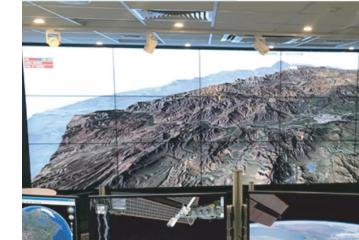


VISUAL COMMUNICATION SOLUTIONS



VIDEO WALLS

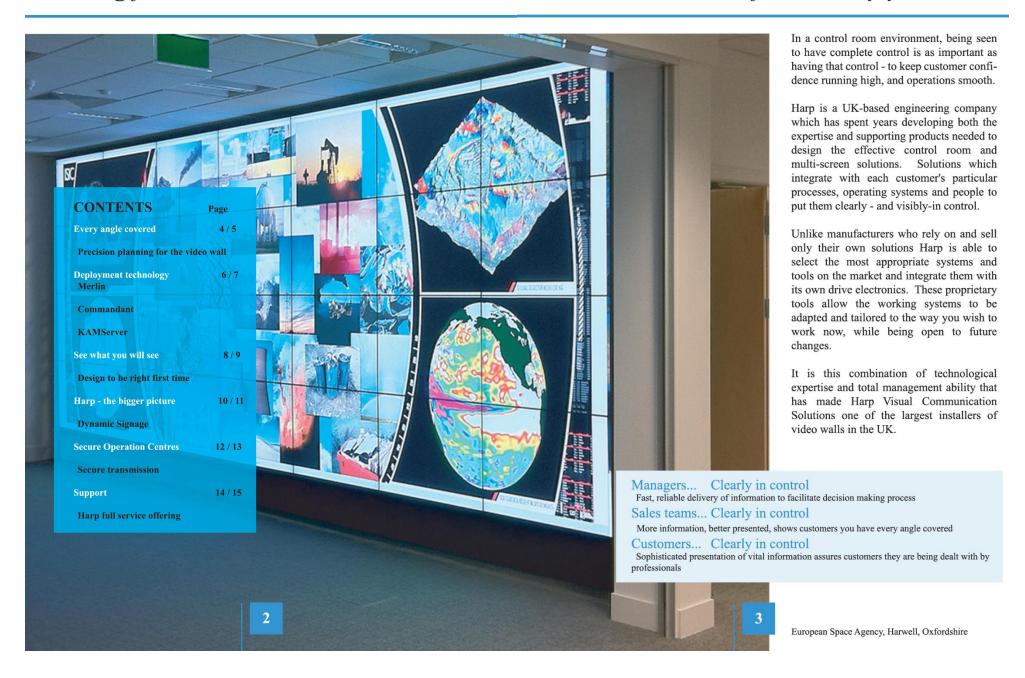


If you would like Harp Visual Communications Solutions to help you deliver your Video Wall, please call us on 01329 844005 and ask for our new business manager. We look forward to showing you the bigger picture.

Tel: 01329 844005 Website: www.harpvisual.com Email: sales@harpvisual.co.uk

© Harp Visual Communications Limited 2018 Registered in England and Wales. Company Registration No. 03671929

Total Solutions for the way you work





Objective

Companies use video walls as the main interface to their network and processes, to enable different groups to see the 'bigger picture' of what is happening, and to manage and control (sometimes vast) operations from one central point. Demonstrating a commitment to sophisticated, hi-tech solutions also shows a commitment to providing the best for customers. Harp spends time defining parameters for each new installation to ensure the final solution meets every requirement.

