LIGHTING SOUND International



- Light the Darkness: Geneva
- The Matador in London's West End
- Camelont and the Lightmen: Stockholm
- Juliana's in Tokyo
- ABTT at The Mermaid
- Lumo Lighting the new name at Kearsley

JUNE 1991



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LIGHTING SOUND

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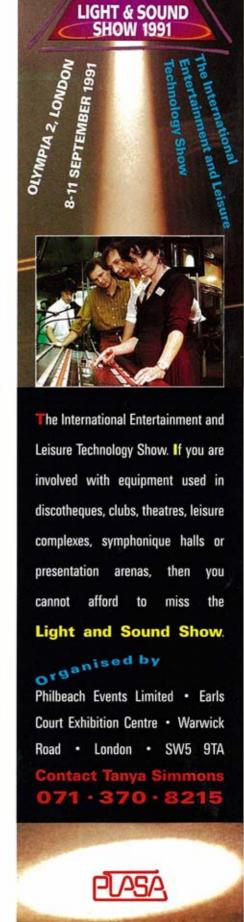
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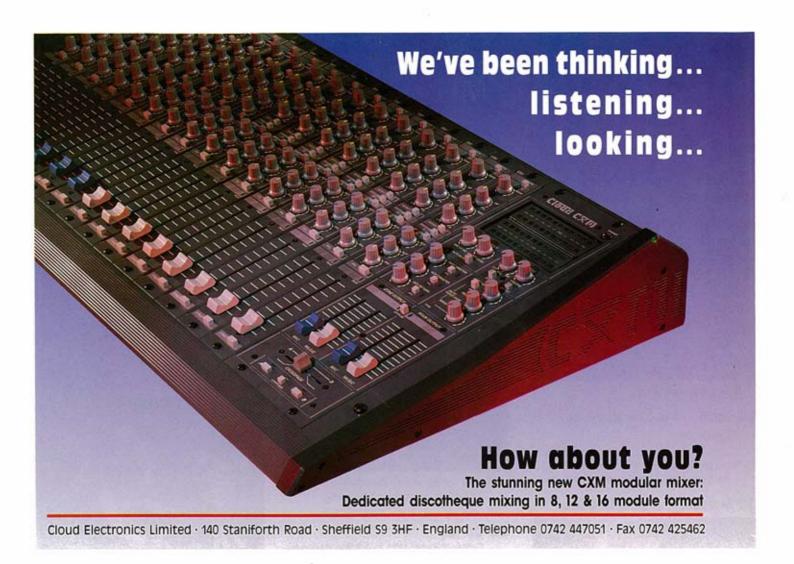
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Regular Contributors: Ben Duncan, Catriona Forcer, Tim Frost, Mike Lethby, Graham Walne, Julian Williams.







LIGHTING SOUND News



Promoting PLASA's Light and Sound Show

Pictured above on PLASA's stand at the recent ABTT Trade Show at the Mermaid Theatre are Simon Boyd of Philbeach Events, Ruth Rossington of Lighting and Sound International, and Nicola Hynes from PR representatives O'Brien Associates.

Latest show bookings reported by Tanya Simmons of Philbeach include: Lighting and Sound Division of Samuelson Group plc; Ludwig Pani; Steeldeck (P L Parsons); Winstonlead; Mushroom Lighting; Playlight P & G.



ABTT 'Product of the Year' Award

XTBA's Chris Cook accepts his award from ABTT chairman John Faulkner, for the Dimmersafe (see ABTT review pages 35-39).

Xylo Part Company with TGI



Labour Shadow Treasury Minister and Islington South MP Chris Smith congratulates Xylo's managing director Tim Davies on their order for Juliana's Tokyo (see story this issue).

Tim Davies and his co-directors at Xylo have successfully carried out an MBO for the company from erstwhile parent the TGI Group. Terms of the deal were not immediately available, but TGI will benefit from the future profitability of Xylo.

Norman Crocker, T.G.I. chairman, commented: "Xylo undoubtedly have

a very interesting system, with good long term potential. However, T.G.I.'s business is primarily in the field of audio equipment and wishes to concentrate its resources in this area. We wish Xylo every success for the future."

This has been a busy month for Tim who had flown to Japan in the middle of negotiations for his company to oversee the completion of their major video installation for Juliana's in Tokyo (see also pages 23-27 this issue). Meanwhile, Xylo Ltd were also called in at the eleventh hour by Metro Video to help with a problem at their new installation in Madame Tussauds. The combination of severe EPROM-blowing problems and the Pioneer specialist being on a visit to Japan, meant that they were unable to complete the installation of 'Space Trail', a 16 videodisc player video and text display that forms a feeder to the Planetarium. Pioneer suggested that Xylo might have the solution.

The flexibility of Xylo's 'Turbine' CPU, developed by the company especially for video system control, meant that programme director Hugh Roberts was able to configure, programme and install the system within four hours of Metro's call. The system, set-up for unattended continuous operation, allows synchronised or offset looping of eight of the videodisc sequences, which are all of a different duration. Roberts has also thoughtfully provided a 'photocall' button that brings up suitably photogenic still frames on these players. All videodisc activity may be monitored on the Turbine's VDU. Xylo also supplied for hire two of the Pioneer LDV6100s used in the display.

Tim Davies, managing director of the company, told L+SI: "The buy-out is an excellent opportunity for us. T.G.I. have been very supportive during the period of product development, but the time is now right for us to take the company forward independently. We are parting good friends and will stay in close touch." There are no changes planned to the operational, or management end of Xylo.











& Globes ... from ...

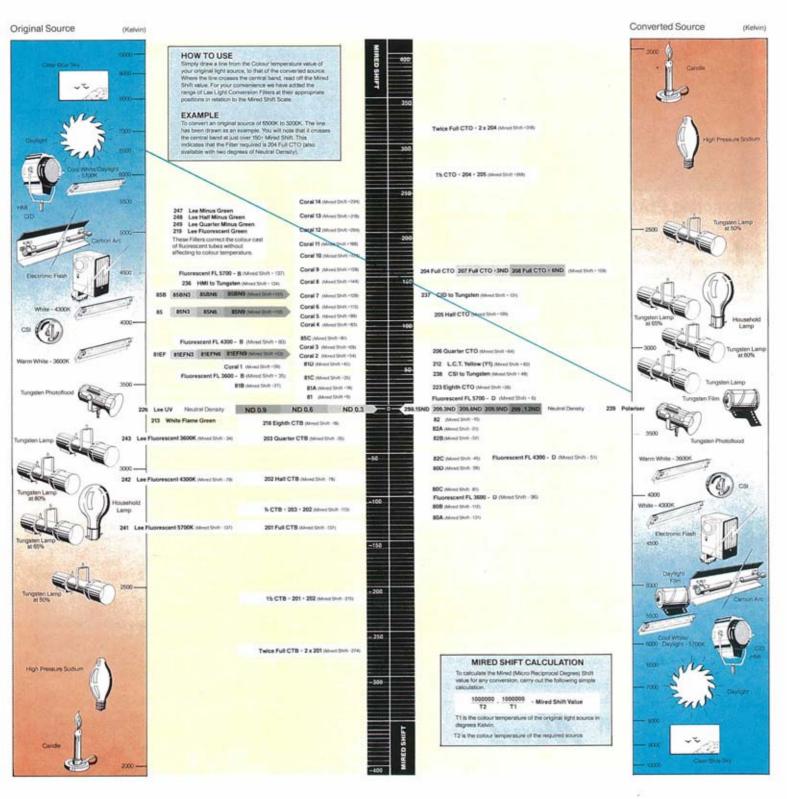
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Image Projection

Surrey-based Alien Projects produced the largest projection ever realised on the facade of Wembley Arena for the recent George Michael concerts. The photograph used for the cover of his latest album Listen Without Prejudice, was reproduced on a huge projection screen (75m × 28m) using three Hardware For Xenon 5000W projectors. These projectors delivered a picture of brilliant resolution with an astonishing depth-of-field on uneven surfaces together with 80,000 lumens of brightness.

Laserpoint Re-Structure

At a meeting with its creditors, held in Cambridge on May 15th 1991, Laserpoint Communications Limited, which took over the assets of Laserpoint Ltd, in 1989, announced that it had persuaded its bankers, who were NatWest, to write off 90% of a £310,000 overdraft with the balance repayable by installments over the next 12 months. Ordinary creditors were then recommended to accept 21p per pound owed to them, and the proposal was accepted by a majority in excess of 90% of the value of creditor's present in person or by proxy and voting on the resolution. Trade creditors were owed £300,000.

Rather than go into liquidation, the directors asked for a voluntary arrangement which allows a strengthened company to trade as normal whilst guaranteed funds are made available to the creditors within a parallel arrangement: the CVA agreed at the meeting. A beefed-up management team was proposed with Richard Brooks, a chartered accountant with entertainment industry experience, at the helm. Andy Holmes remains as sales director, and Sussi Christiansen as marketing director.

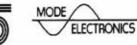
Holmes told L+SI: "We had planned a different sort of financial reorganisation as far back as last October, but the bank had a change of heart which scuppered that. That was part of the problem, but mainly it was caused by the Gulf War as the result of which our exports, the main plank of the business, simply evaporated. Nobody expected the bottom to drop out of the market in the way it has over the last six months and to bring about the need for such drastic action.

"While none of this was something we wanted to happen," Holmes added, "the fact remains that these moves, which resulted from advice given by out investment bankers, have given us a clean balance sheet and lower gearing. The result of which is that we now have in place a refunding package of around £750,000."

Laserpoint have two new videowall products under development and continue to improve the animation capabilities of their Aquarius laser display controller.

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We also exclusively represent AMPTOWN (Manufacturers of the POSISPOT moving light system), MA LIGHTING TECHNOLOGY (Manufacturers of professional lighting control consoles), and SUNN (Manufacturers of MIDI lighting systems) in both the U.K. and certain overseas markets.

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On the Level

Following our mention of Level Acoustics in the news section of the last issue (May, P.10) the directors, Mike Boylan and Paul Davies, have asked us to point out that although they work closely with Hi-Tec (Quiplight) there is no financial or operational connection between the two organisations or any previous company of a similar name, and the magazine would not have wished to give any impression otherwise.

As Paul Davies explains: "Level rent the ground floor of Oriel Court from Hi-Tec (Quiplight) and have done so for some time. We will also continue our close trading relationship with them as this provides benefits to both parties from a marketing and design standpoint."

L+SI hopes that this paints a clearer picture of the position as to the association between the two companies. As Paul says, "Level Acoustics are still trading and we are confident will continue to do so through and beyond these recessive times. We wish to assure our clients and suppliers of our continued existence."

Strand World-Wide

Strand Lighting North America announces its integration into the Strand Lighting Worldwide structure. In order to maximise responsiveness through operating locally and investing globally, Strand will divide into two divisions: manufacturing and sales.

Under the new structure, Glen Griffith, formerly vice-president of human resources and operations, has been appointed to president manufacturing/corporate division. Griffith will lead the Los Angeles-based factory, providing development and world-class manufacturing of entertainment and architectural products for distribution to the nine Strand trading companies. This new division joins other primary Strand manufacturing facilities in Scotland and Italy, supporting the world-wide trading companies. Operations, finance, marketing, and R&D are included in the manufacturing division. Other key appointments in the division are: Robert Heninger, vice-president operations; Jim Henehan, vice-president finance; Steve Norman, marketing manager and Ian Ibbitson, director of R&D.

Also under the new structure, Bill Groener, formally vice-president of sales and marketing, has been appointed to executive vice-president sales division. Groener will lead the US-based trading company, providing increased focus on the stage and studio businesses. Sourcing entertainment products from Strand's world-wide manufacturing facilities, this division will service the USA and relevant export markets. Recent key appointments in the trading company are: Brian Hartley, sales manager film and television; Ted Doumazios, project management; Jim Zook, service manager and Ely Mangabat, credit manager.

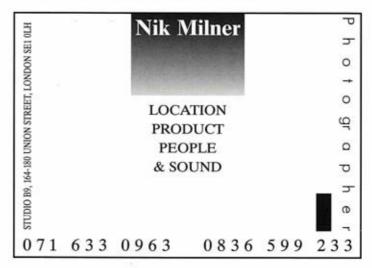
The Fall and Rise of RDE

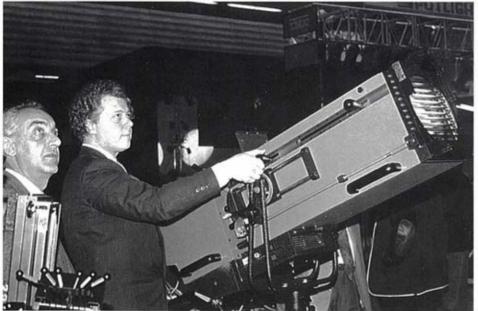
A meeting of the creditors of RDE Production Services held recently heard that the total deficiency of the company amounted to £427,000. £313,000 was owed to trade creditors.

Among substantial debts, those in excess of £4,000, were sums listed as owing to Creative Sound Services, Kimbolton Fireworks, Laser Magic, Light Angles, Lighting Technology, Mushroom Lighting, Outback Productions, Rock Construction and Stage Miracles.

In the meantime, L+SI understands that RDE founder Richard Dale with colleagues, Kevin Eyres and Simon Fryer, has established a new company operating from the same Malborough Hall, Greenwich premises under the name of Design and Production Associates Ltd. Dale told L+SI that this company was already contracted to produce the technical aspects of the Earls Court and NEC Ski Shows, as well as provide similar services to the Liberal Democrats once an election is announced.

RDE, as the company has been generally known since it took over from a predecessor company of a similar name (RDE Stage and Lighting Systems Ltd), were involved with the Christmas lighting in Oxford Street last year and had been widely tipped to carry out a repeat this year.





Gert Raffelsberger shows Ludwig Pani's latest followspot at MAGIS in Rimini — details in our July issue.

PALS go to College

A new college for the Performing Arts is to open in Nottingham complete with the latest Precision Automated Lighting System (PALS) for its theatre from Strand Lighting.

College Street's theatre, which is used by visiting professional companies and by young people in performance and on training courses, is already equipped with a Strand M24 memory and effects board. This complements its audio visual recording facilities and music technology suite. Strand's PALS equipment has been installed to allow pupils and students to become conversant with the latest technology.

The PALS system allows motorised luminaires to be remotely positioned according to instructions relayed either from a Galaxy 3 or, as in this venue, a personal computer. It permits repeated pinpoint accuracy in repositioning the PALS luminaires as each pre-recorded memory is played back. Although PALS will be used primarily by students from the college of performing arts, it will also be available to visiting schools from throughout the county.

CLS Sales

A meeting of the creditors of CLS (Sales) Limited of Bolton will be held in Manchester on June 13th.

Metro Audio

Metro Audio & Communication Ltd has been placed in creditors' voluntary liquidation following a meeting of creditors on 30th May.

The estimated deficiency as regards preferential creditors was £4,366 and listed trade creditors were detailed at a total of £3,604.

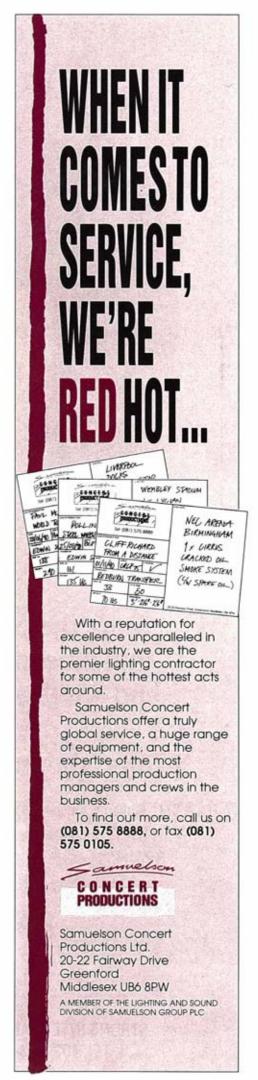
Carlton Communications' Profit Down

Carlton Communications the TV and film services group which recently sold Avolites back to its management, reported a fall to £46.3M in pre-tax profits for the six months to March, from £64.9M for the previous period. The dividend was, however, raised on hopes of brighter prospects.

Lighting the Darkness in Geneva



The London Chamber Orchestra in performance at the Avenue of Peace, Geneva. The event was the culmination of a world-wide campaign by the International Red Cross and Red Crescent to publicise the plight of victims of war. See full feature on pages 51-54.





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Ex-Juliana's Singapore Team Set Up Shop

The four Singapore-based staff of Juliana's, who left the company shortly after it was sold by Wembley Leisure to Leisure Resources Group, have established themselves as LeisureWorks PTE with major ambitions in the Asia Pacific regions.

The four, Steve Carroll, Mike Thomsett, Heather D'Silva and Ardan Peddell, who was responsible for the original light and sound specification for the new Juliana's Club in Tokyo (see pages 23-27 this issue) but left before his scheme could be implemented, are offering what they describe as a full in-house entertainment package.

Supported by the skills of individuals involved, facilities to be offered by the new company include technical services for design, installation and maintenance of sound and light equipment, consultancy services for operation and management for new leisure investors, and entertainment services for the provision of operatives and music.

Their move follows a similar development some years ago when expat. engineers Tony Leedham and Ian Stott left Juliana's and set up Innova AV Designs in the same area. Innova have recently been appointed Far East distributors for Laser Grafix and Leedham, who is now based in the UK, is additionally providing an export consultancy service for others.

LeisureWorks claim to have a number of projects underway already, including a fun pub for Shangri-la Hotels in Kuala Lumpur and other work for the Hard Rock in Singapore.

Link Up

Flexiplas Ltd, the owners of 5 Star Cases, have announced the amalgamation of 5 Star Cases and Pro-Tect Products. All manufacturing has been concentrated at the modern production facilities of 5 Star Cases in Wisbech. The previous partners of Pro-Tect Products will remain involved with the enlarged company.

Keith Sykes has joined the company as production manager of the case division, and Mal Ward, although now an independent member of the MI 5 Consortium, will be representing the company along with the other members.

Hill Light & Sound

After a successful exhibition at SIB/Magis in Rimini, Italy, Hill Light & Sound announced the appointment of a main dealer for London and the south. Hill's new representatives are The Spot Co, 53 Northfield Road, West Ealing, London. Telephone 081-566 5012.

Available for sale or hire are a complete Dualscan system, controller, and mirrors. Hill Light and Sound are also planning the release of the new SMARThead system, currently being developed in conjunction with major rock and roll tour companies for stage and touring use.

BKSTS Conference

Over 76 papers will be presented over four days at the Film and Television production conference in July.

Organised by the British Kinematograph Sound and Television Society (BKSTS) and held at London's Olympia 2, the papers programme has been put together by leading professionals from the BBC, Thames TV, Dolby, Kodak, BASF and Metrocolor.

As a meeting point for the industry, the event also has an active social and partners programme running concurrently with the conference. The programme includes trips to the Museum of the Moving Image and the Royal Tournament. To receive additional information on any of the programmes contact Philbeach Events on 071-370 8180.

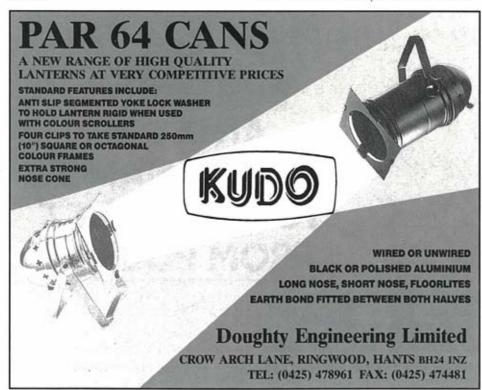
Leisure Services

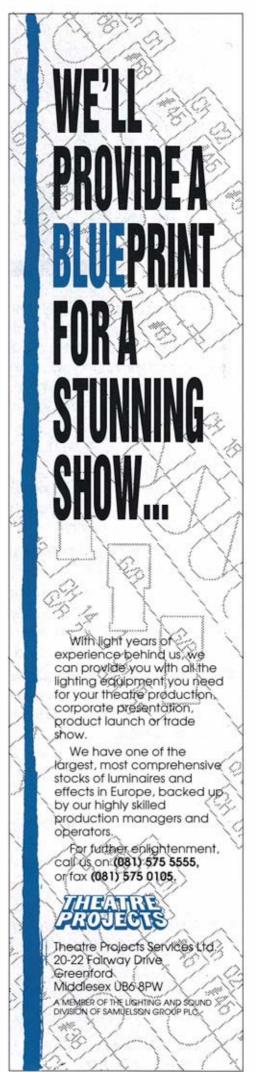
Ian Levine and Myke Lavelle formally of Light and Sound Distribution Ltd, are now running their new company Leisure Services (UK) Ltd at 7 Westerham Trading Centre, Flyers Way, Westerham, Kent TN16 1DE. The company can be contacted on (0959) 62254.

