AVMATRIX®

4K60 HDMI ⇆ FULL NDI ENCODER & DECODER

Effortless 4K60 HDMI and Full NDI conversion.

Model No.:

DE21-4K PRO

NDI/POE

HDMI IN

HDMI OUT

LINE IN & OUT

POWER

AVMATRIX

4K60 HDMI ⇆ FULL NDI ENCODER & DECODER

DE21-4K PRO

HDMI / NDI Bidirectional Conversion

HDMI ➜ ⬅ NDI

Full Bandwidth NDI

4K60

LCD Screen with Tally Indicator

☀ 8 % | 🔋 60 %
CPU | Memory
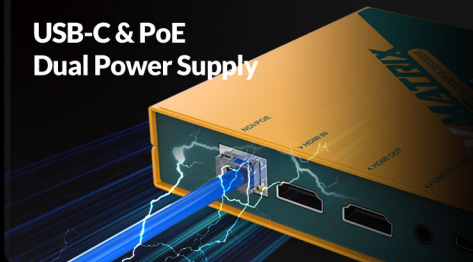Version 1.01.0004

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.

NDI/POE

▸ HDMI IN

◂ HDMI OUT

◂▸ LINE IN & OUT

▸ POWER

AVMATRIX

4K60 HDMI ⇌ FULL NDI ENCODER & DECODER

DE21-4K PRO

*Encoding and decoding functions are mutually exclusive and cannot be used simultaneously.
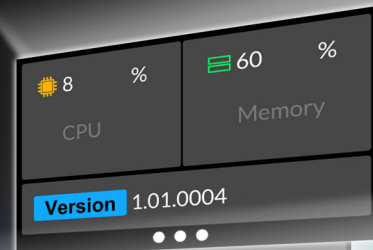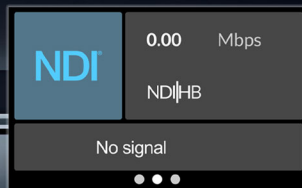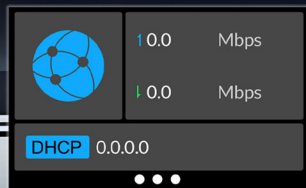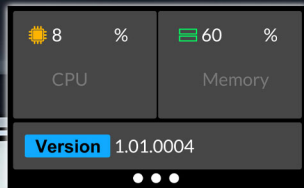
Next-Level NDI Conversion

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.

