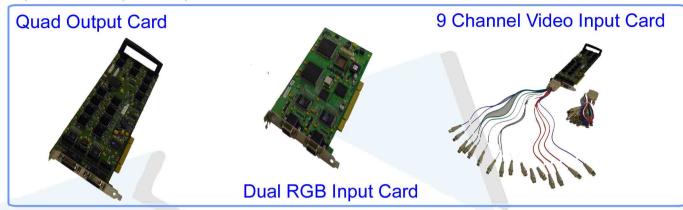
Configuration Hardware Options

Input and Output Graphics Cards



Optional Hot Swappable units



Remote Mouse & Keyboard



Window Manager



Networkable Keyboard and Mouse

RemKam

The video wall mouse can be acessed via the network by an operators or supervisors workstation. Harp software called RemKam allows transfer of the mouse from workstaion to video wall just by selecting a dedicated function ley on the users workstation.





Harp Visual Communications Limited
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Tel. 01329 844005 Fax. 01329 843203 MERLIN 17
VIDEO WALL PROCESSOR

Turn your display wall into one giant workstation, with a tool that manages

Turn your display wall into one giant workstation, with a tool that manages visual flow from screen to screen, displaying seamless movement in real time.

With the Harp MERLIN video wall processor users can view up to 16 connected screens 'as one' - increasing the number of people who can comfortably view larger amounts of information. The MERLIN increases the amount of screen real-estate available enabling large computer generated topographical images to be viewed in their entirety that could not be viewe are seaml

ess and carried out in real time.d on a single desk top monitor.

Harp MERLIN operates on a soft Windows XP or Windows 7, and incorporates a sophisticated . control manager which allows appli. . cations to be launched automatically,

windows moved, and scenarios and salvos selected on demand. As all screen breaks are handled by the MERLIN, drawings and window movements from screen block to screen block are seamless and carried out in real time.

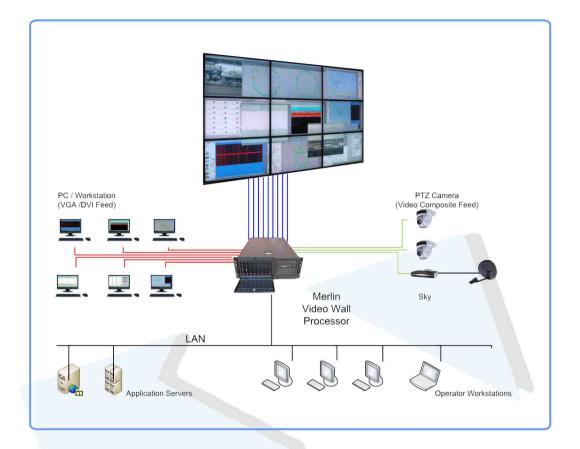
The system is eaily operated via a user-friendly touch panel, and /or remotely by cursor operation on a PC over the LAN.

Base Windows appliactions can be run directly on the MERLIN. Externally generated PC and UNIX windows can be digitally fed into the Windows environment, whilst video feeds can be super-imposed enabling satellite and CCTV information to be displayed in real time.



www.displaywall.co.uk

SYSTEM ARCHITECTURE



System Overview

Images can be displayed onto the video wall using a number of different techniques. In its basic form the Merlin video wall processor is a multi-headed PC that can drive up to 40 screens. This allows windows to be resized from thumb nail to full screen size seamlessly across screen boundaries. Appliactions can be run directly on the Merlin as if it were a PC on some ones desk although it has a somewhat bigger screen than usual.

Inputs

On top of the basic system overlay 'picture in picture' images can superimposed on top of the PC background image. Each of these windows can be again scaled from thumb nail to full screen size and overlaid on top of one another. These come in two formats composite video and RGB. Video input can be from CCTV, broadcast and satellite signals. Whereas the RGB inputs come from computer generated sources such as PC's or workstations.

Outputs

The interface between the Merlin and the video wall is done using DVI cables which ensures that the best possible image is generated putting a square pixel into a square LCD element on the screen.

TECHNICAL DATA

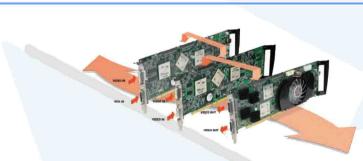
Technical specification	
Architecture	Intel i7 Core 3.2GHz Hyper-Threading Technology
	Intel Q57 chipset and Intel 3450 chipset for embedded computing
	4GB DDR2 SDRAM
Software	Operating System: XP Service Pack 3 or Windows 7
	Optional Solaris : Redhat
Graphics Output Card	Outputs: 4 ports per card Maxium of 10 cards giving ability to drive 40 screens
•	Format: VGA or Dual/Single Link DVI Interface
	Resolution: 640 x 480 to 1920 x1080 pixels
	Frame Buffer: 2 x 256Mb
	Video Input Bus: Inter-card high speed 5Gb/s SIP Bus
Video Input Card	Inputs: 16 Channels per card. Maxium of 8 cards delivering 128 ouytput windows.
The state of the s	Format: RS343A compatible video feed with 75 ohm termination: PAL/ NTSC
	Video Bus: Inter-card high speed 5 G/Bs SIP Bus
	Window Update: Real time 25/30 fames per second PAL/NTSC.
DVI / RGB Input Card	DVI/RGB Mode: 640 x 480 to 1920 x 1080 pixels.
	Sample rate: 170 Mpixels per second.
	Sample depth: 24 bits per pixel in 8:8:8 format
	Capture Memory: 32 Mbytes per channel (updated in real time), triple buffered
Power Supply	100-240V AC , 50/60 Hz
Communications	Ethernet RJ45 10/100/1000 Mbps

Physical specifications	
Dimensions	202mm (h) x 160 mm (w) x 474mm(d)
Weight	12Kg
Temperature	640 x 480 to 1920 x1080 pixels
Video Input	Operational +5°C to + 40°C Survival -10°C to + 50°C Storage -15°C to + 60°C
Humidity	Operational 15% to 95%. RH at + 40°C Storgae 15% to 95%. RH at + 65°C
Safety	EN55022, UL478 FCC reg 151, Class A-EMI/RFI, ISO924-3, CE Approved
Reliability	MTBF 20, 000 Hrs

System Options	
Power Supply	Dual Redundant PSU Hot Swap
Hard Disk	Dual 250GB Hard Drive with removable caddy
Ethernet	Redundant Ethernet Adapter
Auxiliary Products	
Commandant Control Manager	Allows multiple appliactions to be moved and started from the touch panel

INTERNAL ARCHITECTURE

LAN Connection of keyboard and Mouse



KAM Server

Diagram shows the additional internal bus architecture that allows transfer of the video images at high speed without using the PC mother board bus.