Lite Smiffs

Patrick McGuane, formerly of Lumo Lighting, has joined former colleagues Gordon Smith and Bob Jeffs as co-director of Middlesex-based Lite Smiffs Ltd. He will be responsible for UK sales in the film, studio and rental outlets.

The company have also recently moved into new premises and can be contacted at 'The Shop', 4-5 Ealing Road, Northolt Village, Middlesex UB5 5HT. Telephone 081-845 9337.





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EXHIBITION DIARY

Pro Light & Sound Expo 91

June 14-16, 1991 — **Melbourne** — PO Box 913, Adelaide, Australia 5001. Telephone 08 269 4189.

Safe-T 91

June 18-19, 1991 — London — ABTT, 4 Great Pulteney Street, London W1R 3DF. Telephone 071-434 3901

BKSTS Conference & Exhibition

July 9-12, 1991 — London — British Kinematograph, Sound and Television Society, 547-549 Victoria House, Vernon Place, London WC1B 4DJ. Telephone 071-242 8400

Sound & Light Show and Pro Audio Asia

July 10-12, 1991 — Singapore — PLASA Head Office, 7 Highlight House, St Leonards Road, Eastbourne, BN21 3UH. Telephone (0323) 410335

Light and Sound Show 91

September 8-11, 1991 — London — PLASA Head Office, 7 Highlight House, St Leonards Road, Eastbourne BN21 3UH. Telephone (0323) 410335

Vision & Audio 91

September 15-18, 1991 — London — Emap Maclaren Exhibitions Ltd, 840 London Road, Purley, Surrey, CR2 2BH. Telephone 081-660 8008

Leisure Industry Week

October 22-24, 1991 — Birmingham — Independent Exhibitions Ltd, 2 London Street, Chertsey, Surrey KT16 8AA. Telephone (0932) 564455

ABTT North Trade Show 91

Oct 31 — Nov 2, 1991 — Manchester — ABTT North, Palace Theatre, Oxford Street, Manchester M1 6FT. Telephone 061-236 7671

Entertainment and Arts Management Show

November 13-14, 1991 — London — Silver Collins Ltd, 148 Curtain Road, London EC2. Telephone 071-729 0677

Lighting Dimensions International

November 22-24, 1991 — **Reno** — PLASA Head Office, 7 Highlight House, St Leonards Road, Eastbourne, BN21 3UH. Telephone (0323) 410335.

SIEL

dates to follow — **Paris** — Bernard Becker Blenheim, 22-24 rue du President-Wilson, 92532 Levallois-Perret, Cedex, Paris. Telephone (1) 47 56 50 00

USITT Conference & Stage Expo 92

March 4-7, 1992 — Seattle — USITT, Suite 5a, 10 West 19th Street, New York NY 10011-4206. Telephone (212) 924 9088

Frankfurt Musik Messe

dates to follow — Frankfurt — PLASA Head Office, 7 Highlight House, St Leonards Road, Eastbourne, BN21 3UH. Telephone (0323) 410335

SIB/Magis

dates to follow — Rimini — Knights Management Services, 1 Knight's Gardens, Hailsham. East Sussex BN27 3JR. Telephone (0323) 442747

National Lighting Conference

April 5-8, 1992 — Manchester — CIBSE, Delta House, 222 Balham High Road, London SW12 9BS. Telephone 081-675 5211

Showtech 92

June 2-4, 1992 — **Berlin** — AMK Berlin, Messedamm 22, D-1000 Berlin 19. Telephone (49) 30 30380

Have go — Luff for sale

Luff Light and Sound Ltd, a wholly-owned subsidiary of Have Facilities Ltd, went into administrative receivership on May 29th. The administrative receiver, who is Brian Callaghan of Chantrey Vellacott chartered accountants, has decided to continue trading whilst buyers are sought for the business. He invited enquiries to either Luff Light and Sound on 081-318 6767 or to Chantrey Vellacott on 071-436 3666.

As we went to press on 7th June, it was confirmed that Have Facilities Ltd ceased trading and a meeting of creditors had been convened for 26th June.

Absolute Appointments

Two new appointments have recently been announced by Absolute Action, the fibre optic lighting and display specialists in Wandsworth.

Phil Reddiough, previously with Lighting Design Partnership, joins the company's project management and sales team. Kieran Sturrock will join the company as head of production.





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INXS "World Tour 1991"
SINEAD O'CONNOR "World Tour 1990"
Lighting Designer - Roy Bennett

DIANA ROSS "Workin' Overtime" Tour THE WHO "The Kids are Alright" Tour "MTV Awards"

"1990 Billboard Music Awards"

"1990 All-Star Pro Sports Awards"

Lighting Designer - Allen Branton

U2 "Joshua Tree Tour" DAVID BOWIE "Sound + Vision" Tour

Lighting Designer - Peter Williams

TINA TURNER "Foreign Affair" Tour
AC/DC "The Razors Edge" Tour
ROLLING STONES "Steel Wheels/
Urban Jungle" Tour
Lighting Designer - Patrick Woodroffe



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Intrade 91

7,000 visitors are expected to attend the threeday Intrade 91 at Wembley Exhibition Centre, which is the first international trade show to be held in London for many years. Special features at the show will include the 40 National Stands taken by Governments of Britain's major trading partners; 16 seminars aimed at helping UK exporters and importers to increase profitability; and a Marketing Pavilion for specialist companies, each offering services aimed at increasing the business of UK exporters.

Each of the 40 National Stands is being manned by its country's most senior UK commercial representative. They will supply full details on agents and distributors, specific information about manufacturers and suppliers and expert knowledge on investment, joint ventures and market potential.

The list of countries runs from Australia to Yugoslavia and includes the USA, USSR, Germany, Japan, Netherlands, France, South Africa, India, Thailand, Korea, Egypt, Romania and Hungary.

Arranged on the theme of 'Practical Answers to Practical Problems', the 16 seminars cover finance, freight and logistics, and customs over the three days.

Overall there will be more than 100 exhibitors including the National Stands. The others offering services to international traders include airlines, freight and insurance companies, banks, accountants, marketing and computer firms.

Organised by Setform, publishers of Export Today and Importing Today, Intrade 91 has the backing of the Institute of Export and the British Importers Confederation. For further details contact David Washington, managing director, Setform Ltd. Telephone 071-253 2545.

Orion Trading

Chip Bullock has recently been appointed director of marketing for Orion Trading Corporation. The San Antonio, Texas-based company is the United States distributor for Coemar, TAS, SGM and other lines of entertainment lighting systems. Bullock, a professional lighting designer for 17 years, recently left his position as marketing director for High End Systems where he was also the managing editor for ShowTechnology Magazine.

R G Jones to distribute Renkus-Heinz

R G Jones Sound Engineering has been appointed sole British distributor for Renkus-Heinz loudspeaker systems. Engineer Simon Honywill, who has worked with the Renkus-Heinz equipment has joined R G Jones to work specifically on the Renkus-Heinz distribution.

Sound Advice for Pilkington



Wigwam Acoustics have recently designed and installed a highly specialised two-way calling system to link the St. Helen's Line, Pilkington's new £65 million glass production line. Using 70 volt lines to cope with the 200 metre long production line and its 12 stations, Wigwam custom-built an audio mixer with transformer balanced imputs and outputs, and sited it in an accessible cavity under the production line.

The system uses convection-cooled Crest amplifiers, teamed with FC100 University Sound loudspeakers. A compressor limiter was placed in the circuit to prevent the overload of the system which has its own power supply including automatic switch-over facilities in case of failure.

Arri Supports the Arts

To mark the introduction of its new Mirage lighting control consoles, featured in last month's Rimini report, Arri (GB) Ltd is proposing to give one away to a deserving user at this year's Light and Sound Show.

The only condition for entry to the draw is to be a genuine arts organisation in need of a new light board. The draw will take place on the Arri stand at 1pm on September 11th and entrants must be there to receive the prize, worth over £5,000, or the hand will go back into the hat!

Arri will distribute entry forms, but will accept entries (one per organisation) by letter, which should be sent to: Tim Burnham, Arri (GB) Ltd, 1-3 Spitfire Way, Heston, TW5 9NR.

Rane Day at Shuttlesound

As of June 1st 1991, Shuttlesound have added Rane to their list of professional audio brand names. The range includes equalisers, amplifiers, mixers, crossovers, controllers and the Flex modular signal processing system which Shuttlesound consider ideally suited to the UK contractor market.

Rane was formerly handled in the UK by London-based pro-audio Music Lab who will remain a major dealer but have relinquished distribution rights due to growth and consolidation within the recording market.

All Set for Europe

Amongst contracts won by All Set International of Seville for next year's World Expo are the Energy, Valencia and Pais Vasco pavilions. All Set will be responsible for project management including exhibit fabrication, technical aspects installation and maintenance in all the pavilions.

The company have also been awarded the contract for the nightly spectaculars on the Expo Lake. All Set's proposal includes fireworks, fountains, laser, video laser projection, sound, light and special effects.

The company are now looking for bilingual (Spanish/English) technicians or project managers wishing to work in Southern Spain. For further information contact Graeme Pusey at All Set International, Seville. Telephone 34 5 428 31 19.

International Music Show

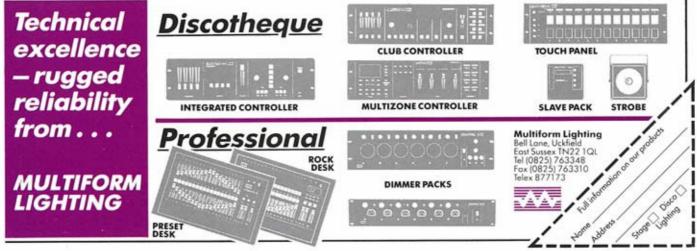
At least 13 new exhibitors will be taking part in this year's newly named International Music Show at Olympia from 10th-14th July. A wide variety of products will be on display from traditional and high-tech musical instruments and accessories, pro-audio and recording equipment and computer software to videowalls and karaoke machines. A major feature of the show will be a live entertainment programme combining a variety of masterclasses and performances by young musicians with gigs by major artistes such as Courtney Pine. For further information contact Westland Associates Limited in London, telephone 071-730 7852.

TIPS Training

Sony Broadcast & Communications (SBC) has donated a DAT recorder to sound industry lead body TIPS for use in a training video project currently underway at Air Studios.

TIPS is videoing Air Studios' move from Oxford Circus to Lyndhurst Hall in Hampstead. TIPS seized the opportunity to record the extensive renovation and redesigning work that Air is carrying out in order to collate a series of training videos for sound students for the future.

For further information about TIPS and the training videos contact Paul Turner at the TIPS office in Sandwell on 021-556 6000.



At last there's a console you can take anywhere



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The Event by Jands is available with 24, 36 or 48 channels but if a show comes up which needs more the console can be switched to wide to double the number of channels by using the bottom preset faders to control the extra outputs.

Recording and editing is a breeze with Event. 450 Memories are available and each can be given a label which displays in the LCD window, fade times and a cuestack link. Chases can include up to 99 steps and offer all the features of a memory plus controls for direction, speed and attack / decay.

The total flexibility of the Event is seen in the Assign Master faders, these can be used to control a Page of memories just like

regular scene masters but that's just the start. They can also control Chases and any combination of Memories and Chases can be assigned to the faders.

For theatrical applications a pair can be used as A/B crossfade masters, in fact it's possible to run 6 crossfades simultaneously.

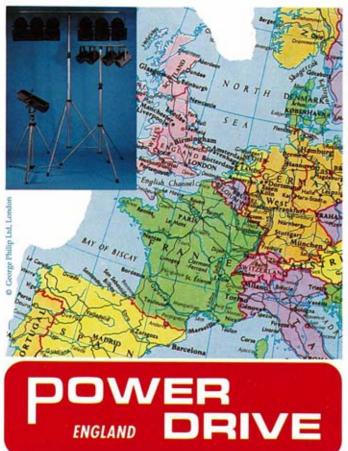
Once the assign masters are set the way you want that selection can be saved as a File and recalled at any time.

With its on board softpatch to 512 dimmers, midi input, and options for a VDU, RAM card, and analogue outputs the Event is unquestionably a

major contribution to the art of lighting design.

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Mike Lowe of Teatro and Strand's Andy Collier sharing the joke as Mike tries to manoeuvre his yuppie phone out of shot (just in case Norman Lamont should read L+SI this month!)

LETTERS

Dear Editor

As ACR Switzerland's UK distributor, we were disturbed to read Tony Gottelier's Rimini report regarding ACR (L+SI May 1991). In this, he states that ACR 'cancelled their entire range of non-laser products which proved such a trial to them for some years'.

This statement is incorrect and misleading. Whilst ACR have told us of a planned phasing out of production of some of the non-laser lines, as of today the timing of this has not yet been finalised, and we are assured that any of the products in this range offered by ACR will be available to us at least until the end of the year, with spare parts being guaranteed for the foreseeable future.

ACR refute the implication that 'the products proved such a trial to them for so many years' and are futher upset by the statement that the products were 'infamous for their lack of functionality' and that 'they didn't work, or not for long anyway'. Whilst we ourselves cannot comment on possible problems that Tony Gottelier may have had in the past with ACR products directly or indirectly, we would nevertheless sympathise with ACR's feeling that these comments are both irresponsible and inflammatory, and certainly in our opinion unnecessary in a journal as responsible as Lighting+Sound International.

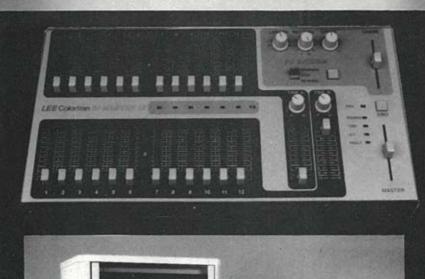
For the record, I would like to inform your readers of our association with ACR. We took on the distribution a year ago, after an extended factory visit and lengthy discussions, as is normal with any new distribution arrangement entered into by this company. ACR had, at that time, recently restructured their organisation, with new management, and we were impressed by all aspects of their company. Being launched at this time was the new Spectron 3, a moving head 'intelligent' luminaire which improved on the existing Spectron 2 product by the addition of gobos. These and other ACR products were brought into the UK for our normal extensive product evaluation before being offered for sale by us. Most products passed with 'flying colours'; but we did indeed require improvements with Spectron 3, and the product was withheld from sale by us until these minor changes were finalised to our approval.

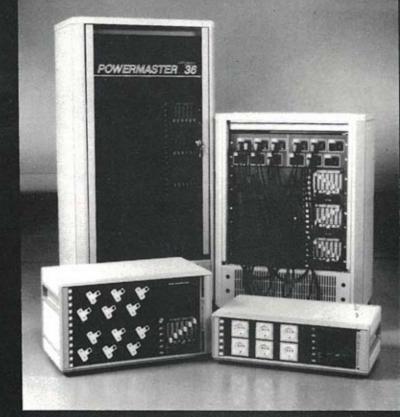
Whilst we have not sold a vast amount of the ACR product, we have now supplied a representative number of units, including Spectron 3, and these are functioning without reported problem out in the field. As our many satisfied customers will know, we strive, as a company, to sell products that are as reliable as possible, and although occasional problems do occur from time to time, we have not yet had to make any excuses for ACR products, nor do we see any reason that we should ever have to.

To finalise: whilst we appreciate that Tony Gottelier is no stranger to controversy and indeed ourselves welcome controversy as grist for the journalist's mill, we do feel that he has in this instance, for whatever reason, reported erroneously, and that his aspersions on ACR product reliability are somewhat misplaced with today's product.

Tony Kingsley, Director Avitec Electronics (UK) Ltd







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SPEED:

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

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

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

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*OTHERS:
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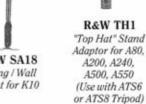


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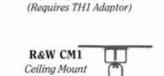


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JULIANA'S ORIENTAL EXPRESS

Introduced by Tony Gottelier with reports from Tim Davies, Ardan Peddell, Graeme Harrison and Colin Mitchell

When interior designer Lisa Der and technical designer Ardan Peddell were briefed about the Juliana's Club project in Tokyo, they were given six weeks to come up with a unique concept for the 1200 square foot and 25 feet high space with ten months to complete the task for the Group's biggest-ever discotheque project, no small problem from such a distance.

the event, following Peddell's pre-emptive decision to leave and set up on his own, the pressure was certainly on Colin Mitchell, who took on the task of technical project manager, to complete the sourcing and installation of the designer's ambitious lighting, sound and video scheme in double quick

On May 15th Juliana's Club, as the venue is to be called by order of the Japanese client, opened its doors for the first time with a substantial proportion of the equipment in an operable condition, with most coming online by night two.

L+SI has been tracking this major project for some time

with a view to producing an armchair review (editorial expenses don't run to expensespaid trips to Tokyo), but in the event asked the various participants to highlight various facets of the technical installation which, it was felt, would give readers a more accurate picture of the content than any long distance impression.

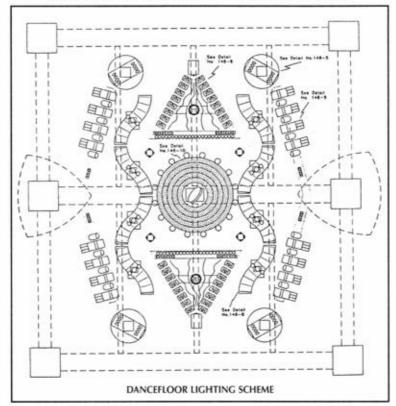
Tim Davies of Xylo, who provided the massive video features, was actually on the spot, so we asked him to give his impressions of what he had seen. Colin Mitchell, because of his previous video experience, was asked to give the run down on the video set-up.

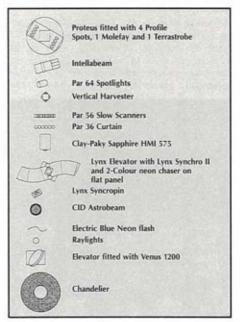
As, from a technical standpoint, it was his concept, we asked Ardan Peddell to describe his intentions for the scheme and Graeme Harrison of Renkus-Heinz gives the sound facts. We have drawings from Lynx, Xylo and Peddell (Juliana's) and comment from Laser Grafix and

One item which has not received adequate attention, largely because it did not form part of Juliana's scope of work, but is in the club nonetheless as the result of a time honoured Japanese tradition, best translated as 'the old pals act', is the Bodysonic dancefloor. This new Japanese designed system, which follows similar earlier attempts in the US, incorporates low frequency transducers coupled directly to the underside of a supported dancefloor. Great for aerobics, but does it work in practice?

Colin Mitchell comments: "The Bodysonic system extends over the whole of the main dancefloor, both raised dance podiums and the entire stage area. In operation one can feel definite movement underfoot not dissimilar to the feeling of driving over a cattle grid. At low frequencies the floor makes an attempt at supplementing the sub-bass provided by the Renkus-Heinz speakers, but natural resonance renders it an unwelcome distortion to the sound

"On overall balance, the product certainly works, but would better suit an audio visual experience in a cinema or auditorium rather than a discotheque."





Been There Facts Tim Davies

It opened with a tremendous party. The place was packed with the super-smart Tokyo designer/media/style set, rubbing shoulders with the expensive grey suits of Juliana's Japanese backers. The club seemed perfectly matched to this crowd: conscious and stylish design of each last detail, superb sound, sharp video, a battery of slick technology. The invited guests dripped designer money; the club itself a demonstration of how to spend money on design and get it

Juliana's, in the club and operation, is a fascinating blend of inspired design, Japanese tradition and 'Britishness'. Ironically, for a club billed as 'the British discotheque', it beats the pants off anything in Britain's own capital city. Lisa Der, Imagimax' project designer, was clearly given her head and made full use of the

opportunity.

Soft hangings of coloured silk reflect in great curved sheets of burnished metal, dramatic murals loom above swirling shades of carpet; every line is curved or angled. Take the followspot platforms, six metres up around the square support pillars and hardly visible to the audience. They could have been simple squares - but here they are curved, three-sided structures.

Naturally, I was delighted to see video used as an integral part of the interior design. The main multi-screen display, the shape of a soaring wing, is set in a curve of shining copper panels behind the stage. Tiny 4" LCD screens in the VIP bar are set into the armrests; other monitors are set into picture frames with a deliberately vulgar feel.

Of the many interesting details my favourites are around the entrance. As a punter, you pay 5,000 yen (£20) and pass inside through tall, heavy doors manned by both Japanese and British doormen. At least six Japanese girls bow in turn and usher you up a steel ramp flanked by well lit

metal sculptures. Two huge stainless steel doors slide open and you enter the club over a crushed-glass eye in the floor that emits periodic bursts of strobe and jets of smoke. You are looking across the DJ box, through the dancefloor and lights, directly at the big video display snapping away at the far end. A wonderfully intimidating entrance for the first time punter.