8 % | 60 %
CPU | Memory
Version 1.01.0004

↑ 0.0 Mbps
↓ 0.0 Mbps
DHCP 0.0.0.0

NDI

0.00 Mbps
NDI|HB
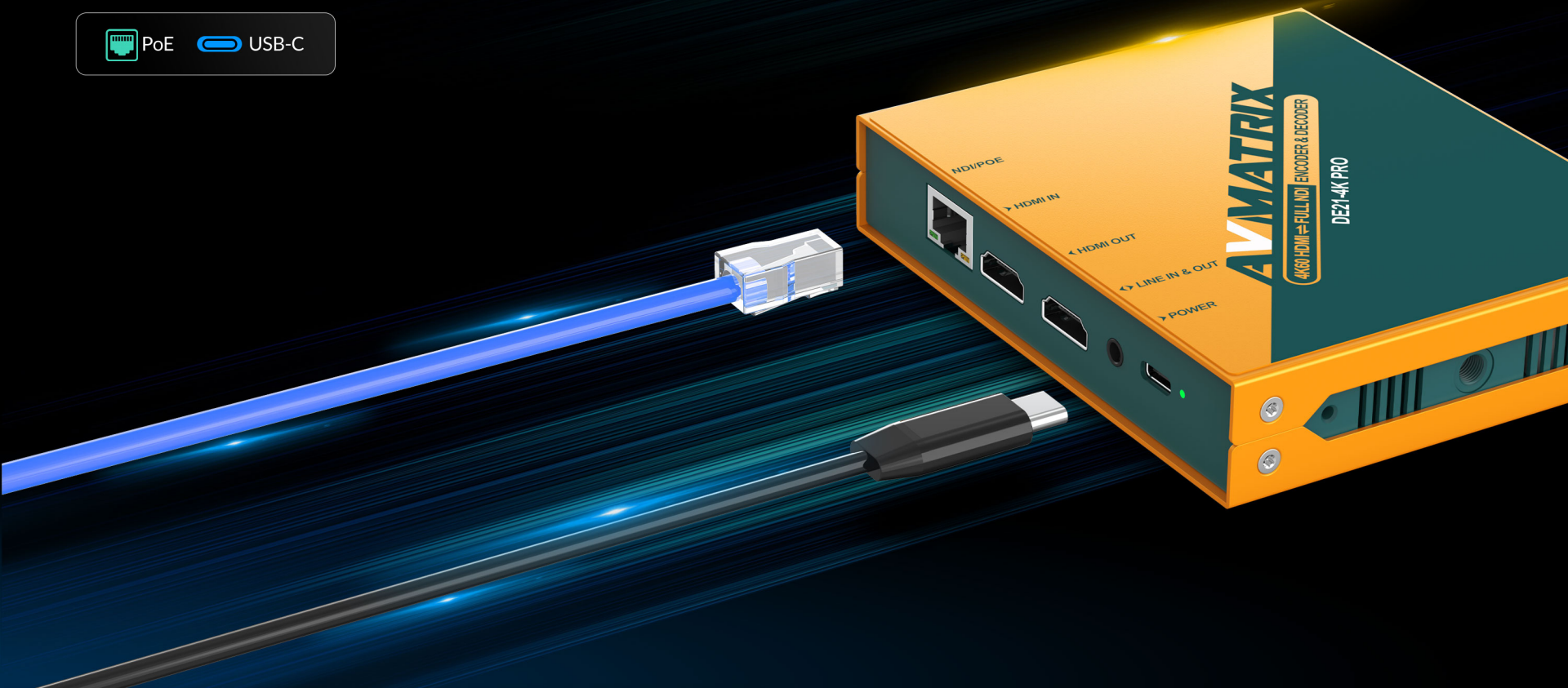No signal

