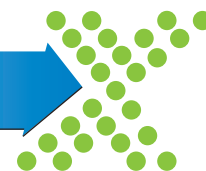# DXN5600/5800 Video Wall Controller
Multi-screen graphics, multi-standard input overlays and IP streams

The Multi-screen Controller

DEXON's DXN5600/5800 controllers offer a perfect solution for any video wall or control room visualization requirement on Windows platform. The LAN-based unit controls the wall of multiple screens displaying Windows compatible graphics combined with live video and IP streaming input overlays.

The DXN5600/5800 controllers apply advanced Express Crossbar technology for the full digital display of digital and analogue input sources in real time. The easy-to-use DEXON controllers are characterized by superior design, excellent price/performance balance and high reliability.

Thousands of controllers operating all over the world for years have proven high MTBF of the products.

The Video Wall

The Video Wall can be built from multiple displays, cubes or front projectors of different vizualisation technologies. Advanced tools guarantee brilliant, full frame, de-interlaced and comb-filtered video visualization. The input processing handles and displays DVI, HDMI, RGB, YPbPr, S-video, Composite video, SDI, direct Cat6 and Optical signals with unlimited zoom in real time.

The input overlay windows can be scaled and positioned freely on the desktop of the wall. All the windows can overlap giving the freedom of picture-in-picture display. Perfect quality and full speed of the input windows are guaranteed regardless of the number and size of open video windows.

Fields of Application

The DXN-5600/5800 systems ensure outstanding graphics performance on the wall. The comprehensive DXWall software system provides easy-to-use tools for wall management, video input handling and remote control. The DXWall controllers offer customized solutions to meet various project requirements in the following applications:

- security supervision
- public information displays
- utility supervision
- industrial process control
- telecom control centers
- traffic supervision
- police command centers
- military control systems
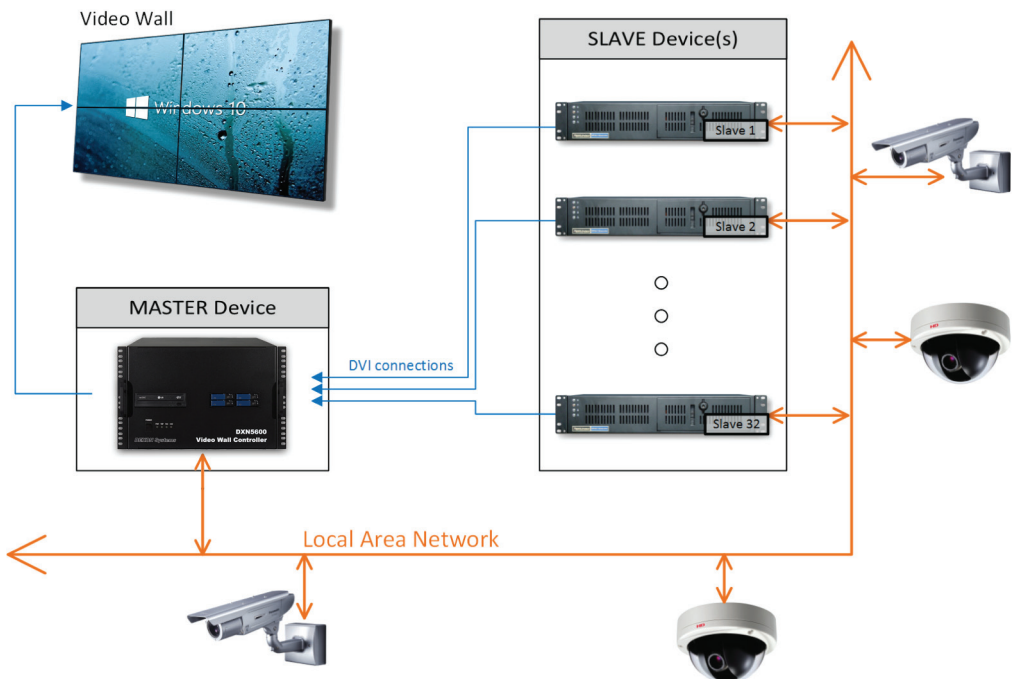- university campuses

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Main Features

- Integrated DXN5600 controllers for large walls with general video display demand
- DXN5800 Controllers for smaller walls' high-end video visualization
- Total resolution of the wall is the sum of screen resolutions
- Picture-in-picture visualization of input sources in real time
- Handling of 4 – 64 Express Universal inputs up to 1920x1200 resolution
- Handling and display of Cat6 based HDMI, SDI input signals
- Display of IP Cameras with MPEG-2, MPEG-4, H.264, MJPEG standards
- Advanced tools for networked remote operators to interact and control video visualization
- Full Windows 10 64 bit compatibility
- Latest Intel XEON processor and PCI Express bus based customized configurations
- Cost effective, industry standard components and interfaces
- Housed in a 19" rack mount chassis
- High overall system MTBF
- Superior technical support

Video Wall

SLAVE Device(s)

Slave 1

Slave 2

Slave 32

MASTER Device

DVI connections

Local Area Network

DXWall Software System

The DXWall software system offers user-friendly packages to meet control room operation requirements. Advanced configuration service facilitates the installation and setup of graphics and video wall properties. The DXWallControl system manages the wall and provides user interface for impressive video and DVI/RGB input visualization. Full interfacing of touch panel devices through RS-232C or LAN connections. Innovative features include alarm management, layout control and time-based scheduling. Sophisticated remote tools support network-based operators' interaction and the remote control of video display services. The DXWallControl system provides English, Spanish, French, Polish, Chinese, Japanese, Korean and Russian user interfaces.

Controller Hardware

Designed for maximum flexibility, DEXON controllers offer customized solutions to meet specific project requirements.

Platform
Windows 10 64bit

Control processor
Intel Xeon

System memory
16 GBytes - 64 GBytes

Peripherals
LAN, SSD, DVD-ROM
keyboard, mouse

Casing
19" rack mount chassis

Redundancy
dual LAN
dual power supply

Graphics Specification

The video processors use up-to-date technology for high-performance and perfect quality visualization.

Graphics processor
- custom VLSI

Output resolution per channel
- 640x480 – 1920x1200

Output signals
- HDMI
- HDBaseT direct

Input signals
- Digital DVI/HDMI
- Analogue RGB
- YPbPr
- Composite video, S-video
- Cat6 based remote HDMI
- SDI/HDSDI/3GSDI

IP-slave input resolution
- 640x480 – 1920x1200

IP streams supported
- MJPEG, MPEG-2/4, H.264

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