VisionX™ 6326

PCI-based Multi-Head Graphic Controller

Windows 98 · Windows Me · Linux, FreeBSD, Solaris x86

VisionX multi-screen adapters allow one PC to display images across up to four standard CRT monitors. Multiple VsionX adapters can be installed in a single system, limited only by the number PCI slots available.

The VisionX-6326 is a highly integrated “three quarter” size multi-display (also known as multi-screen, multi-monitor, multi-head or multi-VGA) adapter for the PCI bus, that provides 4 SVGA compatible output channels on a single card.

Each channel provides exactly the same CRT output signals as a normal SVGA card. Each channel comes standard with 4 MB SDRAM or optional with 8 MB and supports resolutions of up to 1280 x 1024 in high color.

Using Windows® 98/Me standard multi-display driver, an image can be spread across multiple monitors to create one large virtual display (such as a video wall).

Accelerated-X Display Server for Multi-head Linux, Solaris and FreeBSD applications

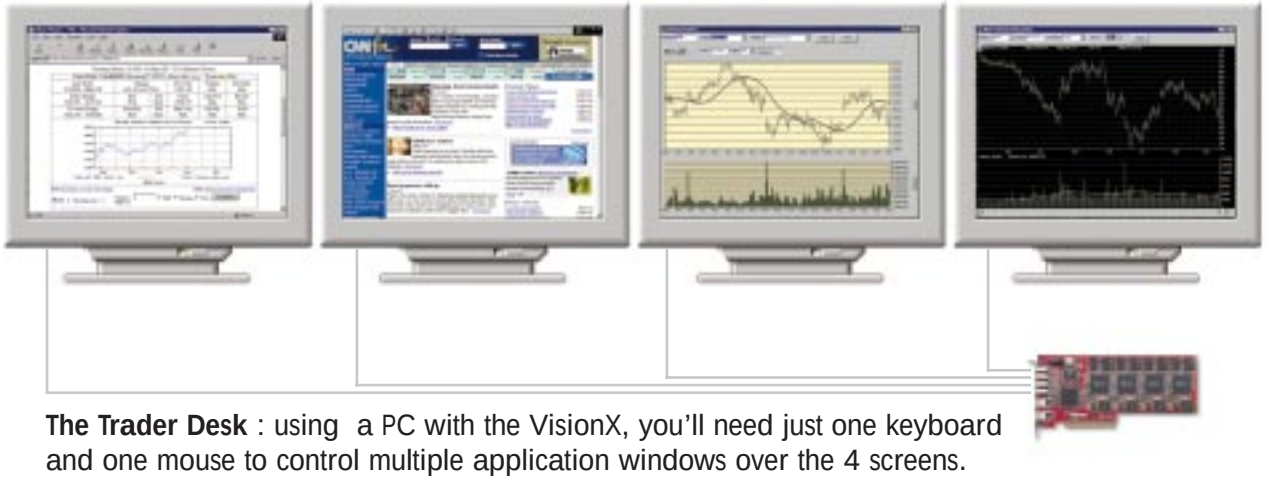
XiGraphics Premium 2D X server supports multiiple multi-head graphics cards in UNIX/ Linux based X Window System installations on Intel x86 compatible hardware. This product has to been purchased seperatly from XiGraphics. Up to eight displays (screens) are supported (up to sixteen upon special request). Stability, fast performance, and free service are features of the Xi Graphics products. Available for Linux, Solaris x86 and FreeBSD.

USB Input

The VisionX-6326 includes a VIA83C572 PCI to USB host controller with 2 external USB host connectors to increase the total USB bandwidth of your PC system. The onboard USB function allows easy connection of devices such as camera, keyboard and mouse

Optional NTSC/PAL Output

A special version of the VsionX-6326, the 6326TV comes with additional TV-out capabilities to connect to standard NTSC or PAL monitors. No external decoder is needed since all circuitry for composite NTSC/PAL signals are on-board. Two S-terminals replace the USB connectors. The USB function is not available on this board.



The Trader Desk : using a PC with the VisionX, you’ll need just one keyboard and one mouse to control multiple application windows over the 4 screens.

General Specifications

Bus Type
32-bits PCI 2.1 compliant

Memory
4 MB SDRAM per channel,
8 MB SDRAN per channel (factory option)

Connectors
Fire-wire to DB-15 standard analog monitor

Dimensions
250 mm (L) x 115 mm (H)

SiS-6326 Specifications

PC 98 Support (PNP, OnNow, DDC, Low Resolution)
High Performance & High Quality 3D Engine

Built-in 32-bit floating point format VLIW triangle setup engine

Built-in turbo queue architecture

Built-in texture cache

Peak polygon rate: 2M polygons/sec @ 25 pixels/polygon.

