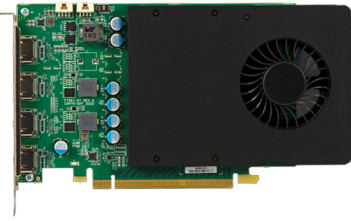
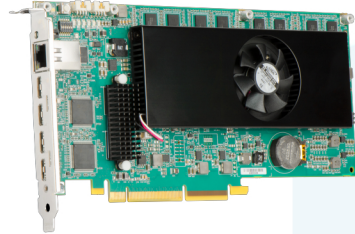


Input and Output Graphics Cards

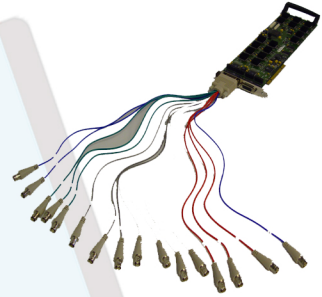
Quad Output Card



Input Card



9 Channel Video Input Card



Optional Hot Swappable units

Removal Disk



Power Supply



Remote Mouse & Keyboard

KVM



Window Manager



CommandaNT window manager using touch screen solution.

Networkable Keyboard and Mouse

RemKam

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



HARP

VISUAL COMMUNICATION SOLUTIONS

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Merlin i9 IPX

VIDEO WALL PROCESSOR



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 64 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 viewed seamlessly and carried out in real time on a single desk top monitor.



Harp MERLIN operates on Windows 10 or Windows 11, and incorporates a sophisticated control manager which allows applications 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 easily operated via a user friendly touch panel, and /or remotely by cursor operation on a PC over the LAN.

