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Business, insight and intelligence for the media and entertainment industry

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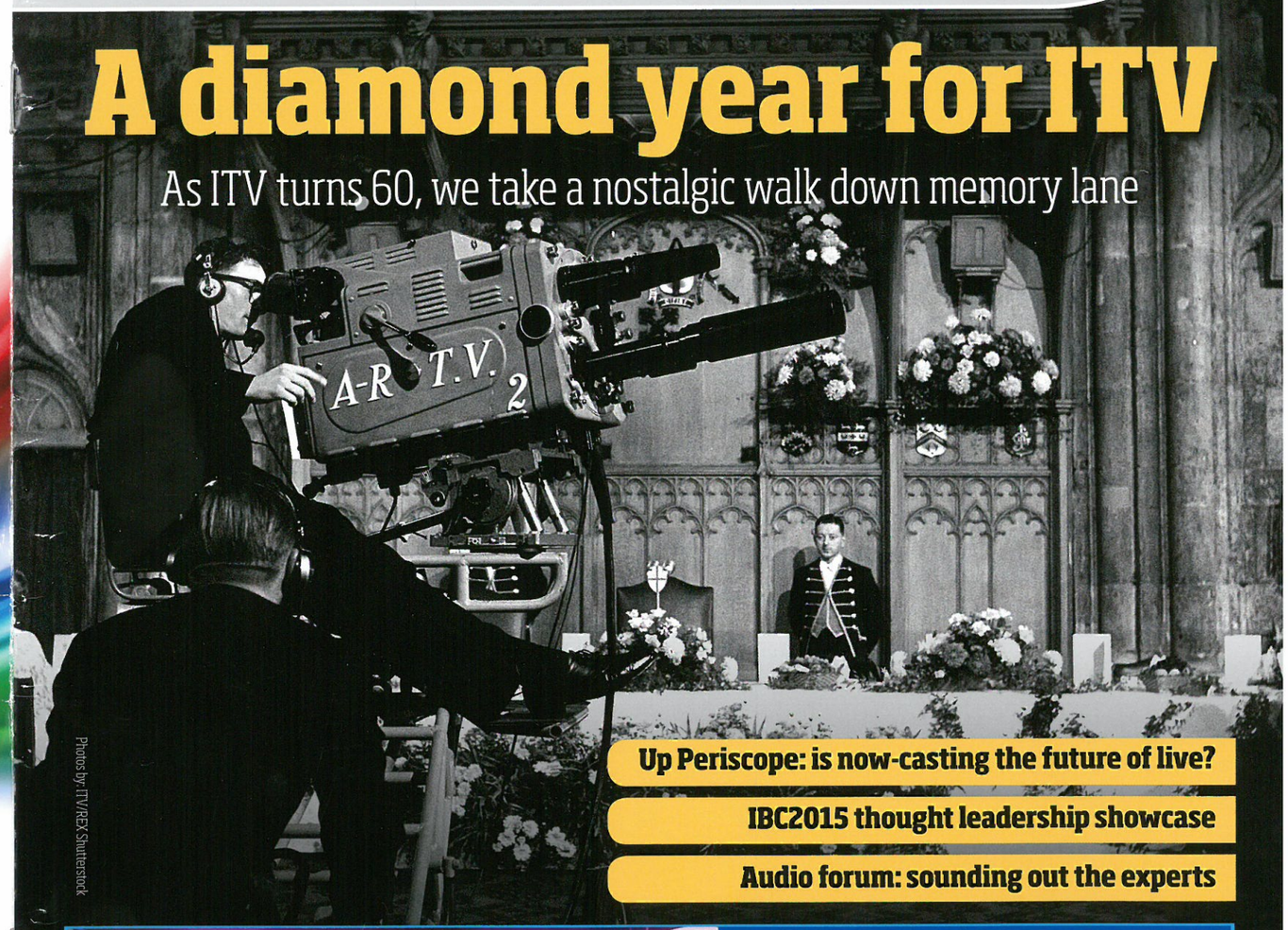
A diamond year for ITV

As ITV turns 60, we take a nostalgic walk down memory lane



Photos by: ITV/REX Shutterstock

Up Periscope: is now-casting the future of live?