Peak fill rate: 45M pixels/sec

Advanced 3D Features
Solid, flat, and Gouraud shading

High quality dithering

Z-buffering and alpha buffering

Mip-Mapping

Point-sample, bi-linear, and tri-linear texture filtering

Texture transparency, blending, wrapping, mirror, and clamping

Fogging, alpha blending and primitive transparency

High Performance 2D Accelerator
Support to 1024x768/ 800x600/ 640x480 in 8/16/24 bit color format @ 120Hz refresh rate

Support to 1280x1024 in 8/16/24 bit color format @ 85Hz refresh rate

Built-in 64x32x2 bit-mapped hardware cursor

Four VGA Ports

VGA connections

4x Firewire connector
to DB9 female connector
for CRT monitor

Dual Port USB

Compatibillity
USB ver 1.1

Throughput
12 Mbits/s divided over two ports
can support video frame input of up to 30 frames per second per host channnel

Multi Monitor OS Support

Linux, FreeBSD, Solaris x86
XiGraphics Accelerated-X Display Server for Multi-head Linux, Solaris and FreeBSD up to 8 (or 16) consecutive monitors

Windows 98 / Windows Me
up to 9 consecutive monitors

DOS Support
initialization tools and switching tools

Ordering

VisonX-6326-4
4-port PCI-based Multi Display Adapter (SiS-6326) with 4 MB SDRAM per channel and integrated Dual port USB host controller
(4 firewire to VGA cables included)

VisonX-6326-8
4-port PCI-based Multi Display Adapter (SiS-6326) with 8 MB SDRAM per channel and integrated Dual port USB host controller
(4 firewire to VGA cables included)

MX-L-6	Multi-head Accelerated-X DS v6 for Linux
MX-F-6	Multi-head Accelerated-X DS v6 for FreeBSD
MX-S-6	Multi-head Accelerated-X DS v6 for Solaris

order directly from

Xi Graphics, Inc.
http://www.xigraphics.com

Video Wall : a single image can be spread across multiple monitors to create one large virtual display

VisionX Applications

Monitoring Heavy Traffic with Live Video

Multi-display card play a key role in Taipei cities' traffic management system. Taipei city has recently implemented high-tech remote monitoring systems as part of an advanced approach to traffic management.

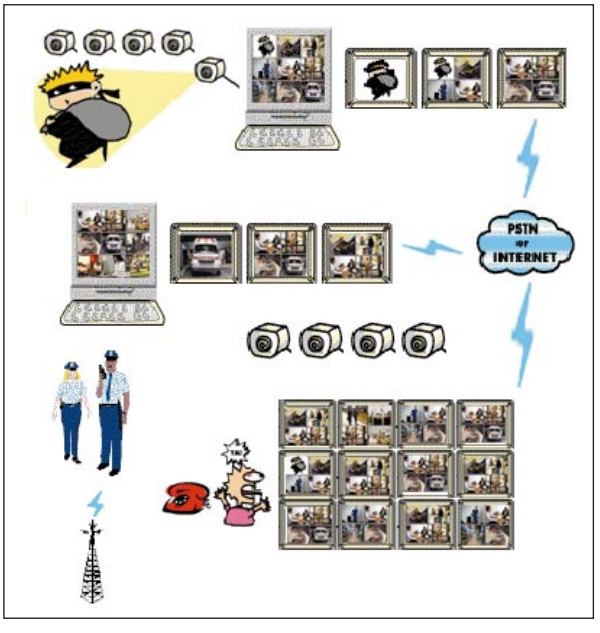
In these "smart traffic management" systems, traffic engineers monitor key locations around the city from a control room facility. A variety of electronic surveillance and detection systems, including video cameras, collect and transmit real-time data from the selected locations. The direction and angle of the cameras can be controlled from the traffic control center, and feeds from these video cameras are displayed directly on the computer screens of traffic engineers using the Multi-Display system. This facilitates early detection of traffic congestion and traffic signal timing adjustment or dispatch of emergency crews.

The center is sophisticated control room where traffic engineers use Multi-Display systems to display live video feeds in windows on their monitors or on a large projection screen. By using this real-time video information in combination with computerized city maps and other graphical information, technicians can respond quickly to traffic situations by controlling traffic signals or even communicating directly with motorists through a local radio station and changeable message signs in strategic locations around the city.

In the short term, drivers will experience less waiting time at signals and better traffic flow. The system's most important contribution long-term will be in accommodating expected increases in local traffic. Building new streets or physically widening older ones can take months and funding for such construction. It's much less time-consuming and expensive to use technology to improve conditions on existing streets.

Multi-Display and Digital Video Recording

As the performance of Internet improves, it becomes possible to apply realtime WEB security systems over public TCP/IP. In an average situation, a central control room may recieve information from up up to 100 nodes at a frame rate of 2~10 frames/sec..



This picture describes the application of Multi-display with DVR

Whith such a fast amount of nodes, a control room needs multiple screens to be able to monitor every CCD. Installation of up to 12 multi-display cards in a single 19” systems (that allows one system to drive 48 monitors) greatly reduces overall system costs. With just two susch systems you almost cover up to hunderd CCD camera’s.