N1000 Windowing Processor, 4x1 + Stacking

NMX-WP-N1512 (FGN1512)

Overview

The NMX-WP-N1512 Windowing Processor functions with the N1000-Series family of Video over IP Encoders and Decoders and is capable of handling multiple real-time HD streams with no video input or output connectors – all video connections are done via Ethernet. This is a fundamental shift in the way ProAV technologies have traditionally addressed windowing, but one that increases capability and flexibility while reducing installation and support costs.

The N-Series Windowing Processor is a 1RU rack-mount appliance that connects to an SVSI video over an IP network and accepts up to four video streams as input. 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 routed to one or more displays at HD 1080p or CG 1900×1200 resolution. It functions as a 4×1 windowing processor and 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
- **Retrofit Capable –** Easily retrofits to an existing SVSI N1000 video network. Can reside anywhere there is network connectivity to the N1000 sources and destinations.
- **4x1 Windowing + Stacking –** Accepts up to four independent N1000 video streams in addition to user-defined static backgrounds. Units can be stacked to provide 7×1, 10×1, 13×1, 16×1, or higher windowing.
- **Layout Presets –** Multiple window layouts can be stored a presets and quickly recalled using a control system. The videos animate between the different layout configurations.

- **Audio Matrix –** Built-in audio matrix switch allows selection of any audio stream for Windowing Processor output.

Specifications

VIDEO	
Signal Types	•Input: Up to four N1000 MPC-compatible network video sources over Ethernet •Output: N1000 MPC-compatible network video over Ethernet
Input Resolutions	Input Stream • Pixel clock between 27 MHz - 165 MHz • Minimum resolution of 640x480p • Maximum horizontal resolution of 1920 or a vertical resolution of 1200
Note	Input resolutions supported @60Hz refresh rates are also supported @59.94Hz
Output Resolutions	Supports most common HD up to 1920x1200. See website for all supported resolutions
Color Space	4:2:2

AUDIO	
Signal Types	•Input: Embedded in the stream from the N1000 encoder •Video Output: Selectable from one of the input streams
Formats	8ch PCM

LATENCY	
1080p	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.

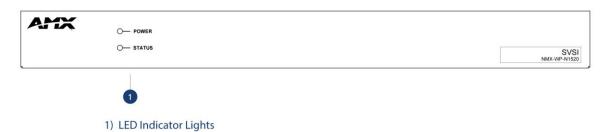| CONTROLS AND INDICATORS – FRONT PANEL	
RESET button	Recessed pushbutton. Press to initiate a 'warm restart' causing the processor to reset, but not lose power. A reset does NOT affect the current settings unless you press and hold one minute (which will restore the unit to factory default settings).
POWER LED	On solid (green) when operating power is supplied (via

	local power supply).
STATUS LED	On flashing (green) when there is software activity.
Diagnostic LEDs	LEDs 0-3 on top row: Flashing (green) represents activity on corresponding window. LEDs 0-3 on bottom row: Solid (green) represents presence of video input stream on corresponding window. LEDs 4 on top and bottom rows: Used for advanced diagnostics. LED 5 on top row: Flashing green represents output video status/activity. LED 5 on bottom row: Flashing green represents software status/activity.

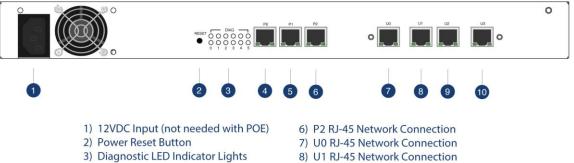| POWER SUPPLY	
Power Supply, Internal	1.0 Amp @ 120 Volts AC; 100-240 Volts AC power supply;

ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	Up to 160 BTU/Hr

GENERAL	
Rack Mounting	Mounting ears included in shipment.
Dimensions (HWD)	1.75" x 17.25" x 12" (4.5 cm x 43.8 cm x 30.5 cm)
Weight	7.15 lbs (3.24 kg)
Regulatory Compliance	FCC, CE, and NTRL

NMX-WP-N1512 Front View

1) LED Indicator Lights

NMX-WP-N1512 Rear View

1) 12VDC Input (not needed with POE)
2) Power Reset Button
3) Diagnostic LED Indicator Lights
4) P0 RJ-45 Network Connection
5) P1 RJ-45 Network Connection
6) P2 RJ-45 Network Connection
7) U0 RJ-45 Network Connection
8) U1 RJ-45 Network Connection
9) U2 RJ-45 Network Connection
10) U3 RJ-45 Network Connection