# LIGHTING SOUND International

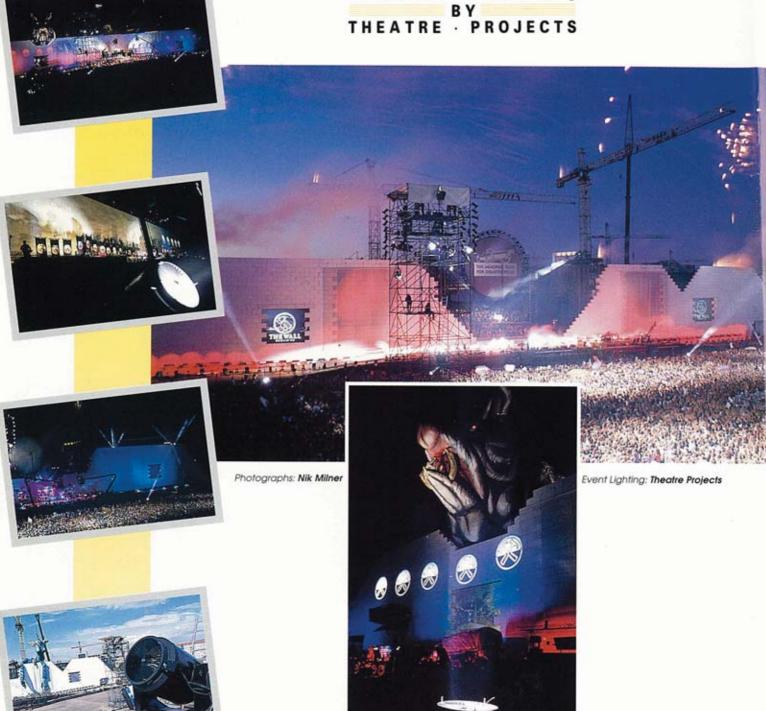


IN CONTROL AT 4:1

- Designing to Scale at Patrick Woodroffe's 4:1 Studio
- Francis Reid at Photokina
- Into the Woods: Sound Planning from Autograph
- PLASA trio in control at Worthing
- Disco at Wrexham and Walsall Wood
- Forth Bridge Centenary Celebrations

**NOVEMBER 1990** 





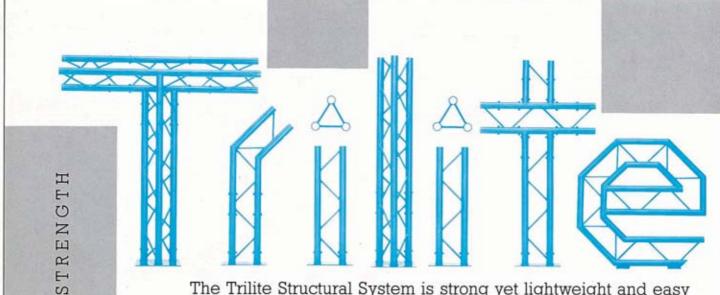
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# LIGHTING SOUND International

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## LIGHTING SOUND

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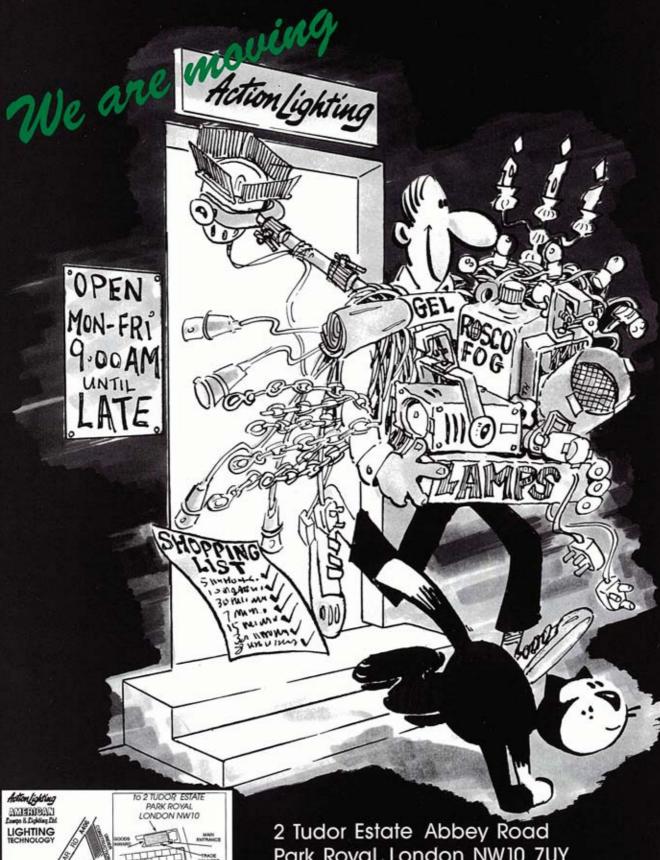
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# LIGHTING SOUND News

#### New German company for Clay Paky and Pulsar

Pulsar Light of Cambridge and Clay Paky of Italy, have announced the formation of a jointly owned company to supply and service the German entertainment market. Trading from 1st January 1991, the new company, Clay Paky & Pulsar GmbH, will be managed by Ralph-Jörg Wezorke of Lightpower Showtechnik GmbH.



Ralph-Jörg Wezorke.

The move has been made by Pulsar and Clay Paky in response to the growing need for increasingly high levels of professional and technical pre and post sales service demanded by users of the highly sophisticated equipment manufactured by both companies. Clay Paky & Pulsar GmbH is the first jointly owned venture of both companies and it is intended to establish further jointly owned companies in other international markets.

The announcement has been made to coincide with one of Germany's most important trade events, Discotec 90, and the companies issued the following joint statement: "We believe that the industry's increasing use of complex electronically and software controlled equipment requires professional and integrated site analysis, installation, training and on-going support. Clay Paky & Pulsar GmbH will satisfy this need in the German marketplace by promoting a new type of customer service and support which reflects the sophistication of the equipment."

Ralph-Jörg Wezorke has been appointed as managing director of the new company, and he will assume this position in addition to his current responsibilities as director of Lightpower. To incorporate the new company, Lightpower's premises in Paderborn have been expanded.

Clay Paky & Pulsar GmbH will control the distribution of both companies' equipment through dealers and installers in Germany. Overall the company will be responsible for creating and maintaining the high quality of system design, installation and support necessary for much of the electronically and computer-controlled equipment manufactured by both companies.

Both companies have stated that they intend to make further announcements about similar joint ventures in other international markets very soon.

## The Goings and Comings of Total Fabrications Ltd

Light & Sound Design Ltd of Birmingham have announced that on October 2 they acquired the assets and goodwill of Total Fabrications Ltd of Pershore in Worcestershire.

The first Total Fabrications Ltd went into voluntary liquidation in October with an estimated deficiency of over £120,000 having changed its name to Pershore Realisations Ltd. The 'new' Total Fabrications Ltd started trading immediately after. Chris Cronin, formerly a director of the first Total Fabrications Ltd (version two).

The press release received from Light & Sound Design Ltd stated that it is their intention to continue and expand the range of Total Fabrications products, which will be marketed through the world-wide distribution network established by the former company. Chris Cronin was on board to ensure continuity and this, combined with the financial and administrative stewardship of Light & Sound Design Ltd would ensure a bright future for the company, they said.

The new Total Fabrications Ltd will operate from Pershore with all accounting and administrative functions based at the head office in Birmingham.

#### Strand look East

Strand Lighting have announced the opening of an office in Berlin at Helmholzrabe 16, 1000 Berlin 10 (Charlottenburg). Although a relatively small office, located in the west part of Berlin, a small display of architectural lighting and stage and studio equipment is available for demonstration.

The office is staffed by Harl-Heinz Richter and Sabina Schroter, both former East German citizens. Richter was editor of the publication 'Forum', which was the equivalent to BTR in East Germany, and has headed the education of theatre electricians and stage hands.

Contact numbers are (010 49) 30 39 14516 (from the UK) and fax contact is (010 49) 30 39 12317.

#### Dunsire heads ADB in UK

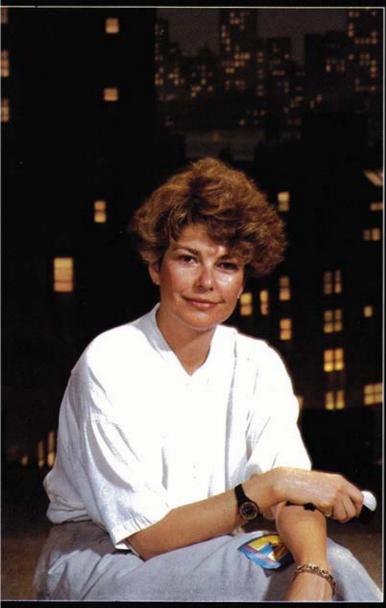
ADB Belgium, a Siemens company, have announced the opening of ADB-UK and the appointment of Russel Dunsire (below) as general manager. Until recently sales director of Strand Lighting, the choice of Dunsire to head up the UK operation shows a determination by ADB to compete with the world leader on its own doorstep.



Based at Siemens House in Sunbury-on-Thames, Dunsire told L+SI that with ADB companies already well established in Belgium, France and Germany, the obvious next step for the company was to continue their overall growth with a strong UK operation from which they can develop and support the UK market. He added that ADB have all the attributes necessary to be a quality supplier to the UK market, being part of the Siemens group of companies, and having a proven range of quality products including controls and dimmers as technologically advanced as any UK manufacturer.

For further information contact Russell Dunsire in Middlesex on (0932) 752994.





MARILYN LOWEY on the set of "YO! MTV LAUGHS" (MTV) at the Regency West, Los Angeles.

## "My favorite GamColor last week was 725 Princess Blue."

"Most blue-greens have too much green in them. Princess Blue is a clear color that balances perfectly for me. I have used it extensively for the Neil Diamond World Tour, Siegfried & Roy, Disney on Ice, and others. But the more GamColors I try, the more I find that work for me. My favorite this week is #220 Pink Red."

MARILYN LOWEY Lowey & Co.

#### **MARILYN LOWEY**

TV/FILM (SELECTED): SIEGFRIED & ROY, Tokyo Fuji TV; HELLO AGAIN: NEIL DIAMOND, CBS\*; LENA HORNE: A Lady and her Music; THE JAZZ SINGER, concert sequences; STAR TREK, The Adventure, Universal Studios; GALLAGHER-OVERBOARD, MTV, New Years Eve '87.

\*EMMY AWARD, 1986.

CONCERTS, SPECTACULARS (SELECTED): Neil Diamond, Cyndi Lauper, Liza Minelli, DISNEY ON ICE: MICKEY MOUSE DIAMOND JUBILEE; PETER PAN; OLYMPIC & WORLD FIGURE SKATING CHAMPIONS; ICE CAPADES.

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#### Bill Graham prepares for Birmingham ICC Opening

Counting down to opening day in April, technical manager Bill Graham (left), late of Harrogate Centre is busy working on final recruitment for his 60 plus technical team that will run the multi-venued £158m International Convention Centre in the heart of Birmingham. On a quick visit just before we went to press, L+SI editor John Offord witnessed the final stages of fitting out, and apart from a light covering of dust, could see the remarkable set of 11 venues coming to final state, with seating now almost fully installed. Highlight is the new Symphony Hall, which will become the home of the world-renowned City of Birmingham Symphony Orchestra, Simon Rattle and all.

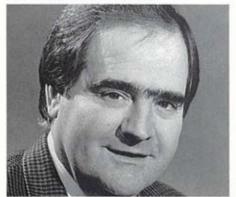
Lucky contractors and suppliers in our field include Strand Lighting, Teatro, Arri GB, Celco, Harman (JBL), DDA, Audix, Theatretech, Sheetfabs, Rae Stage, LSD, Northern Light, Furse and Glantre Engineering.

L+SI will run a major feature on the venue(s) in its April 1991 edition.

#### For Lee Read Lumo

Lee Colortran International has changed its name to Lumo Lighting following a management buyout of Lee Panavision International's UK lighting production operation, effective from October 12, 1990.

The TV, film and theatre specialist — one of the country's leading lighting manufacturers — will continue to offer its full product range from a newly-extended factory at its Manchester headquarters site. A London trade counter will also continue to operate from the premises in Wembley.



Jim Pollard: "everything very much the same."

The acquisition of the UK company by senior management comes just as the company is about to step up its new product introduction, and creates a British-owned lighting and control specialist with international experience, and a ready-made network of agents around the globe.

Managing director Jim Pollard told L+SI: "We felt that we would be able to attack world markets more effectively as a completely self-contained unit and therefore gear ourselves specifically towards the lighting needs of our customers.

"The new name — Lumo Lighting — is, we believe, both striking and memorable. Apart from the new name, everything is very much the same — same experienced people, same excellent and proven product range, and the same levels of industry knowledge and support."

#### **Technical Training**

According to Donmar their demonstration studio is fast becoming a leading venue for technical training. Recent courses have been run by Mountview Theatre School and Arri GB Ltd. Since the end of October The Half Moon Young People's Theatre have been running a series of eight day courses on consecutive Saturdays. These courses will focus on new developments in equipment and techniques for working technicians and

designers in small and middle scale theatre.

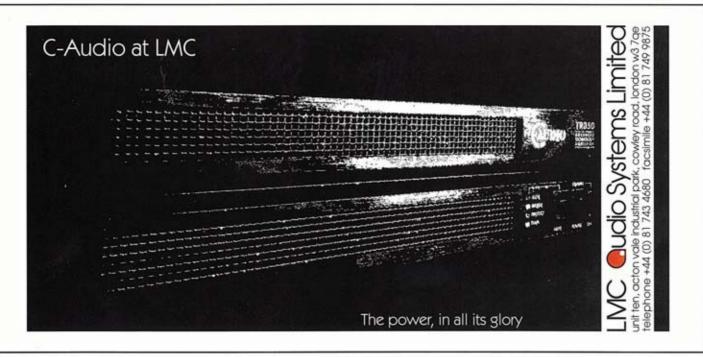
The studio is about 900 square feet and is equipped with flying sets to demonstrate single and double purchase counterweighing, winch and rope sets and motorised curtain tracks. Lighting equipment includes luminaires from CCT, Strand, Lee Colortran, Pulsar and other manufacturers. Lighting controls range from manual to sophisticated memory systems, graphic tablets, riggers controls and connexion/back up devices. Architectural lighting control systems and various pyrotechnic and other special effects can also be demonstrated.

#### Image Pro European Launch

Following on from their highly successful European launch of Image Pro at the Light & Sound Show, London, the European distributor, Optikinetics of Luton, England, have appointed the following dealers:

Belgium: Radio Violette, Finland: Light & Sound Technology, France: Radio Violette, Germany: Light Effects, Holland: Jac Van Ham, Italy: Etabeta Electronics, Switzerland: Electric Claudio Merlo. Image Pro will be on show for the first time in Germany on the Light Effects Stand, at Discotec 90, Dusseldorf.

Optikinetics have also announced that Spot Co of London have been appointed as UK agents of Image Pro for the live/hire market.





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NMK Electronics Tel: 971 6 593887 Fax: 971 6 379613

#### **SWEDEN**

BellaLite Ljusdesign Tel: 46 470 14600 Fax: 46 470 47662

#### **JBL Goes Bonkers**

An impressive 10kW sound system consisting solely of JBL loudspeakers has been installed into Bonkers Showbar, a new fun-pub in Glasgow which will be Scotland's largest licensed pub, and the second largest in Great Britain.

Bonkers is the concept of the Carnegies Group. This latest venture, which recently opened, is based on a scaled down version in Ayr, also called Bonkers.

The sound system has been supplied and installed by Marquee Audio's Glasgow operation, and comprises no less than 18 Sound Power cabinets and 10 Control Series units, four of which are the new Control 1+ loudspeakers. The system for the main bar area alone, consists of eight JBL 4726 active speakers for mid and high frequencies, and two JBL 4785 sub bass units. The first floor bar area has been supplied with eight JBL 4726P passive speakers, and the diner area on the same floor has been fitted out with four JBL Control 10s.

The quality and the tone of the music is set in the entrance area, via four of the new JBL Control 1+ loudspeakers, and four Control 10s have been used in the audio system for the galleries. JBL ceiling speakers have also been used in the toilet areas.

#### **Ark Light Service**

Ark Light Theatre Lantern Restoration announce a new service which will prove invaluable to all users of stage lighting. Their new Searchlight service is a computerised matching scheme, whereby clients register free of charge all surplus lighting equipment and, or their search for equipment needed.

For those operating on a tight budget buying second-hand and restored equipment has obvious benefits. The company will restore, safely re-wire, convert to tungsten halogen lamps, replace or repair broken or missing parts according to requirements.

For free registration on the Searchlight service, whether you are buying, selling or both, contact Ark Light in Leicestershire on (0533) 478336.

#### **Training Aims**

The AETTI is anxious to hear from designers, production managers and technicians who are not members of the established unions or trade associations. Chairman Graham Walne told L+SI: "We are aware that there are some individuals out there who don't belong to any associations and yet still have a right to be consulted about defining minimum standards, and so we would like them to get in touch."

The AETTI is now well under way with its work in delivering National Vocational Qualifications (NVQs). In the last few weeks the AETTI has been in close consultation with many organisations including Beta, the TMA, the ADA, the ALD, the SBTD and the SMA; it has also been forming closer ties with other lead bodies such as the new AETC. In addition the AETTI has also begun consultations with some of the 100+ people who have offered the benefit of their individual experience, many of which are not members of any association, hence the request.

All these contributions will be fed through a series of working parties who will produce the first set of draft standards early next year. The AETTI will then begin detailed test consultations around the country to check how the draft standards stand up when applied to real situations, a series of revisions and refinements will follow before the NVQs are finally assembled next summer. The AETTI will then work with its colleagues to monitor progress and update as required.

For further information please write to Joe Aveline, the AETTI, Cockpit Theatre, Gateforth Street, London NW8.

#### Wharfedale buys Cambridge

Just nine months after its successful reversetakeover of Audio Fidelity plc, the Wharfedale Group has achieved one of its primary objectives — to enter the hi-fi electronics market. The acquisition of the assets of Cambridge Audio from the receiver opens the door to Wharfedale's plans to re-launch the prestigious yet dormant Leak brand and brings the necessary design and engineering skills to the Group to make this possible.

#### Vari-Lite Expands in Europe

Showtec Gmbh of Cologne, one of Germany's top stage, TV and film lighting companies has become Vari-Lite's third European sub-distributor.

Like the existing sub-distributors in Paris, TV facilities house 'Video Communications France', and in Madrid and Seville, lighting and sound hire company 'Berenice/CYP', Showtec will maintain a selection of Vari-Lite luminaires and provide installation and operation for the convenience of clients in those regions.

Pictured below at the recent signing of the Vari-Lite Deutschland agreement are (L to R): Roger Dix, managing director of Samuelson Lighting and Sound Division; Brian Croft, managing director of Vari-Lite Europe; Wilfrid Schiefer of Showtec, Pascal Farcouli of Video Communications France, and Webb Spradley, vice president of Vari-Lite Inc, Dallas.

London-based Vari-Lite Europe, part of the Lighting and Sound Division of Samuelson Group plc, is now seeking candidates with the right mix of skills, resources and professional standards for new sub-distributorships elsewhere in Europe.





SEDA at Pulsar Seminar/Demos

On October 7th, 50 members of the South Eastern Discotheque Association were guests of Pulsar at their Cambridge base. Team in charge on the day was Andy Graves on demos, Paul Mardon on Masterpiece, ably backed up by Derrick Saunders and Ken Sewell.



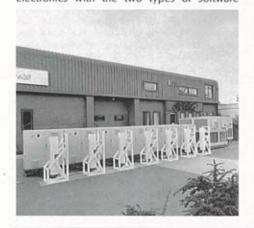
Technical Talk in Hungary

Pictured in southern Hungary during the recent OISTAT publication and information exchange committee meetings are (left to right): Ned Bowman (USITT), Richard Durst (USITT), Ian Herbert (ABTT Sightline editor), John Offord (editor L+SI), Ralph Pine (Drama Book Publishers, New York) and Ken Smalley (ABTT, London).

