



NPX-4900 SERIES

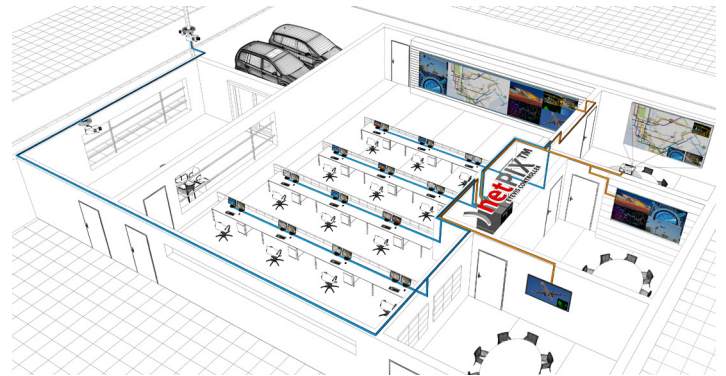
HIGH-END GRAPHICS CONTROLLER
FOR VISUAL DISPLAY SYSTEM



PRODUCT DESCRIPTION

NPX-4900 VIDEO WALL CONTROLLER SERIES

netPIX 4900 is a network based graphic controller for the management of video wall systems, single displays or projectors. Through its MultiScreenability any display surfaces can be realized. The controller creates a big joined desktop for network-applications, video and graphic sources. At the heart of the NPX-4900 works the powerful SBC in combination with latest generation backplanes with Switch Fabric. The new controllers from the NPX-4900 series offer an ultra high performance bus, cost-effective INTEL CPUs, 64Bit technology and high bandwidth through a Switch Fabric bus with 192GB/s. These new technologies guarantee the revolutionary and powerful performance of the next generation of the netPIX family in any control room application.

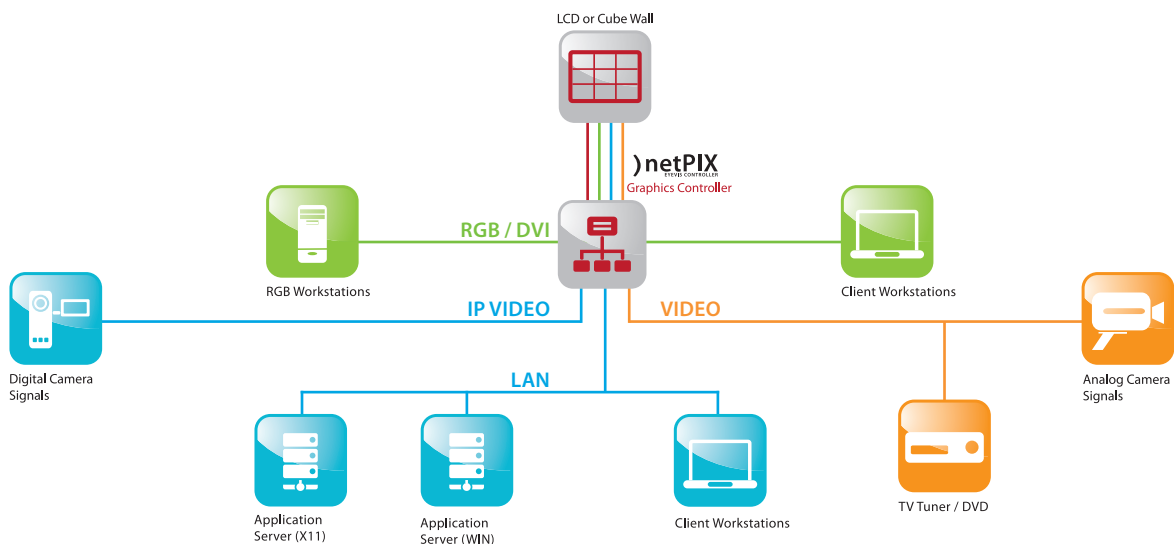


The NPX-4900 controllers provide multiple analog and digital video and graphic connectivity with input cards. Through the new Switch Fabric architecture, video and graphic sources can be displayed simultaneously on the display wall in full frame rates. All analog and digital Video-/RGB-/DVI- and IP Streaming data is transmitted with up to 192 GB/s without any dependencies on the system.