IBC2015 thought leadership showcase

Audio forum: sounding out the experts

Opinion and Analysis

The use of KVM in OB vans

KVM matrix switches are becoming essential in OB vans to provide unlimited and highly flexible access to facilities within the vehicle. Switches of different sizes have been installed in many new builds, writes **Enno Littman**, managing director of IHSE GmbH

Outside broadcast vehicles have changed radically over the past few years. The move to HD throughout the world, coupled with the introduction of broadcast-quality flat panel displays, stimulated a new generation of builds toward the end of the last decade. Most major broadcast organisations and independent operators took advantage of the buoyant TV market, which was hit less hard by recession as many others, to upgrade their fleets with new vans and new technology. The introduction of 4K transmission and an ever-increasing demand for more cameras at live events has further stimulated ongoing growth in the outside broadcast market.

A desire to utilise the internal and highly restricted space within a truck to the absolute greatest efficiency and level of flexibility has encouraged system integrators and designers to seek and deploy new techniques and technologies. KVM matrix switches are rapidly proving that they can offer significant benefits in this field and are being incorporated into many new OB vehicle builds, as well as into fixed broadcast studios and editing facilities.

The primary role of the switch is to connect all available operator workstations to all resources within the truck: performing for data- and file-based systems the same type of function as the video router for video feeds. It allows freedom of access from any console to any device, which in turn means that every operator position is completely application-independent. The broadcast workflow is streamlined: production staff can be situated anywhere within the vehicle and can change their working application instantly. A consequent benefit is that the total number, and hence real estate, of monitors and keyboards is reduced to the minimum.

This flexibility provides several advantages. Production staff can set workstations to their preferred configuration, whilst becoming less reliant upon the actual physical equipment configuration. Resources are more easily shared: files can be accessed directly from the source without the need for comprehensive network configuration and associated and time-consuming downloading and distribution of content. Direct access to servers helps eliminate the proliferation of multiple copies of content, which can lead to confusion and part-finished work being transmitted.

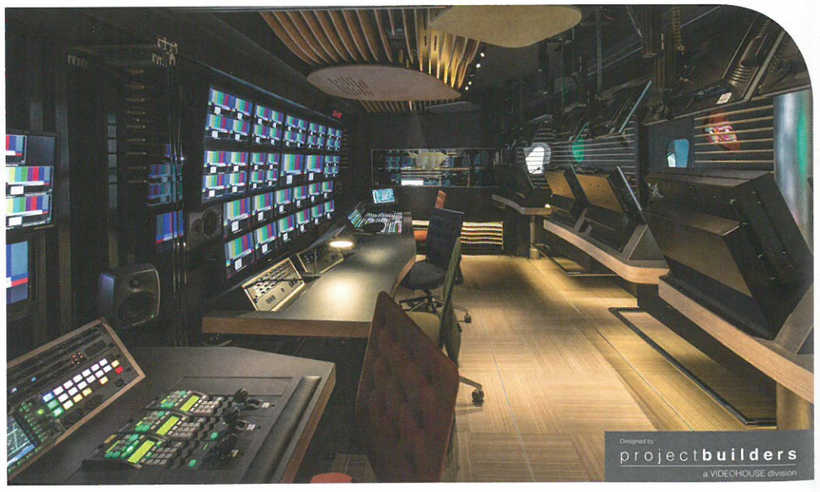
Connection between source devices and operator consoles is fast, and artefact- and delay-free. In operation, there is no perceivable delay in user response, so operators are not normally even aware of the switch and are presented with images that are visually accurate. Switching is instantaneous and can be achieved through several methods: in-band switching where the user selects the source by keyboard hot-keys; through an administrator GUI, which is useful in setting up configurations using stored layouts for rapid and efficient changeover of layout as the vehicle changes jobs; and by integration with a standard broadcast control system, and there are several examples of KVM switch deployments using VSM and KSC Commander controllers.

A recent introduction has been the universal IO (UNI-IO) module that enables parallel switching of keyboard, video and mouse signals along with the associated HD-SDI stream. This is invaluable in setting up editing stations where both types of signal need to be provided to the editor together.