#### **Laserpoint World-wide**

At the recent Photokina exhibition, Laserpoint reported an amazing response to the launch of their Pixelite Projection Videowall System which has been developed for use in shopping centre advertising in the United States of America. Using self supporting 40' rear projection cubes with special high brightness viewing screens, the multiple input system is already in use in a large number of shopping malls in the United States.

Renewed interest was shown in the Pixelite electronics with the two types of software



ShoGo for the entertainment market and ConFex for the communication/rental market.

Also on display was their monitor-based wall complete with an interactive capability, enabling user selection of information from multiple video disk libraries, built into the system. This variation is being used by



Pictured above is the Pixelite videowall system selected by Pioneer United Artists Mallvision of the USA for use in shopping centres across America. To the left are the seven laser architectural display systems which Laserpoint have just shipped to the Holy Prophet Mosque, Medinah, Saudi Arabia.

Laserpoint's Japanese distributor and is available throughout Europe from Laserpoint.

The collection of video technology was enhanced by a demonstration of the high resolution Aquarius laser projection graphics system with a white light laser.

New at Photokina '90, Laserpoint launched their Pixelite Projection Videowall System which has been developed for use in shopping centre advertising in the USA. Using self supporting 40' rear projection cubes with special high brightness viewing screens, the multiple input system is already in use in a large number of shopping malls in the United States.

#### **3G To Continue**

Following news of Third Generation passing into receivership, managing director Ron Bailey has announced that the designs and order book have been purchased by Essexbased electronics manufacturer Ponting Engineering Ltd.

The new company has been restructured and renamed as 3G Ltd. It will continue to manufacture the popular mixing consoles, signal processors and amplifiers, previously sold under the Third Generation banner.

For further information contact 3G in Southend-On-Sea, telephone (0702) 420645.





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#### Imagination's R&D Resources

Europe's leading design and communication company, Imagination, was showing off its considerable R&D resources mid-October with a one-off exhibition and tour organised by unit head Malcolm Clarke.

A specialist in audio-animatronics, projection control systems and other computerdriven special effects, Clarke designed and installed much of the equipment in Madame Tussauds and the London Planetarium.

On show were a number of examples in support of the Imagination department's claim to produce some of the most innovative work in the industry. Examples of the R&D department's contributions to Imagination projects include: the development of multi-image video walls; the striking 'bubbles' in the flotation roadshow sets for the UK Water businesses; unique fog-generating machines and an automatic slide-change system for large-scale scenic projection.

Other projects include the talking head of Lord Olivier in the West End musical 'Time' and a range of unique effects in continuous operation at Europe's largest theme park, De Efteling in Holland.

A key strength of the R&D unit, claim Imagination, is its ability to work across a broad range of technical disciplines whilst also working with designers from the earliest stages of a project. Past projects have brought together special software programmes, microprocessor control, optics, hydraulics, pneumatics, fluid systems, mechanical drives and animated displays.

#### **BBE Projects**

On the recommendation of the London Limelight's technical director, the club has installed a BBE 422A in the venue's main dance area. The BBE 422A corrects the phase and amplitude distortion inherent in dynamic loudspeakers. By controlling both of these parameters, the BBE claims to accurately reproduce the full audio spectrum of any original performance.

In recent months, BBE have appointed new distributors to handle their products in a range of countries across Europe.

#### **Shuttlesound Move**

Shuttlesound's rapid growth and success as one of the leading importers and distributors of professional audio products has resulted in them having to seek larger premises. From 5 November 1990 they will be operating from: 4 The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX. Tel: 081-640 9600. Fax: 081-640 0106.

#### **Glasgow Sound**

Glasgow's recently opened new Royal Concert Hall is the latest success for Allen & Heath's Saber sound mixing consoles. With 28 mono and four stereo channels plus the standard output matrix system and the specified Penny & Giles faders, the console was chosen after extensive evaluation.



Northern Light, Allen & Heath's agents for Scotland, designed, supplied, installed and commissioned the power amplification and control package as well as the sophisticated building security and communications system. A custom multipin interface to the patchbay allows the Saber to be operated from an alternative position in the auditorium.

Saber PA consoles have now become well estalished in the performing arts world. Until this project the Alhambra Theatre in Bradford was the most northerly Saber, while the Cambridge Arts Theatre held the eastern frontier. In the South the Hawth at Crawley marked the furthest extent, while a hire company in Torquay marks the western marches of live sound Saber.

#### On Tour

Portugese companies 'Voxmania, LDA' and 'Odisseia — Sound and Lighting' were recently involved in several major tours in their country including those of the Rolling Stones, David Bowie, and Tina Turner. The two companies were hired by Birminghambased LSD to supply a rig for Tina Turner's shows in Lisbon, and La Coruna in Spain. José Manuel Henriques told L+SI that the all their equipment complies to European standards, and that they also offer English speaking crews.

#### LDP At Waterloo

One of the UK's leading specialists in the design of lit environments, Lighting Design Partnership (LDP), has been appointed to light all public spaces within the Channel Tunnel link's Waterloo Terminus.

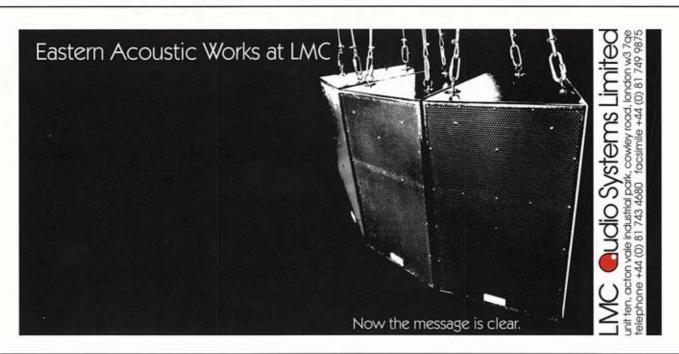
The Nicholas Grimshaw-designed glass and steel roof structure, a dramatic three-pin arch spanning the five rail lines, is to be lit by LDP from inside. It will glow dramatically to provide a strong visual advertisement for the terminal. The consultancy also intends to make good use of the exciting potential for combining natural and artificial lighting inside this space.

#### **Joint Venture**

In a major joint marketing move, RCF SPA of Italy, Europe's premier manufacturer of sound re-inforcement and loudspeaker systems, together with Audilec Distribution Ltd, the present UK distributors, announced the formation of RCF Electronics (UK) Ltd.

RCF UK will be responsible for spearheading the sales of RCF's ever-expanding product range which now boasts five separate product divisions: RCF Commercial Sound, RCF Pro-Audio, RCF Video, RCF Hi-Fi, RCF In-Car Hi-Fi.

Audilec's sales director Phil Price will be concentrating on the sales and marketing campaigns for RCF Electronics (UK) Ltd. "I am anxious to speak to all the major dealers/contractors who will be interested in working with RCF to ultimately create strong dealer networks throughout our five divisions," he told L+SI.



#### **RDE Christmas Lights**

RDE Production Services, has been awarded the contract to provide the Oxford Street Christmas Lights for the next three years by the Oxford Association. This year's £0.5 million lighting 'extravaganza' employs animated and illuminated Tivoli displays of The 12 Days of Christmas. It will be the first time that Oxford Street has been bridged from side to side by the annual illuminations.

All frontages and buildings of members of the Oxford Street Association will be floodlit in consecutive colours along the length of the street, from Marble Arch to Tottenham Court Road, providing some 2 kilometres of continuous colour. Pairs of searchlights will illuminate the sky from rooftops at either end and from centrally located Oxford Circus. The traditional 'switch on' will be performed by Cliff Richard on Monday, 12th November.

#### **Theatrical Consultancy**

Following three successful years in Scotland, Paul Covell has left Lighting Design Partnership's Edinburgh office to set up his own theatre and lighting consultancy practice, based in the south east.

Whilst specialising in the design and specification of both theatre and architectural lighting systems, a full theatre consultancy service covering all technical aspects of theatre design and fit-out is also offered.

Further details may be obtained from Paul S Covell in Crowborough on (0892) 669599.

#### DMX And More of All That

One of the most successful debates at this year's Light and Sound show took place at the seminar on control protocols. The panel of industry experts, chaired by lighting designer Tony Gottelier represented a broad spectrum of opinion on the subject.

Steve Terry of Production Arts in New York, a member of the original committee which formulated DMX512, was opposed to its extension beyond existing control uses with dimmer and simple peripheral devices. He sought a new protocol for more sophisticated requirements, while Charles Woods, a freelance designer of control interfaces, felt DMX still had some untapped potential.

A discussion on SMX, following a presentation by Dave Bertenshaw, drew far from unanimous support for the Strand protocol, which was considered by some to be overkill, although it received general praise as a body-of-work achievement and for the enlightened concept of providing freedom of access. All agreed that desk-to-desk communications were a different matter altogether and that existing protocols such as MIDI, SMPTE and RS232 were cheap, accessible and could probably all be provided as options on future boards to enable combined cueing.

Summing up, Tony Gottelier told delegates that a second opportunity for discussion on the subject would be provided by the Lighting Dimensions Exhibition (17-19 November).

Apart from Steve Terry and Dave Bertenshaw, the panelists in Orlando will include control specialist Gordon Pearlman, Vari\*Lite software wiz. Andy Meldrum, Charlie Richmond, a MIDI expert from Canada, Matt Deakin from Celco UK and Anders Ekvald from AVAB.

Tony Gottelier will be contributing a full combined report on both UK and US sessions in the December issue of L+SI.



#### Sound Move

In the first phase of a two year expansion plan, sound specialists Wigwam Acoustics Ltd. have relocated their rental division. Having more than tripled this division in size to over 12,000 square feet the Manchester-based company aim to double it by 1992.

During the next two years Wigwam intend to move their sales and administration departments to the prime site, on one of the area's developing industrial estates.

Wigwam's new rental division is at 402 Phoenix Close, Phoenix Park, Heywood, Greater Manchester. For more information please contact their headquarters at St. Annes House, Ryecroft Avenue, Heywood, Greater Manchester.

Pictured right are Wigwam's group of directors Chris Hill, Mike Huck, Iain Beeston and Mike Spratt, at their new rental division.





## Sofiscotech



1440 Leeds Road Bradford BD3 7AA Tel: 0274 661405/6 Fax: 0274 666463

COMPUTERISED LIGHTING CONTROL SYSTEMS

#### Champagne 1st Birthday

Vestax celebrated their first birthday during October. Preparations first began a year earlier for marketing the Vestax range of DJ equipment. Since that time Vestax has become one of the fastest selling brands of mixer on the market, with new dealers and European distributors joining almost every day, according to the company.

To celebrate, Vestax are giving each new dealer two bottles of champagne on their initial stock order. For DJs who purchased a Vestax product during the month of October, there will be a Vestax jogging suit or grey vest tee shirt

#### 'From A Distance Tour'

When planning the Cliff Richard 'From A Distance Tour' LD Bob Hellyer turned to Cambridge-based Laserpoint Communications for the show's spectacular laser display.

Hellyer, who has worked for the Cliff Richard Organisation (CRO) for well over 10 years and used Laserpoint on Silver Tour in 1980, contacted Ron Turpie at Laserpoint. Turpie produced five different configurations for Hellyer who opted eventually for a combination of the second and fifth schemes which featured lasers flown as part of the lighting rig.

The system is using seven individual lasers with an eighth as back up. As it simply wasn't possible to position all that weight and volume in the lighting rig, it meant taking Laserlight from the power source to the truss mounted effects head using fibre optics. The system had to be flight cased. All the services, i.e. water and power had to be able to be connected into the lasers and be ready to go within minutes at each venue.

Developing the laser system meant combining a number of original and established design ideas to create a unique touring system. At each stage of the development Laserpoint considered the logistics and safety aspects of the show in order to deliver on time and spec. The tour takes place at the NEC, Birmingham; Exhibition Centre Aberdeen; Wembley Arena, London; The Point, Dublin and the Kings Hall Belfast between Nov 1st and December 31st and has now been extended to 7 January 1991. A feature on the tour will appear in a future issue of L+SI.

#### Pub, Club & Leisure

The National Pub, Club & Leisure Show celebrates it's 10th birthday at Olympia 2, from the 9-11 April 1991.

For further details contact the organisers in Ruislip on (0895) 677677.

#### **Multilingual Brochures**

In preparation for 1992, UK company Carlsbro Electronics has commissioned Simon Herbert Associates to design and produce a new series of multilingual product brochures that have been printed in four different languages: German, French, Italian and Spanish. The brochures will cover the complete range of Carlsbro lead, bass and keyboard combos; loudspeaker enclosures, monitors, power amplifiers, powered mixing consoles and full range PA systems.

Carlsbro have recently appointed Ali Baba in Tunisia, and P.H. Nakas in Greece as international distributors.

# THERE'S ONE THING YOU'LL APPRECIATE ABOUT OUR COLOUR CHANGERS MORE THAN THE APPLAUSE.

THE SILENCE

Ever since their launch late in 1988, Rainbow Colour Changers have been impressing lighting designers with the quietness of their operation.

Capable of scrolling through 11 different colours in one second, the Rainbow offers totally inaudible dramatic lighting effects for the theatre, opera, ballet, dance and television - anywhere silent operation, fast effects and proven reliability are imperative.

Rainbow Colour Changers have been used in Miss Saigon, Starlight Express and M Butterfly in London and Phantom of the Opera and Les Misérables in Stockholm - in addition to many other shows and tours throughout the world.

Our Broadway debut in Aspects of Love is to be followed by other major shows later this year.

Rainbow is now being marketed worldwide and will be on display at LDI in Orlando - on the stand will be Magnus Anuell, the Rainbow designer and Michael Goldberg, Marketing Manager.

Make sure you visit Camelont on Stand 1622 - you won't believe what you don't hear.



COLOUR CHANGERS

# CONTROL **BEYOND IMAGINATION**



Imagine a lighting controller that will run Golden Scans, Par Cans, Strobes, Pinspots, tubelights, theatre lanterns, display spots, downlighters, floods, multi-mirror lamps, neon, etc., etc., and produce every effect you could ask for.

Now imagine a controller capable of doing all this simultaneously, but with every effect in its own individually programmed and timed sequence. Guess how much it would cost? Well, the answer is a lot less than you might think - less, in fact, than virtually any memory control board on the market.

Masterpiece is in a class of its own, the second generation of integrated lighting controllers. It is designed not only to get the best from intelligent lighting, but also to replace a collection of controllers that might previously have been needed for the job. We have tried to include every feature needed in modern light control.

## **MASTERPIECE**

#### 108 CHANNEL MEMORY LIGHTING DESK

- add Masterpieces, switched to slave mode, to expand 108 channels at a time, without theoretical limit.

#### DESIGNED FOR:

Theatres, Bands, Discotheques, Intelligent Spotlight and Environmental

#### • CONCEPT:

A synthesis of Pulsar's Touch Panel, Control Desk, Rock Desk and Modulator technology - plus a little more! 70 Touch Pads, 25 Sliders, 108 LEDS, 4 Digit Display and Joy Stick.

#### • STRUCTURE:

108 Channels, 216 Scenes of the 108 channel levels with fade in and out times, 54 Scene Chases, 48 Environments of Scenes and Scene Chases, 6 Environment Chases.

#### FOR THEATRICAL USE:

Fully automatic crossfades or manual crossfades using the A and B masters. Fade In and Fade Out time sliders to create/ override the values stored with each scene. Add in any amount of the other 216 scenes at any time. Individual control of the 108 channels always available. Grand Master. Black Out.

#### · INPUTS:

Audio for Sound to Light and Chases. RS232 and MIDI for total remote control of ANY

#### · OUTPUTS:

Channels 1-36 available as 0-10v analogue, channels 1-108 transmitted in both RS232 and DMX formats.

#### · SPEED:

The ultimate in both programming and operation thanks to its conceptual simplicity and having one touch pad for every requirement.

Internal memory non volatile. RAM card for backup, changing shows and transfer between Masterpieces.

#### · SOUND TO LIGHT:

Pulsar Modulator's Sound to Light circuits built in, 3 zones of 4 channels, each patchable at any level over the 108 channels.

Using his security code, the 'Programmer' may deny access by the 'Operator' to any touch pad or slider.

•OTHERS:
18 Keyboards of 18 pads, Latch/Flaib/Swop/Solo keyboard mides, Sound to Light monitor, Joy stock with position/velocity, Change security code, Freeze output, Matter/Slave desk, Class section: Manual step for/lev. Speed, Slope, Ban/on band, One-shof/repear, Use scene fade times, copy chase.

#### $\dots$ THE SPECIFICATION SAYS IT ALL

FOR FULL SPECIFICATIONS CONTACT



10 Avenue du Frenne. 14760 Breuzville sur Odon, Fran Tel: 31 741001 Teles 171237

Pulsar GmbH, AM Vorort 23, D-4630 Bochum 7, West German Tel: 0234 28171 Telex 825593

#### **4:1 BUT NO TOY SYSTEM**

Catriona Forcer talked to lighting designer Patrick Woodroffe in his revolutionary quarter scale fully working stage set studio under the Battersea arches

For many years Patrick Woodroffe, lighting designer to artistes such as Tina Turner, The Rolling Stones, Bryan Ferry and The Pet Shop Boys, has dreamt of building a studio where lighting rigs could be represented in a full working scale model. The advantages to a lighting designer would be great, particularly the chance to acquaint onself thoroughly with the rig before production rehearsals. Woodroffe's dream has finally been realised with the opening of his 4:1 Scale Design Studio in Battersea, London. The concept is such an obvious one that I had to ask him why no one has thought to do it before.

There are lots of reasons," replied Patrick. "It's not a cheap exercise at all, although I'm convinced that it is the way to go and I'm also convinced of its worth. As a lighting designer I realised there was a market as I'm the person at the end of the line who has to do the programming. I think it really had to be a lighting designer, or possibly a lighting company, who would take the first step to set up something like this. I don't think an entrepreneur, even a music business one, would have taken the gamble. I think lighting companies are probably too busy being lighting companies, so it was very much geared towards a lighting designer putting the idea into practice. I've played with the concept for many years and over that time I've asked people in the business what they thought about it. They also believed it was a good idea and offered help.

"The first thing that inspired me were the Thomas Mini Par Cans. What held me back was whether there was a way that everything could be run light for light as a normal lighting system. I went through periods of wondering if we could run it as just banks of lights running in eights just to bring them up to 240. Then I realised that if you're going to do it, it has to represent very accurately what's going on. I talked to a company called Midnight Design who do a lot of industrial shows, exhibitions and small pop shows working a lot with birdies and low voltage stuff. I went to see them at their old offices in West Kensington and they were incredibly positive

about it. They offered to do things like convert dimmers to 24 volts as well as converting the control side of the dimmers to 240. I got very excited and, as I was leaving, they offered to show me around the premises. In the bottom of the warehouse was this dreadful, old, dirty, damp basement which they said I could have to experiment in. It was a very generous offer and one which, needless to say, I took up.

"A week later I was clearing it out and starting on the mission of trying to get all the equipment I possibly could. The main part of it was the lights and I immediately ordered 250 on six lamp bars from LSD who made them up with miniature connectors and everything. Brian Croft from Samuelsons lent me two very old dimmers which we managed to bash into shape and which we still use. Meteorlites lent us a couple of transformers to run under 24 volts. Alan Thompson of Theatre Projects was very useful, I originally asked him if he had some funky old 24 way board I could use and I ended up with a 90 way Avolites board. Then the ball started rolling, people heard about the project and lent their equipment and expertise.

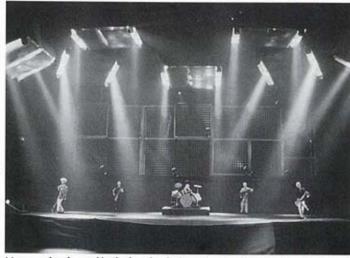
"I feel it will be a success because of the feedback I get from all the people in the industry. All the people who lent us equipment and supported us did so out of very altruistic motives, I think, rather than particularly wanting to get a job from me or saying thank you for work that we'd done in the past. There were companies which I've never done business with who lent equipment. It's a combination of everyone being a schoolkid at heart and liking models. Obviously a lot of the equipment we had to buy or build ourselves. A lot of the control end was lent by various companies.

