



TOA Corporation (UK)

the future is **safe & sound**

HQ3 Unit 2 Hook Rise South Surbiton Surrey KT6 7LD England

Telephone: +44 (0)870 774 0987 Facsimile: +44 (0)870 777 0839

Web site: www.toa.co.uk



Large Chemical Plant (Wales) UK
Network System



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TOA network audio solution saves customers thousands



Chemical plant's audio upgrade uses NX-100 network adapters

TOA's NX-100 Network Audio Adapter has been chosen as the hub of a new PA/VA installation at a large chemical plant in Wales. Specialist systems integration firm PAS Sound Engineering selected the NX-100 because of its ability to convert analogue audio into digital packets for transmission over an IP-based network.

Jeff Vaudrey, Managing Director, of PAS Sound Engineering explains the background to the project: "Our client was an international chemical manufacturer that had a 160-acre site in south Wales. For years their PA system was linked via ageing telephone cables, and we were approached to see if we could provide a solution to the unreliability and poor audio quality which plagued the existing system."

Vaudrey believed that TOA's NX-100 could form the basis of a new system comprising 16 outstations spread across the site, using the client's existing IT network infrastructure in order to save on new cabling.

"Because the PA system has to be able to carry emergency messaging in the event of a gas or chemical leak, any new cabling would have needed to be specially contained and the client was quoted over £100,000 for a new network to be installed," continues Vaudrey. "Our approach obviated the need for this expenditure and also gave the client the opportunity to upgrade the audio network – to cover the addition of a temporary new building, for example – quickly and easily."

For Vaudrey and his team, the only stumbling block was persuading the client's in-house IT department that such a large-scale PA/VA system could reside on their data network without 'stealing' vital bandwidth from elsewhere.

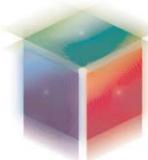
"The IT department were sceptical at first," Vaudrey concedes. "But when they read the NX-100 data sheets, they were surprised at low its bandwidth requirement was – particularly when you consider the high audio quality it offers."

Working under the auspices one of the site's instrument design engineers, Julian Thomas, the PAS team built and delivered 16 new PA racks, each with its own NX-100 network adapter, TOA VM-2000 power amplifiers and VX-2000 battery chargers in just four weeks, with installation taking place over a weekend. "The entire system was assembled and tested in our newrack build department, shipped to site, and swapped over without snags," says Vaudrey. "Because the system is required to function in an emergency, we provided local monitoring of each amp rack for speaker and amplifier faults, plus mains failure, all of which are signaled back over the network to the site security centre."



Julian Thomas comments: "Both PAS and TOA were found to be flexible and responsive to our needs. Everything was delivered and installed according to schedule and disruption to site operations was minimal. The fact that emergency audio can now be distributed reliably over such a large site, without investing in a new, dedicated infrastructure, has saved significant amounts of money."

Brett Downing, Sales & Marketing Director, TOA Europe, concludes: "We have had tremendous success with the NX-100 since it launched a few years back, and this PAS installation is a perfect example of why. Whenever audio signals need to be distributed to and from multiple remote locations, the system's ability to use existing LAN, WAN or IP networks can save the end customer huge amounts of time and money. And, because it does not require its own cable infrastructure, the NX-100 is environmentally friendly, too!"



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