OSKA Winner

"full of hidden promise"

Pulsar Light together with lighting designer Tony Gottelier and Mick Martin and Rowland Hughes of Axon Digital Design hosted a special event at Pembroke College Cambridge on Friday July 10th to show and discuss with their dealers and other industry notables the new 'OSKA' lighting control system. L+SI commissioned Graham Walne to take a long look at a revolutionary new control that will be launched officially at the PLASA Show at Novotel in September.

Another new lighting desk I hear you cry! 'Didn't you report that there were 38 systems at the ABTT Trade Show this year? How can you pretend that yet another one is worth an article?'

I don't need to pretend, this one **is** different. This one changes the way we will think about control systems. This one offers the kind of control we will need when the spotlights come out of the Ark. Current lighting systems with dedicated keyboards cannot really be upgraded and QWERTY keyboards aren't really fast enough. This new system avoids those pitfalls because it has no buttons.

The new system I'm raving about is the brain-child of Tony Gottelier, and it stems from his frustration at not being able to find a control small yet flexible enough for Camden Palace. He talked the problem through with Mick Martin and Rowland Hughes who had just formed Axon Digital Design and six months later 'Oska' was born. The name is an abbreviation of Matrioska which is what those Russian dolls are called that fit one inside the other - the suggestion being that Oska has hidden delights.

On Oska the buttons have all been 'replaced' by a touch-sensitive television screen and as far as I know, no other lighting control system has this facility. Furthermore, Axon have come up with a screen which has a lower cost and a more positive action than many other existing touch screens in other applications. The Oska screen will display in colour all manner of 'keys' and data; 'Help' menus offer advice although the display is already quite clear, and it is likely to improve even further.

The absence of buttons means there can be several software options and the 'keys' and display will adjust automatically to suit the appropriate option. The desk I saw was designed for the disco market and the first installation will soon take place at 'Zig-Zag' in Aberdeen. Since I am theatre orientated,

Tony Gottelier (left) looks on as Pulsar's Ken Sewell unties the red ribbon and shiny black packing to reveal the new 'OSKA' lighting control system.

Tony Gottelier and Mick Martin discuss the new system with Pulsar's dealers and invited guests.

Tony Gottelier - a proud day with OSKA.

Mick Martin, Roman Walanta (W.B. Lighting), Pasquale Quadri and Julio Savoldi (Clay Paky, Italy) discuss fine detail at Oska's Cambridge preview.

copious notes were being made from my comments and added to many others culled from Pulsar's recent dealer launch as a prelude to producing a rock board and a theatre board, in each case using some of the disco facilities but adding others more appropriate to each market. Indeed some adjustments had already been made to the system from the earlier comments. The openness of the designers and their ability to listen and ask questions in this way is refreshing and a contrast to those who declare straight off that their product has all the answers.

Readers will have an opportunity to see Oska at the PLASA show in September, but meanwhile let me give you a closer look. The desk will control 256 items, be they dimmer channels, cues, groups, motors or chases. Each item is accessed by touching its key on the screen and an optional menu can list the content of each key in each mode, useful in non-theatre situations where channel numbers are usually replaced by names. 32 keys can be displayed simultaneously, and for those who think that accessing the next 32 and so on might be too slow, I would remind you that Thorn's keypad was thought too slow when that first replaced individual controls, and now it's a standard item. Essentially there is nothing to prevent a theatre-Oska from having a touch keypad if necessary.

Below the screen is a panel housing 16 digital fader wheels with bar graph displays. These adjust speeds or intensities of each of the items displayed, again be they dimmer channels, cues, groups, motors or chases as required, and the faders return to us the smooth feel we used to enjoy from quadrant faders years ago. The output of the system is stored on conventional disc and the whole desk occupies a space only 40" x 33" - and that includes ample space for plots and ancillary items. Peripherals can be daisy-chained via multiplex off the main system so that stalls controls, printers and modems for servicing are all planned.

The response time of the controls is measured in microseconds, essential in today's disco market and possibly important in other markets too, as new light-sources become available. The operations all function in 'real time' so that no 'action' or 'enter' pushes are necessary. Alterations are made to the stage picture but all functions can be set up blind in 'preview' and then brought on stage in the conventional manner if desired.

I salute the courage of Oska's design team and the foresight of Pulsar who will distribute the system. Oska is full of hidden promise, and as long as its creators listen to its dealers and users, that promise should be fulfilled.

OSKA's Pedigree

If fully computer-based lighting systems have not as yet gained widespread acceptance with the majority of lighting designers and operators, it probably stems from their often inflexible nature. After all, speed and precise timing are the very essence of performance lighting, which dictates a hands-on type of control system.

The QWERTY method of programming, often intrinsic in such systems, does not provide the direct access to lighting channels that most users expect from manual or hybrid memory systems. Great for pre-programming cues, the QWERTY is usually shut away once the performance starts. Only in straight theatre has computer lighting control so far gained widespread acceptance where the lighting action is rather more sedate and instant flexibility and speed of response is an everyday requirement.