"Having got this thing set up and in some kind of order we did our first job with The Pet Shop Boys, which I designed. Vari-Lite lent us an Artisan control board because we were planning to run the show through an Artisan anyway. We programmed all the generic lighting — Par Cans, cyc lighting, projection stuff — into the Artisan. The Vari\*Lite stuff we did as

we normally do which is to represent them with mini Profile lights and then just have the Vari\*Lite operator take notes. We tried out gobos by hand. We went to Brixton Academy for an 8am load-in for production rehearsals and by midnight on that first night we ran the show from top to bottom. That was very exciting. I always told those I worked with that the time when we could judge the success of the exercise was not the first day we saw it all set up in scale rehearsals because, of course, that was going to be impressive at some level; but we could really judge its success when we first set up in real life. If at that time we looked at the stage and we were very at home with what we were looking at, then I knew it was a success. If we had looked at it and it had been different then it would have been a nice gimmick but not a totally practical exercise. It was exactly as we had expected it. Obviously we did a lot of programming and re-programming but we very much had the basis of the show there. We were very familiar with the music as we'd run all the songs ten or 15 times before. It was one of the easiest jobs we'd ever done and one of the better shows I've done."

Patrick Woodroffe then went on to design for Spandau Ballet in the same manner and he became more convinced that he was on to a success. Then Midnight Design moved premises and everything had to be packed away, but very much with the intention of starting up again as soon as time and money allowed. He then became involved with The Rolling Stones and Tina Turner for nine months. During that time he talked about his ideas with some of the people on tour mainly Dave Hill who was running the Vari\*Lite board and Steve Nolan the crew chief. When The Stones arrived in London for their first Wembley dates Woodroffe took out a lease on the current Battersea site and between shows, they created the studio.

In mid-September 4:1 Studio had its first clients — Toto — with a 250 lamp lighting system, 24 Vari\*Lites, 24 colour changers, on stage follow spots, painted cyclorama, cyclights and follow spots.



Mannequins dressed in the band's clothes give a real impression of what will work both technically and costume-wise.

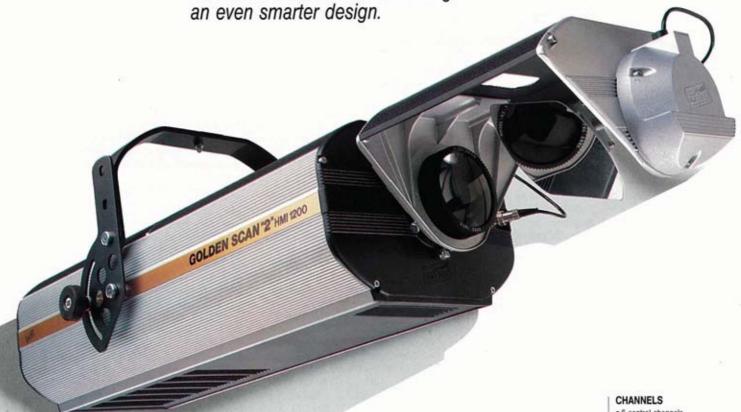


Patrick Woodroffe pictured in his 4:1 studio.

NEW

# **GOLDEN SCAN "2"**

The high performance projector, producing new exclusive effects and having



#### **BUILT-IN EFFECTS**

#### COLOURS

- Eight standard colours: yellow, red, orange, green, blue, violet, pink, white.
   Seven dichroic filters, selected for colour uniformity.
- Colour changer: with fixed positions or continuous (\*).
- · Bicolour beams, by positioning the co lour wheels in intermediate positions (\*).
- Colour change with or without temporary blackout (\*)
- · Rainbow effect, by continuous rotation of the colour wheel (\*).
- · Wide range of rotational speeds.
- . If required, a filter may be inserted to convert the colour temperature from 5600°K to 3300°K (useful for TV studios).

#### GOBOS

- Two wheels with 4 Gobos each. You can project each pattern saparately or in combination.
- A total of 16 different patterns are avai-Gobos change with or without temporary blackout (\*).
- · An evocative rolling effect is available
- by shifting of two superimposed Gobos. · Gobos are interchangeable and easy
- · A wide range of Gobos is available on

#### IRIS

to replace.

- · Fully variable beam size.
- Iris speed is totally controllable by the

#### STOPPER/STROBE

- High speed stopper to cut the beam for as long as required.
- · Strobe effect rate fully adjustable from 1 to 7 flashes per second

#### POWER SUPPLY

220-240 Volts/50 Hz or 60 Hz

#### MOTORS

 7 high resolution steppers motors, controlled by the internal microprocessors

#### **OPTICAL GROUP**

Made by extruded and die - cast alu-minium, with double condenser lens and top efficiency parabolic mirror.

#### **OBJECTIVE LENS**

- Interchangeable objective lens, with three different possibilities.
- Standard dotation:
- High definition trioptical corrected objectives (available as options): 1:3.5/200 mm 1:3/150 mm

#### **ADAPTOR**

Possible rotation of 360° on projector

#### MIRROR

· Very high reflectivity

- · 6 control channels
- · Channels function:
- channel 1 = Iris channel 2 = Colour Disk
- channel 3 = Gobos
- channel 4 = Stopper/Strobe channel 5 = Pan
- channel 6 = Tilt.

#### INPUT

- GOLDEN SCAN "2" can accept either analogue or digital control signals, from a controller or computer.
- analogue input: 0-10 V.
- RS 232/423 DMX 512

#### SAFETY NORMS

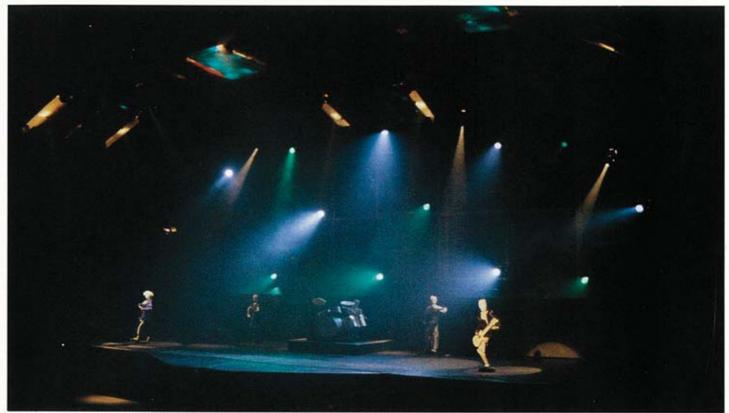
- The equipment is manufactured ac-cording the latest safety regulations.
- Protection degree: IP 20.
   Power supply cable in compliance with CEI 20/22 III norms.

#### DIMENSIONS

- HMI 575 W/GS Version: mm. 430x230x1015 weight 32 Kg.
- HMI 1200 W/GS Version: mm. 430x230x1140 weight 44.5 Kg.
- (\*) Option to be pre selected directly by users.



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Represented in one small room is a lighting system that has taken many years to develop.

"A special moment for me was the first day that Tim Lamb, Toto's lighting designer, along with Dave Hill, arrived here, "said Patrick. "It's been very much my life for the last few months - financially, emotionally and labourwise. It's been very much my baby. A lot of people have been involved but it was something that I really had to believe in to get going. But the first day I saw other people using it I was able to step back. Suddenly the thing wasn't mine anymore, it was much more in the general forum of lighting. That was a special moment because it meant that other people were getting the satisfaction that I had always believed was possible. They were here for five days working very long hours, as you normally would when programming, and then they flew to Brussels for their first show with 24 hours of production rehearsal beforehand. They spent about six hours putting in all the Vari\*Lite programmes that they had discussed and planned. That night they ran a full dress

rehearsal for the band with every cue in place. At the first show the next day, every-body commented on how good the lighting was. Obviously most of that is due to the LD himself and his imagination, but I think that they would admit that normally they wouldn't have been able to be anywhere close to that position on a first show.

"The next job was AC/DC which is particularly ambitious much more so than we imagined until we started to build it. It's a completely custom-built lighting system with these big moving pods stuffed full of Par cans. We're representing them with ACL Molefays as it gives exactly the same look. We've had cyclights made up and there are VL4s all over the stage set as well as floor lighting, effects projectors and on-stage follow spots. The impression is obviously very close to the real thing. We are three days away from pulling out of here and we have most of the show programmed. I keep reminding the guys that

it's important to get a basis of the programming done, but it's not so important to do an accent with a certain channel that might change when we get to production rehearsals. What is important is that you know that a particular group of lights looks good, and that it works. You know what the dynamics of the music dictate. Normally when you're working out how to build a light show you listen to the music a lot and break the songs down on paper. It's not until you actually get behind a board and start pressing buttons in time to the music that you really get a feel for where the dynamics lie. This gives you all that information very directly and specifically.

"We're learning all the time. We're representing in one small room a lighting system that has taken years of lighting technology to develop. The capital cost of a system like AC/DC's is probably a million pounds and we're representing it with something that cost a fraction of that. So we obviously have to use our imagination to find lights that do the same job as other lights. I think we've probably got a way to go in doing very specific colour temperature and candle power, and foot candle output in relation to Par cans and Vari\*Lites. We have to be constantly searching for different bulbs and fixtures. At the moment I'm happy that it looks right but we don't want to stop there. There will always be problems just as there are in every lighting company trying to put a system together but there are opportunities as well. With every job we do, we learn 100% more than the first. I'm sure that one day we'll look back at this and think it was archaic, but right now we're pretty proud of it.

"There are many different ways to approach the future. If I take enough steps back from this and even from the tool that I use to design my shows, it's whether the concept of scale design will be a reality. Will people generally look to use something of this scale and this complication to programme and conceive their shows? If that happens then the sky's the limit, both in terms of



LD's are able to pre-programme most of the show in advance, prior to any rehearsals with the band.

business and in terms of what can be done. But if you take the thing to its obvious conclusion, everything that we use in real life will be represented here to scale, from moving lights which can be programmed to remote control colour changers rather than the hand scrolling ones that were made for us by LSD. I think we'll find very soon that the industry will constantly be demanding more of itself and will want things to be more specific, as will clients.

"If this takes off we will probably try and combine two studios in one facility as it cuts down the overheads. We've already had times where two people have wanted the studio at the same time. Real production rehearsals have to be in a specific time slot, it has to lead right into the first show, but with us this isn't the case. With AC/DC we could have done this a week earlier or a week later. For instance, we moved it forward a few days because we had Sinead O'Connor in here. In fact, we like to have a period of a week to ten days between finishing here and real production rehearsals to solve simple problems.

"With AC/DC we re-rigged two of the pods at different angles and we realised that the ring of Aircraft lights around the main grid didn't focus when we had the pods in their high position. It was a simple solution to pick up the phone and say can you put all those lights on two feet hangers. That sort of problem at rehearsals would have been magnified to the extent that it would have become a disaster. We could have fixed it, but it would have meant flying in equipment from California and we would have lost a day's rehearsal as a result. We would probably have also had to de-rig the lighting system because you can't re-hang lighting bars 40ft in the air. We probably wouldn't have made the change until the first show so we would have had ten days of production rehearsals without the system we should have been looking at. In this case those two or three things were fixed simply by a telephone call.

"One of the advantages of the studio is the technical aspect. We bring the crew chiefs down here and they work out things like their cable runs. It's all stuff that in theory can be done on paper but never is because it's much easier to visualise ideas.

"There's also a more conceptual level where you say first of all does a thing look good? Is there enough frontline? Is there enough backline? All the questions you ask yourself the very first day you see the rig up. Then there's the main part of it which is actually building a light show which is really good fun. Any lighting designer will tell you that in the right circumstances building a light show is the part of it that everyone loves the most. It's a very creative and intuitive process. There's also the idea that you can bring the artiste here and his manager. All of AC/DC's backline crew came here. Backline crews are notorious, whether it's justified or not, for concentrating very much on what their part of the job is. It's an important role and one that involves a limited amount of equipment working perfectly every night. So often those guys lose the picture or at least never have an opportunity to see what the big picture is. By the time we had those guys down here, and we'd run a couple of songs for them they were really on our side. They understand what it is we're trying to do. If we get to rehearsals and we have some problems I'm sure they'll be 100% more co-operative and interested in getting it right, because they've seen what we're trying to achieve. There's also a practical level as they can see where their equipment went in relation to the stage set. They told us a couple of things they wanted changing and it's all easy to do at this point.

"An artiste will be able to spend time seeing if he likes what you're presenting him with. Bryan Ferry is coming down as we've spent quite a lot of time in the past talking about this concept. He's probably going to work next year so we're going to show him some ideas, particularly some projection work. When we come to programme his show to scale then we'll bring him down here and spend some time on it, as he's very concerned about visuals. Production Arts from New York have given us some carousel projectors which in terms of scale will be about the same as their Pani 4Ks or Pani 6Ks. We can work out all the projection stuff using 35mm slides before we go to the expense of having big 8 x 8 format slides made up. We can make the decision on which we want three days before production rehearsals because all the programming will have been

"David Mallett is going to be shooting a live video of AC/DC in Boston, USA, and he's coming down at some point to see exactly what the song looks like, and what lighting effects we're using. He'll be able to work out where he wants his cameras and other equipment well in advance. Costume people will also find it useful. Allen Branton told me that once he did three weeks of production rehearsals with Diana Ross and a third of that time was taken up simply looking at the costumes under different lighting. We have these little manneguins which we dress in the clothes of the band and you get a real impression of what works technically and what doesn't costume-wise. AC/DC's choreographer said that he'd love to stage shows here as you can move the models around so easily. If you move three backing singers in production rehearsals, you're talking about re-focusing all the lighting on them, moving the sound, and moving the monitors. All that can be done ahead of time here."

After AC/DC Patrick Woodroffe's 4:1 Studio will accommodate Sinead O'Connor followed by Paul Weller's show currently being designed by Shawn Richardson and then Woodroffe is back in designing the massive

'Rock in Rio' concert. At this festival in Brazil, there will be about 20 different lighting designers with the various acts on the bill and they will all have to use Patrick's lighting system. He is aiming to get as many of the lighting designers as possible into his studio beforehand to familiarise themselves with his design. Roy Bennet will be in town soon with INXS and he'll be spending a day at 4:1 as they are one of the headlining acts in Rio. When he arrives in Rio, he'll probably only have a couple of hours in the middle of the night to organise a show which will be staged in a 180,000 seater arena and broadcast live around the world. Hopefully, Bennet will be armed with his disc from the studio with a lot on it, or, if not, at least he'll have seen the lighting system and set and will be able to tell Patrick of any changes he wants in advance. Patrick is hoping to design a system that can be altered throughout the course of the ten day festival and he aims to work out ahead of time the different permutations.

Commitments like 'Rock in Rio' mean that Woodroffe will not be touring with AC/DC. "Charlie Wilson will be running the board and Guy Forrester the Vari\*Lites," he explained. "They've been working with me to build this, along with Steve Nolan who has been responsible for a lot of the technical side of putting AC/DC together. He's liaised with the set companies, the lighting companies and the production people. I have to be in Brazil for meetings during the first three days of technical set up. In a normal situation that would have concerned me because I would have wanted to be there from the beginning to see how it looked. But I know how it's going to look so any problems that do come up I think will be much more technical rather than conceptual, and they are problems that can happily be dealt with by Steve and the lighting company. I plan to be with the show one week. I don't really think there's going to be a lot of reason to be there longer because 60/70% of the work will be done. My role during that week will be much wider than specifically deciding whether it should be red or blue on a certain tune because we've done that collectively. It will be a very good test of the studio to see if we can put together this quite big, complicated show in what is really a fairly short period of time. If we can pull that off then I think that is a big indictment for the Studio."



Pictured is Patrick Woodroffe (standing at the rear), and clockwise Charlie Wilson (lighting director for AC/DC) Steve Nolan, and Guy Forrester (Vari\*Lite operator from AC/DC).

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#### **NEW LIGHTING FOR WORTHING PAVILION**

#### Three PLASA members involved in integrated project

Worthing Borough Council who operate the Pavilion Theatre recently approached the Lighting Technology Group with a request to appraise and recommend a new lighting control and dimming system. Richard Pegg, representing the council, and Paul de Ville from Lighting Technology jointly agreed that, not only were the requirements of the lighting system at the Pavilion to be many and varied, but also suitable for the variously qualified staff who would operate it.

The ideal control system for this type of multi-purpose venue was decided at a very early stage to be the 96 channel Celco Gold. It was considered that no other system on the market combines the complete flexibility of manual control of all 96 channels together with more preset faders than most people have ever seen, let alone used. In addition to this the Gold has an excellent effects package.

The problem arises if you want to control more than 96 channels or if there is a requirement for lighting theatre or light operatic productions where the control requirements are very different. To assist in finding a practical and proven solution, advice was taken from the Eurolight Group who also looked at the dimming and installation of the equipment.

The original solution for the first problem was to convert the output of the Gold to DMX and then input this signal into a Eurolight Smart control desk which allows softpatching of up to 96 manual input channels to a maximum of 240 dimmer output channels, at a relatively low cost. This theme was then developed further. If the Pavilion was going to spend so many thousands of pounds on the Smart, simply to site in the corner and act as a softpatch for the Celco, why not spend a little more and purchase a control desk which would not only act as a softpatch, but could also be used for lighting the theatre and operastyle performances, as well as acting as a back-up system. It was decided to opt for the Eurolight Applause 286 control desk which allows for up to 240 channels of

manual input softpatched to a maximum of 800 dimmer output channels, together with all the functions and facilities that are likely to be required for any theatrical show staged at the Pavilion Theatre.

Despite reservations from some staff at the Pavilion, once Lighting Technology brought Celco and Eurolight to a joint project meeting on site to discuss the compatibility of the proposed systems, it was seen that all parties involved had one objective: the installation of a reliable system to fulfil all the requirements of the venue. The system operates in a completely flexible manner where it is possible to use the Celco or the Applause completely independently of each other, or to use both systems simultaneously. The Applause colour monitor always displays the channels that have been selected on the Celco. These are shown in a different colour to those selected on the Applause, so there is never any confusion as to which system is controlling what!

The input softpatch on the Applause allows for any channel on the Celco to be softpatched to any single or group of control channels on the Applause. The dimmer softpatch on the Applause also allows for a different profile fade curve for each dimmer.

All the old dimming was replaced with Green Ginger DMX Wallracks. This is the first major installation of this product in the UK, although there have been several smaller installations. The dimmers are the well-established Wallrack with a 24 channel DMX to analogue card built into the rack. Starting dimmer address switches are provided on the front of each rack together with an active LED and communication present LED. The DMX software incorporates a number of self-test programs which can be accessed by setting the starting dimmer address to numbers above 900.

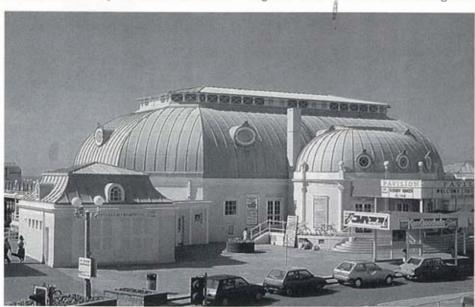
A total of 112 channels of 2.5kW dimming and eight channels of 5kW dimming were installed. The old installation consisted of only 60 channels of dimming together with a multitude of changeover

switches and some switched non-dim circuits. All of these are now controlled by individual dimmers and in addition a number of new socket outlets were installed around the building.

A new Eurolight Designer Remote was ordered as a late addition to the project. As the venue has a relatively small technical staff, bringing in extra casual staff as required, this unit offers the advantage of being able to control virtually all of the main system functions from a remote kevboard which links to the main system using a bi-directional RS422 link. The Designer Remote incorporates two rows of 40 character LCD display, one memory playback, one chase playback and three controllers together with almost all the main system editor function keys. Any key not found on the remote may be recorded as a macro on the main system and then executed on the remote panel. This unit should prove extremely useful for the Pavilion, both for rigging/plotting sessions and for using as a stage lighting control during performances where the lighting requirements are basic.

