



Smart-e

Case Study

Project	Education
Client	University of Warwick
Product	SNX-16x32+
Location	West Midlands



The University of Warwick, West Midlands, UK

University of Warwick use Smart-e equipment

Smart-e's SNX-16x32 matrix is at the heart of the audio visual system at the new £50 million Digital Lab at West Midland's University of Warwick

International Digital Laboratory

The Digital Lab is the University of Warwick's flagship building designed to facilitate major collaborative research opportunities, transfer knowledge between academia and industry, and generate new knowledge and skills. Opened in October 2008 by Prime Minister Gordon Brown, the centre features digital presentation and meeting facilities, board room, teaching and demonstration suites as well as a number of specialist environments specifically for research, as well as teaching digital manufacturing and e-security, amongst other subjects.

ed to undertake the selection and installation of a communication system that would meet the lab's extensive remit. The contract was awarded



Inside the University of Warwick



Smart-e SNX-16x32+

Rapid solution for a complex system

The building is one of the few around to be completely HD 1080p compliant throughout and this led to a few technical challenges for Preston based Pure AV, the integrator who was contract-

to Pure AV in May 2008, the design and first fix was undertaken over the following two months and the final fix was completed in under two months. As Gavin Edwards, manager of Digital Technology at the International Digital Lab, comments *"I have been very impressed by the high quality and the incredibly rapid speed in which this, a complex piece of work, has been completed by Pure AV. Additionally, I am extremely impressed by the flexibility of the Smart-e system"*.



Smart-e

The Smart-e matrix delivers high resolution audio and video (up to 1920 x 1080), from a variety of sources around the facility. These sources range from a high definition video server or a digital signage system, to a live camera feed or PC presentation. Pictures and sound are delivered to 23 displays around the facility ranging from 40" LCD screens to a 6M wide projection screen in the auditorium using Smart-e's SLX-RX212 receivers.

Messages about events and the research being undertaken in the Lab are broadcast via the matrix to common areas. The system also distributes TV channels to any screen, and content is fed from the auditorium, usability lab and sound labs to elsewhere in the building - allowing guests and staff to see/hear what is going on in the building. It also allows the Lab to record feeds to the video server which is co-located with the Smart-e equipment in the AV/Comms room in the centre of the building.

As Richard Lister from integrator Pure AV commented *"We chose the Smart-e matrix because it fulfilled this complex remit, is cost-effective and because all Smart-e equipment is specifically designed to work with structured cabling, it was the perfect option for this building which is flood wired with CAT 6 cable."*

The Smart-e SNX-16x32 matrix features 16 inputs and 32 outputs for UXGA, RGBS, YPrPb, Y/C, CVBS and Stereo Audio, providing inline power, RS232/422 and IR control option. It is HDTV compatible and distributes signals up to 300m from the source, via the Lab's CAT 6 structured cabling. The content is fed in from the input devices, through the Smart-e matrix which transmits the content via a Smart-e SLX-RX212

receiver which then feeds it to the screen. Each output features a Smart-e receiver which has a dual output.

The SNX-16x32 is one of several mid-range matrices from Smart-e that are used extensively for broadcast, commercial, corporate, leisure and marine applications as well as for educational purposes.



THE FACILITIES

Presentation & meeting facilities

With its Smart-e AV solution, the 100-seater auditorium provides an outstanding environment to explain complex Digital technologies. A 6m by 2m screen displays up to 4 simultaneous moving HD images, backed up by a powerful 5.1 Dolby/DTS surround sound system for maximum impact. Meeting rooms feature built-in video conferencing system, and a broadcast standard recording system allows presentations to be archived for later streaming on the Web and other media so those unable to attend in person need not miss out.

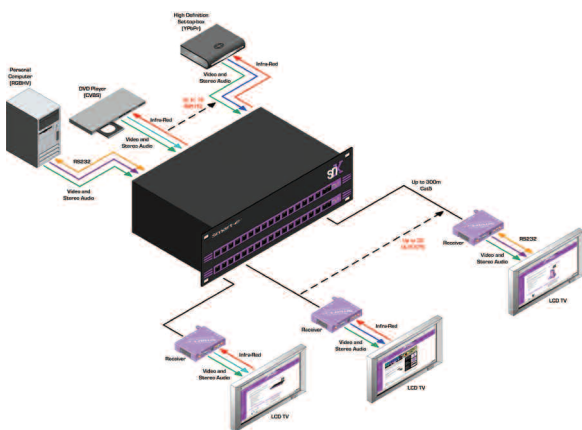
* Smart-e equipment is suitable for use with CAT 5, 5e, 6, 7 and 8 structured cabling.



The Board Room also features twin 50" LCD panels able to support up to 2 simultaneous HD sources, backed by a 5.1 Dolby/DTS sound system and video conference support. Four further meeting rooms cater for up to 8 people with HD displays, stereo sound and mobile video conferencing.

Teaching & demonstration facilities

The Lab has a dedicated education area with 25 high performance workstations for teaching and demonstrating CAD/CAM/PLM/Programming and other activities requiring high quality equipment. Lecturers are supported by widescreen, HD resolution SMARTBoards and stereo sound.



Typical application of the Smart-e SNX-16x32+ matrix

A usability lab gives an ideal environment for evaluating new Digital products and services. The reconfigurable room can be set up as a home, office, hospital or other specialist environment as required. An adjacent control room with 1 way glass allows people to be viewed whilst interacting with products. Eight portable cameras and one fixed connected to the control room, allow detailed recording of events for later study.

Research environments

The Digital Lab also contains a number of specialist environments to support the work of research teams. Over time, these will be expanded and currently include:

Sound lab; packed full of speaker technology, this lab accurately replicates directional sound from environments, ranging from hospital rooms to town centres, in order to better understand peoples' sound preferences.

Visualisation lab; containing the world's first four panel High Dynamic Range (HDR) display and other visualisation technology. The room is designed to give the best possible experimental environment to understand human visual perception.

E-security lab; a secure area for conducting experiments to demonstrate the security risks of incorrectly configured solutions. A Faraday cage co-located within the lab allows security vulnerabilities of wireless equipment to be demonstrated in a safe environment.

Lab Car; comprising the complete electrical system of a car, this is assisting the Systems team to research the development of ever more complex car electronics systems in a robust manner.

Clean manufacturing environment; including nano-scale manufacturing to demonstrate the 'concept to creation' approach using digital technology.



Pure Audio Visual Limited

is primarily a Systems Integration company. Working within the Audio Visual and Broadcast markets in the UK and Europe, Pure AV provides consultancy, design, project management, installation, programming and commissioning services. Through years of experience and constant technology awareness, Pure AV prides itself in being able to provide the right solution on time and in budget to clients ranging from Higher Education to Nuclear Defence. For more information contact Pure AV on 01772 457520 or enquires@pureav.co.uk.

For more information on Smart-e products visit:

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