In many trucks, broadcast equipment is located at a distance from the user workstations. Extended interconnection is necessary and with today's high bandwidth, this is becoming a problem for standard DVI, HDMI and DisplayPort data cables of limited transmission capability. KVM switches incorporate signal extension and bring an added dimension of operational flexibility and efficiency that should be considered at the start of any new build.

A further advantage is that trucks can be equipped to suit each job. Videohouse OB14 employs a Draco tera 32-port matrix switch to great effect: equipment is mounted on sliding trays that are accessible from outside the vehicle and the truck is loaded with just the equipment needed for each outing. It makes for greater flexibility and allows equipment to be shared amongst the fleet thereby reducing the overall stock level of expensive devices.

IHSE's Draco tera range spans a wide range of output ports from eight, right up to 576, so there is a solution for every fixed and mobile installation. Cat X and fibre are interchangeable and can be mixed on the same chassis, and a commitment to supporting new picture resolutions and formats means that the solution is future-proof: it can change and expand as the truck itself evolves. ■



Videohouse OB14 employs a Draco tera 32-port matrix switch to great effect

The challenges of interoperability

Simon Browne, director product management, Clear-Com

As a supplier of intercom systems to the broadcast industry, we see an early perspective on infrastructural changes and expansions among broadcasters. Market data (and our own experience) has shown an overall trend among broadcasters to expand into regional broadcasting and venues. The advancements in IP technologies have enabled intercom, audio and video resource sharing across wide area networks and media mux/demuxing technologies at the end points. One of the challenges for intercom in this mature market is audio and control interoperability when using IP audio standards. Connections need to be independent so that local components can be reconfigured without taking down all cross-connected systems or facing delays in the rediscovery and reconnections of all points. Also, the basic control flow needs to be universal to allow crosspoint, audio level and trunking control over other manufacturers' systems. There is movement in the industry with this standardisation and we look forward to cooperating in forging a control standard.

In addition to IP interoperability is that intercom systems have always had to connect with other elements such as the studio mixer desk and audio router for IFBs or line monitoring, or through the master control to outside lines and to camera and wireless systems.

IBC showcase

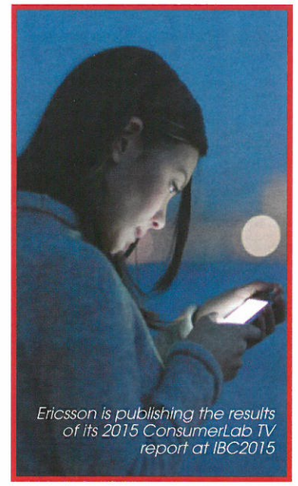
Clear-Com is presenting its latest communications and connectivity solutions at IBC2015 including the new FreeSpeak II 2.4GHz wireless intercom, Agent-IC mobile app and Interactive IFB capabilities. Clear-Com will also make a worldwide debut of all-new intercom and connectivity offerings to the broadcast market at the show.

Stand: 10.D29a

TV transformation and the Networked Society

Simon Frost, Ericsson

The television industry is undergoing its most significant transformation since it begun. Over the next five years, established rights holders, producers, content owners, broadcasters and all forms of MVPD TV service providers will jostle for position with new entrants, new investors and new aggregators. The outcome is unknown, yet the overall winner is assured. In the Networked Society of 2020, the always-connected viewer, with his/her hunger for immediacy of media consumption, will have been met by the most agile and forward-thinking players. On the journey to 2020 all of the sacred cows of television will be put to the test. Every aspect of the commercial model – from selling rights, advertising, bundles, geographical boundaries and especially carriage fees – will need rethinking. Beyond this, serious questions need asking such as whether the creator and distributor industries will share the cost of converting the internet to TV scale, to safeguard the future of all video delivery. With such pace of transformation, the need to be driving this progression rather than reacting to it has never been so important.



Ericsson is publishing the results of its 2015 ConsumerLab TV report at IBC2015

IBC showcase

Ericsson is announcing and showcasing its new solutions at IBC, which enable players to put consumers at the centre of their agenda, deliver new experiences, drive new immersive TV formats such as UHD and HDR, leverage the capabilities of the cloud, and enable IP-networks to become highly efficient and revenue-generating for delivering the explosion in traffic fuelled by online video. Ericsson is publishing the results of its 2015 ConsumerLab TV report into what TV consumers and audiences are demanding.

Stand: 1.D61