At the same time as the stage lighting was installed, Lighting Technology was entrusted to supply new houselight dimmers and control. The dimmers were replaced with four unit dimmers all of 30 amps capacity, two of them for standard Tungsten loads and the remaining two for fluorescent. The control requirement of the houselighting, as with the production lighting, would vary from day to day and so Eurolight recommended a Lytemode Lightmaster control system, primarily designed for architectural applications in offices, shops and conference facilities, but also ideally suited for theatre houselighting applications.

The master control panel offers individual manual control of each channel with an associated bar graph display showing the current level of each channel. In addition up to four lighting scenes may be programmed together with an OFF and MAX state, with the option of increasing this up to 16 scenes. Each scene can be



The Pavilion Theatre, Worthing.



The Pavilion Theatre dimmer room showing Green Ginger DMX Wallracks and houselight dimmers.

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Worthing Pavilion Theatre — Applause Designer Remote control with houselight remote in background.



Worthing Pavilion Theatre — Richard Pegg, technical manager, operating Applause.

programmed with its own fade time which can be anything from instant up to two hours. Scenes may be very quickly and simply re-programmed if required.

A scene remote panel was installed at the side of the stage which allows access to all six scenes. An LED is provided for each key to indicate the currently selected scene together with indication of when a fade is in progress. This houselight scene remote together with the Applause Designer Remote offers complete and flexible control of every light fitting on the stage, and in the auditorium from the prompt corner.

The time available for 'ripping out the old and installing the new' was less than a week due to the busy production schedule of the theatre, but thanks should go to all concerned for their help and co-operation in ensuring that the project was completed on schedule. The major problem for all parties concerned with the installation was how to fit the Celco Gold, Applause, colour monitor and alpha-numeric keyboard in a space previously occupied by an M24 and a 60 channel AMC, and still leave room for the operator!

This was however achieved, and the Pavilion Theatre was left prepared for any future production which may be staged at the venue for many years to come.

#### **Equipment List**

Celco Gold 96 channel control desk Eurolight 96 channel analogue to DMX multiplexer

Eurolight Applause 286, 240 channel control desk

Eurolight Designer Remote unit 112 channels of Green Ginger 2.5kW DMX Wallrack dimming

8 channels of Green Ginger 5kW DMX Wallrack dimming

Lytemode 4 channel Lytemaster houselight control panel

Lytemode 6 scene Lytemaster remote panel 2 x 30 amp tungsten unit dimmers

2 x 30 amp fluorescent unit dimmers

#### Glasgow Concert Hall and more . . .

#### **Eurolight projects in Scotland**

The Eurolight Group recently completed the supply and installation of all the production lighting equipment for the recently opened 2,500 seat Glasgow Royal Concert Hall. The venue was originally named Glasgow International Concert Hall prior to the Princess Royal agreeing to attend the official opening ceremony.

Lighting control equipment consisted of a Eurolight Ovation 286, 400 channel control desk complete with Ovation 400 channel standard back-up computer and a 36 channel non-dim control system was especially designed to meet the concert hall's requirements, and built into a case to match that of the Ovation. The non-dim control panel utilises a simplified version of DMX in order to send information to the non-dim rack in the dimmer room. Two-way communication is used in order that the control panel can send information to the rack and then, once the correct contactor has been energised, a signal is sent back to the control panel to illuminate the LED in the appropriate key. This ensures that the operator can always be confident that the system has carried out the correct operation.

Control positions are provided for both main and back-up systems and the non-dim control panel in the control room, auditorium technical gallery and rear of stalls. An Ovation Designer Remote unit was also provided, essentially as a lighting control desk for a concert manager at the side of the stage. Thus alleviating the requirement for lighting staff to be present in the control room during concerts requiring straightforward 'on/off' lighting. The unit

may also be used in the stalls to facilitate the plotting of shows by both in-house and visiting lighting designers.

A radio riggers control unit allows selection of channels and levels during rigging and focusing sessions. Much to everybody's amazement the radio system works throughout the auditorium, bridges, grid and stage areas. The only areas the system wouldn't reach were the dimmer room and understage areas where outlets are provided for connection of a cable riggers control.

288 channels of Green Ginger Wallrack dimmers are installed complete with dual (main and back-up) DMX demultiplexers. As it is proposed for the venue to be used by the BBC for recording and live broadcast of events, the majority of these are 5kW dimmers with some 2.5kW and 10kW. The opening concert, in the presence of the Princess Royal, was broadcast live on Scottish television and highlights were broadcast later in the evening on national television. The building proved to be exceptionally well-suited for the application, having lighting positions in all the right



Glasgow Concert Hall — Control room showing Ovation 286, standard back-up and non-dim control panel.

places and holes knocked in all the right walls for the cable runs to the multitude of O.B. trucks!

In addition Eurolight also supplied the lighting rig consisting of CCT 1kW and 2kW Silhouette profile spots and 2kW Starlette fresnels, internally wired bars and socket outlet boxes.

This is the second major installation Eurolight have completed in Scotland in the past few weeks. His Majesty's Theatre, Aberdeen have recently taken delivery of an Ovation 286, 240 channel main system and Ovation 240 channel standard back-up computer complete with their complement of three colour monitors. A cable designers control and radio riggers control were also supplied with the system. 60 channels of Green Ginger Wallrack dimming was installed to increase the total number of dimmer channels to 226, with an additional 14 channels of non-dim relays controlled from the Ovation.

#### **Equipment List**

Ovation 286 400 channel control desk Ovation 400 channel standard back-up computer

Ovation 288 channel dual DMX demultiplexer Ovation Designer Remote control unit

Ovation cable riggers control

Ovation radio riggers control

30 x CCT Sil 10, 2kW profile spots

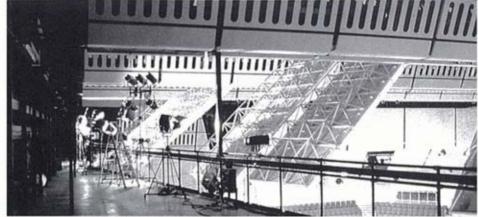
20 x CCT Sil 15-32, 1kW profile spots

30 x CCT Starlette 2kW fresnel spots

200 channels Green Ginger 5kW Wallrack dimming

60 channels Green Ginger 2.5kW Wallrack dimming

18 channels of Green Ginger 10kW Wallrack dimming



Glasgow Concert Hall — view along south technical gallery showing 5k and 10k spots rigged by BBC for the opening concert.



Glasgow Concert Hall - view from south technical gallery.

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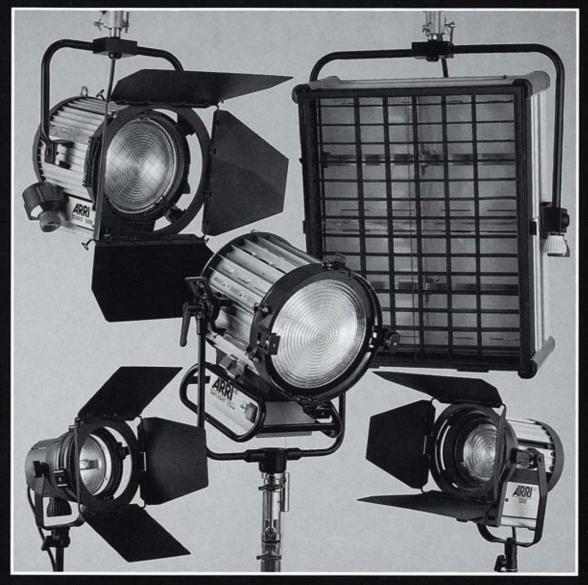
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#### **PHOTOKINA 90**

## Francis Reid visits Cologne's show for the Big Lighting Spenders

Photokina World Fair of Imaging Systems was celebrating its twenty first anniversary although, as a biennial event, this was its fortieth birthday. It was a big show: 1,369 exhibitors from 34 countries occupying 200,000 square metres for seven days. Many of the halls were devoted to cameras and photo processing, but the 80,000 square metre Professional Media section included lots of entertainment lighting. Film and video studios, plus theatres on an opera house scale, were the obvious market targets. However, virtually every lighting manufacturer seriously seeking a share of the action in Central European stages and studios of all scales seemed to have a presence.

Since this was entertainment technology's last big show of the season, there was very little new product still to be launched. However, day three brought a new spotlight which seems guaranteed to get a few sets of worry beads jangling in our industry's counting houses. A new Italian production line had started to roll and Mike Lowe was exhibiting the first of Teatro's TAS range of 1kW fresnel and Prism Convex spotlights. Their appeal is not based on new glitzy high technology optics or mechanics but on price. £75 is considerably more than somewhat below the going rate.

How can anybody market a half price spot while keeping a realistic margin? Well, firstly you go for a simple design with few components and easy assembly (and if you get this right, you have a selling bonus in easy maintenance), but you do not skimp on the lens or electrical safety. Then you find a small firm to manufacture it with family pride and low overheads. And you market it in a clearly identified slot within your range, using the cleverest data sheets I know. (And Strand clearly think so too because they have hired the chap whose technical know-how has directly interfaced with desktop publishing to produce Teatro

literature which is distinguished by its maximum information and minimum crap). Both versions use an identical case and a CP70 lamp: the only difference is the 150mm lens which may be fresnel or PC. It is simple, robust and traditional, yet with a touch of the style that we expect from Italy. Could be just the product for recession-hit budgets.

Those with more upmarket ambitions should have a word with Cerebrum's Rod Bartholomeusz who has taken Amptown, a firm new to me, under his wing. For Vari\*Lite admirers who for some reason (money perhaps) are seeking an alternative package of remoted discharge lamps and dichroics, the Amptown prototype which buzzed impressively, but (inevitably) out of reach, could be something to watch.

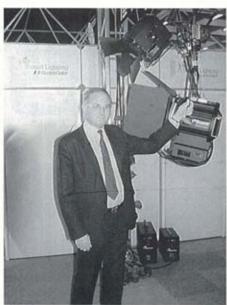
Strand, once again, seemed to be the firm with by far the widest product range. Is this for real? Or is it because their marketing skills (not forgetting their marketing budgets) have made us aware of the extent of their goodies? One thing is for certain: Strand's growth in Germany is an export success story to be measured by standards well beyond just the theatre lighting industry. I can remember visiting a sixties Germany dominated by the massive twin presence of Siemens and Reiche und Vogel. Gerd Ohlmer was slowly building up Strand business, often with just a couple of Pattern 23s or a few sheets of cinemoid 17 (then known in several German theatres as Englisch Blau), but the breakthrough came with the early memory boards when Strand, despite some technology blips, produced desks that talked theatre language rather than just miniaturised old engineering ideas. Heinz Fritz, who joined Gerd Ohlmer in the pioneering days, has built up a Strand market dominance from which it is poised to benefit from reunification . . . and indeed from the new east-west detente generally.

Photokina is the ideal market place for

'full specification' products with maximum facilities generously engineered. A typical Photokina customer can afford the level of captial investment that reduces the risk of operational failures. Such customers make capital investments to save running costs. So they buy full spec self-diagnostic dimmers like EC90MDPlus. And when it comes to a desk, well Galaxy 3 with none of its options skimped (and many duplicated) fits the bill. Such customers do not have the problems that lesser mortals have when trying to choose a board from the Strand range which inspired one saloon bar wag to propose a new collective noun . . . 'A Confusion of Control Desks'.

I am certainly not one to encourage more confusion but I do rather wonder if they may not have made an error of judgement in discontinuing such delightfully simple desk as 'Action'. The new MX series summarises the 1980s in an incredibly cost-effective way, offering an outstanding range of operational facilities for a price so peanuts low as to strain credibility. But might there not be some situations where it may be just a teensyweensy bit over sophisticated? inexperienced operator press-ganged for an occasional show might be a little more relaxed with something simpler, particularly if the operational manual has been lost. I have to say that, generally, today's downmarket boards make me feel glad that I no longer operate . . . the knobs are too fiddling small for my fingers.

Luminaire buyers were firmly focused on remote operation and this formed the topic for one of the seminar days. (The second day's topic was lighting design). The seminars were organised by the German theatre and studio technology organisation (Deutsche Theatertechniche Gesellschaft) and admission was free to anyone attending the exhibition. There seemed to be general agreement between makers, specifiers and



Chris Waldron (managing director) with two of Strand's new Quartzcolor MSR luminaires with electronic ballasts for 'flicker-free' operation.



Ian Ibbotson and David Bertenshaw (director R&D) with Strand's new MX48 control desk.



Teatro's Mike Lowe with their new half price 1kW spot (fresnel or PC).



Gert Raffelsberger of Pani with their range of projectors.

users that physical access to spotlights for making adjustments would soon be an anachronism.

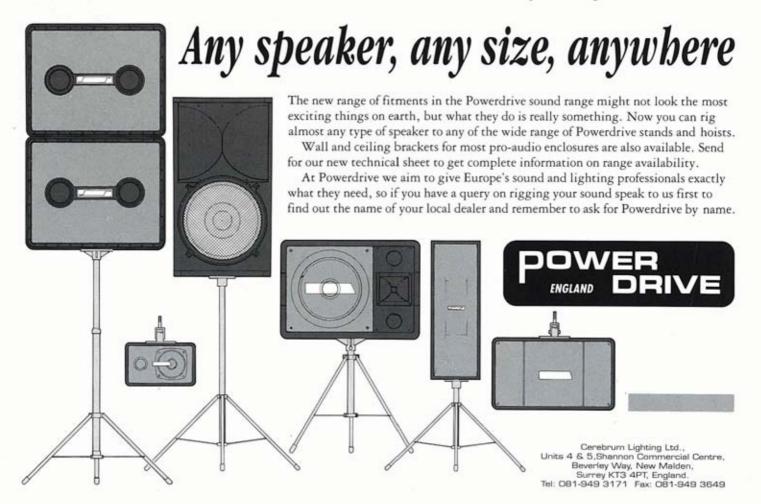
The talk was all of 'when' rather than 'if', and the manufacturers were particularly concerned about improving their dialogue with users to establish needs and priorities more clearly. Much of the discussion, inevitably and properly, was about money. In the context of the daily repertoire changeovers in the German theatre system, the potential for time and personnel saving provides an overwhelming logic for investment. While supporting these lighting management aspects of the new technology, my own paper also considered its potential for improvements in the quality of lighting design. Time may be money but time is also quality. Moreover, it

seems increasingly inevitable that we shall enter the new century with lighting designers using Computer Aided Design techniques as a direct interface with the control of all aspects of luminaire operation.

Any L+SI reader accustomed to my show reports will know that I am not in the business of providing an objective roll-call of the stands. Indeed, manufacturers tend to view my responses much in the same way as the major political parties view the impartiality of the BBC. So let me just say that I continued to derive my usual pleasure from Teatro Talentos, Thomas Parcans, Reiche & Vogel Beamlights, Rosco Diffusers, Pani Projectors, ADB Eurobloc compact lightweight digital dimmers, Arri HMIs and Arri Graphic Tablets. I realise that Vari-Lite

are a rental company running at full capacity, but I wish they would turn up at an occasional exhibition if only to remind everybody where the future lies. And, of course, I looked in vain, as I always do, for a short-nose profile to replace the Pattern 23... nothing else has the short length that allows it to point upstage without being clobbered by flying cloths.

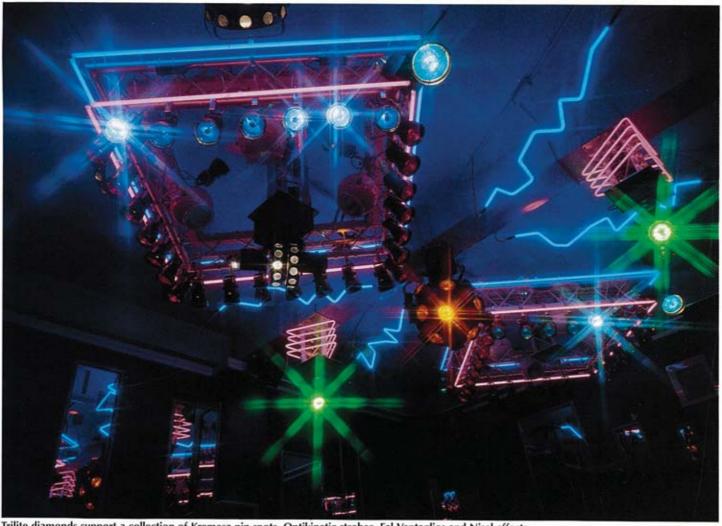
To future Photokina visitors I heartily recommend a cabin in one of the Rhine cruise ships moored as temporary floating hotels during trade fairs. The city centre is alongside, the exhibition halls just across a pedestrian bridge, and the ship's bar offers a splendid view . . . on this occasion uniquely so because of Photokina's opening night coinciding with reunification fireworks.



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#### **WREXHAM COLISEUM**

#### Vincent Rice visits a three-in-one neonic emporium



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The life of a roving disco journalist is not all opening nights and free champagne; in fact it is hardly ever opening nights and free champagne. A four and a half hour drive from London to Wrexham prompts the socio-ecological thought; how long can we tolerate the accelerating car population in this country? The motorway system was a 35mph crawl from Hendon to Wolverhampton on Friday night and I think, much as I love my GTi, we may be seeing the last years of relatively 'free' motoring.

Any road-up, having left the M6 things improved considerably and Wrexham itself was a very pleasant surprise, being a very 'olde-worlde' market/light industrial town lived in by English people with Liverpudlian accents who by some quirk of fate find themselves in Wales. It's funny how you get a mental picture of a place purely from its name; I was completely wrong about Wrexham.

Hitting the town at 10.30 on a Friday night it was not difficult to locate the 'entertainment' area; there were thousands of young people milling from pub to pub and the ones who thought they could pass for relatively sober were stealing themselves for the inevitable inspection by the bouncers at their chosen late night venue, of which there seemed to be many.

The problem for the nightclub entrepreneur in a town like this, i.e. with a relatively unspoilt low-rise town centre, is that there are few of the derelict cinemas and theatres that most major nightclubs inhabit. It is the solution to this problem that swallowed up the £750,000 - £2 million (depending on who you talk to) spent on well-known (but tired) Ferryman nightclub by owner Mike Robins. To gain sufficient space to make the new club a viable prospect it was necessary to extend two floors and virtually create a third on top of what must originally have been an old workshop warehouse or description.

The Coliseum announces its presence with a large neon sign and frontage, which is entirely appropriate since the mood of the various interiors of the place is dictated to a large extent by the excellent and copious neon shapes of Disco Neon of Bristol - a company who seem to be dominating the neon scene at present. After negotiating to be signed in (licensing problems) I entered the ground floor area and was shocked to be assailed by the noise of a hundred screaming girls and a DJ who thought I was Keith Chegwin on speed. It's a Fun Pub! Yes, the oddly named 'Sinatras' is essentially a pub with both day and nightime functions, the Video Karaoke unit and small dancefloor coming into their own at night and the restaurant area being utilised during the day, or at least I hope so

because nobody was in the least bit interested in it when I was there. The small amount of discotheque pinspots struggled against the high ambient lighting, provided by Disco Neon Delta-Neon, but this is necessary for the concept, and the bar was an interesting construction using backlit glass bricks which I think we are going to see a lot more of in interior design schemes.

Escaping into the Wrexham night air I turned left and entered the nightclub proper through the next door along. Or at least attempted to. Another complex negotiation where eventually place membership fee was waived but I had to pay the entrance fee; fair enough. From the entrance you go straight up to the first floor and an increase in the 'luxuriousness' of the in-house designed decor announces that you are into the discotheque proper. This reminded me of the discos of my youth; a dark sitting/drinking predominately in pink and blue with a relatively small dancefloor at one end of the room. Into the equation at this point enters Chris Cadman, a one-time discotheque installer and now apparently an employee of Digital Computers. Coaxed out of retirement to be light and sound designer on this project Chris has managed to pack a very nice little lighting rig into the relatively small space provided. Two small Trilite





The Roma bar returns to ancient Rome for its inspiration, but looks to modern technology to provide effect.

diamonds each support a collection of Kremesa pinspots, Optikinetic slave strobes, Fal static Ventaglios, Kremesa CR90 Super scanners, a central Nisel Spaghetti Mix and the ubiquitous pink and blue neon.

