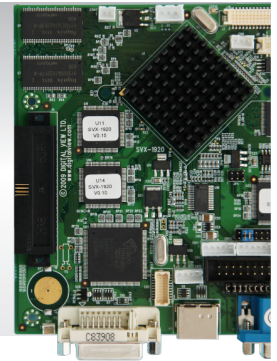




Building a Display System? Why You Need an LCD Controller



LCD controllers format and scale the many types of computer and video signal sources so as to drive LCD panels within a display system. However they can also do considerably more than that, enabling advanced display systems for a wide range of commercial, industrial and defense related applications.

Display input signals are generally grouped into two categories, computer or video. Across these two categories there is a very wide range of variations in signal type, resolutions, signal standards, aspect ratio, signal timing and connector types. On the LCD panel side there are many hundreds of different panel models, the Digital View website based Controller Solution Generator lists over 900 LCD panels from 35 manufacturers.

An LCD controller enables this interface.

In addition many applications require specialist image handling, for example in the broadcast industry being able to adjust the image in a variety of ways is critical. Some applications require working under particular environmental conditions or the display system needs to meet certain industry standards.

Digital View LCD controllers make this possible.

A number of key trends are behind the continuing popularity of LCD controllers :

New Panels

New LCD panel models are being introduced all the time – an LCD controller with multi-panel support makes this easier for system builders. Digital View constantly updates its database of new panels and adds to the portfolio of panels supported by a controller.

Time to Market

System designers are under constant pressure to bring new designs to market quickly. A feature rich and highly flexible LCD controller enables rapid display system prototyping and system design. Digital View provides a high level of consistency between its LCD controller models as well as providing 3D drawings for easy CAD design.

Legacy Systems

A significant quantity of legacy CRT based display equipment remains in use, particularly in industrial, medical and military environments; this is constantly requiring replacement with newer but compatible LCD displays. Digital View controllers support a significant range of legacy signals as well as offering custom engineering services.

Analog to Digital

The transition from analog to digital continues; LCD controllers can help with this transition providing an interface for both.

The Use of Video

There has been an explosion in the use of video for security, medical, defense, transport, exploration, out-of-home advertising, science and many other commercial applications. LCD is typical the display technology of choice and meeting the quality and image standards required calls for a suitable LCD controller.

Advanced Features

Application specific features, examples include: A movable and size adjustable picture in picture window with variable transparency; The ability to switch an image to green or red for night safe colors; Using a joystick to adjust specific image parameters; Ability to make common adjustments over a range of displays simultaneously; and many more.





How Our Customers Use LCD Controllers

Here's some examples of how and why our customers use Digital View LCD controllers in their different markets;

PRO-VIDEO/BROADCAST APPLICATIONS



Monitoring & production displays in Studios & O/B trucks	Range of different aspect ratios & video sources, requirement for multiple images on single screen
Tele-prompting for on-camera / studio use	A secondary slave display from laptop using external VGA port
Portable field systems	Need to be lightweight and have flexible range of inputs

MILITARY APPLICATIONS



Vehicle Mounted Displays & Viewing Systems	Flexible inputs and show video & PC signals
Sealed IP67 monitor systems	Need to keep heat levels down in the sealed monitor
Driver resolutions not available on PC	Specialist fine-tuning required to display image with 100% accuracy

AVIATION APPLICATIONS



Simulators	Need to have fine-tuning control of color and image on each individual display
Passenger airline entertainment	Source is a remotely located player or computer system
Flight deck control consoles	Source is a specialist system or a legacy device

INDUSTRIAL APPLICATIONS



Industrial Panel Monitors	Where external PC's or Video signals are required
Process Control & Automation Monitoring	Multiple sources are monitored simultaneously on screen
Heavy industrial environments	Too much vibration or not enough space for additional equipment at point of use

SECURITY & SURVEILLANCE APPLICATIONS



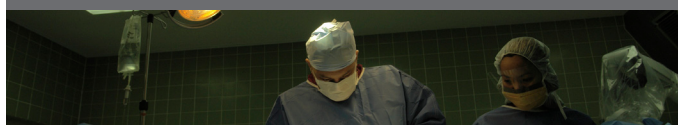
Driver & Cab Control Systems In Transport	Where video signals are used
Security Control Rooms	Multiple cameras are viewed simultaneously or as pop-up windows
Mission displays for in-vehicle police systems	Need to zoom-in and freeze video signal images

DIGITAL SIGNAGE APPLICATIONS



Outdoor Advertising Systems	Images are rendered remotely and video is used locally to increase reliability
Outdoor harsh environments	Temperatures too extreme for high specification PC equipment
Double sided displays	Multiple displays or slave displays from single sources

MEDICAL APPLICATIONS



MRI Control Displays	Need the system to be unaffected by magnetic fields
Ultrasound monitor	Where the display image detail is controlled via RS-232 commands
Keyhole Surgery monitors	Where cross-hair overlays are directly inputted to display area