Dual Power Options
PoE & USB-C Power Supply

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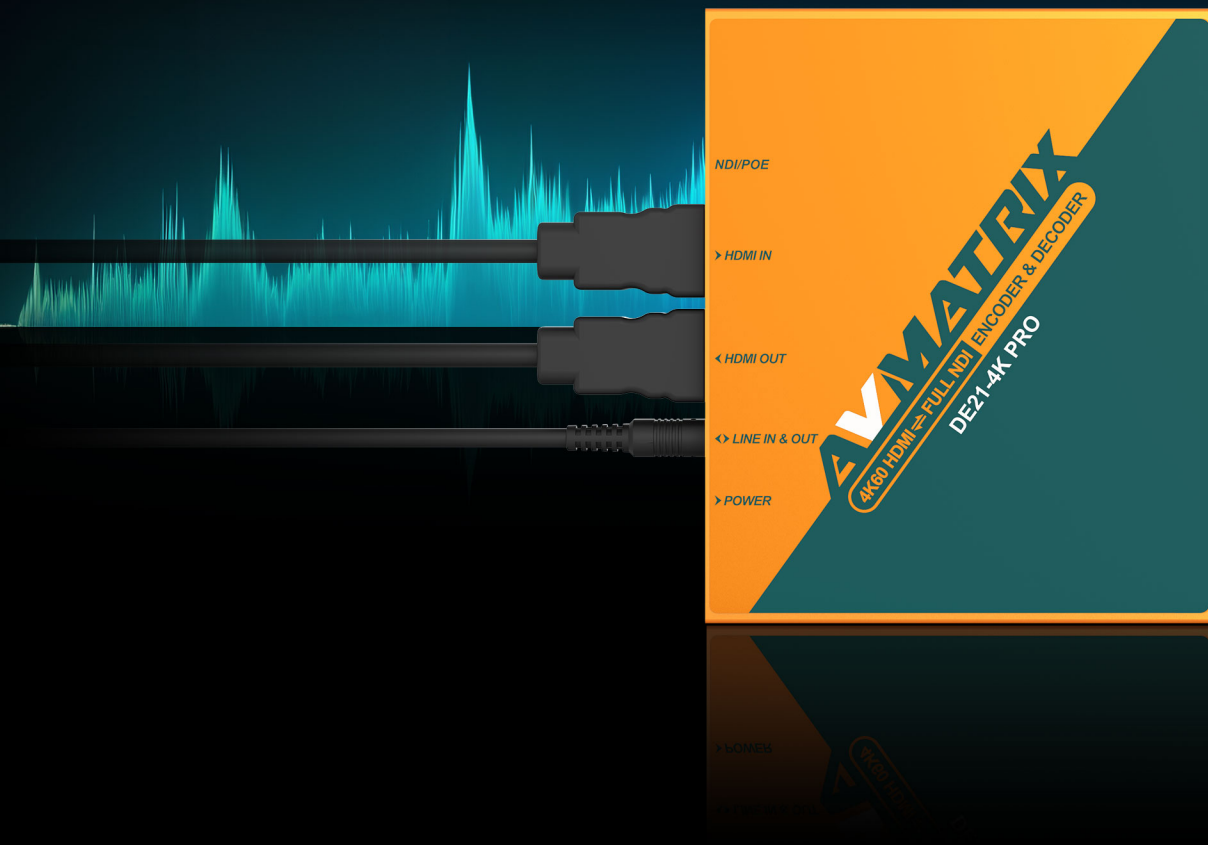
PoE   USB-C

