

FAULT-RESILIENT DESIGN

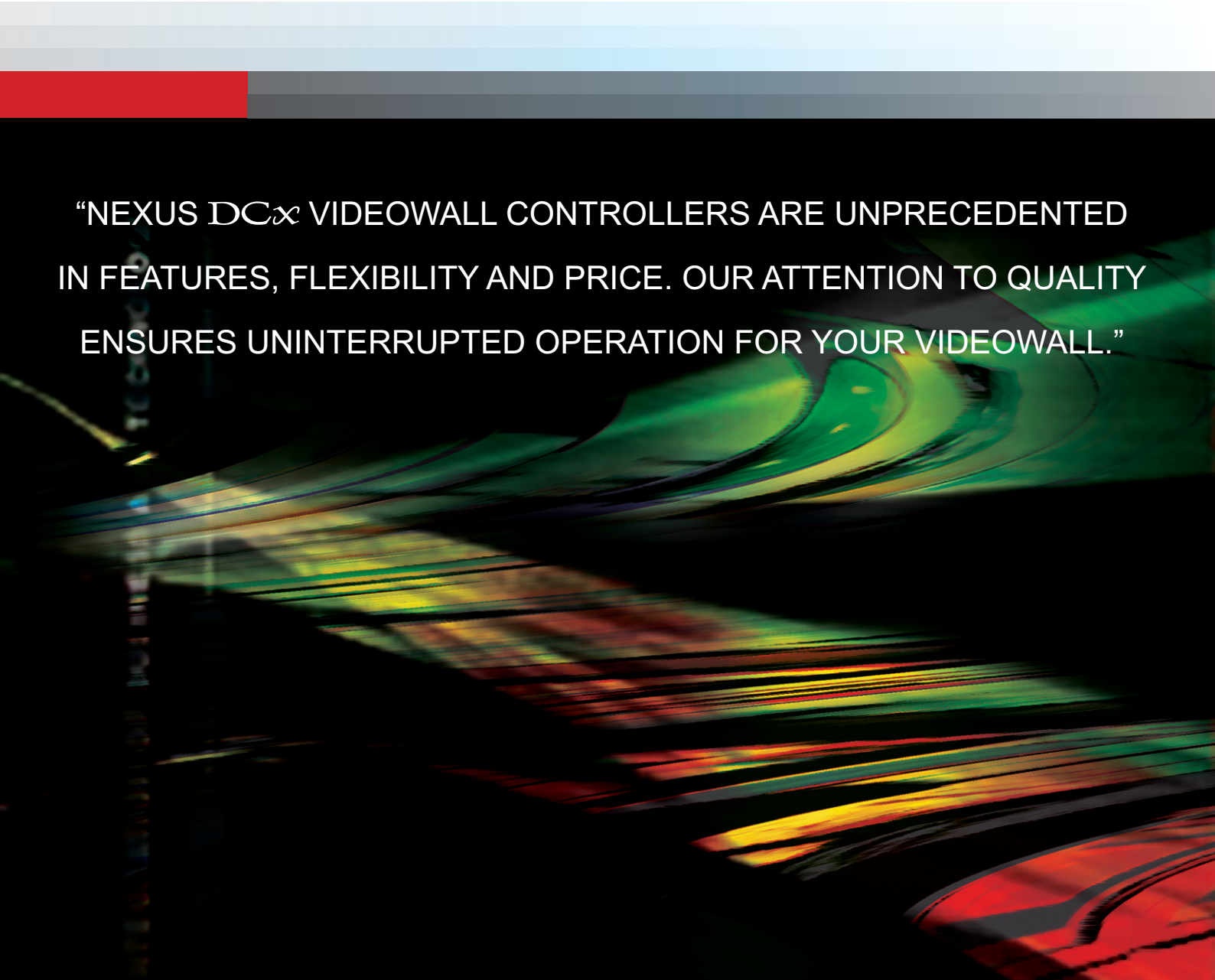
FLEXIBLE CONFIGURATION

MULTIPLE INPUT OPTIONS

VIDEOWALL MANAGEMENT SOFTWARE

SOFT-EDGE BLENDING

SYSTEM INTEGRATION



“NEXUS DC_x VIDEOWALL CONTROLLERS ARE UNPRECEDENTED
IN FEATURES, FLEXIBILITY AND PRICE. OUR ATTENTION TO QUALITY
ENSURES UNINTERRUPTED OPERATION FOR YOUR VIDEOWALL.”

VIDEOWALL MANAGEMENT

Your videowall has special needs, and we understand them. Each DCx comes with software and utilities to suit the varying needs of each control room. This can be comprehensive videowall management software, or lightweight utilities which specialised functions.

SOFT-EDGE BLENDING

DCx, and projectors with gamma correction. That's all you need! We'll configure the overlap for your soft-edge blending needs, or gaps for bezel compensation for your flat panel LCD.