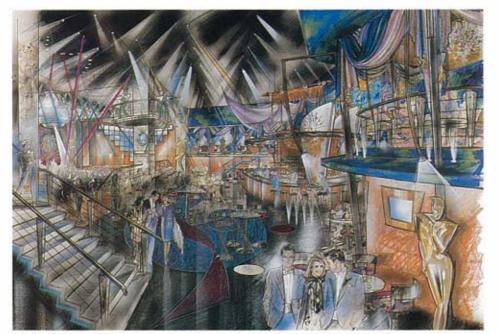
The loos deserve a mention, containing unusual fixtures and design details. On the first night the discreet doors had nothing so boring as a sign, leading to much confusion (somehow they manage with only three urinals in a 1500 capacity venue). Technology extends right into the cubicles, where the loo-goer can use a control panel approaching that of Xylo's Turbine to control and blend temperatures, pressures, and speed of a virtual symphony of water and air playing around the sensitive parts.

It seems that there are no standard interior fixtures in the venue; one searches for the banal but so eclectic is the place that the perfectly standard Exit signs, big and bright green, seem a designed reminder of the real world.

There is so much design, that after five days I was still discovering new details, spotting yet another conscious juxtaposition of texture, colour, or form. It takes courage to abandon conventional design themes and it takes real talent (with a budget to match) to justify the term 'eclectic' rather than 'hotchpotch'.

One of the surprises that Tokyo as a city held for me, was the noticeable over-staffing of every public facility. In Juliana's, maintaining this tradition means dozens more staff than we accept as functionally necessary in the UK. Whole flocks of enchanting Japanese girls bid you welcome, usher you, bring drinks, snacks, cigarettes or just smiles. Each night prior to opening, all the staff gather on the dancefloor for a brief pep talk and the chanted determinations that tonight will be even better than yesterday. Very Japanese, very effective.

Being personally familiar with the Turbine music-driven video system, the technical item new to me was the Bodysonic acoustic floor.



Interior design rendering.

Effective bass reproduction through the soles of the feet certainly adds a certain something, but there seemed to be a slight delay. I have no idea whether this is technically measurable or whether one's feet are simply further from the brain . . .

Juliana's as a whole, in its design and execution, is outstanding. My Japanese contacts were universally impressed with the place and assured me of the future success in Japan of both Juliana's the club and our video control systems. And yet, did something seem to be missing? I couldn't put my finger on it.

On the Virgin Airways flight back to London, sampling the wide range of headset music, the penny dropped. In Juliana's joyfully designed and visually dynamic environment, it was the music that had been disappointing and obvious.

It would be fine in 90% of discotheques, but Juliana's whets the appetite for the unusual, adventurous and bizarre — dancing to ordinary poppy dance music is just not enough.

Juliana's Tokyo took money and nerve. If they can be as adventurous with the entertainment as they have been with design and technology it will offer one of the best nights out in the world.

Technical Design Facts Ardan Peddell

The initial brief for the club called for a high impact design to complement its billing as The British Discotheque in Shibaura. Most of the major effects were to be seen in Japan for the first time, thus emphasising the club's contemporary, advanced high-tech image. The

technical design had to complement the interior design and to involve the whole room, not just the dancefloor. The idea was to create maximum impact when one walked into the club from the entrance.

The lighting system was to cover three areas — the dancefloor, the stage and the remaining public areas.

The back wall of the stage was designed to be slightly concave, which lent itself to being used as a giant cyclorama. This image needed to be very strong as it would be the first thing seen as one entered the club and it would also be used as a backdrop for live bands. The effect was created with six L&SD cyc lamps hung in line with the wall. 49 video monitors were fitted into the wall and driven by a Xylo Turbine system. I envisaged the cyclorama punctuated by video images being thrown around the wall by the Turbine. On top of all this, two CCT 2k effects projectors, one with a flame wheel and the other with water, were to project 10m wide images over the entire wall.

The stage lighting for bands was the usual Parcan setup, with some added Par 64 Raylights. Six Intellabeams were also used on the stage for extra flexibility when lighting the bands, and for use when the stage was used as an extension of the dancefloor.

To get away from the constraint of limiting all the atmosphere created by the lighting to the dancefloor, special effects lighting was placed around the room so that at certain times during the evening, it could be used in contrast to the dancefloor lighting (which would be curtailed/dimmed). Three more 2k effects projectors were placed to enliven dead wall space and to create interest. One of these projected flames above the entrance area, and another back-projected fleecy clouds onto the entrance ramp ceiling.

16 1k profiles were placed around the room to project 3-4m wide patterns over the entire floor area. Each profile was fitted with a gobo and rotator and continuous colour wheel. These wheels were each gelled with several shades of one colour to give the effect of each pattern



Nicknamed the 'Bikini Wall', the massive 49 screen Videowall creates a giant cyclorama.

getting darker and lighter.

On one side of the room, three Kodak slide projectors were fitted to a rotating mount. As the mount rotated, the 10-15' wide images would distort and go in and out of focus with the contour of the walls. The slides were to be simple graphic images (computer-generated) and black and white high contrast photos (old buildings, people etc). The mechanics for these were to be provided by Lynx Lighting.

The dancefloor lighting was designed with maximum attention paid to flexibility, spectacle and atmosphere creation. With this in mind, and after initial discussions with the interior designer, it was decided to place a huge chandelier in the middle of the dancefloor ceiling as a centre of focus. Aesthetically, it would create a counterpoint for the interior design and to some extent disguise the lighting around it when the club

was used for other purposes during the day.

The next problem was how to light a 3m x 2.5m glass chandelier in the middle of a discotheque. I decided to place a Coemar Venus 1200MSR in the centre, mounted on a Lynx elevator. When the Venus is turned on in its upper position (hidden from view), it would make the chandelier glow and change colour from apparent no source. As it is lowered, the light would stronger, and eventually emerge from the bottom to reveal the full impact of the effect itself. 16 Raylights were placed around the top of the chandelier so the

beams would skim its surface to eventually meet near floor level. The 16 Lightwave Research Intellabeams on the ceiling could also be trained on the chandelier to spectacular effect.

All motorisation was to be controlled by the ALS Enigma to maximise effect, and reduce the possibility of operator error.

Apart from the Xylo video display on the stage, four video projectors were placed round the dancefloor. To get over viewing problems, I decided to mount the projectors on modified Lynx Proteus'. This enabled the image to be directed on or off the dancefloor and to be tilted 50° to act as a video ceiling above guest's heads as they walked on the dancefloor. The entire video system, including 4" LCD monitors placed between the banquette seating in the VIP rooms, was to be controlled by the Xylo Turbine, fed by seven sources.

out of focus with e sides were to be imputer-generated portrast photos (old nechanics for these Lighting, vas designed with lexibility, spectacle that this in mind, and de interior designer, the chandelier in the cliub some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and to some extent it when the club screen as a counter- and the counter- and

The remainder of the lighting was designed to maximise the 8m ceiling without losing contact with the dancers. Lynx Proteus were used to pan and tilt mounted effects anywhere in the club, including the stage. A series of Lynx elevators were fitted with Synchro-Ils and neon chasers, and two Trilite 3m triangles each hold a curtain of light. Lynx Synchro-Pins, a CID Astrobeam and a Clay Paky Sapphire were to tilt either side of the chandelier.

INNER FRAME

1Mx1.4M

350deg Y AXIS 180deg X AXIS

Anti PROTFUS

OF DANCE FLOOR

PER CORNER

1K PROFILE SPOTS

8-CELL MOLEFAY

TERRASTROBE

Above is the Lynx Molefay Proteus at —10°, and left is the Screen Proteus, also positioned at —10°.

The sound system is based around the Renkus-Heinz C1 (see Graeme Harrison's full description). Additional KEF CR-200s were placed in the entrance, toilets and VIP rooms and JBL Control 12s were used as fill-in for the boundary areas of the room. The system has to cater for both live bands and recorded music. With simple audio routing, the recorded music could come only from the four corners of the dancefloor, and the live sound only from the stage.

Overall, the conceptual and technical design was dictated by the desire to give Tokyo a new style of discotheque with good sound, different use of video and a style of lighting not seen before. Nonetheless, any system design, however good, relies ultimately on the operator to create and maintain the atmosphere, and with the use of Enigma, and other computer-

controlled equipment, this is made all the more attainable.

Sound Facts Graeme Harrison

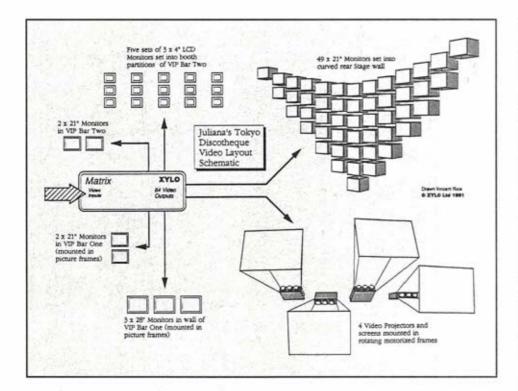
Renkus-Heinz were approached by Juliana's Leisure to supply the speaker system and amplification for the dancefloor and stage areas. The specification called for a no-compromise audio system so, after a comprehensive demonstration, it was decided to use the recently-released C-1A speaker system in its first Far Eastern installation.

The C-1A system is 4-way active and the mid/ high box comprises a 2" high frequency compression driver mounted co-axially with a 2.4" midrange compression driver. Both drivers are coupled to constant directivity horns. This





An initial design collage of fabrics, fittings and materials is translated into an unusual and evocative club interior.



co-axial arrangement uniquely gives an effective point source down to 300Hz ensuring an unusually well integrated midrange and very even coverage.

The low box comprises 4 × 15" drivers, and the optional subwoofer has 2 × 18" drivers mounted in a bandpass configuration. The complete 3-box system is compact and is available with a wide range of flying hardware. It has a frequency response of 30Hz-17KHz and can achieve SPLs of 134dB.

An integral part of the system are the X-120 and X-310 processors which employ such patented features as SPT (Spectrum Power Transfer) and Sense-fail to allow high SPLs to be reliably and accurately produced by compact enclosures.

In Juliana's Tokyo a mid/high and low box system is flown in each corner of the dancefloor, with a further pair being flown above the stage at one end of the dancefloor in a cluster configuration for live music use. These are supplemented by the two dancefloor C-1As at that end of the floor. Sub bass is provided by C-1 SUB LPs placed under dance podiums on



It takes a real talent (with a budget to match) to justify the term 'eclectic' rather than 'hotchpotch'.





each side of the dancefloor.

The stage monitoring system comprises of Renkus-Heinz Pro-Guard passive speakers, with 2 × FRS-152 CDs being flown as side-fills and 4 × SMS-151 being used as floor monitors.

Video Facts Colin Mitchell

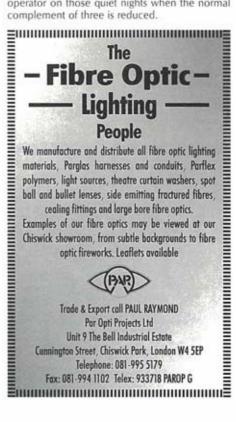
The concept was to provide a unique system in terms of performance and physical appearance. Particular care was taken to ensure all TV monitors would be recessed into the walls and provided with decorative frames to ensure they appeared as part of the furniture rather than a 'bolt-on' appearance typical of many monitor installations.

The main monitor wall was designed to be a feature of the room, as opposed to the clinical block of monitors associated with traditional videowall. 49 Hantarex monitors cover the backstage wall of the club and are mounted in a V formation nicknamed the 'Bikini Wall', All monitors are mounted on an enormous steel frame and are nicely finished in a copper cladding. Additional CCT effects projectors shine subtle images of fire and water over the wall to ensure the whole area is never dormant.

Around the room four Panasonic PT10Z video projectors are mounted on skeleton frames holding three metre video screens which can be viewed from either side. Each frame is mobile under two axes, panning 100 degrees and tilting up to 50 degrees under the control of specially modified Lynx Proteus units. These units can save stored positions to enable the video jock to select any one of nine combinations. Two speed motors then whisk the screens around from their parked positions to that ideal for the moment - be it a stage show, product launch or conference. Completely flexible and a spectacle to watch as the four huge frames move into position like robots.

In one of the two VIP lounges 16 Casio 4" LCD monitors are recessed into the bulkheads between the banquette seating to add subtle excitement to the area for those that chose to watch, whilst remaining unobtrusive for those patrons not as interested.

Design in the DJ console pays particular attention to ergonomics, whilst the video system is a separate station within the console for the video jock, it can still be used by the lighting operator on those quiet nights when the normal complement of three is reduced.



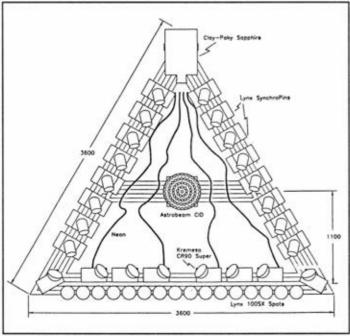


A comprehensive range of source equipment has been installed to offer the best variety including hands-on, up-to-the-minute, control via the Xylo Turbine system.

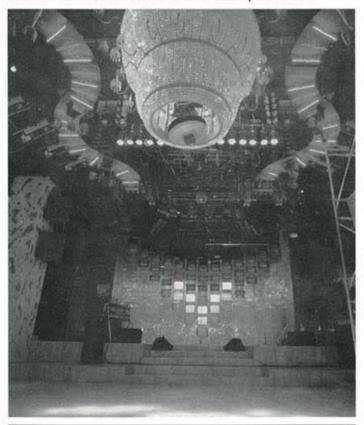
The Xylo Turbine selects from seven sources and displays them across the range of 60 outputs. Three Panasonic industrial VHS players, one recorder, three Panasonic F15 video cameras with Molynx attachments and a Philips laser disc player are used. These are given extra dimensions via the Fairlight CV1 Plus and Sony SEG 2000 special effects generators.

the Fairlight CV1 Plus and Sony SEG 2000 special effects generators.

Using the equipment, the VJ can cater for a range of sources and provide either an informative, well distributed display for conveying information, or switch to the Xylo Turbine and race a multitude of images around the room.



Above, the motorised 'triangle' Trilite lighting truss and below the chandelier which houses a Coemar Venus for those 'special' effects.



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LUMO — THE NEW NAME AT KEARSLEY

John Offord provides the background to the products, people and name behind the former Lee Colortran UK operation

For 'Lee Colortran' read 'Lumo' is a message that could have been advertised much harder months ago. Maybe the film and television sector got the message, but the theatre and concert world largely missed out on the news. It was announced in small print, but for some reason missed the headlines.

Yet there is a good, positive message here. Could you have accurately described which area of the business 'Lee' or 'Colortran' or 'Panavision' operated in and who did or still does what, and in which country? I have to admit I couldn't, without referring back to notes.

Life is easier now! In October 1990, Lumo Lighting was formed following the management buy-out of Lee Colortran International from its parent company Lee Panavision International Inc. — and there is only one qualifying factor to remember: the buy-out was of Lee Colortran UK only, and did not involve the businesses in France, Germany or Spain, which remain as part of Lee Panavision International Inc.

Managing director of Lumo Lighting, Jim Pollard, gave me the hard facts. "The MBO, with a value of £3,865,000, was undertaken because the management felt Lee Colortran was being neglected by Lee Panavision in favour of cameras; Lumo Lighting is owned by six of the former directors and managers of Lee Colortran; ultimately it is the same people, the same products, working on the same site." Blunt, straightforward stuff, a massive commitment by all concerned.

Before going into detail on the Lumo Lighting set-up, let me give you my first impressions after 30 minutes or so on site at Kearsley, which, for the geographically less-inclined, is near Bolton and North West of Manchester.

The complex is modern, sits on a huge site, and has excellent office and production facilities — and space for future expansion. Highlight? The space and facilities and number of staff devoted to design, research and development. And some more raw information completes the picture: there is a total staff of 145, of whom 88 are involved with manufacture; the total area of the complex is 70,921 sq.ft. of which 16,265 is let to the Lee Lighting rental operation; the complete site covers an area of over six acres. That's the background.

Lumo operates in three principle market areas: television, film and theatre. Currently the first two account for 70 per cent of turnover,



The power behind the buy-out: managing director Jim Pollard (right) and director of finance David Leonard.

but the theatre and stage segment is growing at the faster rate. According to marketing manager Paul Baker, 54 per cent of production is exported, and that factor in the equation is also on a steady upward path.

Lumo picked up and continued on with much of the new company strategy initiated by Lee Colortran. During 1990 the Thetford plant was relocated to the expanded Kearsley site and the production processes reorganised for greater efficiency, with older machinery replaced by multi-function computer-controlled equipment. Alongside that, a computer-based planning system was introduced manufacturing, inventory and cost control, and design and engineering efforts were focused on cost reduction measures. For good measure, and to complete the grouping together of all activities under one roof, the Eccles sales and distribution centre was also consolidated at Kearsley.

The Products

So what do Lumo produce? Covering such a wide market area, and having noted that 88 people are involved with direct manufacture, you are right in assuming that a fair bit comes out of the Kearsley complex at the end of every day.

Studio lighting products include fresnels, softlights and cyclorama lighting and location lighting includes baby fresnels, 'Super' HMI fresnels and flicker-free electronic ballasts. For theatre there's the well-known modular Windsor range of lanterns and the 'Club' range. Portable lighting includes Flexikits, ENG kits and the Kobold range of products. Dimming and control includes Prestige memory desks, BiMaster, TriMaster and Status desks, Power-Master dimmers and IDS+ and EDS dimmers.

Lumo's range of suspension equipment includes hoists, monopoles, pantographs and grid systems. Stand and grip equipment, replacement lamps and the new Lumo filter range complete the line-up.

Amongst that list you will have noted some new products, and the most important of these, namely the Universal flicker free ballasts and the BiMaster control boards, are separately pictured and described within this feature.



Lumo at Kearsley, Manchester: over 70,000 sq.ft. on a 61/2 acre site.



... and a Project

Something else that's new from Lumo is a project that they are banking on to take the company on well into the 1990's. Called Reflex, it can briefly be described as a computerised lighting management system for television studios and theatre, and the company has devoted considerable manpower and financial resources to its two-year development programme.

"The aim of Reflex is simple," explained Paul Baker. "It is to reduce the time and manpower required to deploy and set up lighting systems, and the benefits are obvious. Motorised rigging by computer reduces the need for expensive labour and studio downtime is reduced to a fraction of current levels, ensuring efficient use of studio time and maximum production capacity.

"All Reflex systems are modular in design and construction and can be built from common building block components, the key user benefit being that it can be applied to suit all sizes and makes of luminaire. The 'business' end of the system consists of the lamp stirrup or yoke and barndoors, and future developments such as the colour changer, iris and gobo changer. The user has a high level of automated control over all these parts and precise control and high speed set-up are major benefits of the system."

The second element of the system is a highspeed fibre optic network, with a typical data speed of 10 million bits per second. The network is like a ring, and its two main elements are the node and the exchange.

Paul Baker again: "The nodes provide motor and logic power to the luminaires and accessories. The exchange, using the same control and network cards as the nodes, routes information from the terminal to the nodes. In effect, the exchange operates like a telephone exchange and can operate intelligently by diverting information along different routes in the unlikely case of failure."

The final part of the Reflex system is the host or terminal which can be one of two different items. The hand-held terminal is a touch screen type remote control that can be interfaced to the network by either cable or radio remote.



Lumo's new Filters

Lumo have just introduced a comprehensive range of lighting filters to complement their lamps and accessories. It includes a complete range of all-temperature colour effect, diffusion and correction filters.

The polyester-based filters are produced using computerised dye-control to ensure colour consistency, and incorporate advanced fade resistance for longer life say Lumo. New colour effects and correction filters are also currently under development.

Manufactured to BS3944, the filters are covered with a flame retardant coating and are available in full rolls or sheets. Lumo told L+SI that they are giving the new filter range the full backing of their technical development staff to provide specialist advice and guidance for users, and this service is aimed particularly at the less experienced theatre lighting designers or technicians who may work in schools or amateur theatre clubs.

Lumo are marketing the new filters direct through their UK representatives and agencies world-wide, and customers in the UK can obtain delivery the same day or overnight, with free carriage for larger orders. Free filter swatches and price lists can be obtained by contacting Lumo Lighting's marketing department on (0204) 73373.



Lumo's new BiMaster control series

Lumo Lighting has developed a new low-cost series of lighting control desks. BiMaster is a twopreset control desk specifically designed for the smaller venue and is available in 12, 18 or 24-way versions. The desk has a dipless crossfade between presets and a timed crossfade of up to 30 seconds, with individual timed control for each fader.