THE ADVANTAGES OF NPX-4900 CONTROLLERS

- NPX-4900S as cost-efficient video wall controller solution
- NPX-4900-PLUS for video wall systems with larger numbers of output signals
- Simple system architecture
- Expandable for future system upgrades
- Higher performance

SYSTEM OVERVIEW





NPX-4900 SERIES
HIGH-END GRAPHICS CONTROLLER FOR VISUAL DISPLAY SYSTEMS

) SYSTEM ARCHITECTURE

The NPX-4900 controllers rely on new SBC (Single Board Computer) technology. This technology is based on Intel® technology and support up to one i5 processor or up to two XEON® processors. This guarantees a high-quality presentation of applications.

- Up to one i5 processor or up to two XEON® processors
- High-end components for highest availability
- 8GB DDR3 ECC RAM (expandable up to 32GB, depending on product version)
- DUAL Gigabit Ethernet



) SYSTEM AVAILABILITY

- Redundant power supply units, hot swappable
- Redundant SATA Solid State Disk with RAID1 or RAID5
- Paragon Backup & Recovery with Factory Reset on USB-Stick gives the possibility to restore the controller in minutes to the factory reset or to a self-generated image.
- The controllers from the netPIX 4900 series are built in compliance with eyevis ISO 9001 certificated production processes to meet the specific requirements of each customer.
- The netPIX 4900 series is the best controller for standard control rooms with high availability.



) DESKTOP MANAGEMENT & OPERATING SYSTEM

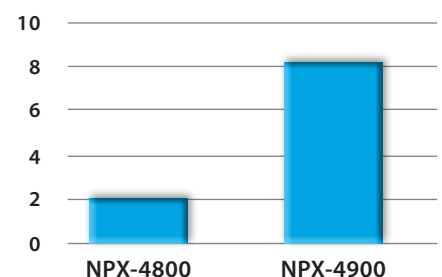
- Because of its MultiScreen-ability, any data and application can be displayed simultaneously; they can also be positioned and resized freely on the entire video wall. The operator has a big desktop with a very high resolution at his disposal, which will be multiplied by the size of the wall.
- Windows 7 Ultimate 64bit and Windows Server 2008/R2 are supported
- Up to 32GB RAM inside the systems for memory intensive applications
- Huge Windows desktop with up to 32000x32000 pixel depending on the size of the system
- Standard Windows & X11 applications (optional) and SCADA software can be displayed on the wall with no restrictions.
- Windows-based applications can be displayed simultaneously with any other input signals like video, IP-video and RGB/DVI.



) BUS SYSTEM

The core of the system is the ultra-fast PCIe Switch Fabric with PCIe Generation 3.0 slots and a total bandwidth of 192GB/s for transmitting Windows information, network data, video, digital streams and graphic signals to each output card. This guarantees a very high bandwidth without decreasing frame rates when numerous inputs are displayed simultaneously.

SPEED





NPX-4900 SERIES

HIGH-END GRAPHICS CONTROLLER FOR VISUAL DISPLAY SYSTEMS

INPUT SIGNAL PROCESSING



The NPX-4900 controllers can be equipped with various input cards for video, RGB/DVI-HDS/ID and IP signals. All input signal windows can be moved, scaled and placed freely on the display wall.

- The input cards provide state-of-the-art video processing resulting in superb quality
- Huge number of cards per system possible
- Easy to upgrade for future system expansion

Analog Video Input Board

- Up to 128 video signals in one system
- Up to 32 video windows can be displayed with every display output
- Composite BNC or S-Video (Y/C)

IP Decoder Board

- Up to 512 video signals in one system
- Simultaneous decoding of up to 32 channels in native D1 resolution per IP-decoder board
- Simultaneous decoding of up to 8 channels in native Full HD resolution per IP-decoder board
- Simultaneous decoding of up to 2 channels in native UHD/4K resolution per IP-decoder board*
- Supports MPEG2, MPEG4, H.264, MJPEG