Pondering these problems in 1981 Tony Gottelier, who was in the midst of conceiving the eclectic Camden Palace light show, decided to take the bull by the horns and find a solution, starting from stratch with a radical new concept.

"I was faced with a lighting system which demanded over 200 individual separately controllable channels," remembers Tony, "and the brief demanded a mixture of rock, disco and theatre lighting. The space required at the time to accommodate two six foot rock desks, or a mixture of controllers, ruled existing equipment out, apart from which none provided exactly the facilities I needed."

He took the problem to two ex-colleagues, Mick Martin and Rowland Hughes, who by then had formed themselves into Axon Digital Design. Fascinated by the prospect they set about the development work enthusiastically, and within six months came up with a prototype to Tony's specification.

"What was mind-blowing at the time was that we were able to control 256 channels of lighting from a desk only 500 x 600mm in size," said Tony, "and the amazing thing is that nobody else in the business picked up on it. It's only now that other manufacturers are catching up with that early concept. Mick found a brilliant solution to the ergonomic problem by inventing transposable keyboards and digital fader wheels so that 16 presets and touch keys could regenerate themselves in memory to provide over 25 controls with real-level memories! And as I didn't want to programme from a QWERTY he found a direct input solution to this too."

A built-in monitor provided preview information and prompt sheets. "It was when we realised that this mimick monitor was making only a limited contribution, that the inspiration emerged for OSKA. But even then, all programming in the system is done in real time working from the actual lighting controls rather than from a data input system."

OSKA is described by Pulsar Light of Cambridge, who are to distribute the system, as the 'total lighting controller'. "When Tony first talked to us we were impressed enough by the capabilities of the Camden system, but when he hit us with Axon's touch sensitive television screen, to replace both the monitor and the keyboard, we were knocked out," explained Ken Sewell. "What a solution to the problems of operating in a dark and hostile environment!"

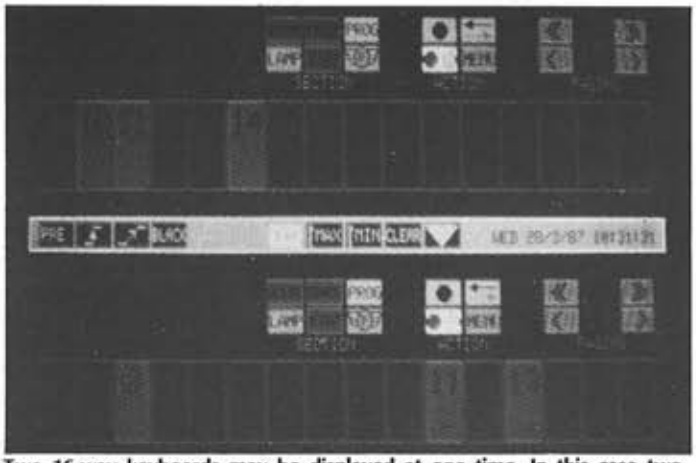
What really convinced Pulsar of its viability was OSKA's intrinsic flexibility, and vast control power from such a small package. 256 channels of lights, soon to be doubled to 512, can be controlled in five different modes, from seven different clockdrivers, all from a colour monitor and 19 inch digital fader unit. Furthermore the facility to programme directly from the lighting controls in-live, rather than from a QWERTY keyboard, is bound to appeal to the vast majority of lighting people who, like Tony Gottelier, are very definitely in the hands-on mould.

For computer buffs the OSKA system has 280K of operating memory with over 156K of graphics in addition and the high speed responsive structure is achieved through triple processor architecture. Although 24K of software has already been written for the basic system it is intended to offer a series of software add-ons to further extend the facilities, via an expansion bus.

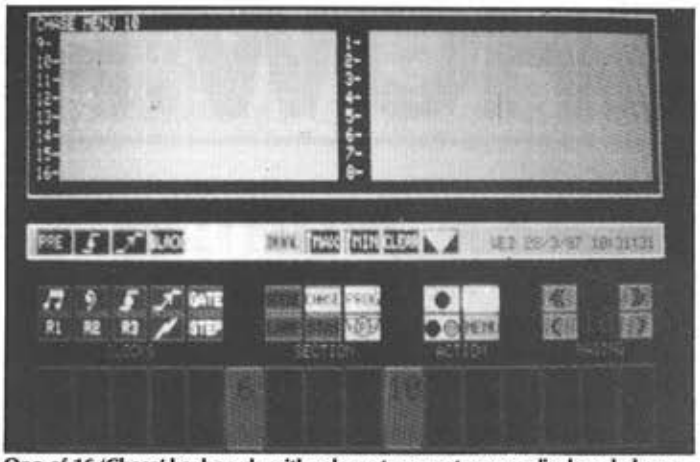
The OSKA system is available in 'hi-fi' format for console mounting, or without the dimmer control for the disco market, or in a splendid touring console which is a '21st century design' based on the style of antique military chests.

Five years on since Camden Palace opened, OSKA looks likely to walk off with all the Oscars at this year's PLASA Light and Sound Show at Novotel in September.