BiMaster consoles have master and blackout switches and diagnostic indicators for tripped, fault and over-temperatures. An added feature is the inclusion of a 6-way effects system. This offers 10 pre-programmed patterns which can be varied by length and speed. In addition, forward, reverse and manual step is provided via bump buttons. The effects can also be faded in and out through the master fader.

BiMaster is compatible with the majority of positive control dimmers and is immediately compatible with Lumo Lighting's PowerMaster system of dimmers.



Lumo's new Universal Flicker-Free Ballast

A range of new 'Super' Universal ballasts — which give flicker-free daylight performance across a range of different manufacturers' luminaires — has just been launched by Lumo Lighting.

Lumo's own Super Daylight luminaire range has achieved industry-leading status in recent years through its ability to eliminate flicker or strobing, regardless of camera speed or shutter angle. The secret of this performance has been the company's electronic ballasts, which are also dramatically lighter and smaller than conventional wire-round choke ballast equivalents.

Now, Lumo has developed a switchable universal ballast range for 4kW, 6kW, 8kW, 12kW and 16/18kW daylight luminaires — regardless of the manufacturer. For complete flexibility of use, the ballasts can be switched between conventional 25 frames/second, 30 frames/second (typically used for HDTV and US video applications) and flicker-free.

Development of Universal ballasts by Lumo enables daylight luminaire users to trade up to flicker-free operation without having to change their entire luminaire/ ballast system, and enables them to dispose of antiquated and bulky choke ballasts.

The ballasts feature a number of other user benefits, including a self-diagnostic indicator panel, colour temperature adjustment, and auto strike switch. When in auto mode, the ballast will strike automatically from the mains breaker of a power supply, such as a generator. This is particularly beneficial when using multiple units in inaccessible locations.

Also recently introduced by Lumo is a single ballast which can drive any 575W, 1.2kW or 2.5kW Super Daylight head, and which features Power Factor Correction.

Because the input stages of an electronic ballast are mainly capacitive, the input current is normally greater than its power rating. This gives rise to a leading power factor of approximately 0.6. In other words, the input current will be 66% greater on a normal electronic ballast than a fully corrected unit.

Lumo has developed a unique input stage which corrects the power factor back to unity, and there are a number of benefits to users. Power Factor Corrected ballasts eliminate operating problems when operating from generators, and, for instance, with the 2.5kW 240V unit the input current is reduced from 17.5A to 11A, enabling the unit to be powered from a domestic supply.



Sales manager Mike Pollard (left) with marketing manager Paul Baker (centre) and export sales manager Peter Boott.



Working on the Reflex project: (left to right) Phil Baker, Mark Crosier (senior design engineer), and Paul Tipple, Lumo's director of production design and engineering.



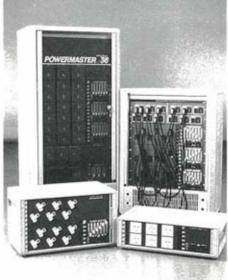
Lumo's modular Windsor theatre luminaire range.



Gareth Elliot (left) senior design engineer on ballasts with Mike Sherrington, design engineer for dimming control.



Factory manager Steve Evans pictured in QC area.



The PowerMaster dimming system was first introduced at the 1989 ABTT Trade Show in London, and has been up-graded regularly since. Its versatile design allows for world-wide use. The range spans from 6 way packs through to 60 way

The main operating terminal is a SUN SPARCstation 2 — a high resolution graphics engineering station which can interface with other terminals by using the industry-standard Ethernet networking systems. The operating terminal can support from one node or exchange to 64 exchanges, depending on the system configuration, and all software is custom designed by Lumo Lighting.

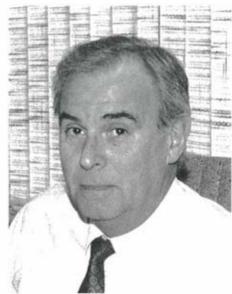
and a Project Consultancy Division

Lumo's new Project Consultancy operation is looked after by John Burgess, who can point to 30 years' experience in the business. It has been established to provide a free advice and design service to customers in theatre and television. "A complete project management package can be offered that covers grid systems, suspension equipment, power distribution and of course lighting and dimming and control," explained John. "The division was started because of the apparent lack of skills, particularly in television, to turn their requirements into engineering systems."

Design, Research and Development

The area of design, research and development is one of Lumo's major strengths. No less than 14 people are involved, and the product design and engineering department is split into dedicated teams covering the four main product areas of luminaires, ballasts, dimming and control, and automation.

One particular two-man team is devoted to full-time luminaire development and design. Their work obviously involves spending time re-



John Burgess, manager of the project consultancy division.



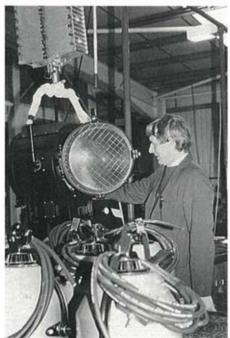
Lumo style: the 12kW 'Super' Daylight flicker-free luminaire.

evaluating existing Lumo luminaires, both for easier production and better final performance, and many improvements have already been incorporated within various elements of reengineering of existing products in recent months.

However, there is a more secret and exciting area of their work which involves luminaire design for the future. "Activity in this area cannot be made public at this stage," explained Jim Pollard, "but our technicians are working on some revolutionary approaches to luminaire optic design, with the aim of boosting dramatically the performance of heads without increasing their size, weight or power rating."

With growing competition in its traditional film and television markets, Lumo has started to widen its net, with theatre one of its prime targets. Some notable successes have already been achieved in this area including a recent lighting dimming and control equipment installation at the Bolshoi Theatre in Moscow.

"This was won against stiff competition from throughout Europe," said Paul Baker. "The installation comprises a Prestige 3000 lighting control desk, 45 ways of IDS (Intelligent Dimming System), and an interface to control a further 380 ways of existing dimming. During a visit to Kearsley, three Bolshoi officials received full product training on the equipment, and were also shown the manufacture



Lumo quality control.

Jim Pollard, the 52 year old managing director of Lumo Lighting, has spent more than 25 years in the TV and film lighting industry. He is a native of Salford, and left school at 15 to become a shop-floor apprentice.

Upon entering the film industry he initially did location lighting work, and rose to head Lee Northern, Lee Electric's Manchester-based lighting rental outlet. He became managing director of Lee Colortran when Lee International acquired Colortran's world-wide manufacturing capabilities in the mid-1980s.

He recently spearheaded the £4 million management buy-out of Lumo Lighting from Lee Panavision.

"The reason for the purchase was that we'd spent a lot of time since 1984-85 building Colortran up into what we thought was a very reasonable company with an excellent product range, motivated in the initial days by John and Benny Lee," Pollard told L+SI.

"As we took the business forward it would have been an absolute shame to see it enter someone else's hands, after the management team had worked so hard to get it into reasonable shape. We wanted to pursue it and take it further into the industry — the industry we all like and love. We feel we've got a lot to offer the industry, and that was the reason we put our hands into our pockets and bought the company.

"I made the decision that as soon as the buy-out was complete we should go ahead with a new name, and the original idea was to launch Lumo at Photokina last year. That turned out to be slightly disastrous because we had everything planned — all the stand was Lumo — but at the eleventh hour we had to change it all back to Colortran. On the last day of the exhibition we took a chance and changed it all back to Lumo. It didn't go down too well with Panavision, but it did have some sort of effect . . .

"I think the new name has a good European flavour to it. Some people didn't like it at first, but it turned out to have a better effect than we thought."

One of Lumo's key product lines is its flickerfree ballasts. How had these been developed?

"The idea of the flicker-free ballast was purely the idea of John and Benny Lee," continued Jim Pollard, "make no mistake about it, it was theirs', and they spent a tremendous amount of money developing the product. was very evident that people were very sceptical about the product in the early days.

"Now, after this long period of time, and



Jim Pollard, managing director of Lumo Lighting.

with our cumulated experience, we have developed the products to such a degree of high technology and reliability that there's nothing we can't do with electronic ballasts. We have therefore decided to specialise in ballasts and make them one of our major product lines. It's the obvious way forward.

"On the sales side in general, we are steadily looking at new countries to sell our products to whereas before we used to sell through sister companies. We now have to look for a new distribution network and new companies to work with. We also rather like the idea of working with other companies similar to ourselves. We've had some very interesting negotiations, with exchange of products and even down to exchange on research and development, so that some of the costs can be shared. Our industry is over-burdened with many 'same' products.

"Ideally if we could work with other companies similar to ourselves from anywhere in the world who have the same ideas and views of the industry, we'd be very happy to discuss any type of project or product. None of us can afford the massive overheads we've got in R and D in developing the same things for little or no margin. A better dialogue within the industry would benefit the industry as a whole.

"We'll move forward with our own ideas, but we're also very willing to talk and be responsive to any positive approaches.

"Lumo has been built up with a great deal of effort, and no one person could have done this alone. It is all about team effort here, and I'm proud to say we have a very good team spirit that permeates every level of the organisation."

of further products in which they have expressed interest."

More recently, Lumo won a £70,000 contract for dimming and control equipment for York Barbican, a new complex due to open this summer. 40 1kW and 40 2kW Windsor profiles and fresnels and 20 Domino 1 cyc lanterns are included in the order and control will be by means of a Prestige 3000 with a new wireless hand-held remote. Lumo is also supplying 150 ways of PowerMaster 2.5kW and 5kW dimming units plus custom-designed mains distribution boxes.

Now on its own, and able to operate freely, Lumo is establishing a tailored network of selling agents across the three main areas of its business. In America, for instance, they are looking for strong success with their new Universal ballasts. "They fill a definite gap in the market," said Jim Pollard.

"The way we are going to carry our business forward is to give high-tech products to the industry so that our customers can save costs in production time. It requires good thinking and lots of discussion with the industry before we go into a product or project, and we

recognise that reliability is a high priority and are striving very hard for absolute reliability in all our products.

"We intend moving forward with bright, clever and inventive ideas. This industry of ours deserves nothing else."

Lumo's Key Personnel

Jim Pollard — managing director
David Leonard — director of finance
Paul Tipple — director of production design and
engineering

John Burgess — manager, projects consultancy division

Steve Evans — factory manager
Paul Baker — marketing manager
Mike Pollard — sales manager
Peter Boott — export sales manager
Fred King — lamp sales manager
Neville Stokes — sales executive, theatre
John Price — sales executive, Kobold
Robert Williams — sales executive, Europe
Mark Crosier — senior design engineer, Reflex
Gareth Elliott — senior design engineer, Ballasts
John Parkinson — senior design engineer,
dimming and control

MATADOR — A STORY IN COLOUR

Julian Williams talks to lighting designer Howard Harrison

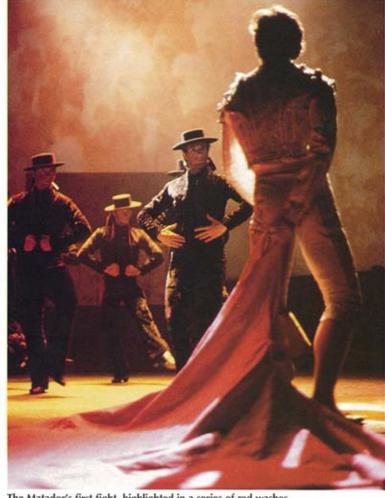
Is technological wizardry — for its own sake — out these days? I'm becoming increasingly aware there are major musicals being turned out now which have no visual high tech image. In fact, there isn't a RAM in **this** show — but there is a Bull — not of the real animal type, but one portrayed by six Flamenco dancers who steal the show.

One of our leading set designers of moving scenery, William Dudley, was given a brief to design a set to serve the 'flow of the piece'. The story is told with the use of flashbacks to demonstrate the Matador's emotions throughout his life, and Dudley has used traditional wings and borders, moving together to form focus-like shutters, which 'iris' in and out as a kind of memory trick. With a revolve, and projection slides this gives a realistic yet fluid method of moving the story through time and place.

The piece is quite naturally set in Spain, and incorporates the passion, colour and excitement of flamenco, and portrays the pageantry of bullfighting through the rise in fame, as a matador, of a boy who escapes from his impoverished peasant background. Dance features are a major element. The bull is the symbol of the show, the boy's alter ego, — a Minotaur which he keeps coming up against.

The action is told in flashback outside the bullring at Las Ventas, Madrid in 1964 where the Matador fights his final bull. It is the fluidity of the piece that is the achievement technically. I found myself waiting with anticipation for the three scenes of confrontation with the bull, portrayed so effectively by the flamenco dancers who, on each occasion, make their entrance through mist via an inset door against Dudley's giant image of a bull. The staging, by Arlene Phillips, is enhanced by subtle eerie sound effects and lighting.

The death of the Matador, as the dying bull finally tosses him in a somersault, is swamped in a switched state of blood-curdling blaze of red light. It is a triumph of combined theatrical



The Matador's first fight, highlighted in a series of red washes.

techniques.

The stage of the Queen's Theatre in London's West End is not the most suitable to take such a large musical, and a downstage bridge is constantly being flown in and out at varying levels to form various parts of the set.

As far as the lights are concerned, the rig involves almost 450 luminaires, mostly with combinations of profile content, and 100 of these are fronted with combinations of colour changers. It is an essential consequence of the design that the lighting should be constantly changing. As lighting designer Howard Harrison told me: "The idea was to make the whole thing very cinematic. Something that had a sense of flow to it.

"There is a blaze of colour in Spain. I wanted to be able to throw broad strokes of colour, with defined sharp lines of colour, to represent heat or night with lighting across the down pieces giving texture to the sets."

Though the rig itself is fixed, the lighting levels are moving in fades with colours being constantly changed and blended, partly through the use of the largest ever number of Rainbow Scrollers on a musical show. It's these combinations of level intensity and fast changing colour that is the essential component in this sense of movement.

Harrison, whose career has spanned various aspects of stage management and who now manages the Cameron Mackintosh Production Office as administrator, which involves the day to day running of the company's five major productions in London, has always combined this activity with lighting design. He insists these are entirely separate interests. Recent shows he has lit include 'Merrily We Roll Along', 'Greek', and 'Just So' at the Tricycle Theatre, Matador is his first major musical show in the West End.

To fit into his schedule while in the theatre for a three week production period, necessitated maintaining constant contact

with his busy office, where they are currently running the London shows of Miss Saigon, Phantom of the Opera, Les Miserables, Cats and the new, award winning, Five Guys Named Mo.

The lighting is based on a conventional rig utilising 10 LX bars driven by the house Strand Gemini board. The light curtain lamps and movements and the scrollers are put in motion by an Arri Image board with DMX512 output. There are three bars of motorised 9 × Par 56 light curtains. These are James Thomas Slimline Par 56 units with DHA rotators, hanging brackets and control. The cyc floods are on LX bar No. 9, in five sections of four celled 1kW Berkey units, with M16 'Howie' battens on the



floor behind the solid circular cyclorama.

The luminaires are primarily Strand: 135 Lekos (Century and Altman), 6 16/30 Preludes, 34 Cantata (some 18/12 but mostly 26/44 variable), 22 fresnel luminaires and 31 Silhouettes. There are 166 Thomas Parcans, 50 of which are mounted on the top and bottom cyc rails.

The colour changers are 20 CCT Coloursettes on the FOH Cantatas, 12 CCT Coloursettes on Par 64s and 55 Rainbow Scrollers on Par 64s, other Cantatas and 9 Rainbow Scrollers on the light curtains.

Matador, Queens Theatre London

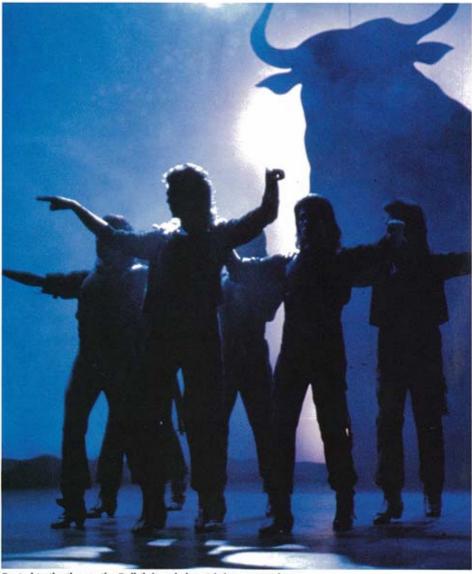
Production electrician: Alistair Grant Assistant lighting designer: Fraser Hall

Sound design by Paul Arditti; equipment supplied by Theatre Project Services

The lighting and projection equipment was supplied by Have Facilities Ltd and Luff Light and Sound

Photographs: Michael Le Poer Trench





Central to the theme, the Bull (left and above) is in constant focus.

Sound Equipment List: Theatre Projects Sound and Vision

- 1 × AKG 414 ULS microphone
- 1 × ElectroVoice RE20 microphone
- 2 × ElectroVoice PL88 microphone
- 3 × Neumann KM84 microphone
- 4 × Neumann KMR82 microphone
- 3 × Neumann U891 microphone
- 1 × Sennheiser MD441 microphone
- 20 × Sennheiser Diversity radio mic lavalier
- 2 × Sennheiser MKH 416 P48 rifle microphone
- 12 × TP active DI box
- 4 × BSS active DI box
- 2 × DBX 150 noise reduction unit
- 6 × Klark Teknik DN360 graphic equaliser
- 3 × Yamaha REV 5
- 8 × Yamaha DDL3 digital delay unit

- 2 × Beyer DT108/109 headset
- 1 × Tec-Pro intercom master station
- 1 × Tec-Pro intercom PSU
- 22 × Tec-Pro intercom beltpack outstation DT 108.5
- 4 × Beltpack outstation
- 1 × Tec-Pro intercom loudspeaker outstation
- 6 × Beyer DT100 headphones
- 4 × ElectroVoice S200 loudspeaker
- 5 × 4 × Meyer UPA1 System 7 racks
- 2 × 2 × Meyer USW1 + rack
- 4 × EV S200 hanging frame vertical
- 1 × Yamaha MS101 self powered monitor
- 3 × Vid dist amp (10 way)
- 1 × PM3000 VCA link lead 1 × 32 way PM3000

- 1 × 40 way PM3000
- 2 × PCC 160 PZM mics
- 15 × Formula Q8 mixers
- 10 × JBL Control 1
- 11 × Sennheiser HD450 headphones
- 2 × 27" Profeel monitor
- 10 × BGW 550 amplifier
- 4 × Comms Telephon
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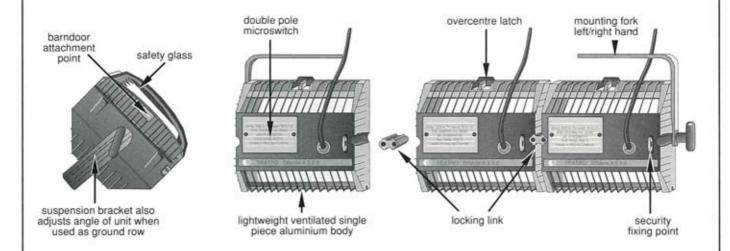
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An accessory four leaf barndoor is available.

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ABTT ON STAGE AT THE MERMAID

John Offord and Ruth Rossington tour the show

Well, we all wondered how the ABTT Trade Show 1991 version would turn out. The answer? A good little show. A case of the right size, the right place, the right people, and at the right time. The old atmosphere was back after a dull performance at the Riverside Studios in 1990. Good to see all the 'regulars' for a chat — and even if many companies were absent, they still got talked about.

The obvious starting comment before taking a tour of the stands, was to note how many luminaire ranges are now on the market — and examples of most, but not all, could be found at the Mermaid. The prospective purchaser can now consider Strand, ADB, Teatro, CCT (hopefully back in full production soon), Selecon, AC Lighting's Vision, and Lumo's Windsor range to name a few — and most of them could be seen at this show.

Out of courtesy to the winners of this year's Product of the Year Award the first stand on our list was XTBA, and a discussion with founder Chris Cook on the merits of his 'Dimmersafe'. "The original idea for the product came about as a result of the 1988 PLASA Show," explained Chris. "Looking around at the products on offer and reading the literature, the phrase 'this unit is for mains use and must not be used with a dimmer' kept appearing with alarming repetition. This is not an unreasonable request as power supplies, motors, ballasts etc react less than favourably to chopped dimmer wave forms.

"Dimmersafe can prevent the disaster of an overload by continuously monitoring the incoming voltage line and refusing to allow voltage to pass through if it is too high or too

low," continued Chris.