SYSTEM INTEGRATION

The videowall is just one of the many components in a control room: proper integration is critical for reliable and efficient control room operations. DCx is designed to be a team player in your control room.

FAULT-RESILIENT DESIGN

Some sites just cannot afford unexpected down time. Redundancies in DCx minimises single point failures. Hot-swappable parts let you keep running even when parts are being replaced. High MTBF Industrial level components designed for sustained operation are ideal for mission critical control room applications even when in 24/7 use.

FLEXIBLE CONFIGURATION

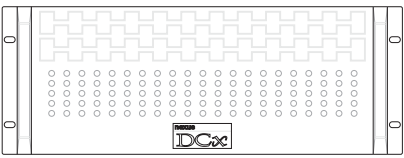
Each site is unique. The DCx has a wide range of configurations and options to suit your needs exactly. Pay only for what you want, not what others think you may want.

INPUT OPTIONS

Display a wide variety of external sources: composite video, S-Video, RGB, Component, DVI, HDMI, SDI, DisplayPort, HDBaseT, and even H.264 streams. Audio can also be captured with its accompanying video. Digital inputs can be HDCP compliant.

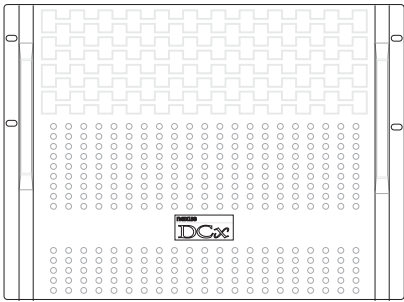
DCx Nucleus

Quick 'n Nimble
Dedicated hardware ensures swift operation. Suitable for videowalls of all size with simple layout requirements.



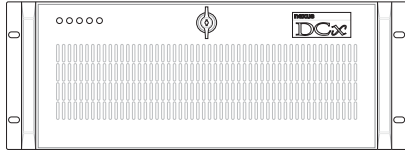
DCx Omni

Juggernaut
Dedicated hardware controller for extremely quick operations, with a flexible platform for total freedom. Suitable for videowalls of all sizes and complexities.



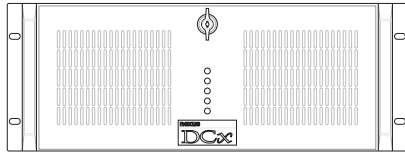
DCx lite

Entry Level
This model is suitable for smaller videowalls with basic input requirements.



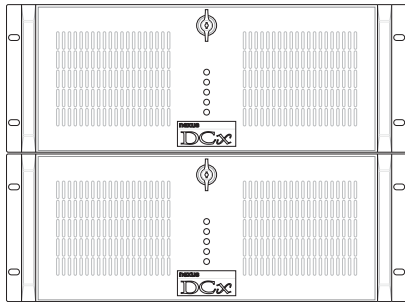
DCx PRO

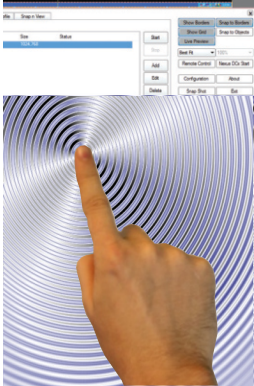
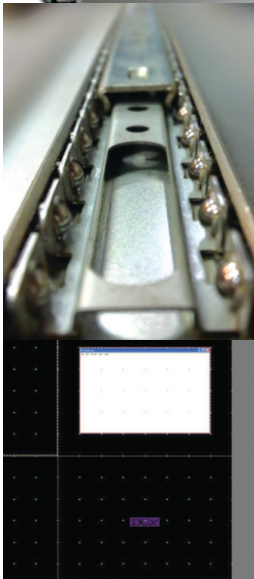
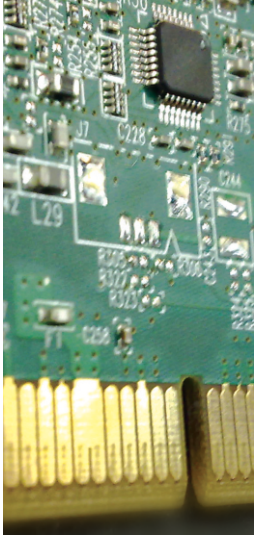
Workhorse
This SBC-based model uses industrial backplane which can be expanded to a huge number of slots. It is ideal for systems which require a large number of cards.



DCx intensity

Powerhouse
This model uses a server motherboard and optional expansion backplanes. It offers processing power to run the most demanding applications





PERFORMANCE

Dedicated hardware	Extensive use of dedicated hardware to process most of the specialised functions of a controller, providing high performance with low power requirements. Dedicated hardware supports features like streaming video decoder, DVI capture ADC, touchpanel controller, and RAID controller.
PCI-Express	Data transfer is via DMA on PCIe slots, running on a switched-fabric.
Intel Xeon	Powered by Intel's industry leading Xeon processors.
4K UHD	Ultra High Definition resolution inputs and outputs.