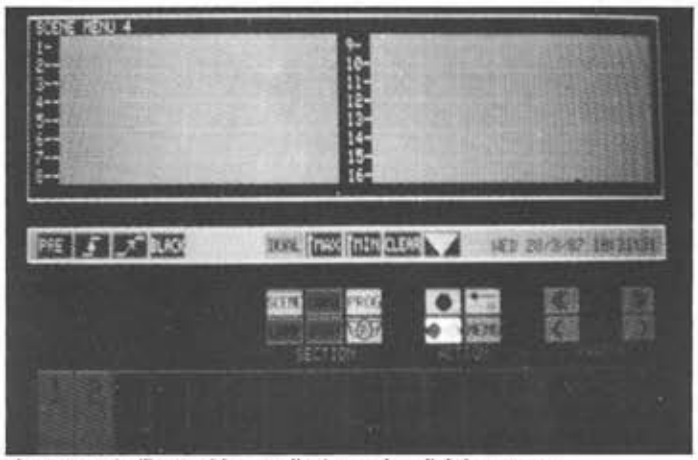
The OSKA 'Magic'



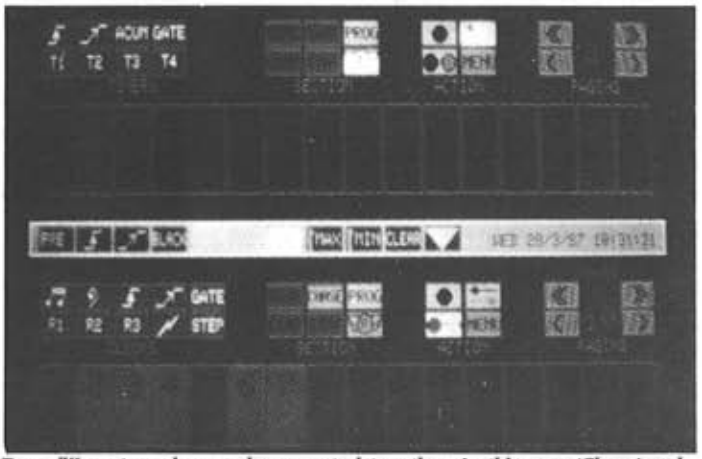
Two 16-way keyboards may be displayed at one time. In this case two 'Lamp' keyboards represent 32 output channels out of a possible 256.



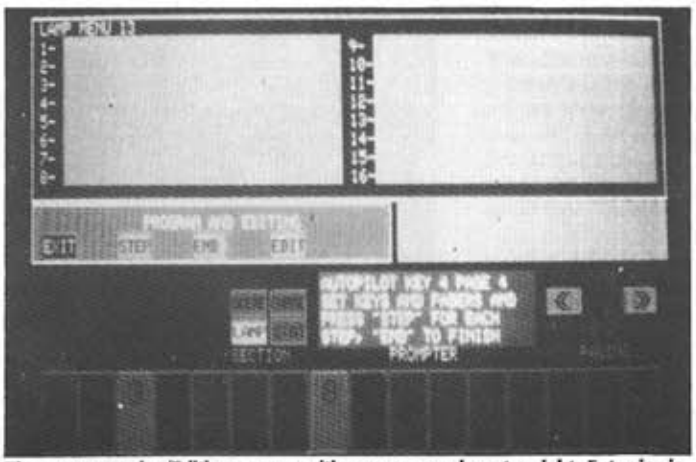
One of 16 'Chase' keyboards with relevant prompt screen displayed above.



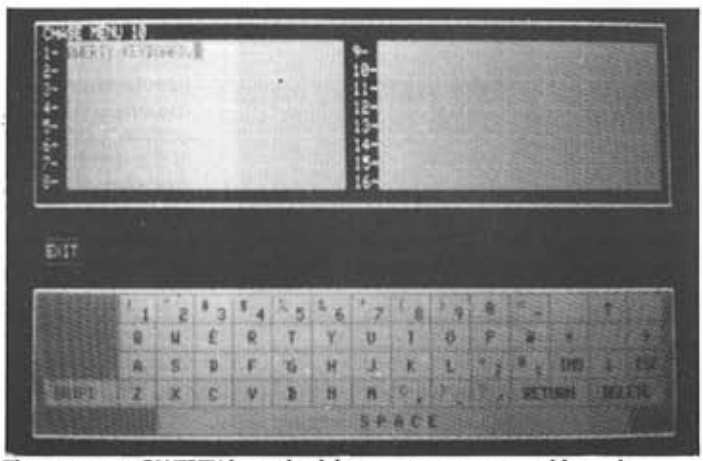
The 'Scene' facility enables recall of complete lighting states.



Two different modes can be operated together. In this case 'Chase' and 'Autopilot', a super-sequencing facility.



The programming/Editing screen with memo panel centre right. Entry is via the 'Lamp' keys and digital fader wheels below (not in picture).



The on-screen QWERTY is used solely to enter prompts and legends.

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Pulsar launch 'Oska' at Cambridge - review in this issue.

PLASA

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