As lighting hardware becomes increasingly more sophisticated, simple 'tin cans with a lamp in them' are being augmented with a host of clever products which are most definitely not designed to be simply split into the nearest dimmer feed, but require their own mains supply. Finding a 13A mains feed in many venues or on many touring rigs 40 feet up in the air is about as likely as finding a client with an unlimited budget. The normal solution is to feed the equipment with whatever is at hand and sort the problem out elsewhere, either at the patch or by parking the dimmer at full, if you have enough dimmers (when was the last time you had enough dimmers!) Unfortunately, apart from putting labels on the equipment, little can be done to prevent users from plugging into dimmer circuits, both accidentally or intentionally.

The cost of repairing highly expensive and sophisticated lighting equipment is a growing burden to both main houses and touring companies, who, because of the very nature of theatre in the 90's, are working within tightly controlled budgets. In lighting rental the problem is more acute as the equipment is rented on a 'per show' basis and is sometimes used by what could be tactfully described as, 'less than careful' users.

Manufacturers and rental companies have tried to overcome this problem by putting on warning stickers and sending out non-dim equipment fitted with 13amp plugs — if nothing else you have been warned! Unfortunately, the end-user normally has a good supply of 15 and 13A jumpers or simply changes the plug. This

presents a two-fold problem for the rental company. First, their equipment is being damaged or destroyed and then how do they prove what happened to the equipment when the show finished last week, when the crew have disbanded? And, of course, nobody will ever admit to plugging a piece of equipment into a dimmer, would you? Now, for only £40.00, you can save your equipment, production and possibly your reputation by using a Dimmersafe unit.

Now for some quick snapshots of ABTT regulars. The familiar pairing of Joanne and Mike Taylor were talking restoration on the Ark Light stand, with some fine examples of what a little bit of know-how and a lot of elbow grease can do for your tired old lanterns. The company has also found an interesting little niche in the market with the introduction of 'Searchlight' — a service which matches up the I want's, with the I have's to re-employ surplus stocks in venues across the country.

Hall Stage Products are about to notch up their 'century' in the theatre business, but they look well on it. Their portfolio of services covers the complete gamut of design, production and installation of a range of stage-related machinery and tracking. The company also offers maintenance and inspection of theatre hardware for insurance certification.

Just round the corner was David Fitch who has recently moved into larger premises in Kent, from where he now runs his stage lighting service for theatre and drama applications. There's a lot to discover about this company, because their services are quite extensive, and they interpret 'stage lighting service' any which

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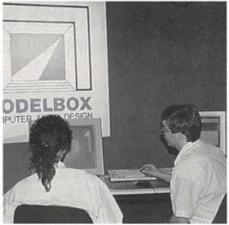
Michael Goldberg goes for the Smoke Factory.

way you will. You'll more than likely find that David Fitch has got any request you make covered, and he's now added a sound hire service. One item he was keen for us to take a look at was Flamecheck, a non-toxic non-corrosive liquid that when sprayed onto any type of material, makes it non-flammable.

Fronting the Varia Textile stand were Lena Johannsen and Karl Leuthenmayr with their familiar range of flooring and textiles. Across the aisle, Northern Light showed their full range of accessories, or what they refer to as the 'bits' for performance venues including connectors, control systems, panels and SM desks.

Lee Filters showcased their range of polyester filters and the recently extended range of high temperature polycarbonate filters. For devotees the attraction of the latter is that its resistance to temperatures has been increased to mirror the light intensity of modern theatre lanterns. Paul Topliss on the stand promised that there was lots more in the pipeline, but would reveal no more, despite being pressed on the matter. No doubt we shall know all by PLASA's Light & Sound Show.

A quick mention of CCT's Don Hindle, David Manners and Jack Watling, who, despite not having a stand, seemed to be managing very well by going walk-and-bar-about . . . backed with a little help in the exhibition area from RB Lighting, whose Richard Broadhurst had a wide range of theatrical lighting goodies on a smartly lit stand.



Bryan Raven (right) of White Light demos Modelbox.

One of the most interesting products at the show was the Digital Light Curtain on the stand of DHA, which Wyatt Enever, Philip Nye and Barrie Guy were keen to put through the motions. This is a self-contained, eight lamp light curtain with a built-in scroller and tilt mechanism. Each individual two metre section is motorised, and is capable of making a 350 degree rotation in 1/10 degree steps. Each unit has a self-contained colour scroller which can take up to 20 colours and even allow for the programming of 'split colour'. Tilt angle, tilt speed, colour selection and colour speed can be specified individually in a variety of cue types. The control system has been written for the Apple Macintosh computer which is, in turn, controlled by your lighting board. 30 of the units are currently being put to good use with Miss Saigon on Broadway and no doubt further orders will follow.

Cerebrum Lighting were showing, for the first time at an ABTT show, the full range of M.A. microprocessor lighting desks from the Lightcommander II 24 channel desk to the LCD 120 channel desk. Alongside these, the team from Cerebrum promoted the Powerdrive range of lighting stands, including the famous 'Trusstower', together with Amptown Posi-Spots and L&SD Colourmags and Molemags.

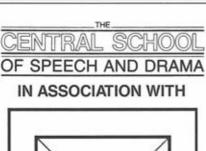
M & M Lighting recently took on sole UK distribution of the Smoke Factory's fog generators from Germany, namely the Sky Walker and the Enterprise, and Michael Goldberg was



Looking in — David Hersey (Trust Me — I'm a Lighting Designer) with Pulsar's Andy Graves.

sending all sorts of peculiar smoke signals around the Mermaid. For now, the brochure's in German, but without attempting a direct translation we can tell you that these robustly manufactured and compact units are flexible in their operation, with remote, electrical temperature control, and output quantity control (nebelmengenregulierung) through any 0-10V fader. Through the mist, there could also be seen Rainbow colour changers, and New Zealand-based Selecon's 1200 range of performance lighting. Richard Frankson, ex Turbosound, is now providing the forward line for Meridien Communications, a new operation established last September by Elliot Bros. Having secured a range of top line brand names under its belt, the company's stock-intrade includes microphones from both Pastega and Pearl, intercom equipment from RTS, digital telephone hybrids and intercom faces from Telos, and audio level monitoring and routers from NTP.

On an adjoining stand was the Elliot Bros/ Novak Electromusic conglomerate, a relatively new marriage that specialises in all aspects of sound contracting. Jon Trotter and Mike Novak were demo'ing the 'brand new, never been seen before' Turbosound installation range, the TXD 80 and 100 (which will be mentioned further in our APRS review in the July issue), together with d&b Audiotechnik E1 compact full frequency system, and a Soundcraft Delta 8/4/2 console. According to Mike Novak, the





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Greg Szabo and John Lethbridge of Cerebrum Lighting explain the MA Light Commander II to ABTT Trade Show organiser Roger Fox.



Checking out the controls on the Marquee Audio stand.



Mike (hands on) Novak promotes Electromusic.

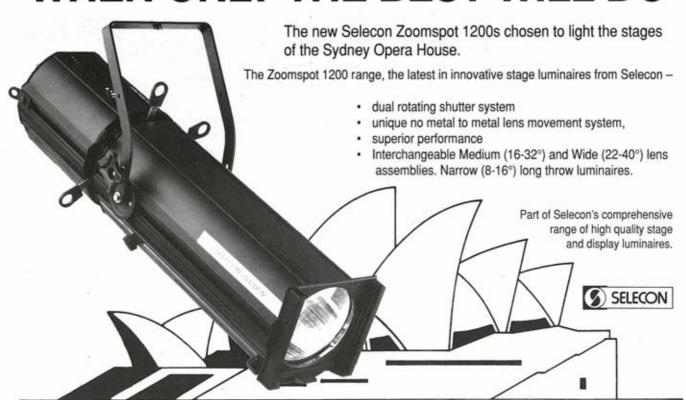
company's strength rests on its combined expertise rather than on its allegiance to any particular manufacturers. We shall see.

Howard Eaton is a well-known figure within the lighting industry and runs his own company, Howard Eaton Lighting Ltd from farm workshops in the heart of Sussex. At the ABTT show, his stand was dedicated to the Bytecraft series of dimmers from Australia, of which the Bytesize was the most interesting, and currently being used on the revival of Joseph and His Amazing Technicolour Dreamcoat at the London Palladium. Unique in its field, the Bytesize, or rackmounted 483, offers a multitude of features and functions far in excess of those normally available in a dimmer. The unit can accept simultaneous control inputs from digital desks, analogue desks, PC compatible computers or internally pre-programmed presets. Proportional output patching allows simultaneous use of varying types of luminaires without the need for transformers or series patching. A unique filter mounting ensures mechanically silent operation and the convection cooling is such that the thermostatically operated fan will very rarely be required. The transfer of previously written preset data to or from a PC compatible computer allows for off-line editing of presets and cues as well as safe storage for your vital show programme.

One of L+SI's regular contributors, Julian Williams, reckons the Bytesize is out of the ordinary and that the system could have a significant influence on the present concept of lighting operations. "For example, any channel on a 512 way desk could access a preset in a dimmer module, or a sequence of presets. By contrast, a 12 way analogue desk now has the power to control a chase, a range of presets and loop presets!" he said.

Strand Lighting had their MX control desk, the Quartet range of luminaires, and Act 6 dimmers – and loads of bodies, in the form of

WHEN ONLY THE BEST WILL DO



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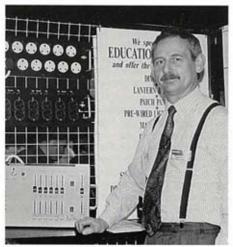
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Moving on: Arri's Peter Ed with their new Mirage lighting control system.



Greg Moger of Novalight with 'Junior 6'.

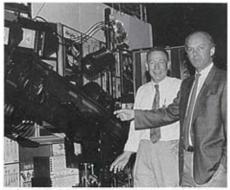


Three Strand men: Richard Harris, Bill Richards and Brian Myers.

numerous arriving and departing stand staff, plus ex-Strand people, Strand friends and Strand followers. Quite a few customers were there too.

Peter Ed was doing his bit for Arri on the stand of **Donmar** with the presentation as given by Tim Burnham at Magis in Rimini (see May issue), aided and abetted by a Mirage control desk. (We've just heard that Peter is due to leave Arri and join Strand — the first reverse in a drain of key people that has gone in the opposite direction over the past few years. He will be joining them as product manager for controls and dimmers.)

Meanwhile a famous ex-Strand man, Russell Dunsire, was just a few feet away, working hard at building up a UK distributor network in the UK for the Siemens-owned Belgian-based ADB operation. AJS of Bournemouth hosted the stand and Adrian Sant's team was backed-up by the big guns from Zaventem including Christian Leonard, group vice-president, theatre and TV lighting systems. A full line up of ADB's Europe range of luminaires was supported by the company's well-established lighting control



Jack Excell (left) of Action Lighting with Teatro's Mike Lowe and the new 2500W MSR follow spot.

systems and the first UK showing of their 'Cantor', which made its first appearance at Siel in Paris in February.

AC Lighting highlighted the Coloram from Wybron and the Jands Event lighting control desk alongside their own Vision luminaires. On stand with David Leggett and Pete Searles was Debbie Potter who had joined the company recently to assist sales director Nic Tolkien. Managing director David Leggett told L+SI that they had had achieved their best-ever April sales figure and that "business in general was good".

One of the major features on the Action Lighting stand was a piece of equipment you couldn't exactly miss. The Teatro 2500W MSR follow spot was a great product reckoned Jack Excell. "They've stolen a march on the market with it," he said, "and it's going to sell well." The other story was about the company's Action Pack range — with the 'Senior 6' on show. This range will receive its fanfare launch at the PLASA Light & Sound Show in September and will eventually number 80 different products when spares are included with the

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Zero 88's David Catterall and Chris Fenwick obviously had good news for Northern Light's Jonathan Allen.



Strand's Andy Collier (left) with Howard Eaton and John Charlton of the Royal Opera House.



Richard Frankson on the Meridien stand.



Manfred Bruns (left), chief executive of the ADB group of companies with Christian Leonard, Adrian Sant and Russell Dunsire and the Europe range of luminaires behind.



DHA's Barrie Guy with their new Light Curtain.



AC Lighting's Debbie Potter, David Leggett and Pete Searles have a rogue element on stand in the form of Pulsar's Derrick Saunders (second from right).

basic bits of equipment — all under the 'Action Pack' banner.

New from Novalight, their Junior 6 control is a 2 preset control desk with masters and blackout switches, and six dimmer outputs via CEE22 outlets at the rear. It's ideal for school and drama group use where a 13amp power socket is all that's available. The unit can drive or be driven via the 8 pin remote control socket.

Triple E had a tiny booking booth and a very lovely lady to persuade you to take their shuttle bus for a ten minute drive to their Tower Bridge Business Square showroom. We didn't go, but you would have seen their Showtrack computer scenery control system along with many new products.

Finally, on a prime site in the foyer (near the book bazaar and the bar), two **Pulsar** men in the form of an ever-smiling Derrick Saunders, complete with neck-ensconcing cable and free drinks mats, and the (slightly) more staid Andy Graves, were demonstrating the Masterpiece control system with the Clay Paky MiniScan (see last month's Rimini feature). Evidently they had a field day.

The ABTT Trade Show in this guise is much more like a market, and much more concentrated than most of the trade shows on our regular international circuit; but what's nice about it is that it's one of the few trade shows where you can actually talk to people in a relaxed fashion — and you have to talk, because you're all crushed up together. It seems the organisers, possibly more by luck than design, have now actually got it right. Clearly, there is a requirement for what the ABTT offers, and perhaps it's time to end the yo-yoing between what it might want or feel it ought to achieve and what it can achieve, and settle for the sort of format we had at the Riverside in the early days. It was a good show.

Cerebrum Lighting are looking for a

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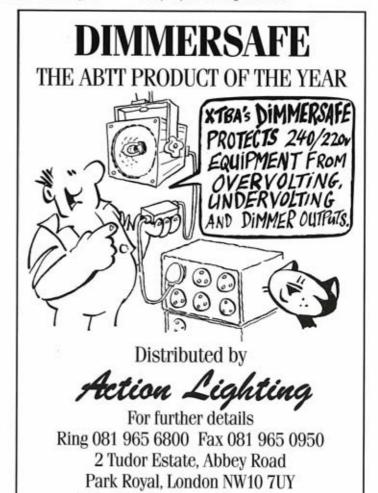
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The Lighting Technology Group

MIDI MUSIC SHOW

John Lethbridge reports



Jim St Pier on the Project Music stand.

The second 'Midi Music Show' at the Novotel, Hammersmith, from April 26-28 is probably one of those shows that several sound and lighting companies would benefit from exhibiting at, but one that is probably not well supported by our industry due to a combination of it's 'fringe' market target and the general economic gloom at present.

Consequently, only a handful of Plasa members had the confidence to take a stand, but those I spoke to were very pleased with both the attendance figures and the number of serious enquiries received.

It was good to see the ever-smiling face of former Plasa chairman, Jim St Pier on the Project Music stand. Jim is nowadays out of the discotheque and stage lighting business of earlier years, concentrating on the professional hi-tech keyboards and pro-audio market. Project's Hounslow premises now house a 24-track Akai digital recording studio.

It was Jim's second year at the exhibition, and he felt it was a big improvement on last year's show in terms of attendance and organisation. Project were showing a new Midi software package called 'Band in a Box' that had met with a very positive response.

Opposite Project, Peavey Electronics (UK) Ltd were swarming with visitors. They were showing their new DPM-3SE keyboard, the DPM-SX Sampling Expansion Module and the DPM-V3 Digital Phase Modulation unit, together with 'Profex' and 'Midi Master' software.

Watkins Electric Music Ltd are a company who have been at the forefront of live music technology since the sixties, when their innovative WEM 'Copycat' was the state of the art in echo machines.



Clay Paky Golden Scans, a Pulsar Masterpiece and loadsa light on the MSL stand.

It was good to see the stalwart product relaunched at the show as the 'Watkins Copycat Valve Echo'. They were also launching, after three years development, a new product for guitarists called the 'Midi One Man Band', but there was so much interest on their stand, I was unable to get a closer look at how this worked.

Richard Allan Audio Ltd were launching their new RA8 Series 2 Compact Studio Monitor aimed at the small home or Midi Studio.

As with several of the computer trade shows held at the Novotel, visitors were able to buy products directly off many stands, and one of the busiest was BEM Retail from Brixton, who specialise in high-tech audio products and software, both new and secondhand.

Two of the largest stands were naturally Roland (UK) Ltd, with their popular format of plenty of product for the punters to play through headphones, and Yamaha-Kemble Music (UK) Ltd, who also had several keyboards on display.

The latter were premiering their brand new QY10 workstation — a fully portable unit, no longer than a VHS video cassette, featuring an 8-track sequencer, a PCM voice drum machine and tone generator, and retailing for under £260! How much smaller and cheaper can the Japanese make these products?

Larking Audio of Hitchen deal at the top end of the professional market, and they were exhibiting some impressive Soundtracs consoles and a full range of Midi outboard units and samplers.

The only lighting equipment on show was from Martin Prescott's MSL Pro Light & Sound Ltd, who teamed up with Derrick Saunders to show Pulsar's 'Masterpiece' and 'Universal Interface' linked up to a Midi keyboard and Clay



Interest is high for Peavey.

Paky 'Golden Scans'.

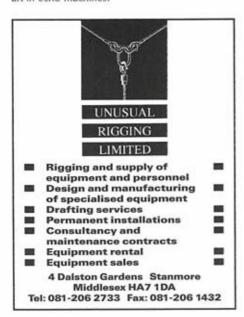
Sales manager Rhys Thomas told me that they were only just getting in to Midi lighting, but saw great potential for both musicians and club jocks and lighting technicians to utilise this still virtually unknown but powerful technology.

MSL's export sales director, Ashley Lewis, was full of enthusiasm for the new Pulsar products and the high level of interest from visitors. "People are interested in lighting whether it works on Midi or not," Ashley told me, "but the youngsters at this show are definitely Midi and computer literate, and MSL is committed to catering for this new generation of high-technology buyers."

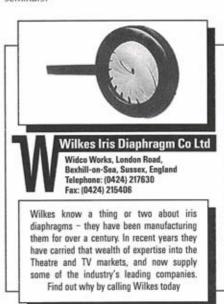
The only other lighting company who were billed to appear were the Midi and protocol interfacing specialists, Live Wire Systems (UK) Ltd, but they had not made the show, due to their equipment getting held up in Belgium.

Upstairs, there was a non-stop programme of seminars on such topics as 'Midi and the Guitarist', 'Midi and Sync'ing' and 'Synthesis in the 90's'. I sat in on Nick Magnus's seminar on 'Midi Drum Programming' which was both entertaining and highly informative.

Light & Sound Show organisers please note — each seminar was run at least twice each day, and the halls were packed, but the seminars were free, and sponsored by the manufacturers. This gives both the manufacturers and the potential clients the opportunity to participate in an in-depth demonstration for up to one hour, which has to be better than a five-minute superficial run through on a crowded, noisy exhibition stand. Maybe Plasa should try this format alongside the 'debate/forum' type seminars?

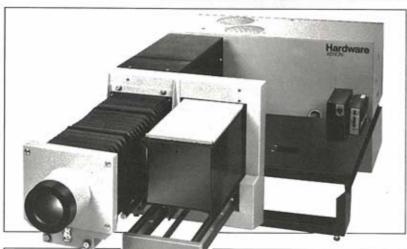






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CAMELONT AND THE LIGHTMEN

John Offord has a fast-moving Saturday in Stockholm

In fact, to crash it all in, my Saturday started on Friday evening with a visit to Camelont's out of town production facility where the Rainbow colour changers are made, and ended early on Sunday morning at a city centre club, the Börsen, and two hours of a slick, non-stop drag show, 'Scen-Vinter'.

In between I demolished a couple of books (I don't sleep away from home), had discussions with numerous Lightmen, visited the Göta Lejon cinema and was lucky to catch a mid-season rehearsal of 'More Amore' with the Ainbusk Singers (a hit show and the talk of the town), looked in at the Dome (a dramatic and horizonenhancing new venue where I understand lighting designer Patrick Woodroffe realised he did suffer from acrophobia whilst taking photographs from the mid-air grid), looked in at a defunct steel warehouse to view the set and lighting rig for a production of Carl Orff's Carmina Burana, drove out of town to the Riksteatern to see set and rig being prepared for a tour of 'Hoffman's Adventures', went on to the Cirkus for a quick glimpse of a delightfully refurbished Winter Garden type venue that is playing host to Les Miserables, and returned to steel warehouse for a full televised production of the said Carmina Burana.

Members of my host team were occasionally missing (for refurbishment?), but mostly present, and kept me fed and watered exceedingly well. I'd at least done them the favour of switching on good weather which evidently hasn't reappeared since (three weeks later), and no doubt they will be reading this description of my visit with mixed feelings on that score, as the Scandinavian summer should have been in place by now.

If I've done my intro right, you should be wondering who the 'Lightmen' are. Well, The Lightmen beget Camelont, who brought the Rainbow colour changers into the world, as you already know.