RESILIENCE

Redundant Power	Redundant power supply with hotswap modules.
RAID Storage	System independent RAID1 with hotswap trays and auto-rebuild capability.
ECC RAM	Automatically corrects single bit errors, and detects multi-bit errors in system memory.
Redundant Ethernet	Port aggregated Gigabit Ethernet ports for load balancing and auto-failover.
Redundant Fans	Hotswap redundant cooling fans for proper ventilation and cooling.

FLEXIBILITY

Platform Options	A range of platforms and base technologies to choose from, to suit your operation environment, features requirement, and budget.
Output Options	Choice of both digital and analogue output formats, with optional extension of up to 100m.
Input Options	Capture and display multiple video inputs of a large variety of sources, from basic analogue, to HDCP protected digital signals, together with accompanying audio, to IP streams and HDBaseT.
Overlap / Gap	Configure overlaps for soft-edge blended installations, or gaps for display devices with bezels.
Integration	Third party integrators can easily control the videowall with simple CLI or a sophisticated API.

CONVENIENCE

Sliding Rails	High quality rails with steel bearings ensures a smooth and stable slide to ease maintenance.
Physical Locks	Physical lock and key on front panel.
Washable Filter	Washable sponge air-filters make it easy to maintain a good supply of clean air.
RAID trays & display	HDD in hotswap trays with key locks. LCD display provides real time RAID1 status.
COTS Components	Proprietary technology is only used when necessary. Commonly available commercial off the shelf components are used whenever possible.

CONTROL

MimicScreen	Monitor and manage your videowall and controller from your workstation.
Pre-sets	Pre-set any commonly used windows.
RemoteControl	Remote mouse/keyboard over Ethernet.
External systems	Listener Utility for integration with external control systems over Ethernet or RS-232. Full command list available to integrators.
Touchscreen	Dedicated touchscreen for pre-set layout selection and source switching.

SYSTEM (Windows version)

Chassis

4U, industrial 19" rackmount chassis,

Processor

up to Dual Intel QuadCore Xeon

Bus

up to switch fabric with peak of 192Gb/s

up to 120 PCI-Express Gen3 slots

Memory

up to 288GB ECC Registered DDR3

OS

64bit Microsoft Windows 7 Professional

Storage

up to 2TB primary volume

RAID1 with hot-swap and auto-rebuild

OUTPUT

Ports

up to 128 output channels

Resolution

up to WQXGA (2560 x 1600) 32bpp

Memory

128MB GDDR5 800MHz per channel

Interface

DisplayPort, DL-DVI, SL-DVI, HDMI, SDI, VGA, HDBaseT

HDCP

Available on digital channels

CONTROL

Enabler

Wall mimic, LiveView, Remote mouse/keyboard, Viewer/apps presets

Hotkey Utility

User configurable shortcut keys for preset layout

Listener Utility

Integration with external system over RS-232 and Ethernet

Touchscreen

Intuitive user interface for layout selection and source switching

Source preview

Non-Windows version

Wall mimic with LiveView, Source preview

OPTIONS

Multiple wall

drive up to 4 videowalls from a single controller

Power Supply

redundant, hot-swap

RAID1

hot-swap, hardware controller, auto-rebuild

Ethernet

port aggregated up to 8Gb/s

Rails

steel sliding rails with bearings

Standalone Transmitters

HDBaseT up to 100m

Optical up to 5km

Source Preview

Preview inputs sources before display on videowall

(streamed from controller to client)

SD CAPTURE

Ports

up to 960 inputs

Resolution

up to 576 TV lines

Interface

Composite video / S-Video

Format

PAL, NTSC, SECAM auto-detected

HD CAPTURE

Ports

up to 480 inputs

Resolution

up to 4096x4096

Interface

DisplayPort, DVI-DL, HDMI, RGB, Component,

Line Equalisation

built-in TMDS equaliser supporting 20m cables

Transfer rate

up to 800 MB/s bandwidth

SDI CAPTURE

Ports

up to 240 inputs

SDI bit-rate

3 Gb/s

Video modes

SD-SDI, HD-SDI, 3G-SDI, 2K Digital Cinema

Resolution

up to 2048x1556

Transfer rate

up to 650 MB/s DMA

AUDIO CAPTURE

Analogue

Balanced (XLR) and Unbalance (RCA)

Digital

HDMI embedded audio

Sampling rate

16bit at 44.1-96 KHz

Gain

+/- 12dB programmable

STREAMING CAPTURE

Decoder

Dedicated processors on cards

Streams

up to 250 simultaneous HD streams

Codec

H.264 on RTSP with multicast support

Resolution

Up to 1920x1200

EXTENDED CAPTURE

HDBaseT

165MHz over 100m

Optical

165MHz over 5km

Ethernet

H.264 over Ethernet