The ceiling is further punctuated with two short vertical Trilite lengths supporting mini vertical harvesters and surrounded by small, but perfectly formed, pink neon triangles. A workmanlike and efficient design. The sound in this area is provided by a refurbished Avitec system of some years vintage picked up from an ailing operation elsewhere for about £200! The mid/high cabinets are of an old Tony Kingsley design utilising two 12 inch cone drivers, a JBL mid horn and a JBL bi-radial tweeter. The bass end being provided by

four Cerwin-Vega L36 JEs, laid on their sides and being used as a raised dance area. Amplification and graphics were also old style Avitec badged units. It may not be hi-fi but Jesus it was loud and clear with astonishingly high SPLs without distortion in a small area — mega, as they say.

Onto the landing and upstairs again to the new second floor and into a gem of a room — 'Roma'. Here the classical theme really takes off with marbled columns, decorative friezes, Roman tiles, the works. The higher ambient lighting level, again provided by Disco Neon's sculptures, and the full Mike Robins Romano/Hollywood fantasy make this the room to do some serious posing Wrexham style. Gentle Trilite curves and circles are more the thing here

with a less intensive lighting set-up using pinspots, floods and one of my favourite effects, Scorpion Autocolours by Fal out of Avitec. Sound in this area is again provided by an Avitec system of a somewhat more refined nature, being the excellent Ramsa 200/250 combination with again Avitec badged amplifiers and graphics.

Mike Robins has certainly had the courage to put what must be thought of as the perfect metaphorical three-ring circus of 'fun-pub', discotheque and posey nightclub, all decorated to his own specification, to the ultimate test of Wrexham's nightime punters. Judging by the sheer desperation of young ladies trying to enter the establishment on Friday night the result really cannot be in doubt.



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### INTO THE WOODS

### Tim Frost reviews the sound development for Stephen Sondheim's new musical

The new Steven Sondheim musical, 'Into the Woods' opened recently at the Pheonix Theatre. Having only ever been performed before in the US, the show in the UK is a totally new project with everyone from director to sound designers starting from scratch.

Instead of looking to see what was done to the sound, I decided to follow the sound designer and system suppliers, Autograph, through the project from start to finish. Over a period of five months tabs were kept on the way the sound was planned and put together, with all the changes, planned and unplanned, that occured.

May 1990 Mac Plans and Fighting for Position One of the first appointments by the produc-

One of the first appointments by the production team was Andrew Bruce as sound designer, and his first job was to go through the script with a fine tooth comb. Autograph co-director Julian Beech explained: "Once we know we are designing a show — in other words we have the contract — Andrew will plan the design to the point where it can be costed in terms of what we have to buy and rental costs. Then it goes back to the producer for a second contract negotiation which usually happens the following week." Once the costing has been agreed, Andrew Bruce verifies all the details of the project.

From the script, and by talking to the director, he gets a feel for the overall type of sound reinforcement needed — whether it is going to be heavy rock, or as with Into the Woods, a light touch, to aid clarity and allow the insertion of a large number of sound

effects. To get an idea of the radio mic needs, he details every character, what they do and when they are on stage. He then looks at all the requirements for effects: what needs to be recorded, where special speakers have to be positioned, and so on. This is all in addition to the basic sound system design.

Having read the script, Bruce explained his impression of the show. "In Into the Woods Sondheim uses basically a chamber orchestra. His style is very intelligent and needs minimal reinforcement, and from that point of view it will not be difficult to run.

"The show interweaves various well-known fairy tales. In the first act everyone lives happily ever after, and in the second act it all goes wrong. The interesting aspect for the sound team is that this particular production relies heavily on sound effects. So you have effects that reinforce people's ideas of fairy-tales; harps that sing, giant's houses falling down, and birds that talk.

"I also work through the script to see how many characters there are and how many are on stage at the same time, and then the minimum number of radio mics we need. With Into the Woods, there are very few times where a transmitter can be used for two jobs. The only opportunity in this play is where the wolf becomes a prince, so in all there will be 17 mics needed. In the last weeks of rehearsal though, the radio mic operator will check these flow charts to see that the actors do actually go off stage when expected to, and that the mic count is OK."

The orchestra for the production is acoustic apart from an electric piano and a keyboard. At this stage Bruce has assigned 19 channels to the band and the plan is to put the band in one section of the desk and the vocals on a separate section under automated VCA control. The effects will be controlled on a specially commissioned eight channel automated fader/matrix unit.

As sound designer, Andrew Bruce's job is to present the producers with what is and isn't possible, together with the basic options. On Into the Woods, two different ways of dealing with the heavy effects workload presented themselves. "I explained to the producers that they had two options; either they had two people to mix the show, one for the music and one for the sound effects, or one person to mix the lot with an automated sound effects system that once it was set up was capable of doing everything on its own."

The producers decided on the automation option. Bruce has now split the control section, entirely separating the effects from the rest of the system and commissioned Out Board Electronics to build the eight channel fader matrix package that he needs to do the job. All the equipment plans are printed out on several working diagrams. These are all produced on an Apple Macintosh computer which gives Bruce the speed, flexibility and accuracy that he needs, and would be simply too time-consuming to do by hand.

Bruce explained: "We have computerproduced working diagrams on how it's all put together, with details such as the number of



The Cadac Console in sitú for the production of Follies is identical to that used on Into the Woods.

multicores we need. When we worked on 'Les Miserables' all over the world, I had to do drawings for every show. The drawing for the London show was done with paper and pen, and it took a week. When we went into the theatre everything changed, but I never did get round to changing the drawings.

"When I got to the US for the Broadway version of 'Les Mizz' I found that the Mac was very popular over there so I bought one, and developed a master drawing system. Now with all the basic elements prepared, doing a new version of the plans is only about a day's work, and it also forces me to think exactly how the system is put together and what is needed."

The next logical step is the decision on speaker positions, and Bruce has to meet with the rest of the creative team to decide exactly what goes where. "The day of the meeting is quite significant, because I have to get my loudspeaker positions, and I have to fight very hard for them. The designers avowed intent is to hide everything possible. But we have only so many places that we can put loudspeakers where they will be effective and if they say 'you can't do that, they have to go somewhere else,' you have to say no. I have to point out that I have to work in the space too, and supply sound effects exactly where they are needed."

### What sort of noise does a giant falling out of a beanstalk make?

Two months later and the contract has arrived with Autograph. It should have been there a lot earlier but it somehow got forgotten. Far from being upset, Julian Beech was happy that they were one of the very first people the producers had contacted for availability and that it was assumed from the start that they were going to be doing the sound design without hanging around for the contracts to be signed.

Andrew Bruce had prepared his detailed plans and Julian Beech had calculated how much it was all going to cost. The contracts for Autograph as sound designers and Autograph as equipment supplier are completely separate. Beech simply sees his job as one of costing Andrew Bruce's plans out, and making the occasional suggestion if something looks as though it might be unnecessarily expen-

Part of the semi-circular Cyclorama set designed by Richard Hudson.

sive. "If the job was from an outside designer we wouldn't have any control, except that if something was going to be costly we would go back to him and discuss it. Of course, the producers are not obliged to use us to supply the system, even though we have done the design. They have an obligation to protect their investors by going for the best deal, but normally we are cheaper on our own designs because we have control of it."

At this stage Bruce has been to see the set for the first time, which generated a few surprises. "The meeting with the designer went so-so. He is not fabulously used to musicals and the things that we need to have. He had a very open mind though — although when he sees things like speakers in the flesh, it might be a different matter.

"The meeting where the set was presented to us and everyone else connected with the show, was quite interesting. The New York set was pantomime-ish, with painted cloths. This director has commissioned a set that is like a Victorian drawing room with a perfectly semicircular cyclorama which is a hard wall with lots of doors."

This curved solid wall created major problems (or opportunities depending which way you look at it) for the sound designer. As the set was to be well lit there was no possibility of cutting holes for effects speakers and covering them with gauze. Bruce was busily discussing the possibilities of hiding speakers at floor level or tucking them behind some of the dozens of doors, large and small, that are in the set.

But the curved solid set opened up an alternative possibility. "We knew we were going to have to be quite clever about any effects that needed to come from the stage. Being a hard semi circle, the set will act as a hard reflector so that it allows me, with I think a reasonable chance of success, to bounce everything off this hard surface using a forward, centrally placed speaker pointed at the set rather than the audience. The area above the stage is packed with other equipment, a lot of which must have free passage past the speakers. I have managed to book only two places in the flies to hang these speakers in order to bounce sound off the wall."



Not content with trying the impossible in the set itself, Autograph were preparing to locate sound inside the 'pantomime' cow, hen and baby. The cow is to be more or less full size and to be fully automated so that it can move, kneel, blink, crap and fall over dead. As well as all this, the idea is to place a VHF radio mic receiver with a little amp and speaker inside the body so that its moos and dying scream can come directly from the animal. The mini sound system had already been developed and is now with the prop builder to see how it can be fitted in.

Meanwhile, upstairs at the Autograph office, sound engineer Nick Gilpin was busily working in the studio, preparing the sound effects tracks on the DAR SoundStation. They had just taken delivery of a new library of digital CD effects which were proving very useful but Gilpin was using them as elements rather than simply lifting them complete. "As a matter of principle you should never rely 100% on effects disks. We put effects together from discs, tapes and sounds we record here and use the SoundStation to assemble them. It takes around two hours to do an average effect, but it can take up to a day. The SoundStation hasn't changed how quickly we do each effect, but it has vastly improved the quality in every sense."

One of the most intractable problems, especially on a fantasy show is interpreting the stage directions and turning them into sound. An aeroplane going overhead is one thing, but the death shriek of a giant hitting the ground with several ton of beanstalk in tow is another. Gilpin supplies effects to the director to see if he is on the right lines, which he normally is. If changes need to be made, the individual elements of the Sound-Station can be altered without having to go back to the beginning and do it all over again. I left Nick Gilpin manufacturing some very unpleasant noises.

#### Vari-UMs and welding the dead cow

Five months from our first meeting we were in the Phoenix after the first set of previews. How closely had the plans matched reality and why were two men attacking the cow with oxy-acetylene torches?

After the development of the special radio PA system, it turned out that the cow MK I



Into the Woods interweaves various well-known fairy tales, pictured above, Julia Mckenzie as the Witch and Jacqueline Dankwort as Cinderella.

was simply too heavy and had to be completely re-thought. The MK II, operated by levers and without internal sound, was doing a stirling job; although failing to drop down dead on command, hence the on-stage modifications.

So with one good idea out the window I checked with Andrew Bruce what else had changed? "As the radio system had to be cut, we were then able to re-think those effects in a way that was quite useful.

"We now have two Meyer MSL3s on each corner downstage, bouncing off the set, and we have a single central Ultra Monitor mounted on one of the electrics bars. We commissioned somebody to build a motorised hanging frame, so we now remotely move the Ultra Monitor so that it can adopt six positions around the stage. We call it our Vari-UM and it is being used all the time. It gives some directivity; you can definitely tell the difference between left, right and centre. In this particular case it has proved invaluable, it allows us to use one speaker to do five jobs and we can even get effects on the move."

The desk position at the rear of the stalls is very compact, with the CADAC in two sections as planned, with the main section for the vocals and the side section for the orchestra. To the left of the main desk are the effects which are coming from an expanded Akai \$1000 sampler with an external disk drive, an RDAT and the Out Board Electronics automated mixer/matrix. Bruce explained that they had one unforeseen problem with the Out Board unit: "When we commissioned it, we ignored the fact that we were using a lot more effects than for, say, Miss Saigon. When



Out Board Electronics were commissioned to build an automated sound effects console.

we got up to cue 49 out of 60, we simply ran out of memory. The chaps who built it, responded very quickly and doubled the memory size."

A second newly developed feature of the system was a custom written software package to control the effects cues. "The software is our own and we have chosen this route because it is a lot more user-friendly and tells us more of what we need to know. A lot of these features stem from the fact that the software designer has operated a lighting board for several years — a lot of features we need for audio cues have been common on lighting boards for years."

The sound has been designed to allow the actor's voice to project over the sound system, so that the voice quality remains 'natural' for the majority of the time. This requires the actors to speak at a reasonably consistent level. If their voice drops too much, then the reinforced sound predominates, changing the character of the sound. Andrew Bruce has to co-ordinate with the actors to help them achieve good sound.

Fortunately they are generally very open to suggestions and help, so this is not as tricky as it might first seem.

The end result of this work is a show that has opened to almost universal approval. No-one commented about how good the sound was though. And in the theatre, that indicates that Autograph achieved their main aim to produce transparent sound reinforcement and appropriate effects — despite a continuing and fairly typical run of changes.





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### HARPERS — WALSALL WOOD

### L+SI talks to lighting designers Carl Dodds and John Lindsell

The lighting rig at Harpers at Walsall Wood in the West Midlands represents the culmination of two years work for designers Carl Dodds and John Lindsell. After the first concept meeting on 6th January, 1989, serious work began with the presentation of the design in February of this year — since which time only minor refinements, taking into account enhanced versions of specified equipment, have been added.

The main thrust of the design works in harmony with the interesting balcony structures and the fabulous open well space above the Harpers dance floor. The decision to have a totally intelligent rig was taken right from the start, and the rest of the design followed easily from there.

Carl Dodds and John Lindsell have long admired the work of lighting designers Udo Fischer and Tony Gottelier, and it is easy to recognise their influences in the Harpers design. The multilevel and architectural use of light comes from Udo Fischer, whilst the precision lamp placement and attention to detail comes from the work of Tony Gottelier.

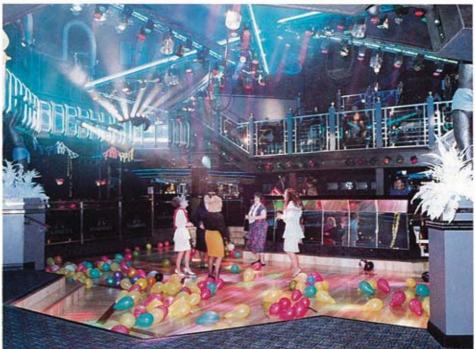
With a design as sophisticated and powerful as Harpers it was imperative to have a control system capable of handling it. The the decision to use OSKA was taken from day one as they considered no other control system currently available was capable of driving the lighting rig. This one decision gave Dodds and Lindsell the required freedom to create and explore the space available.

The rig is conceived as a series of layers around the central well with fibre optic ceiling and neon wiggles providing a backdrop to the multitude of geometric sculptures that can be created with the movement of the three minimalist rigs. Due to the use of the PinPoint units the rigs are usable in all positions, unlike traditional moving rigs where units which are focused to look good in one rig position don't necessarily look good when the rig is in another position. At its simplest equation, PinPoint, combined with OSKA, allows for refocusing dynamically as the rigs change position.

The rig PinPoints and their partners on the balcony fronts will cut through intelligent washes of light from the balcony mounted Color Pros, whilst at the same time being powerful enough to work in harmony with the power of the Golden Scan 2s mounted at the highest point of the well. The emphasis is very much on the dynamics of the changes of levels and the three dimensional light sculptures that can be produced. At selected points during the night this dynamic can be extended to the edge of the dance floor areas due to the use of the colour changing downlights whilst other times subtle mood changes can be imperceptibly created over long time periods. At the other end of the emotional scale visual overload can be created with the immense power of the DataFlash units used in combination with the massive amounts of neon throughout the space.

The lighting rig itself comprises virtually totally intelligent lighting using the very best





High visual impact is created at Harpers by the use of a geometric rig, forested with lighting effects and backed by a state-of-the-art videowall.

Photos: Elite

of world-wide products, and many of these products have not been seen elsewhere. Indeed, in some cases where reliable product was not available custom units have been commissioned from Soundtech of Birmingham. Other equipment from major manufacturers is hot off the first production runs and represents their first use in this country.

The rig relies heavily on the unique capabilities of the OSKA control system, fitted with the new Ver 1.40 software, and the famous programming skills of Dodds and Lindsell.

The rig is already well-known for its line-up

of new lighting which includes the Golden Scan 2 from Clay Paky. These are the first of these new units to be used in Britain after their highly successful debut at the Rimini trade show. They have also been fitted with a new feature which has, to date, not been seen - dimming. Like the much more expensive Superscan, the Golden Scan 2 can also be dimmed.

One of the problems with using intelligent lighting has been that the high powered discharge light sources in the PowerPin and MegaPoint units from Soundtech have tended to obliterate the rest of the lighting on the rig. Working with Soundtech Dodds and Lindsell

have found a 12v 100W 2" lamp which will be used in all the Pinpoints, PowerPins and MegaPoints on the lighting rig ensuring that all the elements on the rig can be used together.

Surprisingly, Harpers will see the first use of the DataFlash intelligent strobes units from Lightwave Research. The American company sent over PC software for Dodds and Lindsell to programme their own custom chip for use with the DataFlash controller which will subrun from OSKA.

Another new product featured is the Intellihoist from Lynx. Nine of these have been used to give total control over the geometric relationships of the three rigs. Because of the digital technology employed, the rigs can be used dynamically whilst at the same time the winch software allows no more than 25° of tilt in any plane for total safety without limiting operator creativity.

Integrated control systems have suffered up to now from very high cost, and part of this has been for very expensive de-multiplexors. The new DMX switch packs from Light Processor obviate the need for them having it built in. Control wiring is simplified as the packs are daisy-chained. The packs also have many improved features over previous ones, and over 40 have been used at Harpers.

#### Equipment List Ceiling

- 900 point fibre optic ceiling with two light sources fitted with flicker wheels
- 2 rows of 4 Golden Scan 2s on custom cobolt blue Astralloy
- 30 individual channels of blue neon wiggles

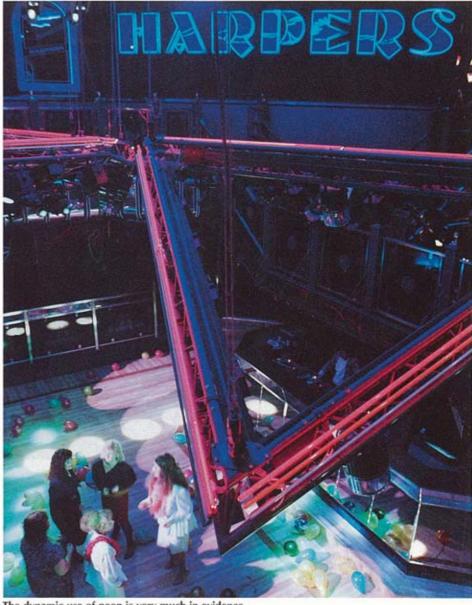
#### Rig

- 3 custom cobolt blue Astralloy triangles
- 9 Lynx Intellihoists
- 3 Sountech MegaPoints
- 12 Lightwave Research DataFlash Illuminators
- 24 Soundtech PinPoints
- 66 Soundtech PowerPins
- 12 individual channels of neon in 4 colours

#### **Balconies**

- 16 Lightwave Research Color Pros 11s
- 24 Soundtech PowerPins
- 16 Soundtech PinPoints
- 130 individual channels of neon in 2 colours





The dynamic use of neon is very much in evidence.