And the simple reason for visiting all the venues mentioned earlier is that one or other of the operations that work from The Lightmen's House in Stockholm provided the lighting equipment.

The original Lightmen (now Lightmen AB) were — and still are — Michael Joyce and Arne Åkerström, who started their rental and production operation in 1981, largely for theatre and opera. A Scandinavian tour of 'Evita' in 1983 was their first major international touring production, and it went a long way to establishing the reputation of The Lightmen as a serious force. The company is now one of a trio of major rental houses in Stockholm, has five full-time employees and a long list of freelancers who can be called in on demand. They have a sizeable warehouse of 750 sq.m, with a good headroom of 9m, and as you would assume, an international line-up of rigging, lighting equipment and control.

Their work is now almost equally balanced between standard production hire and touring with the addition of some permanent installation work, much of it architectural. Michael Joyce: "We need to have a good foundation across many areas of the business because Scandinavia isn't a big market."

How important has their theatre background been to the growth of the business? "All lighting is now going more and more towards theatre, and it is very important to have come from theatre," said Arne Åkerström. "Although I used to do a lot of lighting design we now have so much work that I can't find the time. However, we still work closely with the lighting designers



Lightmen and Camelont: (left to right) Michael Joyce, Magnus Anuèll and Arne Åkerström with equipment manager Klas Pettersson just in picture.



The Rainbow Par size unit . . .

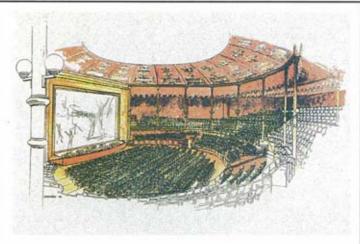


... with detachable scrolls.



Les Miserables at the Cirkus

The Cirkus in Stockholm in the fourth building of a similar kind on the same site since 1827. Over the years the 2000-seat venue has housed everything from massive Greek tragedies to circus, ice shows, the Folies Bergeres and Salvation Army rallies. For the past 30 years it has been used as a TV studio



by the state-owned Swedish television company. After a major refurbishment it was re-opened in 1990 with the Swedish premiere of Les Miserables. Lightmen AB provided the lighting equipment for the production, which includes 24 Rainbow colour changers, to lighting designer David Hersey's specification.

of most of the productions we are renting to and are closely involved with them. We often build customised items for them."

And where do designers in Sweden get their ideas from? "A lot of ideas come from the UK," Michael Joyce explained. "And of course we read all the international magazines, and see lots of shows and TV. Designers here feel the need to pick up ideas and take a broad view, and that's how we work with designers too. They come to us with ideas and we then bounce them off each other. And this in turn is part of the idea of Lightmen. We have a large group of knowledge in-house."

In addition to being the head office of Camelont AB, three further companies share the facilities within The Lightmen's House, and they in turn add a great deal to the expertise available within the complex. Laser Lite AB is owned by Johan Swärd and Lars Karlsson who in turn, with the addition of Danne Persson, are Vari-Lite representativies in Scandinavia. Appropriately, the 'fifth column' in the building is Modelbox Scandinavia which is run by Magnus Anuell (more of whom later) and Karl Xen. Each company operates as an autonomous unit, and can join forces or go their separate ways as occasion demands.

Camelont itself was originally formed during the winter of 1987/88 with the express purpose of manufacturing a colour change unit, and Joyce and Åkerström were joined by Magnus Anuèll in the Spring of 1988. Anuèll had a useful background in electronics and he had also



Michael Joyce with a 2kW-5kW Rainbow colour changer at Camelont's manufacturing facility. Their well-equipped workshop also handles engineering projects for companies outside the lighting industry.

worked at the City Theatre and Stockholm Royal Opera House.

How had the company name come about? I'd figured Sweden might have its own Arthurian-type legends, but it was nothing as romantic or devised as that. No dreams, no colour — the name came into being through a simple and part deliberate spelling mistake. 'Kameleont' is Swedish for Chameleon, and our Lightmen decided to Anglicize it and ended up



The Rainbow o-the unit is designed to fit the Thomas 8-Lite Par 36 unit and incorporates the same fan system as the 2kW-5kW colour changer. It operates at a speed of four seconds end to end through 11 colours.

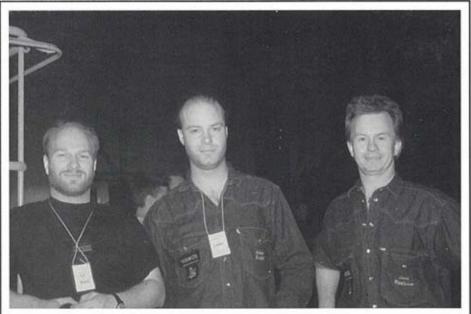
Carmina Burana . . . in a defunct steel warehouse



Produced and promoted by Gertrud Sivall, this production of Carl Orff's Carmina Burana ran for a sell-out 26 performances in a short spring season this year. An 800-seat venue was created within an old steel warehouse in Stockholm that's now due for demolition. A combination of private



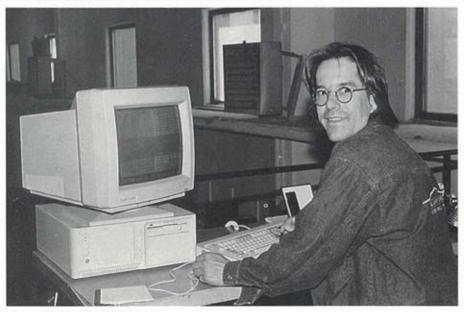
sponsorship, volunteers and professional soloists and orchestra, and, of course, an army of amateur performers and singers created a major success. The Lightmen provided 64 Par 64s, 2 Pani 1200W HMI follow spots, 2 R & V 24V 500W units and various dimming and transformer equipment.



Vari-Lite in Scandinavia

Danne Persson, Johan Swärd and Lars Karlsson (pictured above, left to right) are Svensk Film & Ljusterknic AB, who work from The Lightmen's House and are Vari-Lite Europe Ltd's representatives in Scandinavia. They commenced a six-month trial period on April

22nd this year prior to becoming a fully accredited sub-distributor for the Scandinavian market (Sweden, Denmark, Norway and Finland). Currently they are renting a Series 200 system comprising 16 VL2B spot luminaires and 4 VL4 wash luminaires and one VLDI dimmer interface.



Modelbox Scandinavia

For over four years the Modelbox computer aided design system (the company is part of the White Light group) has been providing a range of drawing and software development services throughout the theatre, entertainment and trade presentation industries.

Modelbox Scandinavia is the first such enterprise outside the UK and began its operations in April this year when it was given a special launch in The Lightmen's House in Stockholm. Bureau services are expected to commence in September.

The man in charge is Magnus Anuèll and he is assisted by Karl Xen. "To take the step from hand drawing to computer drawings is a big step, but Modelbox is much more," said Anuèll. "You can work in 3D and there are libraries of symbols to call on, even truss units, for instance, and you can also call out your beams from luminaires. The report features are also a major bonus."

Equipment at The Lightmen's House

A selected list of equipment held in stock by Lightmen AB includes the following:

Lighting control: Arri, Eurolight, Zero 88, Pulsar and Avolites desks; Galatec, Green Ginger, Avab and Lightmen dimming.

Luminaires: CCT and ADB profiles and lekos, ADB and CCT floods, R&V Parabolics, Pani and CCT follow spots, Strand ADB and CCT fresnels, a massive range of Par lamps, and a huge line of equipment including Svoboda light curtains, strobes, UV equipment, etc.

Latest equipment in the inventory includes 2 Super Trouper 2k long throw follow spots and 6 Phoebus Mighty Arc II 400 HTI short throws.

Obviously the list includes a full range of Rainbow colour changers including the new Light Curtain which allows for tilt of the whole unit including colour change.





Late Summer

Pictured above is the largest rig ever to tour Sweden being prepared at one of the venues on an eightdate tour last summer of the 'Late Summer Show'. A massive marquee went with the tour and the lighting equipment from The Lightmen included 64 Sil 30s, 92 Starlette 1ks, 182 Thomas Par 64s, 2 Pani 1200 HMIs, 6 8-Lite units with Rainbow colour changers, 60 Par size Rainbow changers, 216 channels of dimming and a Eurolight Applause control desk.

with a hybrid. That's their story, anyway.

And how had the first Rainbow colour changer seen the light of day?

Michael Joyce: "Lightmen brought early American scrollers into Sweden and for our own rental stock, and we weren't too pleased with their size and the way they worked." Arne: "They were very noisy and they were made for the rock and roll business. We are all theatre people . ." Michael: "This gave us the will to make a scroller of our own, and we decided to look at making a smaller and quieter unit with different features, and to work in a completely different way."

Magnus: "The development took place in the autumn of 1987 and a prototype was shown at the ABTT Trade Show in London in the Spring of 1988. The first batch we made were never sold: we put them into our own rental stock, and this also gave us a chance to check they were OK. In fact they are still running without any problem."

The first production run of Rainbows came in the Autumn of 1988. Michael Goldberg of M&M Lighting, who now handle world-wide sales of the product, remembers seeing the prototype. "I had met Magnus Anuèll at Stockholm Royal Opera House when I visited as Rosco's 'roving rep', and he became a good friend. He showed me the Rainbow prototype and it seemed to be a good product.

"I found that there was a market for scrollers, but all the potential customers I visited expressed similar views: 'not another scroller that won't work!' After a few setbacks we persuaded lighting designer Andy Philips to look at the product for M. Butterfly which was about to open in London's West End. He thought it fitted the bill — it was a show that needed quiet scrollers — and lots of them. In due course White Light of London purchased the first large order for the M. Butterfly rental, and the exposure this gave the product was immense."

The Rainbow colour changer now comes in four sizes: the basic and original Par size unit, a 2kW/5kW developed for HMI and incandescent lamps, an 8-lite colour changer that fits the Thomas 8-lite Par 36 unit, and the latest, a 2m long Light Curtain colour changer.

How had the development occurred? Magnus Anuell: "The next size we developed



A close-up of the Ainbusk Singers in 'More Amore'.

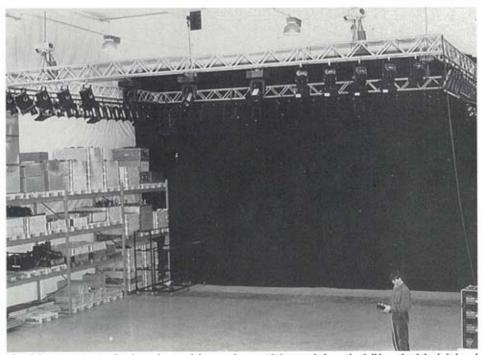
after the Par scroller was a larger unit for Reiche & Vogel 1k low voltage parabolic luminaires made for David Hersey for Miss Saigon. A little later on, Concert Light Systems wanted an 8-lite scroller for use on tours with Chris Rea, and so on. After that we wanted to produce a 2k-5k general scroller for studio lamps, but 1 first updated the 8-lite construction before taking it down to the 2k-5k size."

The Light Curtain was also made for Miss Saigon. Michael Joyce: "We're now working on a development of the Light Curtain. It's a shorter unit which we first made for 'Aspects of Love' on Broadway for six 270W 12v lanterns. Out of that we're making a motorised light curtain that can change 11 colours and tilt as a complete unit at the same time."

It would appear that the next Rainbow developments will be consumer-led. Joyce again: "We are constantly questioned about possible new units, and the major demand at the moment is either for large Xenon units or for clusters of Pars. However, we consider it important to create soon a 2k scroller for theatre luminaires."

Back to Michael Goldberg of M&M Lighting in London, who continues with the story. "Having got the Rainbow on to many West End shows and become closely associated with the product, it seemed obvious to join forces with Camelont and concentrate on the international market. The guys in Stockholm were so busy designing and manufacturing that no time was left for them to market or sell the product. I, on the other hand, had been doing nothing else for three years!

"We set up Camelont London last year and so far it has worked well. We've set up dealers in many overseas territories who are selling well, despite the world recession hitting ticket sales



The Lightmen's House: the rig-end area of the warehouse. Kit is stored along the full length of the left-hand wall and the office area is located on a mezzanine level from where this picture was taken.

and shows, and concerts being cancelled. Things have now picked up however, and with up-dates on the product and new ones coming on stream the year ahead looks very good.

"The success of any scroller is due to its reliability and the back-up that can be given to a show. We have had a couple of situations where one of us has had to jump on a plane to sort out a problem and advise people and it is only this kind of service that will keep the Rainbow out front as an industry standard product in the scroller division. We don't close at 5.30 pm every day and Miss Saigon and M. Butterfly wouldn't have happened for us if that had been our attitude.

"We route all orders and enquiries through London and all deliveries are made direct from Stockholm. The fax is a wonderful invention and we are in contact all the time. This method of operation hasn't proved a problem to the end user so we propose to continue in this way for the present.

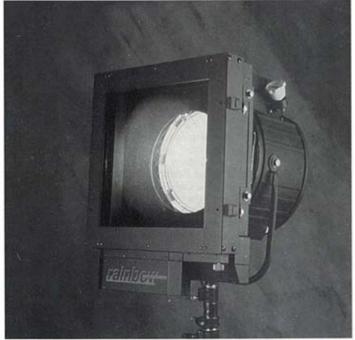
"The Rainbow has created many new opportunities for the lighting designer, as the quietness of operation has meant that for the first time scrollers can be used for plays, ballet



Michael Goldberg of M & M Lighting and Camelont London.

and many other forms of entertainment.

"This month we have Rainbows being used in the Opera House in Amsterdam, on a rig for the Bee Gees which started in Germany, and Andrew Bridge is using them in the new production of 'Joseph' at the Palladium Theatre in London. CYP in Madrid have just received 21 2k-5k Rainbows for television use and Selecon



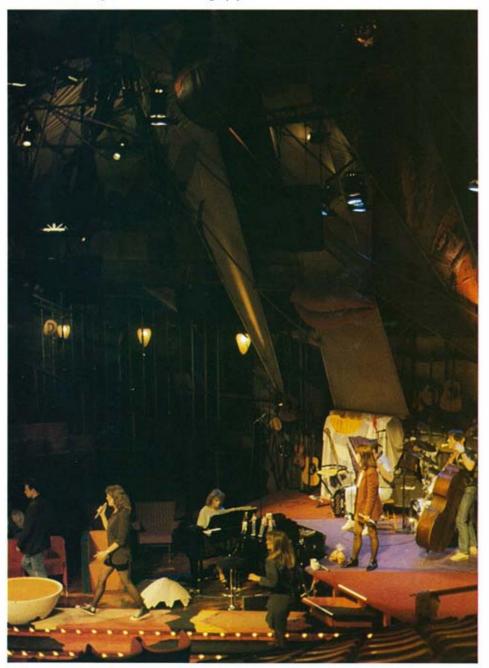


The 2kW-5kW Rainbow colour changer and (right) Scroll Control for the same unit - ideal for followspot use.



More Amore

More Amore featuring the Ainbusk Singers was premiered at the Göta Lejon on 24 November 1990 and is still running to great acclaim. Equipment supplied by Lightmen includes various CCT Minuette and Starlette lanterns, Thomas Par 64s, pinspots and Birdies, $2 \times R\&V$ 24V 1000W, $4 \times AC1001$ floods, 12 Rainbow colour changers and various dimming equipment and cables.





Hoffman's Adventures

Pictured above during preparation is the set for a coming tour of Hoffman's Adventures which goes out from the Ricksteatern in September. Equipment supplied by The Lightmen includes CCT luminaires, Thomas Par 64s, floods, followspots, multi-mirror battens, Birdies, Rainbow colour changers, cables, ladders, etc. Control is by a Eurolight 240 channel desk and dimmers are Galatec of France.



A Rainbow light curtain.

of New Zealand are developing the Australasian market with good exposure about to take place at the Pro Light & Sound Show in Melbourne, Australia this month."

So why and how has the Rainbow established itself so successfully — and so soon? Is there a 'real' reason? Camelont's own brochures say that it's easy to rig, with power and control through one cable, and it can be supplied in DMX512 and analog and can be controlled from any lighting desk. Gel rolls can be changed within minutes and a built-in auto tensioner maintains the tautness of the gel to give smooth, silent colour changes every time. The system has no start-up procedure and so maintains the colour position in the event of loss of power.

In Michael Goldberg's view the 'real' reason is down to the fact that Camelont are a small company and responsive to what the industry actually needs. "The Rainbow is well-engineered, hand-built and ahead electronically. It is successful because it was designed by a lighting designer in Magnus Anuèll who was looking for exactly what in reality the Rainbow turned out to be."

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COLOUR CHANGERS

EQUIPMENT/Jews

Optex Fresnels

A new range of lights, for studio and location work, have been launched by Herts-based Optex. The Sachtler Director series of fresnel lensed luminaires come with a rigid die-cast aluminium housing and are capable of withstanding rough usage. The lights are available in a range of powers: 300W, 650W, 1kW tungsten; 125W, 270W. 575w, 1.2kW and 2.5kW HMI's. The 575w, 1.2kW and 2.5kW utilise the new MSR (dimmable HMI) source. For further details contact Optex in New Barnet, telephone 081-

Dimmer Processing

Artistic Licence have recently extended their range of digital dimmer processors to include the AL1206 Demultiplexer. This device accepts DMX512 and AVAB protocols, generating the control signals for 96 channels of analogue

The AL1206 is aimed at manufacturers of dimmers, moving lights and colour changers as a means of adding digital capability to existing and new products. A data book detailing the entire range - including thyristor phase control - is available from Artistic Licence in London. Telephone 081-961 9520.

New Zoomspots



Earlier this year stage lighting manufacturers Selecon New Zealand launched their new Zoomspot 1200 range, combining three lens systems - Narrow (8-16), Medium (16-32) and Wide (22-40). Features of the new luminaires include: two shutter planes (N/S, E/W) which are individually rotatable and provide up to 180° of movement between adjacent shutters. The lens carriage moves on an extruded rail section held captive on a machined PETP bearing. Even when the luminaire is vertical lens movement is constant without lamp damaging vibrations. Interlocking extrusions which allow all the interchangeable M and W lens assemblies to hinge open for cleaning.

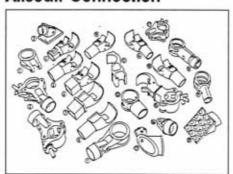
Other features include a spring dampened lamp mounting system, simple yoke movement adjustment, rotatable gobo holder (separate from the shutter system) and a cranked yoke supplied as standard with all luminaires. For further information contact M&M Lighting in London, telephone 071-722 4147.

Continuing Eltec

Following a temporary absence the Eltec range of stage lighting dimmers and control desks is back in production as part of the Theatrecraft

Eltec dimmers range from single units for houselights or followspots, through small three, four and six-channel dimmers that can run off a 13Amp socket and are ideal for classroom use, up to full scale systems with presets, memory control options and 2,000 watt dimmers. 5Amp (small round pins) outlets are available and direct replacement control desks are available to replace Strand Mini-2 desks while-retaining the dimmer packs. For further information and a list of stockists contact Theatrecraft in Bebington, telephone 051-334 0831.

Aliscaff Connection



London-based Aliscaff Limited, a major producer of prefabricated aluminium towers, are now offering extruded aluminium couplers specifically designed for the lighting and sound industry. The couplers can connect any appliance to tubes or trusses, connect tubes to tubes or trusses and the lattice brace couplers can produce load bearing columns and beams from plain tubes.

fittings include half couplers, Standard swivels, doubles (90°) and parallel couplers to fit either 2" (50.8mm) or 1,29/32" (48.4mm) OD tube. Half couplers are available with captive bolts for fixing directly to appliances and swivel couplers can be converted to double couplers (90°) and vice versa by inserting or removing a pin. SWL is 500Kgs.

Aliscaff also offer a wide range of aluminium snap hooks and many other aluminium fittings. For further information contact Aliscaff in London, telephone 081-808 5005.

New Wedges

Turbosound have recently introduced two new active wedge monitors, the TFM 250 and TFM 350. Both the 12" mid/bass loudspeaker unit in the TFM 250 and the 2 × 15" versions in the TFM 350 have been designed and built by-Turbosound's exclusive supplier of loudspeaker units, Precision Devices.

The 12" and 15" units produce 300 watts RMS (AES Power) via massive assemblies containing 50% more flux than is generally found in a loudspeaker of this type, according to the company. Both the new wedges feature the same high frequency unit which is a 3" titanium diaphragm compression driver on a custom designed wave-guide producing 50 watts RMS (AES Power). Passive options of both models will be available shortly. For further information contact Turbosound in Partridge Green, telephone (0403) 711477.

