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JPEG 2000 Digital Cinema Grade Video over IP Decoder, PoE, HDMI

NMX-DEC-N2222 (FGN2222-SA), Stand Alone
NMX-DEC-N2222-C (FGN2222-CD), Card

Overview

The AMX SVSI N2000 Series utilizes JPEG2000 compression for HD, cinema-grade video distribution on the LAN for applications when video quality is top priority. The NMX-DEC-N2222 Decoder is used to decode streams back to DVI or HDMI format for display on any monitor. Pair with the NMX-ENC-N2122 to encode and distribute sources of almost any format onto an existing IP network making that stream available to any endpoint in the facility. With the ability to direct any source stream to any display, large, low-cost switching and distribution systems are simple to deploy without proprietary cabling or dedicated switching hardware.

The NMX-DEC-N2222 includes Local Play, allowing users to upload and save 8 playlists that can contain up to 64 jpeg or PNG files. When a video stream is lost, the stored images will play, preventing blank displays.

Includes IR, serial, balanced audio, and two network ports (one POE). Digital video output only.

Common Applications

- The NMX-DEC-N2222 is the perfect solution for matrix switching and distribution of HD, cinema-grade quality video over LAN. Common applications include enterprise, house of worship, entertainment, and stadiums.

Features

- **Input and Output Scaling** – Video scaling at either input or output allows seamless switching from any source, at any resolution, to any display or projector, while preserving video fidelity.
- **Plug-n-Play** –Auto-detect technology reduces installation and programming time.
- **Power Over Ethernet (PoE)** – PoE eliminates the need for power supply.
- **Infrared (IR)** – Infrared emitter connection allows control of low-cost, IR-only display devices.
- **Onboard Control** – All N-Series encoders and decoders have on-board, built-in control capability via events that can trigger any number of TCP/UDP commands to other IP controllable devices.
- **Unlimited Scalability**
- **Two RJ45 Ports** – Decoder features two RJ45 network ports (one PoE).
- **Stand Alone or Card** – Available as a stand alone device, or card for use with NMX-ACC-N9206.

Specifications

VIDEO	
Digital Video Input	Network video over Ethernet via RJ45 port or fiber via 1G SFP port
Video Output	HDMI, DVI-D (through adapter)
Formats	HDMI, DVI-D (through adapter), HDCP content protection support
Output Resolutions	Supports most common HD resolutions up to 1920x1200. See website for all supported resolutions.

AUDIO	
Input Signal Types	Network video 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 Conversion	16-bit 32 kHz, 44.1 kHz and 48 kHz (matched to Encoder settings)

LATENCY	
Latency	50 ms for 720p60 140ms for 1080p60
Note	- This is the combined encode plus decode latency. Total latency from source to screen will also include any network latency. - Scaling adds one frame of latency (17ms at 60fps)

COMMUNICATIONS	
Ethernet	P0 10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP P1 10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP

PORTS	
+12V 2A	One 12 Volt DC power input

P0	8-wire RJ45 female 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port Provides network connection to the Encoders and Decoders
P1	8-wire RJ45 female 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port
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: 1200-115200 baud rate
AUDIO	5-pin terminal Phoenix connector Provides user-selectable balanced/unbalanced output Dedicated audio output
HDMI OUT	HDMI video output

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 **PWR** LED on the rear panel.
STATUS LED	On flashing (green) when there is software activity. This activity is also shown by the STAT LED on the rear panel

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

POWER SUPPLY	

Power Supply, External, Not Included	2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; **not included in shipment.** NMX-ACC-N9312 (FGN9312)

ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	Up to ~44 BTU/Hr

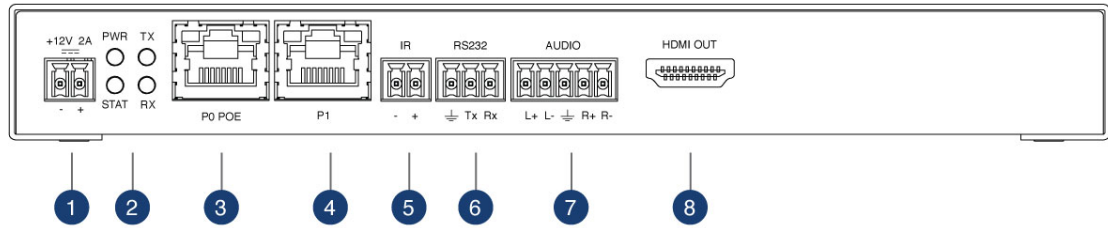| GENERAL	
Dimensions (HWD)	1.05" x 7.888" x 5" (2.67 cm x 20.04 cm x 12.7 cm)
Weight	1.47 lbs (0.67 kg)
Mounting Options	Stand alone, surface mount, wall mount, or rack mount Surface and wall mounting requires (not included): •NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N-Series Encoders and Decoders 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 •NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six SVSI N-Series Card Units
Regulatory Compliance	FCC, CE, and NTRL
Recommended Accessories	•NMX-ACC-N9382 (FGN9382), 1RU Power Supply 16-Channel 12V for up to 16 SVSI N-Series Encoders and Decoders •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 •NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six SVSI N-Series Card Units

N2222 Decoder Front View

1) Device reset button
2) Device ID discovery button
3) Power/Status indicators

NMX-DEC-N2222 Rear View

1) 12VDC Input
2) Status Indicators
3) RJ-45 auto-sensing gigabit Ethernet switch port – POE (Power Over Ethernet)
4) RJ-45 auto-sensing gigabit Ethernet switch port

5) Infrared (IR) emitter connection
6) RS232 connection
7) Analog Audio Input connection
8) HDMI Video Output

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