NDI/POE

HDMI IN

HDMI OUT

LINE IN & OUT

POWER

AVMATRIX

4K60 HDMI ⇄ FULL NDI ENCODER & DECODER

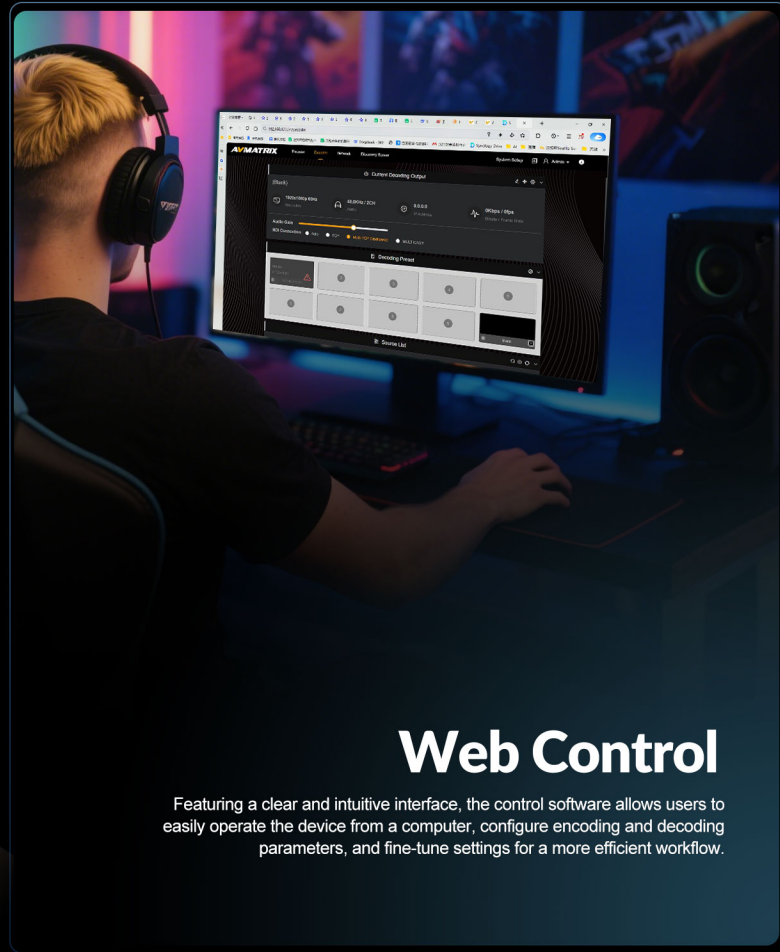DE21-4K PRO

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.

NDI/POE

HDMI IN

HDMI OUT

LINE IN & OUT

POWER

AVMATRIX

4K60 HDMI ⇌ FULL NDI ENCODER & DECODER

DE21-4K PRO

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.

NDI

CPU 8%   Memory 60%
Version 1.01.0004

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.
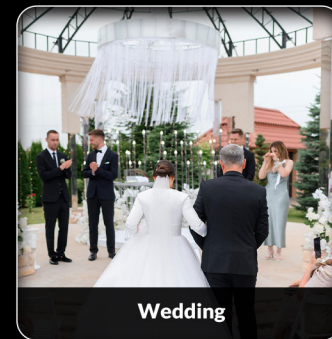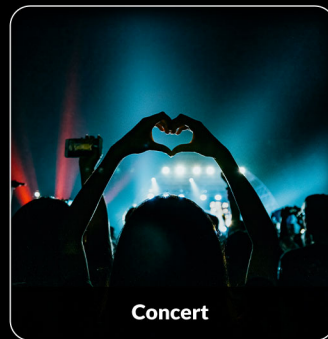
Flexible Mounting

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.
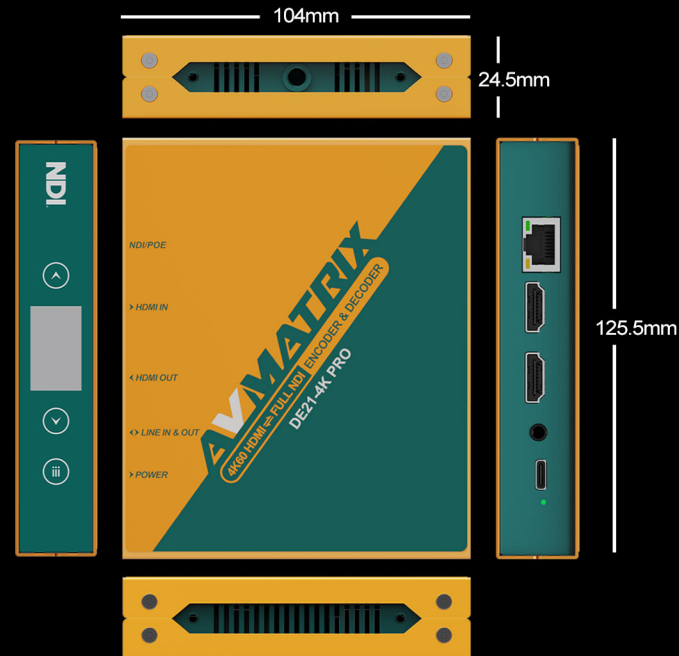

Broadcast

Education

Conference

Self Media/Vlog

Live Sports

Church

Concert

Wedding

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)1920x1080p 30/29.97/25/24/23.98 (HD) 1920x1080i 60/59.94/50 (HD) 1280x720p 60/59.94/50/30/29.97/25/24/23.98
HDMI Output Formats	(4K) 4096x2160p60/59.94/50/30/29.97/25/24/23.98 (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) 1920x1080p 30/29.97/25/24/23.98 (HD) 1920x1080i 60/59.94/50 (HD) 1280x720p 60/59.94/50
NDI Codec	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

5V 2A Power Adapter

USB2.0 A-C Cable