New Series from JBL

A new range of loudspeaker systems, the JBL Sound Power 'M' Series, will be launched at this year's International Music Show. The range comprises of three systems designed to meet the needs of touring musicians who require a small to medium-sized PA or general back-line system. The largest is the M360, a three-way full-range loudspeaker system. The unit is fitted with a JBL 15" high power cone driver; an 8" midrange transducer and newly-developed horn-loaded tweeter handle mid and high frequencies respectively.

The M350 is a two-way full-range loudspeaker system, incorporating a 15" high power cone driver, and high frequencies are handled by a 1" titanium diaphragm compression driver mounted on a Bi-Radial horn. The M330 is the smallest of the range and is a two-way full-range system incorporating a JBL 12" cone driver, and a JBL 1" titanium diaphragm compression driver mounted on a Bi-Radial horn is employed for high frequencies.

In all three systems, a passive crossover network is fitted within the enclosure and connection is via a 4-pin Speakon connector. To facilitate initial wiring, a 4-pin Speakon line connector is supplied with the units. For further information contact Harman Audio Ltd in Slough, telephone (0753) 76911.

Sound Engineering

Long-time manufacturer and distributor of effects lighting and accessories Light Engineering have launched the first of a range of sound products which will be marketed under the Sound Engineering brand. The range includes the DJ 1600B turntable, together with a comprehensive range of loudspeakers, from the 2 way 60 litre 150watt compact to the 3 way 140 litre 250watt. For further details contact Light Engineering in London, telephone 081-520

Lasertech-nology

The Laser Scanning System from Suffolk-based Lasertech has been developed to provide a lowcost, but versatile laser unit, according to the company.



The compact 2 mega-watt system uses linear scanning in X and Y axes, courtesy of rapid response scanning transducers, and combined with an optional graphics controller, can produce a wide range of text and images.

The External Effects Module with pattern sequencer provides music synchronised scanning, together with controlled zoom and rotate functions which create a variable pattern size and scan angle. Further details on the Laser Scanning system are available from Lasertech in Bury St Edmunds on (0284 87) 8108.

LIGHT THE DARKNESS IN GENEVA

Overview, photographs and sound design report by Mike Lethby Lighting design report by Simon Tapping

On May 8th the International Committee of the Red Cross and Red Crescent (ICRC), in alliance with the BBC, staged a unique concert for world-wide broadcast in Geneva.

Designed to highlight the ICRC's 'Light the Darkness' campaign for the protection of victims of war, the show was free to all who came on the night. But global TV viewers (the organisers hoped) would tune in two days later when the post-production team had spliced its live concert footage with film from some of the 35 or so countries also taking part in the event.

The broadcast was intended purely as a consciousness-raising exercise (unlike the Live Aid-style 'Simple Truth' Kurdish benefit, also for the Red Cross, at Wembley four days later. See page 58). Through 'Light the Darkness' the ICRC aims to remind governments of the plight of civilians — who account for 90 per cent of most war casualties.

So to the concert itself, which took place in the open air on a cool, dry night in May.

'Light the Darkness', sponsored by Philips, was staged alongside the ICRC's hilltop Geneva HQ, in a leafy park which is also home to numerous other international organisations. Universal appeal was supplied by a children's choir and by the ambitious co-ordination of a 'ring of light' using participating countries around the world.

Geneva — the hub of the broadcast — saw the Warren-Green brother's London Chamber Orchestra running through their familiar 'Power Proms' show with a mixture of classical pieces and specially-commissioned 'new age' numbers in which rock percussion, guitars and keyboards join the fray. Although the LCO are no strangers to TV, it was their biggest exposure so far and orchestra leader Chris Warren-Green put his musicians through a punishing series of rehearsals — only giving up when the cold Swiss night froze hands on strings and bows.

There was an all-British production crew in Geneva including Derrick Zieba's Dimension Audio, Vari-Lite Europe and Theatre Projects. Simon Tapping deisgned the lights, and his description of the task follows in this feature. Derrick Zieba, sound designer on 'Light the Darkness' has worked closely with the LCO since their Docklands Arena shows last autumn. Supplying a Turbosound system, he achieved an excellent result from a difficult site.

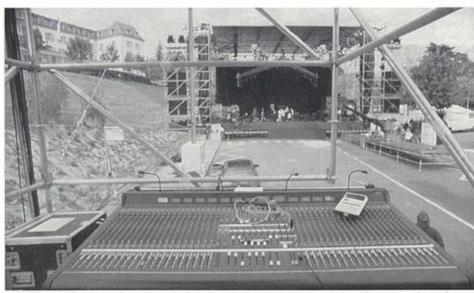
The Site

TV watchers got a rather 'rose-tinted spectacles' view of what was actually a uniquely awkward site.

The Red Cross wanted the stage located on the main road which passes their HQ — some 20 metres downhill. The audience would fill the tree-lined road that sweeps down and away in a long curve.

This plan wasn't without its difficulties to begin with since the road forms a major route through Geneva, while the nearby Russian Mission building was perfectly placed to provide a loud one-second slapback echo to confuse musicians.

Matters were further complicated by the ICRC's lax attitude to preparation. A professional promoter was only appointed (at the behest of despairing participants) 10 days before the show. When crews arrived, they found there was no police permission for sound checks and airport authorities were balking at TP's SkyArt searchlights. They then demanded the stage be moved 30m uphill to allow traffic through a side road in front of the stage during soundchecks. This



Control desks in use on the concert included a Ramsa S-840 monitor desk and two Yamaha 4-channel PM300s.

crazy prospect was only averted by a mixture of diplomacy and blunt talking. Finally, Philips' huge light bulb-shaped hot-air balloon (intended to advertise the show across Geneva) was ordered down to an altitude where no-one could see it.

The confusion left production manager Mick Klusczynski in a difficult position, ultimately to the disadvantage of the local audience.

The original concept had allowed for 15,000 people, with PA delay towers and Diamond-Vision screens relaying the show down the road to a square (well out of sight) at the bottom of the hill. But scant publicity and early problems with the authorities (the only local I found who had heard about it asked whether Pink Floyd were playing) convinced the producers that the screens and extra delays wouldn't be needed.

It all seemed a shame considering the effort everyone had put into the show. Even the adjacent ICRC museum had provided the LCO with a superb venue for off-stage rehearsals and a hilarious photo-call that, typically, no-one had told the photographers about. Yet the Swiss authorities proved willing to move heaven and earth when they knew what was happening in their midst. Roads were dug up for cables and



Pre-production sound checks.

the local crew, said Klusczynski, were "unbelievably well disciplined and helpful — I wish we could have guys like these everywhere."

And then to confound everybody, the long and winding road in Geneva filled up before showtime with an audience conservatively estimated by police at 15,000. A tearful Natasia Kinsky, in her opening speech, had to remind them to save their candles for the finale. They made an impressive sight and added yet more emotion to the warmth of the final broadcast.

LCO and The Power Proms

The London Chamber Orchestra with their 'Power Proms' shows, have boldy gone for what orchestra leader Chris Warren-Green and his brother Nigel (LCO production manager) see as the classical music establishment's elitist jugular. Top class musicians themselves, they put their reputations and large sums of cash on the line, and set out to hand the classics back to the people. The third member of the orchestra's production team is Step Parikan, who Derek Zeiba explains was taken on as 'technical production manager because they're not very technically-minded themselves'.

I let Chris Warren-Green explain: "When we re-formed the LCO we just wanted to do what we believe in. As far as I'm concerned 'classical' music was stuck in a time-warp, only playing to the cognoscenti. The true meaning wasn't there; the mainstream weren't getting to it. Not because of the music itself — music was written for everybody — but because of elitism."

The Sound in Geneva

Derrick Zeiba has worked with the LCO on its 'Power Proms' shows as sound designer since the end of last year, when he designed a surround sound system (and mixed monitors) for Theatre Projects on the orchestra's London dates. Now heading his own company — Dimension Audio — Zieba has maintained his relationship with the LCO and their studio engineer Doug Bennett, who mixed the FOH in Geneva with assistance from Dimension's Clinton Cast.

Dimension Audio provided the PA sound for Light The Darkness, with Derrick himself designing the system's configuration. He also mixed the stage monitors during the show, though he says he'll try to avoid doing that in future. "I've always mixed monitors for them in the past," he explained, "so they expect to see me up there by the stage; it sort of reassures them. But it also means that I can't be out-front fine tuning the PA as I'd really like to be."

I spoke to Derrick Zeiba, FOH engineer Doug Bennett, Dimension technical supervisor Clinton Cast, and Nigel Warren-Green about the sound production.

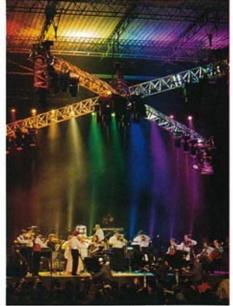
Nigel first outlined the difficulties which had to be confronted before the PA could even be built and tested. "The man of the match has been Mick Klusczynski, our production manager in Geneva. It's been a nightmare of logistics to get the clearance to shut the streets down and allow sound checks and lighting checks." The site the Red Cross chose, directly in front of their headquarters, is normally a busy road. "Between him and the on-site promoters they've managed it despite everything - that's what you get when you surround yourself with the best. To give you some idea, a day before the show, the guys were having to decide whether to make the delay system stereo or mono, because the estimated audience size was shrinking from the original 15,000 down to 5,000 - they were getting very pessimistic!"

Clinton: "The Red Cross do seem to have blithely assumed everything will just happen. Certainly when we went into the initial stages of sound checking, we received a very quick visit from the local constabulary who informed us in no uncertain terms that the Red Cross had not actually asked permission for us to do that."

Confusion didn't end there. Right up to the last minute, no-one was certain whether a supposedly rigid upper sound level limit would actually be enforced. In the event the lack of direction worked to Dimension's advantage.

Chris: "One of our recording engineers — Doug Bennett — is mixing the show, but onstage we still balance ourselves as we would in an acoustic concert." So Derrick's task is to reflect your acoustic balance? "Absolutely right." How close does he get? "He's the best. He's so dedicated he's prepared to do the monitor mix rather than mix front of house." In fact, Derrick's monitoring task — accomplished using a Ramsa S-840 monitor desk — was tricky even by the usually hazardous standards of monitor engineering.

The stage layout meant that Chris Warren-Green couldn't actually see Derrick — an essential part of their working relationship. So a crew member was deputed to act as 'relay', conveying the nods, winks, nudges, smiles and



An image of hope, conveyed by the Rainbow motif.

grimaces by which orchestra leader and engineer communicate cues and instructions.

As well as designing and mixing the FOH and monitor systems, rehearsals gave Derrick another role again - tutor. He could often be found stage-front, explaining to the musicians why microphones were placed where they were, what happens to amplified sound when the wind blows or the temperature falls or a crowd arrives - and how not to panic when the movement of a Stradivarius makes something else feed back. Patiently, like a teacher with a willing, but slightly confused child, he went through the whole system step by step. The musicians listened carefully: for the LCO, a lot was riding on the show. With 50 musicians on stage, microphones everywhere and a whole host of different demands and requests, it looked rather an exhausting task, although Derrick remained relentlessly cheerful, and sanguine about the practical difficulties. "We can make it work - though I wish I had a bit more time to spend on the front of house sound. Doug and Clinton are doing a great job, but there's a couple of things with the system that I wouldn't mind tweaking a little. Still, I can't be in two places at once . .

Amplifying an orchestra is still an evolving science - as shown by the fact that every PA company has its own ideas about microphone placement, mixing techniques and stage monitoring. Derrick says that for him and Dimension more is being learned with every show. "Chris realises this isn't the ultimate as it stands — for example, we wanted the Turbosound Flashlight system for our FOH but it simply wasn't available.

"But Chris prefers to stick with a team he feels are prepared to learn with him. We love working with the LCO — it's a very rewarding experience to work with such a committed, highly skilled and above all, warm bunch of people."

Clinton Cast outlined the FOD set-up. "We're using two 4-channel Yamaha PM3000s, VCA-linked with one predominantly handling the orchestral parts, the other handling the rhythm section and electronic parts; we're using 64 channels in all.

"There are graphics across every output to the stereo PA, a stereo delay system and a mono delay fill for the side section down the road — known as the 'Russian delay' since it faces their building!" To a background of crashing percussion soundcheck he continued: "We've got a Lexicon 480 run as two machines across the orchestra — one for the strings, one for the brass and wind sections, to warm it up and give it some ambience that they'd get naturally from a concert hall, but effects-wise there's just a Yamaha SPX-1000 for the drum kit and that's it. We haven't gated or compressed anything at this end either because it's a classical show.

"The PA consists of six flown TMS-3s (with 60 degree flares on the HF) a side and four 90 degree versions on platforms lower down to fill across the front. Then there's three TSW-124 sub-woofers a side; in an indoor environment we probably wouldn't need those but here we need to lift up the bottom end a little."

Doug Bennett has worked for a long time with the LCO: how does the team work together in designing the sound? "It's mostly between myself, Nigel and Derrick. Nigel is invariably beside me during soundchecks and concerts to ensure that it's as he wants it. Although for the last two concerts he's been quietly sitting there with a big smile on his face.

"We've no real problems mixing this show — Derrick has promised me we wouldn't have any feedback problems as we have had sometimes in the past and we've been able to get it very loud with no difficulties. The only problem really is the slapback from the Russian building, which the musicians have found hard to cope with at times — though they seem to be getting the hang of it. Unless we demolish the Russian Mission there's not a lot we can do about it!

On their technology, Doug adds: "I love the Yamaha's VCA routing - I can do virtually everything on eight faders, it's great. The only problem I've found is seeing the indicator LEDs in the dayleight. And the TMS-3s are the best system I've worked with; it's easy to get a good sound from them. We started with them running flat and we didn't have to use much EQ after that."

The final touch of the show night, after the local authorities had been satisfied, the rehearsals completed and the backing tape machines re-checked by Derrick for the fiftieth time, was the most dramatic of all.

Toby Allington, mixing the broadcast 24 track in the Fleetwood mobile for the broadcast mix, prayed harder than anyone that the show would finish bang on schedule at 10.50pm. Forty minutes later, Geneva airport would be closed — by which time he and his crew had to be in a chartered Lear jet and heading for London with the precious tapes. At stake was the simple matter of a global broadcast on Friday. It was close. But he made his plane.





A crowd of 15,000 plus packed the Avenue of Peace to help 'Light the Darkness'.

Anyone who has lit a major outdoor event will understand the mixed emotions which greet the first tentative warblings of the dawn chorus; a sense of frustration that, within half an hour, the sun will be up, you will have lost your black-out, and the lighting session will come to an enforced end; a sense of panic that you didn't achieve as much as you had planned, especially if it was the last night before the show; a sense of relief that you can finally trek back to your hotel, peel off the layers of thermals and climb into a warm bed for the day.

When I had flown into Geneva airport earlier that night, I had peered out into the gloom from my window seat as we made our final approach, hoping to glimpse a SkyArt sweeping across the sky. To my disappointment, I discovered that air traffic control had refused permission to fire them up until all flights had finished for the night. I did, however, see stage lights glowing from the direction of our site, and this re-awakened the excitement generated by the project which I had been experiencing since I first got involved.

At this point I should turn the clock back and explain the preliminaries to the events in Geneva. I am a lighting designer for the London Chamber Orchestra. I was lucky enough to be asked by them to light two of the 'Power Concerts' at the Docklands Arena last

'Light the Darkness' was, for the orchestra, a natural forward step, and for me it was a progressive and challenging brief which had to work on various levels.

December, and we hit it off straight away.

It was commissioned at short notice — my first visit to Switzerland to discuss possible sites for the stage was only four weeks before the day of the concert — but because of the number of people involved, and the fact that the idea for the programme was a very unusual one, relying so heavily on a musical performance to put across a serious message, it took several weeks



A bevvy of Vari*Lites, Xenon Supertroopers and SkyArts strafed the night sky above Geneva.

of discussion to devise a format for television and a concert programme that everyone was happy with. From my point of view, the challenge was that the lighting had to work on four different levels.

Firstly, and most straightforwardly, I had to light each piece of music sympathetically, to enhance the performance for the live audience. Secondly, I knew how each piece of music was to be used within the television programme; different pieces were to have different themes, such as prisoners of war, torture, orphans and child soldiers, and mute footage illustrating these was to be inter-cut with the concert relay. I had seen some of this material and had discussions with John Carlaw, the programme director, about how he wanted to use it, so I

had to adapt my interpretation of each piece of music to provide him with pictures on stage which he could work with. For example, a piece to be used behind images of prisoners was lit with stark bars of white light, whilst a piece showing some hope was lit with a rainbow motif.

Thirdly, the lighting had to be enhanced to work for cameras, and to stand on its own in case it was decided at a later date to release a video of the concert in its own right. This turned out to be much easier than I had anticipated, or previously experienced, mainly because of the brilliant and sympathetic direction of the outside broadcast by Gavin Taylor, and the excellent sensitivity of the cameras that were part of the new BBC O.B. unit we were working with.

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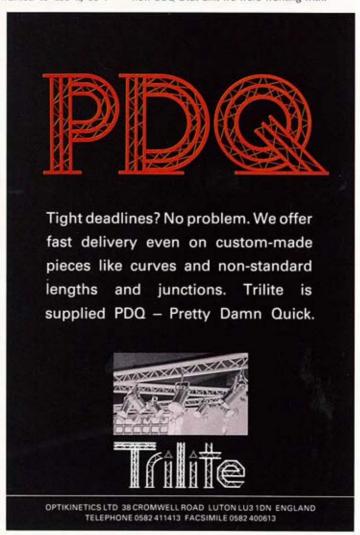
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On the fourth level, the concert was also seen as the Geneva event in the world-wide chain of light that night. Two of the pieces in the programme were set aside within the TV programme to show clips from the various other lighting events which were happening simultaneously around the world, beamed into the BBC by satellite.

As Geneva was to be used as a starting point for each group of these clips, I had to provide a striking symbolic beginning and end to this chain of light. In order to achieve this, I decided to use eight of Theatre Projects' SkyArts, mounted on top of the main PA towers either side of the stage. During these particular pieces of music, they could be seen beaming off in all directions, as though to the various other locations seen on film. They were also a very valuable tool within the rest of the concert, providing some tremendous punctuation at key moments of the music.

And so to the rest of the equipment and people who made all of this happen. The main rig on stage consisted of Vari*Lites, with a few conventionals for specific effects. At the Docklands Power Concerts we had used 20 VL2Bs and 30 VL4s. In Geneva I increased this to 24 VL2Bs, 40 VL4s and 20 VL3s.

Most of the 2Bs were on a Telestage cross over the stage with some of the VL4s, whilst the majority were used at the top and bottom of a cyc, made up of staggered strips of white material, to give some depth and texture. Some VL2s were used as a side boom position, particularly to highlight percussion players and to backlight into a perspex drum booth (required for sound separation, but a lighting designer's nightmare).

The VL3s were added as a downstage boom position, running up the on-stage corner of the main roof support scaffold. They proved to be very versatile, as they could provide a full stage wash, or be used to bounce colour off the underside of the metallic roof. They could also turn upstage to colour the whole of the roof

support scaffold as well as downstage, pointing out front providing a side frame to the picture in anything from a gentle rippling dark blue, through a bright rainbow of colour to audience-blinding white.

Conventional lighting on stage ranged from 500W Codas and Minuettes in ambers, to highlight the percussion instruments, to Par 36 ACLs and Raylites in open white used for percussion and drumkit stabs; from Par 64 Raylites with Colormags in the truss (enabling us at one significant moment to leave a red cross hanging over the darkened stage) to two 2.5K HMls with dimmer shutters in blue to provide a strong backlight for a trumpet fanfare at the opening, and a children's choir at the end.

There was an arched footbridge directly behind the stage, erected as part of the city of Geneva's 700th anniversary celebrations, and we were able to use this as a backdrop by opening the white cyc and starcloth which we had as alternate backdrops. By lighting this arch with Pars in red, we were able to provide a red crescent to go with the red cross over the stage. It was also highlighted at various stages with blue Pars from below, red encapsulites and some 30 lengths of Arcline.

Followspots used were four Supertroopers from the front, with two short throw Lycians on stage for backlight. White balance for the cameras was through the Xenons with one and a half stops of neutral density and half Hamburg frost, and the only other front light specifically for the cameras was the occasional use of 12 Par 64 CPOs in steel blue. Audience lighting was achieved with 40 5K tungsten fresnels, again with steel blue, and a series of flags, suspended down the centre of the road, were lit with 1k Silhouette 15" and 30" profiles. As the stage and audience were on a road overlooked by the Red Cross headquarters building, it was important that it should be lit and balanced with the stage lighting, as I knew that the cameras would often be picking it up in the background as a device to locate the event.

I was anxious that the building should not end up looking flat, but should have texture and depth. I also wanted to emphasise an image of it floating in the darkness looking down on us.

