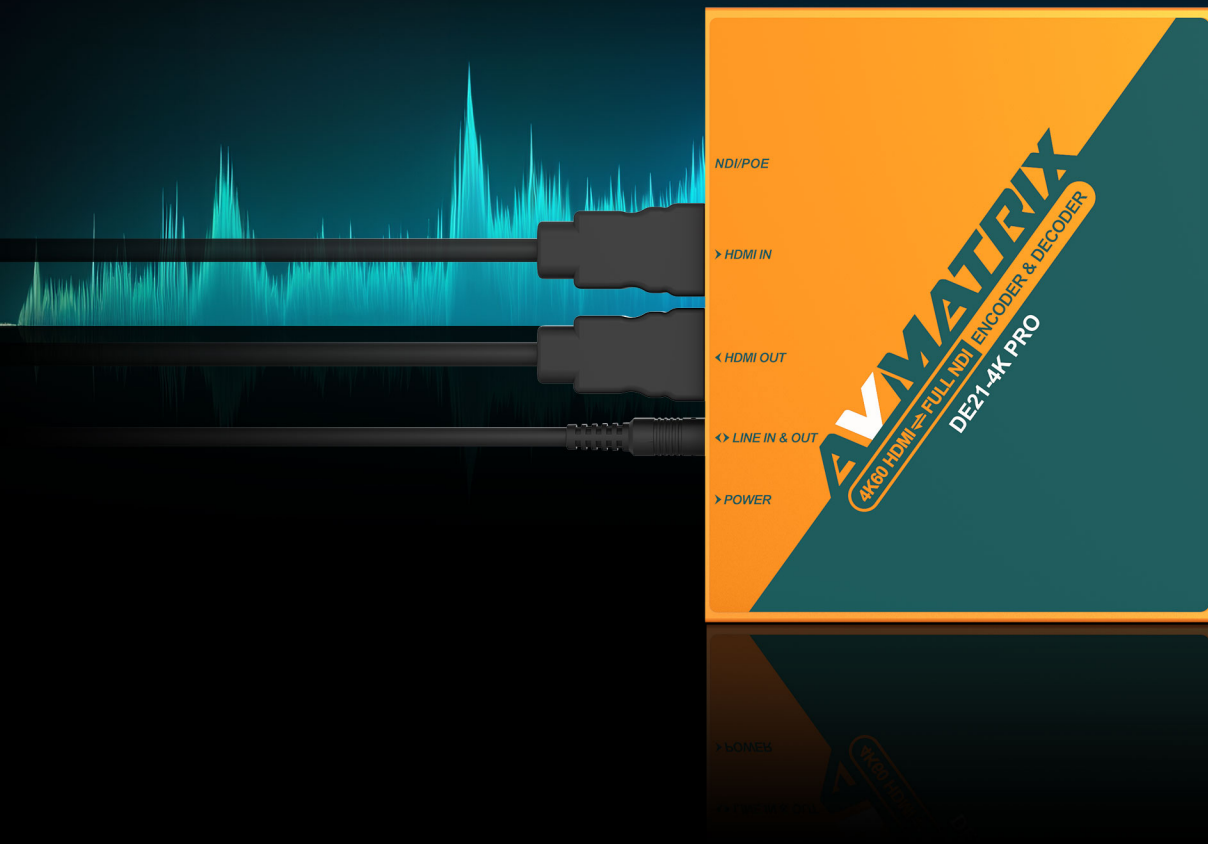
USB-C



Flexible Audio Mixing

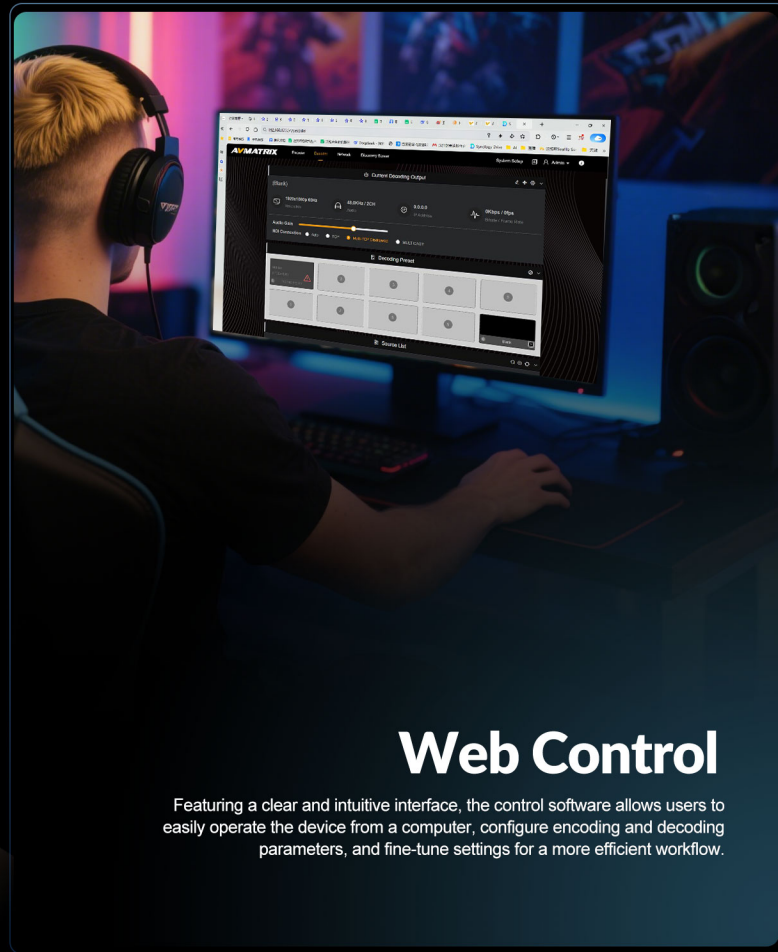
Audio Embedding & De-embedding

Supports HDMI embedded audio and 3.5mm analog line input and output. Whether it's HDMI-embedded audio or external sources like professional mixers, or media players, our flexible configuration.