RGB / DVI Input Board

- Display of the source output in freely moveable, scalable and placeable windows on the display wall
- Up to 40 RGB/DVI input sources
- Input Signals:
 - **NEW:** Up to 4096x2048 with the new DVI input card**
 - DVI Single Link up to 1920x1200
 - DVI Dual Link up to 4096x4096
 - Analog up to 2048x1536

SDI Inputs

- Display of the source output in freely moveable, scalable and placeable windows on the display wall
- Up to 20 SDI inputs
- Video Modes: SD-SDI (480i/576i), HD-SDI (up to 1080i), 3G-SDI (up to 1080p) & 2k digital cinema modes

*) only with NPX-4900-IPD32HQ ***) only with NPX-4900-PLUS

OUTPUT GRAPHICS PROCESSING



The new GPU with 128MB GDDR5 per output channel achieves a never seen graphic performance.

- Digital outputs up to 2560x1600 pixels and HD format
- Configurations up to 64 output channels (max. number of outputs depends on product version)
- Multiple resolution modes for different output resolutions at the same time, for rectangle or none-rectangle display configurations*
- Live preview support for each source connected with the eyeCON® wall management software
- Under-lapping mode for narrow bezel displays*
- Over-lapping mode for edge overlapping projections*
- Pivot mode for landscape and portrait display*

*) non-standard modes, available on request

WALL MANAGEMENT SOFTWARE



EYEVIS SOFTWARE



For an easy management of large screen displays, we recommend to combine the eyeCON® wall management software with the netPIX controller. With this software, especially developed for large screen displays, the user has nearly unlimited possibilities for the management and operation of his display wall.

) TECHNICAL SPECIFICATION

netPIX Controller Units and Expansions

	NPX-4900PLUS-CONTROLLER UNIT	NPX-4900S-CONTROLLER UNIT
Processor:	Up to two Intel® 64-bit XEON® processors Intel® Xeon® processor EC5539 with 2.27GHz (optional EC5549 with 2.53GHz)	Intel® Core Processor i5-4570S with up to 3.6 GHz
Chipset:	Intel® 3420	Intel® Q87
RAM:	8GB DDR3 ECC RAM (expandable up to 32GB)	8GB DDR3 RAM (expandable up to 16GB)
Expansion Slots:	11x PCIe x8 Gen. 3	8x PCIe Gen.3 x4 and 1x PCIe Gen.3 x8
Hard Disk:	1x 256 GB, SSD (optional: 2x 256 GB in RAID1 or 3x 256 GB in RAID5) (optional: 500 GB HDD)	
BUS:	Switch Fabric with a maximum bandwidth of 192GB/s	
Ethernet:	2x 10/100/1000 Mbps RJ45 ports standard integrated	
Dimensions (WxHxD):	43.0 x 17.7 x 52.3 cm / 16.9 x 7 x 20.6 inch	
Weight:	26.5 kg / 58.42 lbs	
Operating Conditions:	Temperature: 0°C - 30°C (32°F - 86°F) / Humidity: 10 - 90% not condensing / Altitude: up to 3,048.0m (10,000 ft)	
Power Supply:	100-240 V, 50-60Hz, redundant, HotSwap 650 Watt	
Operating System:	Windows Server 2008/R2 64bit, Windows 7 Ultimate 64bit	
Accessories (optional):	104-key keyboard, 2-key-wheel/button-mouse, optionally with extension cable up to 50m, DVI cable for eyevis Cubes (fibre optics) up to 100m	
Ordering Information:	Art. No.: 20264	Art. No.: 21018