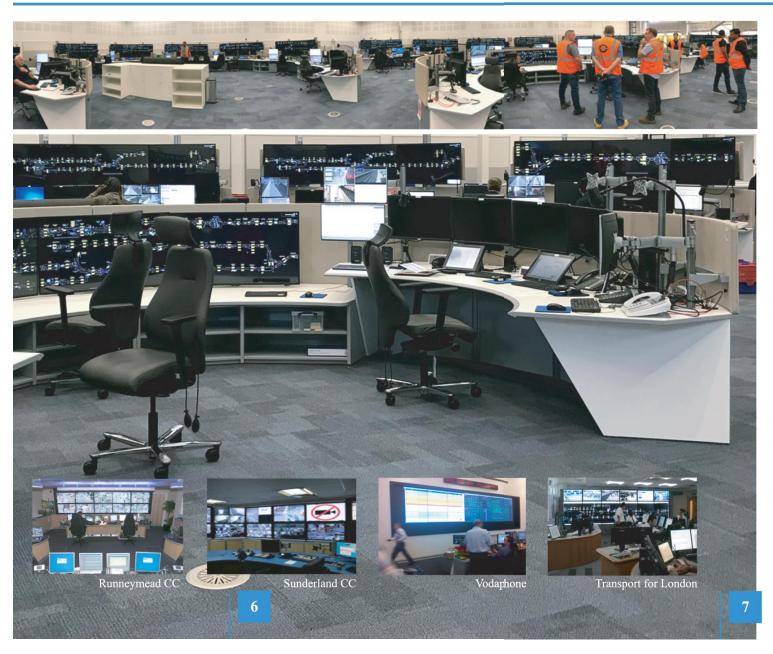
Audience

Operators need access to information as needed and the ability to deploy decisions. They need to work on faults and incidences locally, while monitoring the overall picture to ensure priorities are correctly assigned.

Managers need to see that their operators are comfortably receiving the information they need, and so maintaining customer confidence in both the ability and competence of the business.

Sales and marketing teams may need access to customer• specific information in contrast to the 'overview' information already on display. This can be provided through a 'Viewing Gallery', in which the required information can be monitored and manipulated on a dedicated section of the display wall without impacting the overall operation.

Interxion, London



Proprietary tools, designed by experience

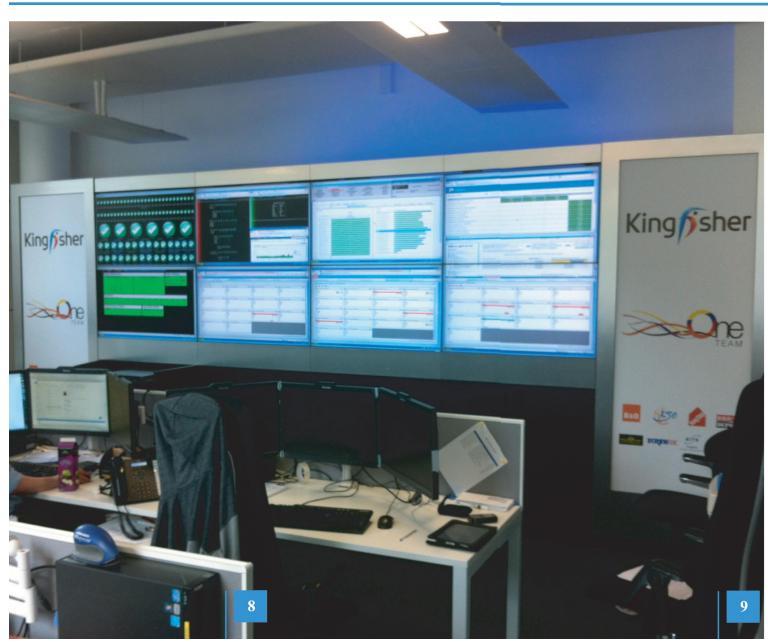
Selecting the appropriate, quality parts of the system is one aspect of the solution. Making them work seamlessly together is where Harp excels. Harp has designed its own innovative system management products in response to customer input on the many and varied ways they wish to work.

Harp Merlin

A drive electronics module which allows users to view up to 64 connected screens 'as one'- to show large spreads of information that could only be viewed piece-by-piece on a single desktop monitor. The Merlin manages the visual flow on the (perceived) 'giant' screen, displaying seamless movement in real time.

Harp Commandant

A powerful touch-panel interface for the display wall, which allows users to control applications by selecting and moving windows, imposing scenarios (which give a pre-configured position and window size to multiple applications) and activating salvos (to launch applications either at the touch of a button or when triggered by an alarm or timed event).



