N40 Plus

4K HDMI and NDI® bi-directional converter

Descriptions

NDI® (Network Device Interface) is an IP-based video transmission technology developed by NewTek (Vizrt). With the help of NDI-based ecological system, N40 Plus 4K HDMI NDI® encoder/decoder will benefit greatly from the versatility of an NDI-based IP workflow. One unit, dual use.

It is a compact and small unit, either to a pocket or mounted on the camera equipped with standard 1/4" screw. N40 Plus not only converts 4Kp60 HDMI video to NDI ® (Encoding) but also converts NDI to 4Kp60 HDMI (Decoding). It can be powered via PoE, DC or D-Tap (camera), and has a 3.5 mm audio headset interface, and support audio intercom (customization). Different from N40, it features a color LCD display and touch buttons on the front panel. The display allows quick access to device status, network information, IP address, and the current encoding/decoding mode. In addition, the LCD screen provides real-time Tally status indication.

Applications

- IP-based post production
- Video output to screen
- Low latency transmission
- Video conferences

Advantages

NDI encoding + decoding, one unit, dual use

- Plug-and-play operation, HDMII to NDI®, or NDI® to the screen;
- Equipped with HDMI input and output dual interfaces, which can be looped out on the monitor during streaming, or output HDMI signal during decoding;
- Preset 10 outputs, including 9 decoding addresses and 1 blank preset box (customizable background color), and USB extended keyboard for switching.

High quality and low latency transmission

- Support up to 4Kp60 HDMI input (4:4:4/4:2:2), backward compatible with SD/HD/VESA resolution and other special resolutions;
- Ultra-low latency, end-to-end latency is less than 100ms;
- FULL NDI high-quality encoding ensures excellent image quality, and lossless audio encoding ensures high-fidelity sound quality;
- Accurate clock and intelligent algorithm ensured video frame, image and audio synchronization.

More advanced functions at your palm

- Color LCD display with touch buttons
- Tally status can be indicated in real time via the LCD display or the Tally indicator light on the rear panel
- Support for PoE (Power over Ethernet) and 5-18V DC input powered by USB, mobile power or camera battery;
- Equipped with 3.5mm headset interface, support voice intercom (customization).
- PTZ control with protocols of Visca/Visca over IP/Pelco (special PTZ control protocols can be customized);
- Integrated with IMS software to realize functions such as remote management and control, NDI stream management and distribution, centralized call management, and large-scale program production management;
- SDK/API provided for secondary development.

Compatible software

OBS Studio | XSplit GOING LIVE IS SIMPLE! | vMix | VIDBlasterX | Wirecast | mimoLive The Multi-In, Multi-Out Live Video Engine

streamstar | NewTek™ | NDI®

NewTek NDI-enabled encoding or stream software

Parameters

Model	N40 Plus
Video input	4096×2160p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 3840×2160p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 2048×1080p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 1920×1080p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 1920×1080i @ 60 / 59.94 / 50 fps 1280×720p @ 60 / 59.94 / 50 fps
Video output	4096×2160p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 3840×2160p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 2048×1080p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 1920×1080p @ 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 fps 1920×1080i @ 60 / 59.94 / 50 fps 1280×720p @ 60 / 59.94 / 50 fps
Video Encoding & Decoding	SpeedHQ (NDI Codec): SHQ0, SHQ2
Audio Encoding & Decoding	NDI Audio/AAC-LC/Opus/G.711 A-Law / μ-Law *Additional formats via software expansion
Typical Encoding Bitrates	SpeedHQ (NDI Codec): • 4Kp60: 250 Mbps • 1080p60: 132 Mbps • 1080p30: 112 Mbps • 720p60: 105 Mbps
Streaming Protocol	NDI® High Bandwidth
Color Depth	8-bit
Audio Channels	Encoding & decoding capture: 2 channels Encoding & decoding mapping: up to 16 channels (non-capture)
NDI SDK	NDI® SDK 6.0
Intercom	Group intercom supported with Kiloview Intercom System (KIS) Requires external USB headset

PTZ control	Via USB-to-RS232 / RS485 expansion Or via network control protocols (e.g. IP VISCA)
Video Input	HDMI
Video Output	HDMI
Audio Interface	1× 3.5 mm Line In / Line Out
Network Interface	1× 1000 Mbps Ethernet (10/100/1000 Mbps adaptive) Supports PoE (IEEE 802.3af)
USB Interface	1× USB 3.0 Type-C
Tally	Front panel: LCD display used as Tally indicator Rear panel: Dedicated Tally LED indicator
Mounting	Supports camera cold shoe mounting adapter
Power Supply	12–18 V DC input Or PoE power supply
Power Consumption	≤ 6 W
Operating Temperature	−20 °C to 55 °C (−4 °F to 131 °F)
Storage Temperature	−20 °C to 65 °C (−4 °F to 149 °F)
Management	Web UI / Remote management via Kiloview KiloLink Server Pro
Dimensions	100 × 95 × 23 mm
Weight	260g