

# N2400 Series Windowing Processor, 4x1 + Stacking

NMX-WP-N2410(FGN2410)



## Overview

The AMX NMX-WP-N2410 4K60 4:4:4 Windowing Processor functions with the N2400 Series of Video over IP Encoders and Decoders. The NMX-WP-N2410 is capable of handling multiple real-time 4K60 networked AV streams with no video input or output connectors – using only a single network port. This is a fundamental shift in the way professional AV technologies have traditionally addressed windowing, but one that increases capability and flexibility while reducing installation and support costs. With the NMX-WP-N2410, users can combine up to four HD sources together into a single 4K image, as well as mix 4K and HD sources in any configuration.

The N2400 Series Windowing Processor is a 1RU rack-mount 4x1 windowing appliance that connects to an N2400 Series Video over IP network and accepts up to four video streams from AMX N2400 Series encoders. Each input can be cropped, scaled, and positioned according to stored presets (such as quad, window-in-window, 3+1, etc.) or in any user-defined configuration. The combined output video stream is then streamed to one or more N2400 Series Decoders at resolutions up to 4K60 4:4:4. Multiple 4×1 windowing processors can be stacked to give 7×1, 10×1, 13×1, 16×1, or higher capability.

#### **Common Applications**

Common applications include operations centers, sports bars, and conference rooms (show content side-by-side on a display).

# Features

- Up to 4 Video Streams Accepts up to four independent video streams in addition to userdefined static backgrounds.
- 4x1 Windowing + Stacking 4×1 windowing with stacking capability.
- 4K60 4:4:4 Output Output to the latest displays with no loss of quality.
- **Built-In Web Interface** Easy-to-use, built-in web browser interface provides pallets to manipulate each 'window' stream: Crop, scale and position in seconds.
- Audio Matrix Switch Built-in audio matrix switch allows selection of any audio stream for Windowing Processor output.

- Locate Anywhere on the Video Network Networked AV inputs and outputs mean the N2410 does not have to be located near the sources or the displays, which often have space limitations.
- **Retrofit Capable** Easily retrofits to an existing N2400 Series video network.

## Specifications

VIDEO	
Signal Types	<ul> <li>Input: Up to four N2400 network video sources over Ethernet</li> <li>Output: N2400 network video over Ethernet</li> </ul>
Input Resolutions	Input Stream <ul> <li>Pixel clock between 27 MHz - 600 MHz</li> <li>Minimum resolution of 640x480p</li> <li>Maximum horizontal resolution of 4096 or a vertical resolution of 2160</li> </ul>
Note	Input resolutions supported @60Hz refresh rates are also supported @59.94Hz
Output Resolutions	Supports most common UHD up to 4096x2160. See website for all supported resolutions
Color Space	4:4:4

AUDIO	
Signal Types	<ul> <li>Input: Embedded in the stream from the N2400 encoder</li> <li>Video Output: Selectable from one of the input streams</li> </ul>
Formats	8ch PCM

LATENCY	
2160p	50 ms at 60 fps
Note	This is the latency from the input to the output of the
	windowing processor

WINDOWING	
Maximum Number of Windowed Videos	4
Built-in Presets	Quad, P-in-P, 3-Stack, Full-1
Maximum of Custom Presets	1000

PORTS	
Power	One 120 Volt AC power input
P0-P2 Output	8-wire RJ45 female.10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch ports.
U0-U3 Input	8-wire RJ45 female. 1000 Mbps 1000Base-T gigabit Ethernet switch ports.

CONTROLS AND INDICATORS – FRONT PANEL	
Reset button	Recessed pushbutton.
	Press to initiate a 'warm restart' causing the processor to reset, but not lose power.
ID Button	Recessed pushbutton.
	Press to send a notification out on the network toidentify the unit (the notification causes a pop-up dialog in N-Able and N-Command).

On solid (green) when operating power is supplied (via
local power supply).
On flashing (green) when there is software activity.
<ul> <li>LEDs 0-3 on top row: Flashing (green) represents networked video activity on corresponding window.</li> <li>LEDs 0-3 on bottom row: Flashing (green) represents processing of video on corresponding window.</li> <li>LED 4 on top row: Flashing (green) represents video transmit status.</li> <li>LED 4 on bottom row: Flashing (green) represents output video processor status.</li> <li>LED 5 on top row: Flashing green represents CPU status/activity.</li> <li>LED 5 on bottom row: Solid green represents device started.</li> </ul>
1.0 Amp @ 120 Volts AC; 100-240 Volts AC power supply;
supply;
supply; 32° to 104°F (0° to 40°C)
supply; 32° to 104°F (0° to 40°C) 10% to 90% RH (non-condensing)
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supply; 32° to 104°F (0° to 40°C) 10% to 90% RH (non-condensing) Up to 400 BTU/Hr
supply; 32° to 104°F (0° to 40°C) 10% to 90% RH (non-condensing) Up to 400 BTU/Hr Mounting ears included in shipment.

About AMX by HARMAN

Founded in 1982 and acquired by HARMAN in 2014, AMX<sup>®</sup> is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 6.3.16. ©2015 Harman. All rights reserved. Specifications subject to change.

www.amx.com | +1.469.624.7400 |800.222.0193