

# JPEG 2000 4K60 4:4:4 UHD Video Over IP Decoder with PoE, KVM, AES67

NMX-DEC-N2422A (FGN2422A-SA), Stand Alone



## Overview

Utilizing JPEG2000 encoding, the N2412A and N2422A encoders and decoder (N2400 Series) deliver cinema quality video with just two frames of latency. Furthermore, these products support HDMI 2.0 and HDCP 2.2, offering increased compatibility with 4K sources and displays.

The N2400 Series encoders and decoders use the same control APIs, software, and web interfaces as the existing Networked AV products, which have been optimized to market needs as a result of years of field experience.

## Common Applications

4K60 video is popular in casinos, sporting arenas, museums and other venues where high-resolution large-scale video distribution is required. The N2400 Series is also perfect for lecture halls, university campus distribution, active learning spaces, or anywhere viewers with a discerning eye will be expecting the beauty of 4K60.

## Features

- **4K60 4:4:4 Support** – The N2400 Series can be used to support today's 4K content without modifying the color space or reducing the frame rate.
- **Operates over Gigabit Ethernet** – Distribute video over cost effective Gigabit Ethernet switches using Cat5 cable already installed in a location. This also allows for greater switching scalability vs. a solution that depends on 10 GbE.
- **Low Latency** – Distribute video over an IP network with just two frames of latency which is nearly imperceptible.
- **HDMI 2.0 and HDCP 2.2 Support** – By incorporating HDMI 2.0 and HDCP 2.2, the N2400 Series products are compatible with all the latest 4K sources and displays.

- **PoE+ Powered** – The N2400 Series can operate using PoE+ power from the network switch, simplifying installation and reducing installation cost.
- **Native NetLinx** – Simplifies integration with AMX control to reduce cost of installation.

## Specifications

VIDEO	
Video Input	Network video over Ethernet via RJ45 port or SFP port
Video Output	HDMI, DVI-D (through adapter)
Formats	HDMI, DVI-D (through adapter), HDCP content protection support
Progressive Input Resolutions	HDMI and DVI (Progressive) Matched to inputs or scaled to 720x480@59.94Hz (480p59.94), 1280x720@50Hz (720p50), 1280x720@59.94Hz (720p59.94), 1280x720@60Hz (720p60), 1280x800@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@59.94Hz (1080p59.94), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 3840x2160p@30Hz (2160p30), 3840x2160p@60 Hz (2160p60)

AUDIO	
Input Signal Types	Network PCM and AES-67 audio over Ethernet via RJ45
Output Signal Types	Embedded audio on DVI-D or HDMI (through adapter)
HDMI Audio Formats	8ch PCM
Analog Audio Format	Stereo 2-channel
Digital-to-Analog Conversation	16-bit 48 kHz (matched to Encoder settings)

LATENCY	
Latency	17-ms at 60 fps.
Note	Note: To calculate an end-to-end latency value, add the given Decoder latency (shown above) to your Encoder's latency (which is provided in the Encoder's Specifications sheet)

COMMUNICATIONS	
Ethernet	<p>PO 10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP</p> <p>P1 1 Gbps SFP port which accepts compatible fiber transceivers or direct attach cables (fiber or copper cabling)</p>

PORTS	
+12V 3A	One 12 Volt DC power input
PO	<p>8-wire RJ45 female</p> <p>10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port</p> <p>POE+ Powered Device support</p>

	Provides network connection to the Encoders and Decoders
P1	SFP port (SFP fiber transceiver or direct attach cable not included) for JPEG2000 compressed networked AV video
IR	2-pin terminal Phoenix connector  Provides Infrared (IR) output only (33-60 kHz; typically 39 kHz). Emitter may be necessary (not included)
RS232	3-pin terminal Phoenix connector  Provides a serial control interface. Full duplex communication. Available terminal speed settings: 9600-115200 baud rate
AUDIO	5-pin terminal Phoenix connector  Provides user-selectable balanced/unbalanced input. Dedicated audio input
HDMI OUT	HDMI video output
USB connectors (front panel)	USB-B control input and two USB-A control inputs
IR IN (front panel)	3-pin terminal Phoenix connector  Provides Infrared (IR) input only (33-60 kHz; typically 39 kHz). Receiver required (not included)

CONTROLS AND INDICATORS – FRONT PANEL	
RESET Button	Recessed pushbutton  Press to initiate a 'warm restart' causing the processor to reset, but not lose power. A reset does NOT affect the current settings
ID Button	Recessed pushbutton  Press to send a notification out on the network to identify the unit (the notification causes a pop-up dialog in N-Able and N-Command)
POWER LED	On solid (green) when operating power is supplied (via PoE or local power supply)  This activity is also shown by the <b>PWR</b> LED on the rear panel
STATUS LED	On flashing (green) when there is software activity  This activity is also shown by the <b>STAT</b> LED on the rear panel

CONTROLS AND INDICATORS – REAR PANEL	
PWR LED	Same as <b>POWER</b> LED described above
HDMI LED	On (green) when there is a connection to a valid video source
STAT LED	Same as <b>STATUS</b> LED described above
STRM LED	On (green) when the unit is streaming video

POWER SUPPLY	

Power Supply, External, Not Included	3.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; <b>not included in shipment.</b> NMX-ACC-N9313 (FGN9313)
Power over Ethernet (PoE+), External	Can be powered via a PoE+-capable switch or other equipment with a PoE+ source  Conforms to IEEE 802.3at Type 2

GENERAL	
Dimensions (HWD)	1.05" x 7.888" x 5" (2.67 cm x 20.04 cm x 12/7 cm)
Weight	1.54 lbs (0.68 kg)
Mounting Options	Stand alone, surface mount, wall mount, or rack mount  Surface and wall mounting requires (not included): •NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N-Series Encoders and Decoders  Rack mounting requires one of the following (not included): •NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side for SVSI N-Series Encoders and Decoders
Regulatory Compliance	FCC, CE, and NTRL
Recommended Accessories	•NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N-Series Encoders and Decoders •NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side SVSI N-Series Encoders and Decoders

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