It is very important that sufficient time is given to the initial planning phase, to ensure that the finished solution is right first time. To facilitate the process (for both the designers and end users of the room), Harp generates real-look 3D renderings of the room to show how the needs of operations staff, managers and customers will be met, and how the elements will look together. Human ergonomics are the first considerations - the size of character a person can read at what distance, how many people form key viewing groups and where they can be seated.

While much technology is available to choose from, some hi-tech hardware is capable of more than is actually required, and using it can result in costly over-engineering. For example, although the brightness, clarity and colour uniformity of screen images are important, it is pointless to try and show high resolution pictures which the eye cannot resolve from a distance and large groups cannot get close enough to see.

The physical environment has to be carefully controlled. Automatic daylight following lighting, audio levels, ventilation, air ionisation and humidity all need to be considered to keep staff comfortable and productive.

Harp design process:

Define exact requirements
Draft a proposal
Fill in design detail
Test and prove the design
Build the system
Customise the solution.

Kingfisher, Winchester



Harp deliver visual solutions that become tools for advertisers to reach the public through imagery of their client's products.

Which technology is needed? Harp can recommend and deploy solutions be it LCD, OLED or LED. A knowledge pool within Harp can recommend which resolution, brightness, colour temperature, deployment and return on investment can be achieved. All of which can be controlled from cloud -based systems delivering content and reporting proof of play statistics.

Video walls can be installed internally in buildings or using high brightness displays in direct sunlight next to roads. When hooked up to nationwide network campaigns new imagery can be deployed in seconds keeping them current and effective. These solutions can be visually monitored 24/7 to ensure the correct files are being shown at the correct times.

VUE, Leeds



Secure transmission

Harp have deployed multiple video walls into secure environments where security of the data and the information shown is significant and should only be seen by approved staff.

To achieve this level of security Harp uses a video encoder that digitises the screen images and broadcasts them on a video fibre highway. This fibre highway is normally a closed loop system with inputs only from the source screens and outputs shown only on the video wall. The video wall processor has a decoder that allows these images to be picked off the network and displayed as required

Closed Loop.

Source information is taken from the secure screens and transmitted in loss free compression onto the video fibre highway so that any other terminal or video wall with the correct privileges can view these image copies.

The video wall is controlled by a supervisor's terminal that creates and deploys screen scenarios that have been pre-configured so that when events occur all the appropriate information is displayed so that informed decisions can be made. These can be automatically triggered using SNMP traps through to 0 Volt relays that detect doors opening.



Foreign & Commonwealth Office

Cyber Security Centre, Various

The Strength behind the support room

HARP the bigger picture

Harp solutions to support the control room include:

Reception detail

Moving display panels (such as large LCD screens) presenting a strong message for first impact.

Presentation room

Maintaining a room dedicated to presentations is a good way to impress customers with the perceived commitment to winning their business.

Viewing galleries

These allow customers to see the extent of the control room operation without interfering with it. A variety of high-impact 'techno-toys' can be used to hype up the impression, such as SNAP glass, which initially appears frosted (and as such can act as a screen for rear-projected messages or images but clears at the touch of a button to reveal the real view.

Signage

Flat panels can be arranged on walls to provide images and messages, from tactical information in rest areas to dynamic advertising along corridors.

Call centres

Wherever there is an operational centre, there is often a call centre nearby. Visual information can be relayed into the call centre to provide vital, up-to-date information on the network - such as when repairs are due to complete.



Full service offering...

In a command room or similar environment, continuing availability is the measure of the installed system's success. Harp offers a full support programme to ensure that mission-critical centres remain fully operational, with engineers located both in the North and South of the UK to provide timely support as required.

- · Next-day on-site callout
- All spare parts (down to board level) always in stock
- · Full module replacement
- Swappable units for items needing off-site repair
- · Fully trained engineers
- · Documentation for all system parts
- 24-hour telephone support

Customers already using Harp Visual Communication Solutions to meet their control room objectives include:

DOCKLANDS LIGHT RAILWAY GLASGOW UNDERGROUND LONDON UNDERGROUND **FUTURE CITIES CATAPULT** DRAX

MESSAGELABS FOREIGN OFFICE **HMRC MERSEYTRAVEL** B & O NETWORK RAIL UNILEVER **NATO**