	HARDWARE EXPANSION NPX-4900-EXP-11S-1	HARDWARE EXPANSION NPX-4900-EXP-9S-1
Expansion Slots:	11x PCIe x8 (up to 41 with further expansion units)	8x PCIe x4 and 1x PCIe x8 (up to 32 with further expansion units)
BUS:	Switch Fabric with a maximum bandwidth of 192 GB/s	
Dimensions (WxHxD):	43.0 x 17.7 x 52.3 cm / 16.9 x 7 x 20.6 inch	
Weight:	26.5 kg / 58.42 lbs	
Operating Conditions:	Temperature: 0°C - 30°C (32°F - 86°F) / Humidity: 10 - 90% not condensing / Altitude: up to 3,048m (10,000 ft)	
Power Supply:	100-240 V, 50-60Hz, redundant HotSwap 650 Watt	
Ordering Information:	Art. No.: 20266 (only available with NPX-4900-PLUS)	Art. No.: 21019

netPIX Output Boards

	GRAPHIC BOARD NPX-4900-OUT4-DSL-1
Graphic Memory:	512MB per board
Wall Configuration:	Any rectangular or non-rectangular array up to 64 display modules (max. 36 display modules with NPX-4900S)
Resolutions:	640x480 up to 2560x1600 (max. 359 Mpixels/s)
Colour Depth:	32 Bit
Output Signal:	DisplayPort 1.1a
Ordering Information:	Art. No.: 20274

netPIX Input Boards

	VIDEO INPUT BOARD NPX-4900-IN8-VID-1	VIDEO INPUT BOARD NPX-4900-IN2-SDI-3G-1
Inputs:	8 x Composite or S-Video BNC connectors	2x SDI BNC connectors with loop-through capability
Input Format:	NTSC, PAL, SECAM	SD-SDI (480i/576i), HD-SDI (up to 1080i), 3G-SDI (up to 1080p), 2k Digital Cinema Mode
Decoding/SDI Bitrate:	High-quality video decoder with de-interlacing	64MB per channel (total 128MB)
Scaling & Display:	Display multiple video sources in any size, everywhere on the wall. Control of colour, brightness, contrast.	
Ordering Information:	Art. No.: 20271	Art. No.: 20269

	DVI INPUT BOARD NPX-4900-IN2-DVI-1	DUAL DVI INPUT BOARD NPX-4900-IN1-DVI-DL-1	DVI INPUT BOARD NPX-4900-IN4-DVI-1
Inputs:	2x DVI-I / HD15	1x DVI-D Dual Link	4x DVI-I/HDMI with digital audio capture
Signal Processing:	RGB/DVI with full refresh; integrated scaler	DVI with full refresh; integrated scaler	HDMI/DVI/RGB/YpPr
Resolutions:	Up to 1920x1200 pixels	Up to 4096x4096 pixels (max. 330MHz pixel clock)	Up to 4096x2048 pixels
Pixel Format:	16Bit/32Bit, YUV422, RGB 8:8:8		
Scaling & Display:	Display multiple sources of any size, anywhere on the video wall		
Ordering Information:	Art. No.: 20268	Art. No.: 20267	Art. No.: 20270

netPIX IP Decoder Boards

	IP DECODER NPX-4900-IPD32-1	NPX-4900-IPD32HQ-1
Decoder:	32x D1 native or 16x HD native or 4x Full HD native	32x D1 native or 16x HD native or 8x Full HD native or 2x UHD/4K native
LAN:	2x 10/100/1000 Mbps RJ45 port	
Format:	H264, MPEG2, MPEG4, MJPEG	
Resolutions:	QCIF up to Megapixels	
Frame Rates:	25/30 frames per channel	
Dimensions (WxHxD):	48.4 x 8.9 x 50.0 cm / 19.2 x 3.5 x 19.7 inch (incl. rack handles)	
Weight:	10.5 kg / 23.15 lbs	
Ordering Information:	Art. No.: 20272	Art. No.: 19991

	IP DECODER LINK BOARD NPX-4900-IPL-2	IP DECODER LINK BOARD NPX-4900-IPL-3
Inputs:	Input card to connect the netPIX IP Decoder Boards NPX-4900-IPD32-1 in a netPIX 4900 controller system	Input cards to connect the netPIX IP Decoder Boards NPX-4900-IPD32HQ-1 in a netPIX 4900 controller system
Ordering Information:	Art. No.: 20273	Art. No.: 20265



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