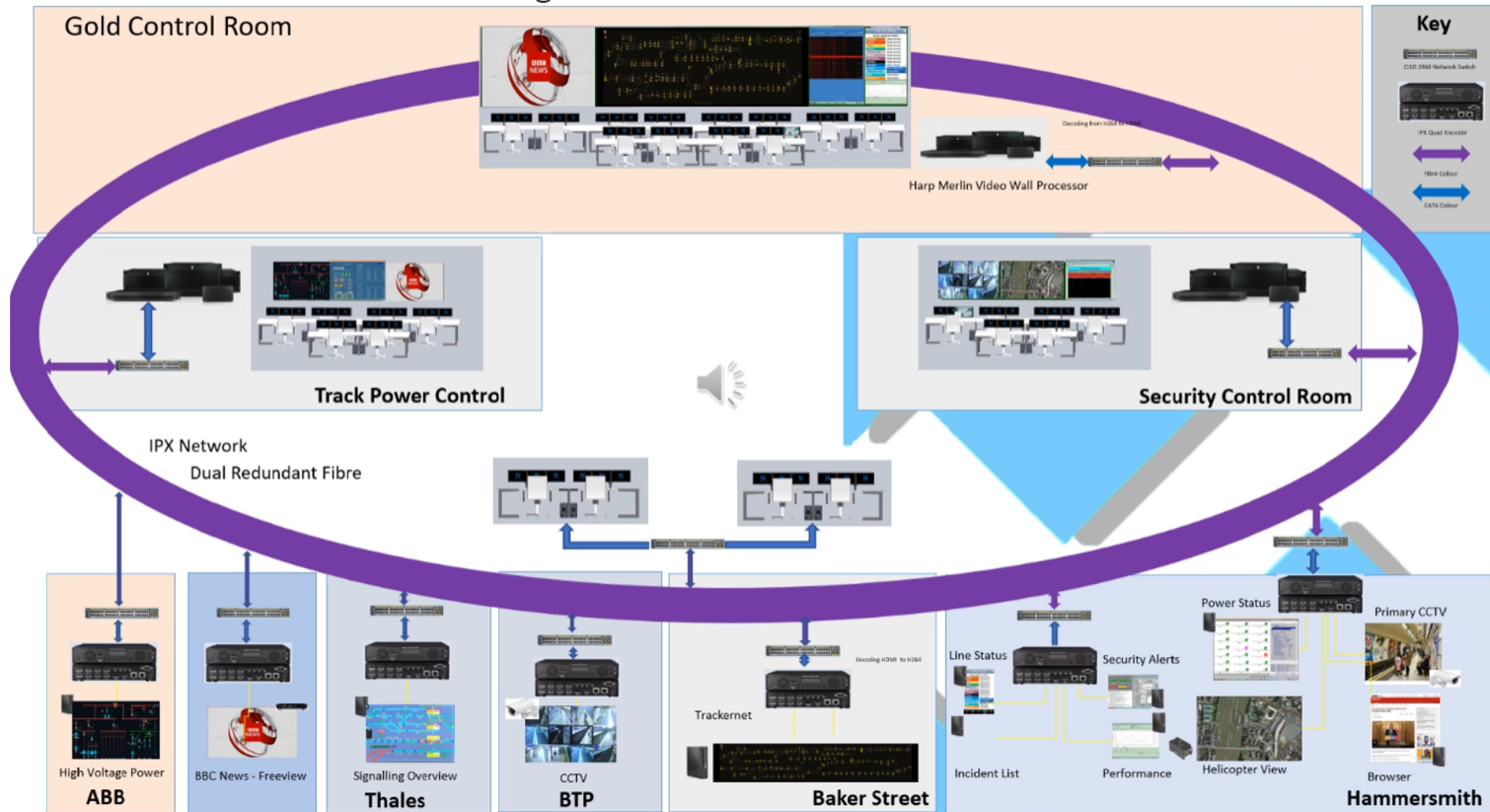


Base Windows applications can be run directly on the MERLIN. Externally generated PC and Android windows can be digitally fed into the Merlin's Windows environment, whilst video feeds can be superimposed enabling satellite and CCTV information to be displayed in real time.

Videowall.co.uk

SYSTEM ARCHITECTURE

Transmission of Images over an IP Network from remote site – Incident



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 64 screens. This allows windows to be resized from thumb nail to full screen size seamlessly across screen boundaries. Applications 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.

Input

The IPX version of the Merlin Video Wall processor series has been designed principally for video steaming where all of the video sources are received via a LAN connection. All video feeds are from IPX encoder units which are converted in real time up to 4K HDMI feeds to an H264 4.4.4 format. Multiple streams can be decoded in parallel on this processor and displayed on the video wall.

Outputs

The interface between the Merlin and the video wall is done using HDMI over fiber 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 i9 Core 13th Gen Alder Lake Intel Core 64GB ECC and non ECC
Software	Operating System: Win 10 / 11
Graphics Output Card	Outputs: 4 ports per card giving ability to drive 64 screens Format: HDMI/DP Resolution: 4Kp60 + 640 x 480 to 3840 x 2160 pixels Frame Buffer: 4 GB GPU: NVIDIA
IPX Decoder Card	Codec: H.264/MPEG-4 Part 10 (AVC), Up to level 5.2 Format: RTP, RTSP< RTMP, MPEG2-TS Video Bus: PCIe x8 (Gen3) Window Update: Real time 25/30 frames per second.
HDMI / DP Input Card	HDMI/DP Mode: 640 x 480 to 3840 x 2160 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
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
Output	Upto 64 HDMI/DP
Temperatue	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 1TB CCD with removable caddy
Ethernet	Redundant Ethernet Adapter
Auxiliary Products	
Commandant Control Manager	Allows multiple appliactions to be moved and started from the touch panel
KAM Server	LAN Connection of keyboard and Mouse

BUILD PROFILES

	Merlin	Merlin 2-4	Melin 4-4	Melin IPX 4-8	Merlin IPX 4-16	Merlin IPX 0-32
Apps and Browser	x	x	x	x	x	x
2 HDMI Inputs		x	x			
4 HDMI Inputs			x		x	
IPX Stream Decoding			x	x	x	x
4 Outputs	x	x	x	x	x	x
8 Outputs				x	x	x
16 outputs					x	x
32 outputs						x

Many other custom solutions are available tailored to the system needs.