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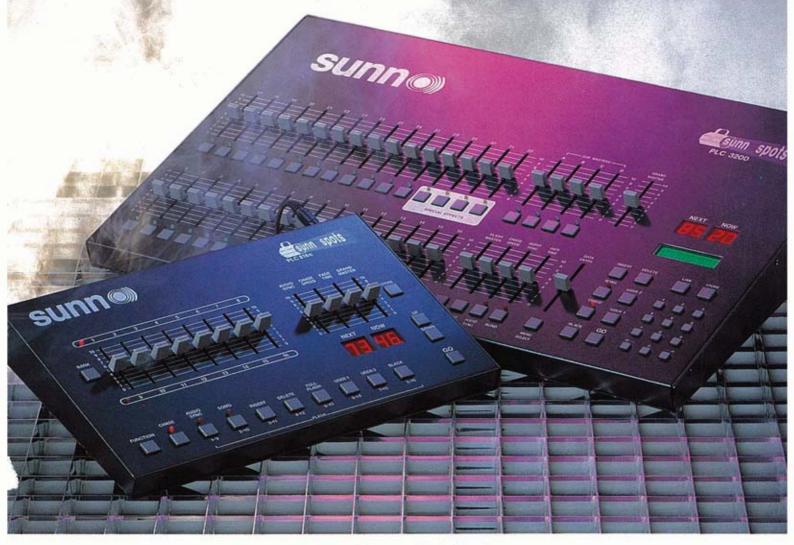
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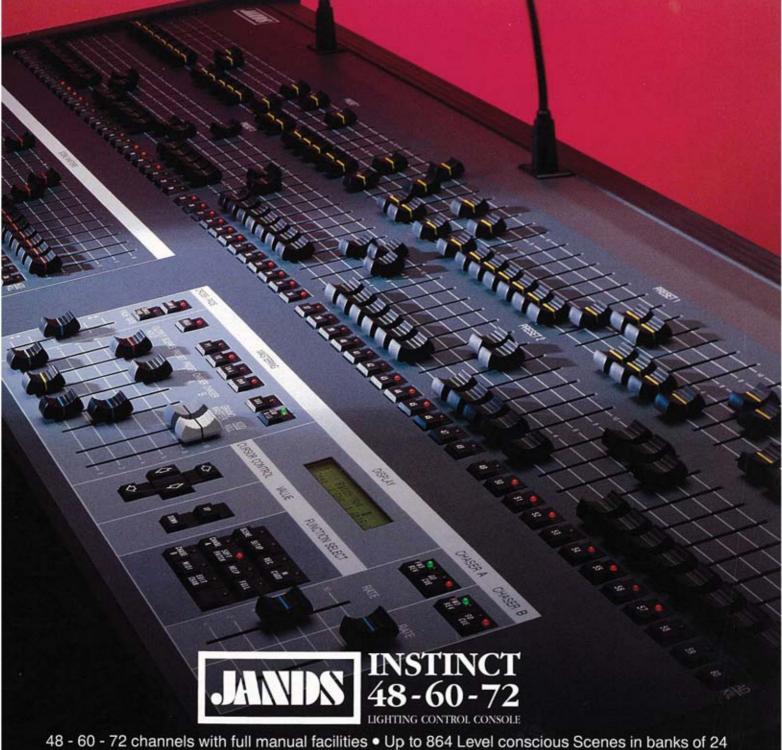
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An L+SI special report on the recent centennial celebrations at the Forth Bridge



A spectacular firework display lights up the 100 year old Forth Bridge.

The year long Centenary celebrations for the Forth Bridge culminated on October 7th with the biggest birthday party ever seen in Scotland, and one of the largest fireworks and special effects concerts staged anywhere in the world. Crowds in excess of 250,000 crammed both banks of the Forth Estuary to take part in the celebrations which included aerobatic stunt displays, mass parachute jumps, jazz bands, fire eaters and wandering street performers. The spectacular ended in an hour long finale of specially compiled music, World War Two and state of the art searchlights, lasers, four tons of fireworks and a fleet of firefighting tugs, all choreographed to tell the history of the Bridge from the day of its conception to its centennial year.

By the time the 'Birthday Party' had burst into life over 15,000 hours of intense planning and organisation had gone into the event. The show had to be squeezed in between a top secret nuclear submarine and naval warship depot, two 'major hazard' oil terminals, Edinburgh airport flight path and a river where volatile cargoes of gas and oil are continously ferried to Grangemouth. Over a period of ten months, project director Mervyn Edgecombe worked with the police, local farmers, meteorologists, engineers and even ratcatchers to ensure the smooth running of the show.

A 60 strong army of top technicians from the fields of pyrotechnics, lighting, rigging explosives and radio communication systems were brought together from all over the world, under the direction of Trevor Smith, a freelance event technical director, who scoured Europe for over six months to acquire the battery of World War Two Searchlights. "This event is like no other of its kind in the world," he explained, "for every single facet and element in the concert has had to be considered in massive, massive terms. The sheer size of the Bridge dwarfs

everything and because of the far flung nature of the viewing areas, we've got the biggest stage anybody has had to work on in the world — four and a half miles long, and over a mile wide. It's colossal, and ordinary fireworks and special effects just couldn't be considered."

To conceive and script the pyrotechnics show, the organisers commissioned Wilf Scott of Le Maitre, the man behind the pyrotechnics for the Rolling Stones, Tina Turner, and the Edinburgh firework display. Because of the enormous amount of gunpowder required for the fireworks a top secret military munitions depot was used to store it prior to it being transported to the show site by armoured vehicle. "This is without doubt the largest and most exciting project of my career so far. It's impossible to think in normal dimensions for this show — everything had to be utterly massive or it wouldn't have had any impact against the

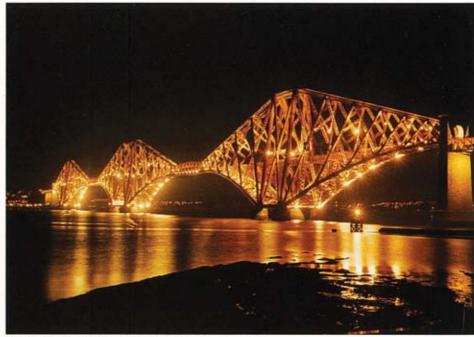
huge backdrop of the Bridge," said Scott.

Inch Garvie Island, beneath the Bridge's central cantilevers, was the main firing point for the pyrotechnic display, but before the crew could use the island, local ratcatchers were employed to rid it of some of the giant rat inhabitants.

All the fireworks were computer-controlled, programmed to fire in time-set harmony with the music sound track. Giant white pyrotechnic flares and golden starburst fireworks were used to simulate all the welding, metal cutting and grinding work necessary to build the Bridge. All in all over 5,000 mortars, flares, Roman candles, shells and aquatic 'bombs' weighing almost five tons, adorned the night sky in Scott's dramatic tribute to the Victorian engineering masterpiece.

The whole finale used 30 searchlights - World War Two and the SkyArt system which had never been seen in Scotland before — over 5,000 fireworks, lasers, 1,000 high pressure sodium floodlights switched on by Prince Edward, 16 miles of control cable and enough power from the banks of generators to light a small town. Two world records were broken on the evening; the event included the world's largest firework display, and also boasted the biggest single installation of floodlighting to date.

The floodlighting on the Bridge will light it every night of the year from dusk until the early hours. Consisting of over 1000 high pressure sodium floodlights of different wattages the total connected load of the scheme amounts to approximately 300kW - no more than 150 standard domestic electrical kettles - due to the use of high efficiency discharge lighting sources. There are some 676 NNF020 which have either



The floodlights will illuminate the Bridge for the next ten years.

wide or narrow distribution. These are used to light the main cantilever sections and house 400W SON lamps where the structure is at its highest, and 250W and 150W SON lamps as the height declines. They are mounted in clusters of two to five and great care had to be taken with positioning, both at lower water levels and particularly at higher levels where train signalling is in constant operation.

The structure also houses 132 HNF003 floodlights. These are mainly used to light the masonary arches, although there are also

several on the Bridge itself. 246 SNF100s are used to light the undersides of both approach viaducts.

The fittings have all been supplied by Philips Lighting who previously lit the Eiffel Tower in Paris and Tower Bridge in London.

The lighting will burn for approximately 2,000 hours per annum at an annual cost of some £40,000, and the lamps are expected to last for up to six years each.

With the installation completed over 25 miles of cable has been installed on the Bridge to distribute the power.



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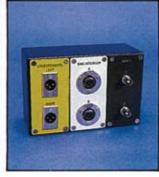


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### PEOPLE NEWS

 Phil Barrett has joined Wigwam Acoustics, bringing with him a wealth of experience in the audio industry. For the past 11 years he lived in Denmark where he was Scandinavian sales manager for Fairlight, before being made product specialist after successfully writing several software programmes.



Formerly from Greater Manchester, Barrett will be putting his experience to use in the company's sales division, headed by Simon Campbell.

- Le Maitre Lighting And Effects have announced the appointment of Noel McPherson to their research and development department. He is an expert in solid and gas discharge lasers, telescope mirrors, and optical flats, and has a degree in electrical and electronic engineering.
- Heritage has promoted two former Tussauds employees to new positions within the York headquarters of its leisure and design consultancy. Michael Wright, after graduating from Newcastle Polytechnic, joined Madame Tussauds, where he has remained for 11 years, employed as head of design.

Working alongside the head of creative design is Heritage's technical design manager, Alan Wilkinson. He spent nine years with The Madame Tussauds group, as head of audiovisual.

- David Bearman has joined Martin Audio in the new post of international sales and marketing manager, bringing with him a wealth of experience in the professional sound reinforcement industry and in particular loudspeakers.
- Stuart Galloway has been appointed sales executive with Lightfactor Sales Limited, the specialist entertainment industry distributor of sound, light and video products. He will be responsible for the company's northern region. He has many years experience in selling both equipment and services to the licensed and entertainment trades.



Stuart Galloway.

 Sound engineering company R G Jones (Morden) Ltd has appointed Bob Caple to the post of director and general manager. He joined the company in 1978 becoming manager of the hire division in 1980. The other spheres within the group for which Caple will now be responsible include the teleconferencing and sales department managed by Mark Adams, the SSL 32 track digital recording studio under Alison Taylor and the installations department managed by George Smerdon.

Rossula Limited, the London-based manufacturer of the 'Light Processor' range of lighting control equipment has appointed Graham Norman as export sales manager. Whilst new to this industry, he brings with him nearly 20 years experience in export sales positions with both manufacturing and distribution companies. He will be responsible for the development of all overseas markets.



Graham Norman.

 Richard Brooks, pictured below, has joined Laserpoint as financial director. Formerly financial director with Samuelsons Communications Ltd, he brings to Laserpoint a breadth of experience in the presentation industry.



 Romano (Ram) Malocca re-enters the commercial laser field as a director of the Belfast head-quartered Continental Lasers (LIK) Ltd.

After six years at Laserpoint, Malocca has spent the last 20 months as a senior service technician for Spectra Physics — the world's largest laser manufacturer.

 After only nine months as technical sales executive at Avitec Electronics Vincent Rice has joined London-based Xylo, part of the TGI Group, as sales manager. He will be the focus of sales to the discotheque market of the company's revolutionary Turbine video controller while Xylo MD Tim Davies will continue to service the corporate presentations sector. Rice will also oversee the completion of the Studio Circus project in Hull as am independent designer for Humberside Leisure Ltd and intends to continue his journalistic activities.



Vincent Rice.

- Bob Doyle, has been appointed as Midas sales manager by Klark-Teknik to handle sales and support of Midas's high quality mixing consoles thoughout the world. Previously with SSE Ltd of Birmingham, he has considerable experience of the live touring market in the UK and overseas.
- Christopher Wray Lighting has announced a series of appointments and developments to power the organisation's growth into the 1990s.

Heading the team will be new chief executive John Bryant. He joins Christopher Wray after being headhunted from Online Lighting, which he set up in 1987. With a background in engineering, sales and marketing, Bryant was previously managing director of Morgan Furniture.

To reinforce the organisation's sales and customer service, **David Williamson** has been appointed to the new position of sales manager with complete responsibility for retail and contract sales in London.

Other appointments include John Hawes, sales executive with specific responsibility for sales to the major hotel groups, and Terry Hills, who joins as systems manager from Designer's Guild.

• The Definitive Laser Company has welcomed Rupert Morse. He has been involved in the laser industry for over two years. Employed as production manager, he will be assisting with programming, show co-ordination and operation. Jane Montague-Smith has also joined the company to liaise with sales and technical production. She has a wealth of experience in the production and lighting industry, having recently co-ordinated the spectacular Forth Bridge Celebrations in Scotland.



Pictured above at the recent Leisure Industry Week Exhibition are (from left to right) Avitec's Paul Dodd, Chris Jackoman, who recently joined the Company as commercial manager, leisure consultant Richard Dixon, and new man at Avitec, James Foster, who joins them as contract sales executive.



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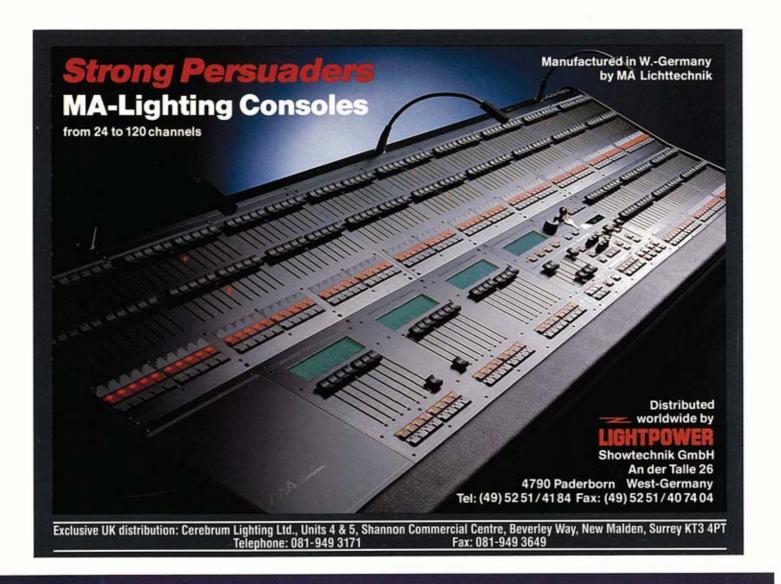
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# ON TOUR.

Catriona Forcer

A diverse selection of acts in this month's On Tour starts with Jason Donovan who managed to produce a successful and professional show despite the critics' doubts. A highly entertaining production with a wide variety of looks was the result.

To follow is an article on Everything But The Girl and their new lighting designer Louise Stickland. As Louise has an excellent command of the English language and an immense vocabulary, it was easier for me to let her get on with it and write her own article! Her designs for Everything But The Girl were excellent and I know she would like to mention her lighting tec, Dave Walden.

A last minute request to see Earth, Wind & Fire was made to me by their lighting designer Edward Brantley. The reshuffling of my social life was worth it to see such a good and, dare I say, nostalgic show. Keep up the good work Edward!

# Jason Donovan Hammersmith Odeon LD: James 'Rocky' McKenzie

After working for several years in Australia for Vari-Lite, Rocky McKenzie has branched out into the world of rock and roll lighting. A week after leaving Vari-Lite he secured the Jason Donovan 'Doin' Fine' tour not realising just how big Jason is over here in England.

"Whilst at Vari-Lite I learned how to use a Vari\*Lite dimmer interface and I think it's a brilliant piece of equipment although not many people use it because it has its drawbacks," Rocky explained to me. "For example, to simply change from red to blue you actually have to programme it and time it to do that, whereas with a manual board you can just push up a fader and pull one down. So even doing the most simple things can

be quite difficult on the VLD but I've set out to prove that you can actually run a pop show with a dimmer interface and run it all through the one board. The Artisan is a brilliant piece of machinery, and I'm very proud to have been able to pull it off with a VLD.

"In Australia Jason is not a big pop star and I didn't realise the immensity of the task until I got here. I really bit off a lot deciding to run all the lighting through one console, as well as call the follow spots. A lot of people told me I couldn't do a pop show like that with this amount of lighting, and I was determined to prove them wrong. Peter Barnes was the set designer and he proved a wealth of knowledge to me. If the show looks good tonight it's a lot to do with the set.

"The set was designed after the lighting had been and not only designed, but programmed in Australia. There were obviously quite a few ideas of what the set was going to be like but as usual things change and I didn't really find out about this set until the day I got to London. So I had to move quite a bit of equipment around. I had to change the physical lighting design, as in lamp placement, to accommodate the white strips used on the set. That was quite difficult in itself especially for the focusing. It was fairly difficult to reprogramme the show but it was reduced to only one night. I'm proud to say I pulled it off. Something I didn't think about when I decided to use a VLD was the amount of programming time involved - in this case twice the normal amount. Usually there's two men to do the programming, one on the board and one on the moving light board, and a lot of the time a separate guy to call the follow spots.

"The approach to the design was very much budget conscious in the beginning. At first it was 48 Par 64s and 16 VL2Bs but that's grown since then. When we got over here we added a lot and for the arena system we're adding six bars of Par cans and two truss spots because we're filming in Dublin and the director is a bit apprehensive about light levels. We need the extra light intensity as it's quite a dark show. I pick people up when they do something and when they are not doing anything they remain unlit to some extent. That doesn't seem to be the right approach for a pop show because a big, bright, colourful show is usually the brief. I'm from the rock and roll camp so it's been a hard transition from rock to pop which is something I really didn't think about before I attempted it. I've learnt a lot from the tour especially about lighting the band rather than making pretty pictures, although there must be a happy medium where you can do both.

"On this rig, I've got 161 Par 64s, out of that there's probably only 16 No.5 medium lamps and the rest are No.2 narrow spots. There are 22 Vari\*Lites - 16 VL2Bs with 400 watt HTIs in them and six VL4s which Peter Barnes introduced, and I wholeheartedly agreed with. It's the first time I've used VL4s, and their colour capacity and speed has really impressed me. There are some Molefays on the front truss to light the audience and a lot of the band specials are Altman Leko profile lamps. They are 1000 watt with shutters and irises on them, and they give an incandescent effect which is a nice change in light source. It's a fast moving show so it's quite a difficult show to run. There's a ten piece band and we're only using four follow spots, two of which Jason takes up. But that's the budget. You work with what you have, and that's the mark of a good lighting designer - someone who can work with what he has, and make it look right.

"I don't do the focusing myself because there is too much to do on the board. My crew chief Mel Craven from Meteorlites, who I must say have given us excellent staff and service, does the focus. He knows what I want, we're from the same sort of school. He does the focus of the analogue system while I do the Vari\*Lite focus and programme. We tend to be finished around the same time each afternoon and we switch the analogue system over to my board. If I didn't have someone like Mel to focus the system for me it would be quite difficult to get it all done in one afternoon, especially when you're doing back to back gigs.

"There are just under 1000 cues in the show, including chase cues, and, from what I'm told, the dimmer interface doesn't really take more than 1000 cues at the moment without giving up at some point. I'm impressed with its capacity. I didn't really think I'd programme 1000 cues for the show but that's the way it's worked out.

"We started rehearsing and programming in Waragull, Australia and then I came to England with my discs. We did another two nights programming in Jersey and by that stage we had a director/choreographer. This is a young outfit and quite a few members of the band have never been on tour before, including Jason, so he was there to give them direction.



The original lamp placement had to be changed to accommodate the white strips used on the set.



The lighting design for the Doin' Fine tour included over 1,000 cues.

Unusually, the set design followed the lighting design in the scheme of things.

"We've already done Europe, Asia and China which was a real experience for me. Ours was only the second ever Vari\*Lite system to go to China and I took some VL1s which came from Hong Kong. I think Jason was allowed into China because he's a pop act like Wham. They seem to be very worried about unrest in the audience and the pop shows that go there don't attract that sort of thing. I was very proud to do a show in China although I know there's a human rights issue there. I suppose to a lot of people it's like

playing Sun City in South Africa but I didn't look at it from a political point of view — I looked at it from a lighting point of view. These people haven't seen many light shows except on television so I was pleased to go there and give them a light show.

"A lot of systems were very hard to use in Asia because the lighting companies had the equipment, but not the technology. They had plenty of lights but most of them were hard wired in the truss. They don't have multilinked systems so it takes much longer to set it up and, of course, there is a language barrier.

"After this tour Vari-Lite in Australia have asked me to come back and either do Cher or John Farnham. I really came to England with the idea of staying here to live and work because the industry in Australia doesn't seem big enough. There's not enough money in Australia for people to hire the computer lights and, because computer lighting is really my field, I find it hard there. I have a British passport so we'll see how things turn out. I'm hoping to go on to bigger and better things!"

