



## NetworkHD 500 Series 4K60 4:4:4 JPEG2000 Encoder

NHD-500-TX

SKU: 113479

### NetworkHD 500 Series 4K60 4:4:4 JPEG2000 Encoder & Decoder NHD-500-TX

The NetworkHD 500s series is an HDMI 2.0 AV over IP solution. Capable of encoding up to 4K60 including Dolby Vision, HDR10 and HLG content. The 500 series comes loaded with a number of advanced features such as the flexibility of Ethernet or Fiber as a transport method. Ultra-low latency encoding and incredibly fast matrix switching speeds enhance the experience. A powerful routing engine allows audio, video, USB, and control signals to be discretely sent to any endpoint. Create captivating video walls up to 16<sup>ˆ</sup>—16 in size and control them with the tap of a button in the amazing NetworkHD Touch control app.

#### PERFORMANCE & VERSATILITY

Introducing the all-new NetworkHD 500 series. The 500 series take what you know and love about the 400 series and improves in almost every way! Full HDMI 2.0 encoding/decoding, faster switching speeds, higher quality preview streams and fiber connectivity are just some of the major advances that have been made.

#### HDMI 2.0 ENCODING

Capable of encoding full HDMI 2.0 content. This includes 4K60 4:4:4 8bit and high dynamic range video including Dolby Vision, HDR10 & HLG up to 12bit 4:2:2 at 60Hz over a 1GbE network.

#### ETHERNET OR FIBER

Equipped with both Ethernet and Fiber outputs, the 500 series offers flexibility for any installation. Ethernet can support transmissions up to 100m (328ft) and fiber is capable of a stunning 550m (1800ft) using OM3 MMF.

#### AUDIO RETURN CHANNEL

Audio Return Channel (ARC) via HDMI allows audio from a display to transmit over the network to a 500 series encoder for connection to a compatible AVR. ARC supports up to Dolby Digital Plus and DTS 5.1 formats. Have an older display? Take advantage of the Toslink passthrough to transmit audio in the same way.

#### VIDEO WALLS

Create captivating large format video walls with the ability to process up to 256 screens (16<sup>ˆ</sup>—16). Easily adjust for screen bezels to ensure the video is picture-perfect. The 500 series also allow you to create mosaic style walls with rotated screens!

**Specifications**  
**Technical Specifications**  
**AUDIO & VIDEO**  
**Inputs**  
TX: 1 x HDMI 2.0b 1 x 3.5mm TRS Audio  
RX: 1 x S/PDIF (Toslink)  
**Outputs**  
TX: 1 x 5-pin Balanced Audio 1 x S/PDIF Digital  
RX: 1 x HDMI 2.0b 1 x 5-Pin Balanced Audio  
**Video**  
Resolution (Max) 4096x2160p @ 60Hz 8bit 4:4:4 or RGB 3840x2160p @ 60Hz 12bit 4:2:2 Dolby Vision/HDR/HLG 1920x1080p @ 60Hz 12bit  
**Audio Formats**  
Passthrough: 2ch PCM and up to DTS:X and Dolby Atmos ARC: 2ch PCM and up to Dolby Digital+ and DTS 5.1  
**Supported Standards**  
DCI | RGB | USB  
**Maximum Pixel Clock** 600Mhz  
**Output Video**  
Encoding JPEG 2000  
Encoding Data Rate Max 850Mbps  
End-to-End Latency 1 video frame latency (pass-through mode) 16ms @ 4K60 | 2 video frames latency (scaler/VW mode)  
**COMMUNICATION & CONTROL**  
HDMI HDMI 2.0 | HDCP 2.2 | CEC | EDID | ARCLAN 1x 1GbE 8-Pin RJ45 1x 1Gb SFP: (1000Base-SX: 550m using OM3 MMF) (1000Base-LX: 5km using SMF) (1000Base-LX10: 10km using SMF) IR 1x IR TX 3.5mm TS Mono Jack | API Programmable 1x IR RX 3.5mm TRS Stereo Jack | API Programmable RS-232 1x 3-Pin Phoenix Connector | 2-Way | API Programmable  
**Communication**



ProtocolsTelnet | TLS | SSH | HTTP | HTTPSUSBTX: 1 x USB 2.0 Type HostRX: 2 x USB HID Type A 1 x USB 2.0  
Type A (up to 300Mbps upstream)POWERPower Supply12V DC 1A | 802.3af PoE Compliant