Touch-panel Control

Supports intuitive touch panel control, enabling users to easily navigate the settings menu, adjust parameters, and perform operations with just a simple tap.



Web Control

Featuring a clear and intuitive interface, the control software allows users to easily operate the device from a computer, configure encoding and decoding parameters, and fine-tune settings for a more efficient workflow.



Flexible Mounting



Bracket Design Optional

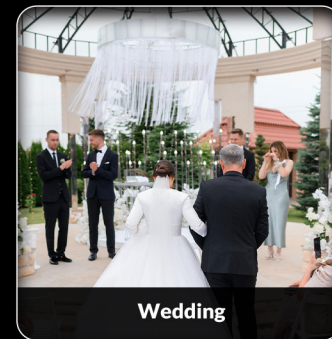
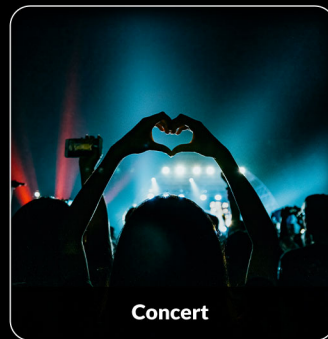
Flexible Mounting for Setup

Cold-shoe & Rack Mount Support

Supports both cold-shoe and rack mounting, accommodating diverse installation scenarios such as camera rigs, gimbals, and OB vans.

Widespread Application

The encoder can be widely used in various field events, such as live sports, virtual studio, education, internet, concert, and so on.



Specifications

CONNECT

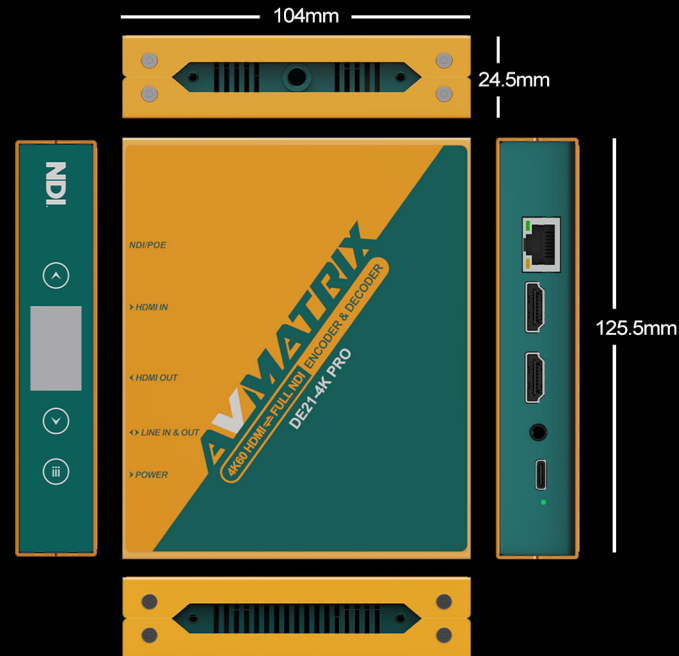
Video Interfaces	HDMI input ×1, HDMI output ×1
Audio Interfaces	3.5mm Line in & Out ×1
RJ45 Port	NDI/PoE ×1
Power Supply	DC 5-18V USB-C Power ×1

FORMATS

HDMI Input Formats	(4K) 4096x2160p 60/59.94/50/30/29.97/25/24/23.98
	(4K) 3840x2160p 60/59.94/50/30/29.97/25/24/23.98
	(2K) 2560x1080 60/59.94/50/30/29.97/25/24/23.98
	(3G) 1920x1080p 60/59.94/50
	(HD)1920*1080p 30/29.97/25/24/23.98
	(HD) 1920x1080i 60/59.94/50
HDMI Output Formats	(HD) 1280x720p 60/59.94/50/30/29.97/25/24/23.98
	(4K)4960x2160p60/59.94/50/30/29.97/25/24/23.98
	(4K)3840x2160p60/59.94/50/30/29.97/25/24/23.98
	(2K)2560x1080 60/59.94/50/30/29.97/25/24/23.98
	(3G)1920x1080p60/59.94/50
	(HD) 1920*1080p 30/29.97/25/24/23.98
NDI Codec	(HD)1920x1080i60/50
	(HD)1280x720p60/50
	1x NDI® encoding or 1x NDI® decoding
	YCbCr 4:2:2 8bit NDI High Bandwidth HD encoding
	Typical bitrate: 250Mbps@4K60, 125Mbps@1080p60

OTHER

Power	Power Wide Voltage: 5-18V; Power: 5W (12V 0.4A)
Consumption	5W ±10%
Dimension (LWD)	104×125.5×24.5mm
Weight	Net Weight: 501g, Gross Weight: 750g
Temperature	Operating: -20-60℃, Storage: -30℃~70℃
Warranty	3 years



Accessories