#### Everything But The Girl Hammersmith Odeon LD: Louise Stickland

I work full time for Chameleon, and every time I take a tour on the road in the UK or Europe, I (obviously) use a Chameleon lighting system. Despite the fact that the company is very relaxed about me working with bands and other lighting companies in different parts of the world, the situation which has arisen with Everything But The Girl is unique.

The UK section of the tour is only for a short period at a very busy time of the year, and it was unfeasible for Chameleon to supply the equipment for the tour. So, in the context of working for the band, I was obliged to find another company who could provide the equipment I wanted within the budget. Meteorlites provided equipment for the last EBTG tour, and everyone concerned was happy for the situation to be thus resolved.

Needless to say, it was a very politically sensitive situation, which had to be approached with honesty, integrity and straightforwardness, and, at every juncture I was conscious of not upsetting any potentially dangerous apple carts!

Jon Cadbury and I have dealt with this breakthrough in diplomatic relations in an utterly civilised manner. John Rinaldi had done Everything But The Girl's lights for years now, and when he found that he was otherwise committed for the period of their current tour, he asked me if I would take care of the lights.

The design was left entirely to me, and, armed with the information which John had given me, I felt it wise not to be as radical as I usually like to be. However, I couldn't compromise myself enough to be totally conventional either!

The band's music (which, after all, provides the conceptual framework within which one works) is mainly classical narrative love songs, with a jazzy and sophisticated groove to them.

The essential ambience of the show is theatrical and simplistic. There are no effects, there is no spectacle; this is the kind of show where if someone was to comment upon the lights as being outstanding from the rest of the show, I'd consider that I'd failed! The whole show is what is outstanding, with no one area dominating. With lighting, I'm merely accentuating the drama which the band are producing.

Within these parameters, the show has obviously developed into my pastiche. (I hate using flash buttons, clichéd looks, colours and symmetry anyway). I've also had to concentrate fairly hard on not making it look too anomalous, and consequently irrelevant to what





The designs for Everything But The Girl were deliberately kept theatrical and simplistic.

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the band are saying.

I haven't been able to excel myself with the usual copious amounts of floor lights (neither have I wound the PA crew up as much as normal), but I have managed to squeeze in a few shadow lights.

I'm extremely fond of using light sources as shadow and silhouette effects. I first noticed the dramatic impact of this when I did a 'Women & Film' course at college. This involved watching a lot of Film Noir and German Expressionism — films of this type maximise use of shadows and silhouettes.

For the last two years, I've been heavily into surrealist art. I like the way it provokes the mind to dig for meaning and ideas, rather than presenting a literal image which can be easily related to the real world. I think it's possible to be surreal with lights to a degree. When I'm working with a band to which these ideas are pertinent, I try to be as surreal as possible in approach — within the realms of practicality (some people would call this a mess!).

Everything But The Girl is the most classical design I've produced for a while, because, as I said before, it's what is called for. (Although I did choose the patch in a very unorthodox

way). I'm enjoying this tour, and I'm working with really pleasant people in a refreshingly non-rock'n'roll atmosphere.

I enjoy working with bands who have a political content, and some intelligent comment to make. With this kind of band, film/slide projection has a lot of scope, and this is something I'm really interested in. I respect people who are sensitive, compassionate, and have ideals, and who aren't afraid to air them. In this vein, I'm lucky enough to have worked with Robert Howard from The Blow Monkeys, Ian McCulloch, and I nearly worked with Roddy Frame from Aztec Camera . . . but that's another story.

There are loads more out there who hopefully I'll get the chance to work with. I've had another busy year this year. The next thing I need to give serious thought to is organising a holiday. I haven't had a break at all for the last 2½ years, and I'm wary of becoming stressed out.

Earlier this year I was on tour in the US and Japan with Ian McCulloch, which was a brilliant tour. Then I did a short tour this summer with The Blow Monkeys. It was a disaster from a number of points of view. It was badly organised from the start; it had a very tight

budget, and we were doing back to front college balls (i.e. 6am get outs and 9am get ins) — so no one was getting too much sleep; and certain people were making bad decisions.

The final straw for me was when the crew bus left for a (non-production) festival in Holland. This was all very well, but it left me and my lighting tec at 4am in the middle of a get out at Egham Summer Ball. On the bus were all our personal belongings, cash, cards, my house keys and vodaphone, and we were stranded there without even the cab fare into town, let alone anyone having told us that the bus was leaving.

Luckily for us, the three company directors from Encore PA (the sound company) were there. They happened to have their mobile phones and a car, whereupon Chris Mounsor and my lighting tec started chasing the bus round the M25, and John Tinline and Peter Kellet steamed into de-rigging the lights with me.

It was one of those really tacky incidents which one tells with great hilarity in the back lounge of the bus, and I can now look back on it and laugh, as no doubt everyone partying aboard the bus was that night. But it could so easily have been avoided and, needless to say, at the time I wasn't the slightest bit impressed.

It's kind of sad when one gets shafted over like that, when one's put one's heart and soul into a tour. It's easy to lose your confidence in humanity when things like that start happening . . . and losing this seems to be quite a common event in the music business.

I'm very much into teamwork on shows, and viewing the show as a total production. Each component part is vitally important. With this in mind it's great to have a good rapport with the F.O.H. sound engineer. I think it's as necessary to have a good front of house vibe as it is for the musicians to be grooving.

The best show I've seen for total production was The Cure during the Prayer tour. Roy Bennet was the LD and a guy called Chubby was the sound engineer. This was the best show sound I've ever heard and at Wembley Arena too. The only other time I've heard anything sound that good was when Gary Hughes was doing The Blow Monkeys . . . and I'll refrain from passing any comment on the lights!

**Louise Stickland** 



The light sources were used to create shadow and silhouette effects.



Lighting designer Louise Stickland.



Earth, Wind & Fire: a touch of theatre in a fast rhythm 'n' blues show.



Adding an extra dimension to the set is a large moving mirror.

#### Earth, Wind & Fire Wembley Arena **LD: Edward Brantley**

As with Bobby Brown, Edward Brantley was the first lighting designer to be considered for the Earth, Wind & Fire tour but, because of economic reasons, another lighting designer was chosen. The first lighting designer however did not come up to scratch and so Brantley was approached a second time. The show at that time was very cumbersome with a lot more trussing than was really necessary. The production manager wanted the design scaled down to make it easier to conform with the set and scenery pieces. There was far too much emphasis on building the show every day and it was quite a bulky show to transport around. It was up to Brantley to cut

back on the instruments and, using the same jigsaw pieces, make a new picture.

The band wanted a more rhythmic feel and a more visual interpretation of the music being played. They wanted more 'pop and swizzle' without leaning back to the old Earth, Wind & Fire type of presentation. And Brantley believes that is pretty much his forte.

The show design is built largely around a moving mirror piece. It takes up about 70% of the stage space and it gives endless opportunities for tricks like bouncing images off it. It does not stop moving throughout the show so there is constantly a different look to the stage. It adds a touch of theatre to what would probably be a fast pace rhythm'n'blues show. The traditional Earth, Wind & Fire shows had a very different feel with emphasis on illusion, the mystic and futuristic costumes. The new look fits the band as they've developed over the years.

"The rig has 124 fixed instruments, various ACL rays and 36 Vari\*Lite Mark 1s. The original designer operated the Vari\*Lites, fixed instruments and called the follow spots. The result was that the clients felt that the look on stage was a little sluggish. Brantley took on a Vari\*Lite operator. Added to the list are four truss spots, six out front spots, various pyrotechnics and flying scenery pieces. One, called the Living Screen, serves as a walk through screen."

The tour goes on to Japan, Korea and the Philippines and then Brantley is off to China for one month. He will be doing a jazz show with a band called Raw Silk, a cult group not widely known. They will be playing six dates in 30 days, so Edward will have plenty of time to see the country. The budget is particularly large, and the promoters are not as interested in making profit as in promoting goodwill and making it a diplomatic event.



# ADVANCED **MICROPHONE TECHNOLOGY**

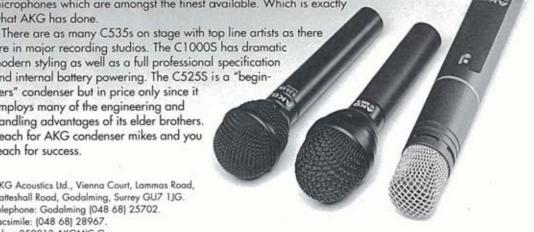
Combine the sheer sound quality of studio condenser microphones with the ruggedness and handling capability of dynamics and you have stage microphones which are amongst the finest available. Which is exactly what AKG has done.

are in major recording studios. The C1000S has dramatic modern styling as well as a full professional specification and internal battery powering. The C525S is a "beginners" condenser but in price only since it employs many of the engineering and handling advantages of its elder brothers. Reach for AKG condenser mikes and you reach for success.



AKG Acoustics Ltd., Vienna Court, Lammas Road, Catteshall Road, Godalming, Surrey GU7 1JG. Telephone: Godalming (048 68) 25702. Facsimile: (048 68) 28967.

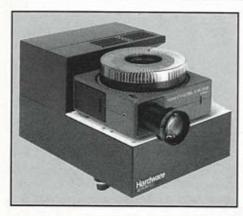
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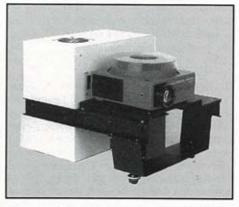


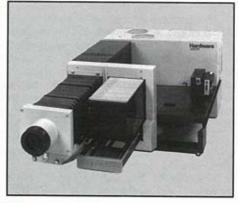
# FOR THE POWER PROJECTION AND LIGHTING FOR COMMUNICATIONS AND SHOW

**APPLICATIONS** 

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#### SLIDE PROJECTORS (600 TO 7 000 W)

The 24 x 36 mm model is often used in multi-

All Hardware for Xenon equipment is portable and operates automatically. It is compatible with all control devices : remote control units, timers, synchronizers. In addition, Hardware for Xenon equipment is compatible with dissolve multivision systems.

#### vision mode for conferences, sales conventions and stands. Image up to 10 metres wide.

XENON 1 000 W - 8 000 Lumens

24 x 36 mm and 60 x 60 mm slides

#### XENON 1 600 W - 14 000 Lumens 24 x 36 mm and 60 x 60 mm slides

Same applications as the 1 000 W projector. The 60 x 60 mm model can be used for theatre backdrops, giant posters, and projecting decors for films and television programmes. Image up to 14 metres wide.

#### XENON 4 500 W - 70 000 Lumens 180 x 185 mm slides

Designed for giant projection in large auditoriums, on to monuments, châteaux, inflatable structures or any medium created for a specific event. Image up to 40 metres wide. The 4 500 W projector is compatible with standard multivision systems. The slide changing is microprocessor controlled with a removable 40 slides tray and a rapid search random access.

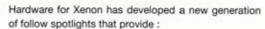
#### XENON 7 000 W - 100 000 Lumens 180 x 185 mm slides

Same applications as the 4 500 W projector. Image up to 50 metres wide.

#### XENON 600 W - 4 000 Lumens 24 x 36 mm slides

A compact projector that enables ambient light to be maintained for taking notes in a conference room. Image up to 7 metres wide.

### FOLLOW SPOTLIGHTS (1 600 TO 7 000 W)



- twice as much light as follow spotlights currently available.
- photographic quality definition by means of a 5-lens zoom that enables the diameter of the beam to be varied from 3 to 12 metres at a distance of 50 metres.
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XENON 4 500 W - 60 000 Lumens. Use distance : 15 to 300 metres.

XENON 7 000 W - 85 000 Lumens. Use distance : 15 to 300 metres.

Hardware for Xenon offers a "short model" follow spotlight in 1 600 an 2 500 W versions.



#### SKYLIGHTS (2 500 TO 7 000 W)

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XENON 2 500 W - XENON 4 500 W XENON 7 000 W.



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# EQUIPMENT/Vews

#### **New Designs from Rosco**

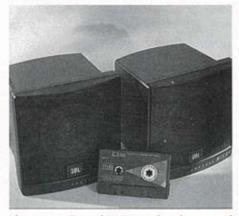
Rosco have recently completely updated their range of gobos in a new 20-page catalogue which contains a total of over 400 designs, more than 80 of them new. The catalogue is divided into 14 sections, including trees and foliage, clouds, elements and city images.

The 'graphics' section has doubled in size to 70 images and now includes the masks of tragedy and comedy and the international signs for radiation and peace. Celebration themed designs have more than doubled, and now include eight different patterns for Christmas. Window designs have increased by over one third, offering three 'Les Mis' grills, two train windows and jail bars amongst the new designs.

To complement the Rosco gobo catalogue the company have issued a brochure of moving effects. The moving effects system combines an etched stainless steel disc, driven by a motor unit, with a gobo to give the impression of movement. The nine etched discs all give different effects.

Both the Gobo catalogue and Moving Effects brochure contain full details of all the various options and are available free from Rosco Limited, in London, telephone 081-659 2300.

#### Micro Power From JBL



The new Control Micro, the latest and smallest member of the JBL Control Series of compact loudspeaker units, is now available. Even smaller than the Control 1, this latest addition to the range means that sound reinforcement and audio visual applications with limited space and budget can now benefit from the established quality expected of the Control Series, claim Harman UK.

The Micro is designed around a single 4½ full frequency speaker cone, which offers a power output of up to 60 watts and a frequency range from 100Hz to 18kHz, and like the rest of the Series, the Control Micro is built of acoustically dampened polymer which is magnetically shielded, making it ideal for use alongside a TV monitor. The versatility of the Micro is further enhanced by its availability in both black and white finishes and the availability of both wall and ceiling mounting fixtures.

For further information contact JBL/Harman in Slough on (0753) 76911.

#### **Energy Efficient**

The energy efficient 'Fluoro-Cyc' linear lighting system unveiled by CCT at Plasa 90 has won an award from the Swiss Electricity Board as part of the Swiss government's policy of encouraging energy efficiency. The award was given on Tuesday Sept 11th by Mr. Ogi, Minister of energy during the annual awards celebrations. The competition is open to Swiss companies and individuals who have made a unique contribution to energy use through the application of new technology.

1990's technology has given a break-through in energy efficient, high performance lighting for vertical and horizontal surfaces of all kinds. It is of particular interest for the theatre, television, and entertainment industries. Based upon small cross section luminaires using 38mm fluorescent lamps colour mixing with intensity control can be customised to suit the application. The basic unit has two lamps and is used as a building block for larger fixtures, its small cross sectional area lends itself to many architectural uses.

The 'Fluoro-Cyc' control system provides for wave, strobe, flash and flicker special effects. CCT are the exclusive distributors for 'Fluoro-Cyc' in the UK. Full technical and price information is available from the company in Mitcham on 081-640 3366.

#### **New Monitor Console**

The AES exhibition saw the world-wide debut of the new Delta Monitor console from Soundcraft. A fully modular 12 bus mixer, its rugged single-piece chassis makes it ideal for both fixed and touring applications working alongside either the Soundcraft Venue or Series 8000 front-of-house consoles.

Available with 24, 32 or 40 input channels Delta Monitor incorporates the same circuitry designs which are already a hallmark of the 200 Delta Venue and Delta 8 consoles including the patented mic amp and active panpot. The console provides access to 12 sends via 10 mono outputs and a single stereo output — a useful facility for side stage monitoring. The input module features 10 rotary send controls, a 4 band sweep EQ section with bypass switch as well as Phase Reverse control.

Each of the ten outputs feature a variable notch filter, providing control at critical high and low frequency areas, with individual 'panic' DIM buttons provided to enable feedback problems to be quickly isolated. Each group module has the added advantage of a separate engineers monitor bus. Talkback facilities on the master module offer a sophisticated communication system, with individual routing to all outputs including the stereo bus. A solo trim facility is featured on the master as well as a 100mm fader for the engineers monitor output.

All outputs on the console are electronically balanced including the stereo, talkback and engineers monitor output — essential for modern PA systems. For further information contact Soundcraft Electronics Ltd, telephone 081-207 5050.

#### MK-6 Mixer/Combo



New from dB Technologies is the MK-6, a compact mixer/combo featuring a 15" driver, compression horn, 6-channel mixing and a 150 watts RMS power section. Intended as a submixer for multi keyboard set-ups or for use with small PA systems, the MK-6 incorporates XLR/jack i.e. balanced/unbalanced line input connection, 3-band equalization on all channels, 5-band stereo graphic equalization at the output stage, spring reverb, headphone and footswitch operation. For further information contact dB Technologies in Italy on (51) 729101.

#### **Broadcast Dimmers**





Pictured top is the TP410 and beneath it the WP410 dimmers.

Silicon Controls is the manufacturing department of Light Beams N.V. of Belgium. They have recently manufactured a range of broadcast dimmers. The WP410 and TP410 feature four channels rated at 2200W each, 40A 800V back-to-back thyristors, 100% duty cycle both resistive and inductive loads, including neon, cold cathode, high frequency fluorescent etc. and user selectable 'linear' or 'square law' dimming curve. For further details contact Light Beams in Belgium on 91 86 82 55.

#### A Symphony of Light

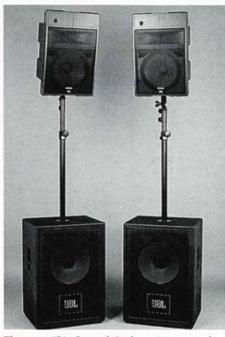
La Conch lighting design consultants and manufacturers have produced a new brochure, 'A Symphony of Light' featuring their Concherto low voltage lighting system.

The Concherto range, which follows a musical theme, consists of Minuet, Concherto and the two most recent additions, Encore and Finale. The range includes ceiling, recessed and cable supported systems.

The brochure shows the range in use in a variety of locations including the Expo '89 Exhibition in Chicago. Retail and restaurant installations have included British Airways world-wide shop refurbishments and Trusthouse Forte's Gallerie Oriel, the restaurant/bar and art gallery in Sloane Square, London SW3.

For further information contact La Conch in London. Telephone 081-968 9832.

#### Off-The-Shelf System from JBL



The new JBL Control Package is a complete pre-wired, packaged sound reinforcement system, designed for on-the-road simplicity.

The idea of packaged systems is a new sales and marketing concept from Harman UK. The Control Package is designed to fulfil the needs of the smaller disco and PA market, and with an output capability of 2,000 watts, Harman claim the system is outstanding value for money.

The package features two Control 12SR compact two-way loudspeakers, together with stands, and the new SB15 sub bass enclosure, designed to integrate into a Control 12 system. The new SB15 features a specially designed built-in, low cost, high pass filter, which offers optimum performance and allows the system to be driven entirely by one amplifier if necessary.

For larger applications there are two Sound Power Systems, designed to meet the requirements of a variety of acoustic environments. In both cases, JBL speakers are complemented by a dedicated rack, crossover and cabling, and as part of the package, JBL also recommended the most suitable amplification for each system. For further information contact JBL/Harman in Slough on (0753) 76911.

#### **Stadium Power**

Aimed primarily at live sound applications, Yamaha's latest additions to its power amp range, the P2700 and P2350, offer flexibility in output configuration combined with lightweight and professional features commonly associated with units costing very much more, glaim Yamaha.

The more powerful P2700 delivers stereo 350W into 8 ohms and 500W into 4 ohms, while in stereo the P2350 outputs 175W and 250W into the same impedances. Both units can be bridged for mono offering 1000W and 500W into 8 ohms respectively. Front panel indicators for clip and signal work in conjunction with two 31 position detented input pots.

Frequency response for both units is 10Hz — 50kHz with THD figures into 8 ohms being less than 0.05% at 175W for the P2700 and 88W for the P2350. All this in two 3us that weigh 24kg and 19kg respectively. Together with Yamaha's new PM1200 live sound console, the P2700 and P2350 power amps are handing big stadium performance to the smaller venue.

For further information contact Alan Martin at Yamaha-Kemble, telephone (0908) 371771.

#### **PC** or Lighting Desk

When Eurolight first introduced their Ovation and Applause lighting control desks, one of their major selling points was that the technology was based around standard PC/XT and AT computers. This resulted in all the discs being MS-DOS compatible, and the later introduction of off-line editing programs which allow plotting of shows on standard PCs, which can subsequently be loaded into the lighting desk. What was not so well publicised was that with the simple addition of a keyswitch, the system can be 'booted up' either as the lighting desk or as a standard computer, loading programs from the disc drive.

This option is now becoming increasingly popular and the Ovations at Birmingham Hippodrome and the Connaught Theatre, Worthing already have this facility in operation. The systems, which utilise the 286 processor, offer an extremely powerful computer which can be used to run many programs including gel/lamp stocks and crew directories.

#### Audio-Dyne Introduces Neodymium Mic Line

Audio-Dyne introduced its 1990 line of neodymium professional microphones at this year's NAMM January Market, the NAB Convention and at the Frankfurt Spring Fair. The product line focuses on vocal applications; the mics are packaged in flight cases for the active musician. Model AD-357S will play an important role in developing quick market acceptance of the Audio-Dyne line with the pro-audio and professional musician markets.

The company has an entire line of support products already developed and in final production for introduction later this year. The company's overall marketing strategy includes a strong promotion programme aimed at the end user.

The full-line 1990 Audio-Dyne catalogue is available with complete details on all models and accessories from John Hornby Skewes in Leeds. Telephone (0532) 865381.

#### **Low Voltage Downlights**

LightGraphix, specialist lighting manufacturers and designers based in Dartford, Kent, have recently introduced a range of three robust die-cast downlights for 51mm diameter (MR16) dichroic reflector lamps from 20W to 50W. These downlights are suitable for either closed lamps with integral glass cover or open lamps for which a clear or tinted protective glass is available.



The range comprises a circular fixed downlight, and a circular and square adjustable downlight. The lamp housing on the adjustable units may be angled out from the ceiling to act as a wall washer. These budget priced units are available in either polished brass or chrome and white or black finishes.



LightGraphix will continue to expand their lighting range well into the 90s. For further information contact LightGraphix in Dartford, telephone (0322) 222389.

#### New Paging Consoles

The six models in PEL's new 'PGM 5000 range' of high-quality Bouyer paging consoles include, as standard, a pre-amplifier to obviate impedance problems when long cable lengths are used. Flush and surface mount versions with 4, 8 and 16 zone capability are available, all with built-in loudspeaker for monitoring, plus a 1W amplifier with volume control. Power consumption is 300mA at 24Vdc.

The new units also have many other useful features and are said to be ideal for use in industrial and office environments.

Full technical details and instructions for installation and operation are available from PEL's dealer sales office at Northolt on 081-841 6251.

#### **Snow Business**

E.S.P. (UK) Limited have recently launched their new Snow Effect Machines, ideally suited for a range of applications including theatre, disco, TV and studio, claim E.S.P.

The units pump a huge volume of a foambased snow substance which will disintegrate in a few minutes. These compact machines can be hung in the conventional way and can be controlled simply by switching on and off from a normal 13 amp mains socket or from any normal lighting control board.

There are two models available — model 2000 being manually operated and model 2005 being remote controlled. For further information contact E.S.P. in Hitchin on (0462) 421594.

Abstract/LeTech

synchrosats Abstract design to Light of Leicester and Abstract design to Light of Leicester and Ryger Electronics of Nottingham have now Abstract the new Abstract the launched the liew Abstract/LeTech Synchroscats and dedicated SS4 Controller, a Synchroscats by Abstract & Russeller, a Synchroscats and dedicated 354 Controller, a joint venture by Abstract & Ryger and joint under Abstract/LeTech. marketed under Abstract/LeTech.

arketed under pusuada Leieuri.
The Synchroscats are based on the very The Synchroscais are passed on the very popular Scatscan 100, and offer a versatile for venues that require an install. popular Scatscan 100, and oner a versatile system for venues that require an intelligent system for venues brac require an intelligent lighting system at a reasonable price, say

The 19° rack mount SS4 controller has five The 19 rack manual position/synch/beat/ main tuned also incorporates four separate mute, and utato channels for individual lamp

control at 8 units max per channel. The manual position allows the positioning are each servo driven Synchroscat mirror head the four manual override softouch buttons and control knob. All Synchroscats will take on the same position together and move in the same pusation to the music. A chase system where each mirror head will sweep in turn, sound activated by the beat of the

disables the Synchroscats from the controller allowing the on-board control sound unit to kick in perfect sound animation from each a seect from the sound system via a jack the SS4 controller. For further details at Abstract on (0455) 823188.

#### Studio Power

never have recently launched two the CD300 and CD500. lower loudspeaker designs are now the both featuring 4-way systems. Both reflex ported on the front



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beam using the Osram Walter Power ballast. A Owam 400 watt HTI system were a variable spread

contact Summa (408) 293-3657.

#### **Optical Lens Design**



English Glass Co Ltd of Leicester are now providing a service for the design of optical products for companies who cannot justify the employment of in-house design specialists.

Aided by dedicated computer facilities the design, development and engineering of lenses for systems such as analytical instruments, micro film and slide projectors, photo electric controls, effects lighting, automative and visual aid lighting and other similar light condensing applications is now

#### R & G Services

R & G Services have announced the inclusion of the Dalton and Artick lighting control ranges to complement their existing 'Nova' brand. It is hoped that a joint development plan with Dalton will result in many new projects. Dalton is the trademark of Light Technology of Ghent who also represent Nova products in Belgium.

Artick professional dimmers and memory desks are now available through R & G. The dimmers are modular and feature air cooling, MCB protection and resistive and inductive load handling in either four 2.5kW, two 5kW or one 10kW units.

For further details, or to arrange a demonstration, contact R & G Services in Cinderford on (0594) 823197.

#### Sound Reinforcement

The S450S is being billed as one of the most important sound reinforcement products to come out of Yamaha for some years.

It's a full-range 2-way Bass Reflex system aimed squarely at the installation and performance market. The highly compact cabinets and impressive power-handling capacity will satisfy the needs of many installers and contractors looking for smaller full-range systems, claim Yamaha.

Compact size is enabled by the proprietary Active Servo Technology design, which obviates the need for 2-box systems with the resultant cost savings. With flat response down to 40Hz, there is really no need for separate sub-bass. The moulded plastic cabinets can be floor- or wall-mounted, or flown for dancefloor, theatre or other appropriate applications.

The P2700 power amplifier offers stereo 350W into 8 ohms, and 500W into 4 ohms. As a 2U rack-mount unit, weighing just 24Kg, it is a small but powerfully flexible unit for smaller venues wanting to provide big stadium performance.

In another area, the MV422 multi-source mixer is a versatile and highly-featured rackmount stereo mixer for all commercial applications. Its combination of features place it between a disco mixer and an Audio Visual pre-amp/mixer. For further details contact Yamaha in Milton Keynes on (0908) 371771.

#### Starlite Laser

Advanced automated lighting technology is now replacing the basic par can instrumentation and dimmer systems used since the 1970s. American company Starlite Technology is making forward steps in lighting production, and UK-based Tasco Communications recently held a series of private showings to demonstrate the new Starlite Mk2 GL StarLaser.

The StarLaser lamp features colours, iris, dim, gobos, hard and soft edge beams, as well as synchronised movement with variable speed and shutter, and a wide angle 'wash' facility. In addition to this the lamp features an integral laser scanning head operated from the Starlite desk using the Prisma laser control system.

The Prisma control system can call on up to 50,000 different images or effects which can be made to rotate, flip, zoom, draw and undraw. The laser also features seven colours and beam blanking giving multicoloured effects with no 'flyback' lines. For further details contact Tasco Communications in London on 081-311 8800.

### McGregor G8 Mixer-Amp



The G8 is a new stereo 8 channel mixer-amp. with a 200 watt mosfet power amp per side. Each channel has 3 band equalisation, two aux sends, a foldback send, peak leds and a balanced XLR mic input plus jack line input.

The output section features a twin 8 band graphic eq and comprehensive patching options with jack and XLR output sockets. The unit is supplied in a tough vinyl sleeve which can be removed for rackmounting purposes. It is also available in a mixer section only version.

For further details, contact distributors MTR in Bushey on (0923) 34050.

#### McKenzie's New Brochure

McKenzie Acoustics, has just launched its new brochure, detailing the company's range of quality drivers for power applications. For a copy of the free brochure contact the company in Leeds on (0532) 601222.

IF YOU HAVE ANY NEW PRODUCTS OR SERVICES THAT YOU WOULD LIKE TO BE FEATURED IN OUR EQUIPMENT NEWS SECTION, PLEASE SEND PRESS RELEASES TO:

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contact: Lorraine Ludman or Marlyn Weeks for further details Telephone: 0707 266778 Fax: 0707 268861



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# PLASA News

#### Sound Tender

PLASA and DTI are arranging a joint venture to Seville to tender for the many contracts now open to supply equipment and services for the World Exposition in 1992. To date, seven member companies have expressed serious interest, but there has been a poor response from sound companies. Anybody wishing to receive further details should contact Chris Sogno in the PLASA office on (0323) 410335.

#### Italian Job

The deadline for stand booking for SIB/MAGIS 1991 in Rimini is fast approaching, and companies interested in attending should ring Annabel Williams for details of the DTI supported scheme.

### Singapore Connections Both PLASA and SCIF have received DTI support

Both PLASA and SCIF have received DTI support for Pro Audio Asia and Sound and Light 91 which will be held concurrently in Singapore from 10-12 July. Although final details are still awaited, if you wish to reserve space, contact Chris Sogno on (0323) 410335.

#### PLASA Out and About

PLASA will be exhibiting at the forthcoming Lighting Dimensions International exhibition in Orlando running from the 17-19 November. On hand to deal with any enquiries will be PLASA chairman Kevin Hopcroft, John Offord and Chris Sogno who look forward to meeting both members and non-members on the stand.

#### **Directory Enquiries**

The 1991 PLASA Yearbook is now in the planning stages with the new version bringing a change in format.

The yearbook has proved to be a valuable reference source and is used extensively both in the UK, and abroad. The new Yearbook will be more intensively targeted to promote members' interests. More details can be obtained from Annabel Williams in the Eastbourne office on (0323) 410335.

#### Why Not Join in 1991?

If you're not a member of PLASA, then why not? Ring Chris Sogno to get all the information on (0323) 410335.

#### Light and Sound at Leisure Week in Birmingham

Leisure Week at the National Exhibition Centre at Birmingham last month drew a dozen or so lighting and sound companies, eager to attract enquiries from the big broad field of leisure. After the event, L+SI called for their reactions, the majority of which were very positive.

Simon Sketchley of AJS reported that they had received many 'quality' contacts, and would certainly be exhibiting again next year. This was their first attendance at the event. Avitec's Tony Kingsley reported a nett result of over 40 good enquiries from the general leisure and local authority areas. He wanted to see PLASA doing more to attract this type of audience.

Phil Coe of Bose UK said the show had been good, better than 1989, with more leads and better quality. Dick Carrier of LSD Contracts told us it was an excellent chance to meet people in the leisure industry who are not just from discos. "We had an excellent cross section of people from the leisure industry," he said. Ian Potter of Leamington Sight & Sound reported some very good leads outside the disco industry.

Anna Sassi of Le Maitre Lighting & Effects told L+SI it wasn't the right show for them although well organised. "For our business as manufacturers, PLASA is the best show," she continued. John Vogel of i-Laser had a contrary view: "There were less people than at PLASA, but they were possibly more serious at Leisure Week. There was too much noise in our location, but we still received over 200 good enquiries."

Harman's Sean Martin reported a reasonable flow of visitors, with some 'high class' contacts among them. He considered it "fairly worthwhile" whilst PLASA would always be their main show.

Toa's Harry Greenaway received some good leads and will be back next year even though he hates Birmingham!

Mick Hannaford of **Lightfactor** told us they will be back in 1991. He noted that customers "were much more interested in concepts rather than just beating down prices on equipment as at PLASA."

The only poor report came from John Lethbridge of Presentation Consultants who had not received enough enquiries to warrant the expense. However, he put this down to the fact that they made what turned out to be an unfortunate choice of site. "Other companies we have spoken to seemed to have had good results," he told L+SI.



John Lethbridge (left) and Greg Szabo of Presentation Consultants.







Dick Carrier of LSD gets in tune with guest entertainer Alan Randall.



Lightfactor's John Adams in show guise while Mick Hannaford carries on with business as usual.



Anna Sassi and Rodney Clarke show the latest from Le Maitre.



Sean Martin and Bruno Wayte demo'ed JBL equipment on the Harman stand.



Leisure Week was a 'local' gig for Leamington Sight & Sound.



Roman Walanta and Ian Brown (centre and right) examine the workings of a Martin Roboscan on the stand of AJS.



Lamba's Ian Kirby and Mark Morley of AJS with a Zero 88 Sirius 24 controlling the lightning.



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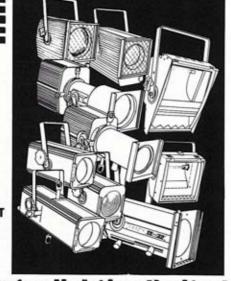
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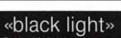


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### **VIEW POINT**

#### John Offord on

### Five Years of Lighting and Sound International

The first and only other magazine I've edited dealt with the management of entertainment venues. It commenced its life in 1973, shortly after local government reorganisation and the explosion in provision of cultural and leisure activities.

There were two identifiable 'camps' within the field. One group, according to the new and (generally) long-haired 'arts' intellectuals, consisted of the (generally) less well-educated end-of-thepier type front-of-house managers who they felt were capable only of smiling nicely at their patrons. From the 'civic' side there was a great deal of cynicism from the older-style managers in particular about the (generally) unkempt managers of scruffy arts centres, who, they felt, were quite happy putting on events that had no appeal whatsoever, wasting public money in the process.

Luckily, operating right down the middle was a larger group of dedicated managers who could handle it all and take the best from both worlds, the pure entertainment plus the best of 'cultural' events, and put them together successfully into a good programme for the locals.

Within a few years a new breed of management had fully emerged: age range (generally) somewhere between 25 and 40, who had good knowledge and good promotional skills and who were aware of what their public wanted to see on a wide creative front, throwing in the occasional unexpected items that they'd seen at a festival somewhere, just to keep the people awake. The Arts with a capital 'A' and entertainment with a capital 'E' began to disappear.

The entertainment lighting and sound equipment industry and the venues and events it has to serve has paralleled this pattern in many ways. There was the disco camp (viewed from other areas as having a maze of flashing lights and little else) and the theatre camp (who thought themselves much the superior, and were quite happy to be held in that light). The disco boys couldn't have cared less anyway, and what was actually said about the theatre end of the industry isn't repeatable.

Like the new professional entertainment and arts manager, down the middle came lighting manufacturers and designers and the money of rock'n'roll. They didn't care which 'camp' they came from; they simply wanted to use a piece of machinery as part of a larger creation, or see it used by a wider spread of the entertainment industry.

The high skills from all areas have now been almost fully accepted, and Lighting + Sound International has endeayoured to follow the same central course and show what can be done with imaginative thinking and imaginative application —

in all areas of entertainment, and across into the wider field of leisure in general.

Scanning the pages of five years' of copies of L+SI, the magazine has highlighted some of the landmarks and the emergence of an incredible range of new equipment and skills, both in the making, and in the using.

A show that was typical of the new mix was 'Time' at the Dominion Theatre in London, featured in our April 1986 issue. Dave Clarke's concept had set design input from John Napier and the lighting designer was Andrew Bridge. Between them they came up with a show that was all technology, with the range of equipment used immense. The fact that it was thoroughly boring (apart from the technology) was a pity.

In October the same year I was able to break through many barriers, physical and otherwise, to interview the technical director of the Bolshoi Ballet. I had to be careful what I reported: evidently some of the senior people involved hadn't come from a technical background at all, and were in senior positions by virtue of family and favour. Hopefully, things are different now.

The end of 1986 had more highlights. The best response we've ever had to an article in the magazine came from a one pager on the use of flicker candles in the Phantom of the Opera. Five overseas telephone calls were received in one morning alone asking where this high technology could be obtained! On a more serious note I took a day trip to Amsterdam to see Coemar Robots in performance at The Escape — a multi-media venue and something of a landmark as it turned out. You'd be hard pushed to find a venue without moving mirrors now.

The summer of 1987 was Pulsar's with their Oska control on the lawns of Pembroke College providing our cover story. We had to doctor the pictures so the screen could be seen in the sunlight.

A substantive list of highlights is far too lengthy for this column. I counted 17 countries we've visited over the years to produce major features, several more than once. What follows is largely a personal summary from the period:

Strand's PALS first fully automated studio lighting set-up in Hannover.

The first UK Golden Scans at Zhivago's in Darlington.

Color Pro units at Avitec.

Jean-Michel-Jarre at Docklands. Vari-Lite, PanCommand and Starlite systems amongst others.

A Netherlands tour with Tony Gottelier and Julian Williams (they're still convinced I navigate by the sun). Eurovision in Lausanne and Opera and Ludwig Pani in Vienna.

Hong Kong Cultural Centre, Acid House and lighting control at the BBC — all in the same issue!

Siegfried & Roy in Las Vegas, digital dimming, Steel Wheels with the Stones, and Andy Collier going Ragazzi at Genux in Desanzano.

A concert to celebrate the dismantling of the Berlin Wall.

Freddy Lloyd (Zero 88) and Derrick Saunders (Pulsar) who've survived the complete entertainment assault course.

Plus too many discos, theatres, concert halls, concerts, companies, and people to mention. It all adds up to an amazingly wide mix of the creative use of lighting and sound in one big fantastic industry in which the few remaining barriers are fast disappearing.

The Professional Lighting and Sound Association in the UK has grown at the same alarming rate. I counted 65 members in mid-1986. There are 170 now. The PLASA Light & Sound Show of the same year was still bound within the small walls of Novotel. Now it uses all five floors of Olympia 2 and is one of the world's biggest dedicated shows for the industry.

So here's to another five years (at least) in an industry of great people and great magic!



John Offord is 48 (just), loves old grand pianos, Savile Club claret, France, old time music, Ronnie Scott's, collecting books and driving little red tractors with real engines — not necessarily in that order.

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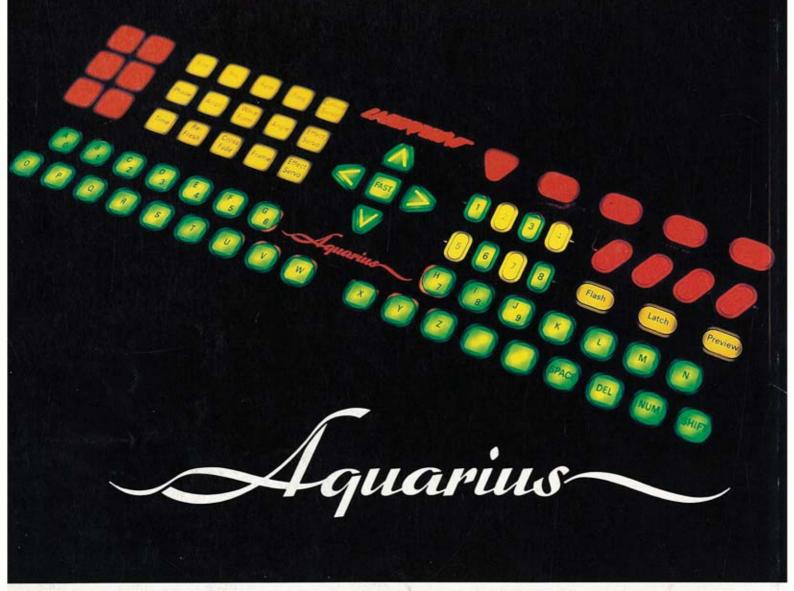
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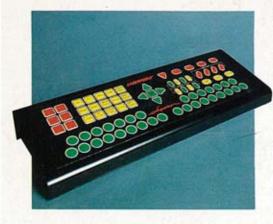
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