To achieve this I used 120 Par 64s and eight ETI500s in a mixture of cool and warm tones, shooting up the sides of the building from very close rather than flooding in from the front.

Lastly, for a specific moment at the end of the concert, I placed a red cross and red crescent on the grass bank below the building. This was about 20' high and 40' wide, made up of 60W light bulbs. When the crew first saw this on the plan, there were several questioning looks and several comments, but as always, they rose to the challenge, got into the spirit of the job, and quite enjoyed planting 250 bulbs!

For me, having seen the reaction of the audience on the night, who planted 1000s of candles on the road as they left at the end, and having seen the programme, which went out two days later, from my hotel room, the brief had been fulfilled and the lighting had worked on all levels thanks to a lot of people. I hope that for some it succeeded not just literally, but also perhaps more deeply, to light the darkness.

Simon Tapping

Lighting Crew and Suppliers

Vari*Lites: Andrew Doig Tom Nulty Telson James Richard Knight

Production Electrician: Glynn Peregrine

SkyArts: Sean Burke

Jonathan Woods Celco operator: Alistair Scott ColorMags: Andy Bartlett Mains/dimmers: Andy Hartley Andy Cave

Cirrus smoke machines: Greg Hamlyn Mark Alington

On stage rigging: U.R.C. All lighting equipment was supplied by Theatre Projects and Vari-Lite

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Manchester	£135.00	£150.00	£42.00	£60.00
Newcastle	£195.00	£210.00	£42.00	£60.00
Copthorne Tara Dublin (IR £)	£205.00	£241.00	£47.00	£83.00
Belfast	£160.00	£193.00	£47.00	£87.00
Glasgow	£153.00	£184.00	£47.00	£87.00
Edinburgh	£153.00	£184.00	£47.00	£87.00
Manchester	£139.00	£170.00	£47.00	£87.00
Newcastle	£199.00	£231.00	£47.00	£87.00
Vanderbilt Hotel Dublin (IR £)	£205.00	£241.00	£47.00	£83.00
Belfast	£157.00	£183.00	£42.00	£74.00
Glasgow	£149.00	£175.00	£42.00	£74.00
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Weekend rates, which are cheaper, can be quoted on application to the relevant Keith Prowse office.

All tickets must be booked by 19th August 1991 and seats and quoted prices are subject to availability.

Packages from Glasgow, Edinburgh, Manchester and Belfast will utilise British Airways shuttle services.

Aer Lingus flights from Dublin are on bookable, and therefore restricted — except the Hilton Olympia packages which use British Midland. British Airways lights from Newcastle are on bookable, and therefore restricted.

To avoid any complications with price variance, applications should be made by phone rather than coupon. Keith Prowse Tours will handle all the administration. Enquiries for Belfast, Edinburgh, Glasgow, Manchester and Newcastle to Jan Cearns,

Keith Prowse Tours, telephone 061-431 9000 quoting ref: L&SS 91.

Dublin enquiries to Naomi White, Keith Prowse Tours, telephone 01 685599 quoting ref: L&SS 91.

ON TOUR Catriona Forcer

This month's On Tour focuses on the return of the liquid light show to the touring scene.

Nick Sholem is one of the most respected designers in the business and he is particularly known for his work with Sting and, formerly, The Police. The current Sting tour, Soul Cages '91, will last for nearly a year and will be returning to the UK in December. Definitely a show to see.

Dave Byars spent a year at The Marquee working with a variety of bands including Voice of the Beehive. At present, he is designing for one of the hottest bands in the charts, Blur.

Sting

Hammersmith Odeon

LD: Nick Sholem

I first interviewed Nick Sholem for Lighting+Sound International back in 1986 when he was working with Sting. Since then Nick has worked on many projects, including another Sting tour and a co-design with Allen Branton on The Who. Last year he took a well-deserved year away from the business to move house and spend time with his family. During that time he did odd jobs including a three week Gary Moore tour and work as a lighting consultant to Spanish television for the Ibiza Music Festival designed by Patrick Woodroffe.

The programming for the Sting 'Soul Cages



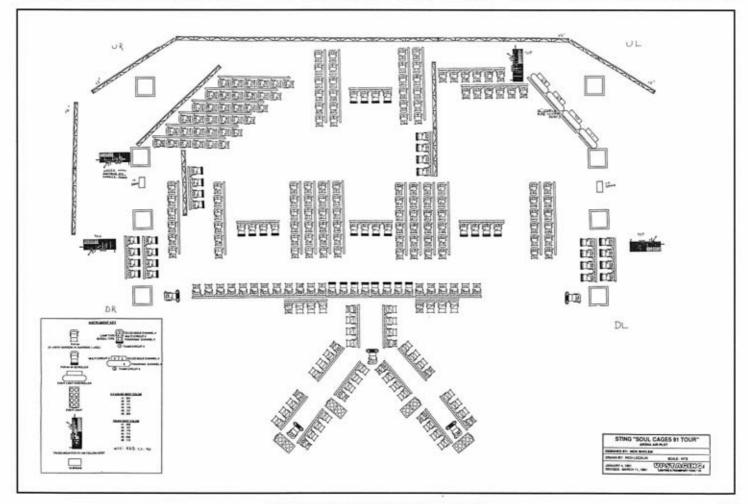
Vari*Lite operator Rocky McKenzie (left) with lighting designer Nick Sholem.

'91 Tour' was done at Patrick Woodroffe's 4:1 Studio and took eight days to complete. Joining Nick Sholem was his Vari*Lite operator Rocky McKenzie who, because it is not yet possible to programme Vari*Lite cues in the studio, took notes. "Vari*Lites haven't got the visionary system together yet," explained Nick. "They are still working on it. They thought it would be ready in six months but so far it has been a year-and-a-half.!"

In 4:1 Nick Sholem used a Celco Gold and a Panorama to programme 22 songs

which he described as 'absolutely marvellous.' From now on Nick will recommend to the management of other bands that they go to 4:1 first. It not only makes financial sense, but artistic sense also. Gone are the days of working at 3am in an arena to catch up with the programming. From 4:1 Nick flew to Chicago where Upstaging were supplying the lighting equipment. Whilst there for two days the rig was hung to check that everything was correct and Nick checked that the cue cards he had brought from 4:1 were working properly. There then followed seven days of band rehearsals in New York without the lighting.

"It gave me a chance to listen to the new versions because every time Sting goes out, he does old songs, but different versions," Nick told me. "You have to re-learn everything and throw out the old habits. We then went to San Francisco for the first show where we also had a tech day and one rehearsal day. It was fine and I went there with no pressure whatsoever. I was so laid back it was unbelievable. Rocky had a lot of work to do because he had to get all his notes into his board, but he is younger than me and he managed to do the all nighter! The guy is very good, he knew what we were going to do and I left him alone. When we first set up he worked until 5am, then he dropped. The first show was excellent. Of course it wasn't right - but it was still excellent. And that was all down to having





The Blues have it. Sting in Performance.

been at the 4:1 Studio."

After San Francisco the tour moved to Los Angeles for five shows and Nick bought himself some time every afternoon to tidy up some songs or come up with new ideas for the Vari*Lites. By the time they had finished in Los Angeles, Nick described the show as 'really happening' and since then it has basically remained the same.

Nick told me that in his whole career he had never got a show together so fast. "The equipment is fairly straightforward including Scroller colour changers on Par cans and on Molefays," he explained. "It's really just Pars, Molefays, some ACLs for the audience, four ACL Moles which shoot from stage left to hit each member of the band. I've also just introduced some ACL Moles to shoot onto the audience for the European tour as we are playing stadiums in Italy and Spain where you need something a bit punchy. The rest of the rig is Vari*Lites — VL4s and VL2Bs.

"Sting has done this show in a fairly laid back manner as he is 39 now. His new album is all about where he was brought up in Newcastle in fairly dingy surroundings and about his parents' deaths, so it's a fairly reflective album. We're also doing some old stuff including material from The Police so the show is pretty mellow but with some high points. What always gets people going every night, is that he does three or four songs from his new album and then an amazing cover version of Jimi Hendrix' 'Purple Haze'. For that we use an RDS 'Scene Machine' projector which holds a sixties oil colour wheel. So, we have an acid look for the Hendrix number which is totally different from the rest of the show. I've cut back on the bump and grind. I say to the spot operators every night: 'this is not a bump show, it's a fade show'. Really, we are running it as a theatre show."

As Nick has done several tours with Sting, I wondered how he approached lighting the same songs on different tours. Did he stick with the same lighting if it had worked once before on a song, or did he always start afresh? "I tend to keep the same sort of feeling," he said. "Ever since we'd done 'King of Pain' I've always used green with other things. That's my green number, and although Sting is not really a 'green' artiste it works well for that particular number. This time we've got the VL2Bs with very different gobos and a wonderful movement that goes out into the audience. There used to be a lot of bumps and real smashes especially when The Police used to play it. Now I've cut all the bumps out taking it slowly, but it works extremely well. It's not a question of being lazy, it's just a question of doing less.

"I've cut back on the bump and grind. I say to the spot operators every night: 'this is not a bump show, it's a fade show'. Really, we are running it as a theatre show."

I've used Celco before but I've always been worried about back-up. I used one of their very, very early Gamma boards on a Police tour and it went down on me in New York half an hour before we played Shea Stadium to 65,000 people and I lost the whole show! But that was one of the original boards that didn't have any back-up anyway. Then Avo came along with their QM500 so I used that. The reason I returned to Celco

Photos by Lewis Lee

was because we had talked about using the Panorama board for the Colour Scrollers and it's absolutely brilliant. You just programme on the Panorama and then don't touch the board during the show. Everything is linked into the Celco Gold so I can actually do all the colour changer cues within my cues for the lights themselves, so I don't have to have an extra person and complications on timing. The Gold is a wonderful board, it's so fast to programme and to modify, and the back-up is fine. The cue cards are great and I've had no problems at all."

In America Nick used Upstaging for the lighting equipment but for the European tour he is using Chameleon Lighting. Two of the Upstaging lighting crew have stayed with the tour - Ritch Locklin (crew chief) and Sean McGrann (lighting tech). Also from America was the Vari*Lite tech Mike Novosel who Nick described as 'extremely good and someone who just fits in well'. Once in London two more lighting crew were picked up - John Armstrong and Simon 'Barney' James - together with Bob Batty who does the followspots as they are taking four Xenon 2.5ks on the road. Alan Chesters at Hangman made up the drape which is a sort of white oval on the stage left side. He also did the scrims for the scenery panels which are dotted around.

The current Sting tour will probably last until January 1992 so it is a little early for Nick to plan his next project. Ideally he would like Patrick Woodroffe to be awarded the contract for the Olympics and then to work on it alongside him!

This month's front cover shot of Sting at Hammersmith Odeon was taken by Lewis Lee.

Blur

Astoria, London

LD: Dave Byars

Like many people in this business, Dave Byars was introduced to lighting design while working with a friend's band. Originally he was involved backline, but one night there was no-one to operate the lights and Dave 'had a go'. From then on he operated the lights whenever possible; and when the band he worked with moved from their home town of Edinburgh to London he went with them. Once there he met up with other London groups such as The End and Pure Pressure, low-key bands who played at The Marquee a lot. This proved to be very important to Dave's career.

Because I was regularly going to The Marquee with these bands I got to know the people there fairly well," Dave explained, "Phil Stevens, the house lighting designer, introduced me to Noreen at Entec (Entec provided The Marquee's lighting system until April 1991) and she asked me if I wanted to do a stint at The Marquee. That was about a year ago and I've worked there on and off ever since. At The Marquee I met Oscar Harris (The Soup Dragons' LD) and Tony Fagan (Jesus Jones' LD) and they put me up for other bands like Voice of the Beehive, Balaam Angel, Pop Will Eat Itself and Blur. Most of the work involved tours, apart from Pop Will Eat Itself which was a oneoff gig. Because I like the band Oscar, their LD, let me do one gig at Sheffield. That was very important for me and an ambition fulfilled.

"I don't go for mass technology ... I'd rather see something that has had a lot of thought put into it rather than an endless list of equipment"

"I picked up Blur through Tony as they're on the same record label as Jesus Jones. To start off with they had a 'lighting concept' which involved 150 architecturals and a 30ft x 5ft backdrop. It was all looking really good until we actually took it out with us and found we couldn't fit it into the club venues. It also involved 5ft x 3ft gels which had either been painted or had designs on them. Unfortunately, someone had to find their way around the stage to change the gels and we found people were watching them rather than the band! It's something that could work on a bigger stage with very large scrollers.

"I see Blur as being 'psychedelic punk rock' so basically psychedelia comes in with the projections. I use a lot of dark moody colours, mixing them as I go through the colour changes rather than going from one scene to another. It's more like colours circulating and the projection obviously works in well with that. I've got Quasars for the manic elements and there are Strobeflowers as well because the gigs we were doing were mostly club gigs where you can't take in a lighting rig but you can immediately transform the place with four Strobeflowers. They may be becoming predictable to us in this business but a lot of people haven't seen them before. I say if it's effective use it: I like them and they do give a certain 'oooh!' element to the show!

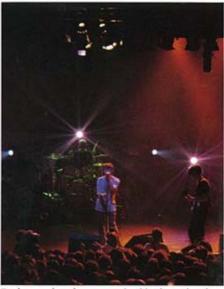
"The set tonight is different from the usual one where the band do the song 'I know' entirely with Strobeflowers right at the end as a climax. Tonight they've moved it to the beginning so that the Strobeflowers kick the set off, although it's a bit of a give away for me. I've also got Solar 250s, Lekos, Silhouettes and various Ray floor cans which I was supposed to get under the drum riser but it wasn't big

enough. The band will just trash them completely and it's a bit dodgy having Strobeflowers on the stage because band member Damien tends to walk through the drum kit. Originally I went for Flexiflash; I liked it but Damien didn't want it. Look is very important to them which is good because I like bands that care about lighting as long as they are constructive. Having said that, when I did Voice of the Beehive I got so many different vibes off each band member it was quite confusing!

"Blur has offered me the only opportunity to use the MA desk which I really like but, as time is tight, I haven't been able to test all its capabilities. Celco is my favourite desk but I didn't like the override, and I prefer to add Swap. I've found that the MA has a lot more chase capability which I'd like to use, but unfortunately I won't get the opportunity.

"The support act is Miranda Sex Garden but sadly the sort of things I had planned for them haven't really come off. We never got the Lekos focused at all and they are not using the same monitor positions as Blur so one of the band has just become invisible. They have the same management as Blur and I would love to light them. I've talked to them about lights and how I'd use the Optikinetic custom-made wheels with extremely gothic-looking windows and oil liquid going through. Once again it's that psychedelic element, but because you've got three stained windows on angled scrim it gives a really imposing gothic feel which reflects their music. I'd use Silhouettes and Lekos with shattered gobos which suggest, to me, broken roofs in old churches with sunlight streaming through. It's not possible to change the look during one of the songs as they are all fairly short. All that is needed is one look per song, but if they do 10 songs then you've got to have 10 different looks which could all be something special. They are not into playing venues as such, and prefer unusual, slightly different buildings. Rather than using a standard lighting rig you could take in completely separate lamps and effects. These could be planted around the building to show up the architectural features as

"I don't have the show that I wanted tonight because we've spent most of the day sorting out technical problems. If Blur became megastars and I had a huge budget I'd like to do something along the lines of Roy Bennett's design for The Cure with the drapes behind the trussing. I'd like to construct a 'shape' without it being immediately recognisable



Dark, moody colours are mixed in through colour changes to give a gothic feel to Blur's performance.

as a lighting rig. There are obviously technical boundaries, but I like disguised lighting. I don't go for mass technology and loads of equipment like The Rolling Stones tour. I'd rather see something that has had a lot of thought put into it rather than an endless list of equipment. There isn't really one particular show I've seen that's inspired me. I see the odd element in a show which I might then use myself. I used to really enjoy going to concerts but now I find I'm spending the whole gig looking at the lights.

"I'd like to become a name in this business. There's no point in entering into something with the frame of mind that you're never going to get anywhere because you've given yourself boundaries. I can remember walking into The Marquee a year ago and thinking 'Wow, look at all those lights' and within a couple of months you want more. It's a constant learning experience and I don't see any reason why it shouldn't continue to be. I've already done my ultimate act which was Pop Will Eat Itself. I actually turned down their tour because I had already committed myself to Blur. It was at the time when Blur had formulated their lighting concept and they had already put a lot of work and effort into it. I couldn't turn round at that stage and say 'cheerio, another band have offered me a tour'."



Pyschedelia is back in fashion.

THE SIMPLE TRUTH BENEFIT CONCERT

Simon Rickman counts down to the main event

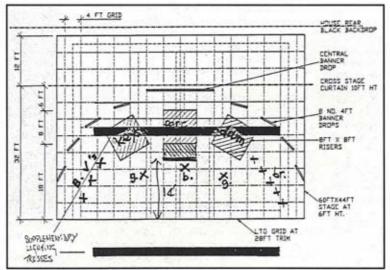
As always, it started with a phone-call. It was Sunday afternoon, I was out planting vegetables in the garden, and it was Steve Martin from Harvey Goldsmith's office wanting to know if I was free next week to direct the lighting for the Simple Truth benefit in aid of the Kurds. He told me it was a real rush job, it was to be MC Hammer's rig of which we could use some and to which we could add some, and it was three hours live 'worldwide'. I reckoned the garden could live without me for a weekend, so I agreed.

A meeting had been arranged at Wembley Arena the next morning and during the course of discussions about camera positions, catering trucks and crash barriers I scribbled a plot

for Tony Panico of Meteorlites who were providing my extra stage lights as well as all the audience lighting. The plot consisted of two 40 feet trusses, the FOH one to hang 48 Par 64 2 Narrows, and ten 6 × 12 Lekos; the mid-stage truss would have 24 Par 64, five Mediums and ten 4 lamp ACL bars. Colouring was to be red, yellow, blue, turquoise, lavender and open white and it was all to be run from an Avo Rolacue 30 next to Hammer's QM 500/180.

My idea was to use Hammer's rig as general wash thus eliminating a lengthy and politically awkward refocus, and to tight spot our band positions with my lights, using the ACLs as decorative fans. The mid truss would also carry two Orbiter follow spots since the scenic drapes, once hung, would effectively obscure the upstage half of Hammer's system, including his upstage centre truss spot. I would have positive control of close-ups of the band as well as good coverage with the added possibility of some interesting shadows from the lights upstage of the drapes. I also had control of eight 2K Xenon FOH follow spots and (now) four above stage, plus some 28 Vari*Lites both 4s and 2Bs to play with. It looked good on paper.

We had been given the promise of reasonable co-operation from Hammer's production manager, provided we didn't forget that it was his show headlining, nevertheless the smart money was on involving them as little as possible. The timetable had the audience lighting being installed on the



Plan of the 'Hammer' rig and extra light positions.

Saturday during the day, as well as my points, racks and mains. After Hammer's show that night they would strike his stage set and we would have total access from around 12.30-1.00am.

I had been told that this was when I ought to do any necessary refocusing of their rig so as not to inconvenience the L&SD crew on what was effectively their day off. But the crew boss knew nothing about it when I put it to him, in fact Hammer's production had called them at 9.00am Sunday to do just that! I had been hoping to work through until about six or seven in the morning, which should have given me and Pete Mackay (Vari*Lite Operator) at least a couple of hours to bosh in some basic looks and then get a few hours kip before 'the day'. So there was no way I was coming back at 9.00! So I let their crew go, figuring that maybe I'd have a better idea of what actual refocusing I'd need after I'd spent the night with the rig and once I'd seen the drapes in position. This, by now, was plan H!

Someone once said: "... it's a game of two halves and it's not over 'til the final whistle" and it took an inordinately long time to hang two relatively simple trusses, for various reasons, and it was well beyond dawn by the time they were both up, working and focused. So much for snoozetime! Meanwhile, Pete had been beavering away programming twirls and sweeps, fades and chases based on our indepth consultation which had gone something like "... this one would be good in blues, this one reds and yellows, this one ..." etc. Sadly

this was all we were to have time to do because, when Pete was asleep later in the day, Hammer's operator 'somehow' erased our only disk of the long night's work!

The drapes too took ages to hang, mainly because Hammer's production 'insisted they be removeable for his 15 minute set. The riggers did a marvellous job creating a pulley system to strike them during a fairly short changeover-slot and, of course, to rehang them for the finalé. This all had me waiting around too, because I couldn't finish my focus until they were up. So my PhD in 'getting over it' was put to the test once more.

I did manage to get back to my room for a quick shower but the sunny afternoon (miss you,

garden!) saw us back inside attempting to reprogramme. With full house lights, no spot ops, and a thousand other distractions, it became obvious that we would not get a look at the overall effect until we were on air. I guess I was too frayed and frazzled by then to worry. John Mason, the BBC's audience lighting EM had overseen my only TV stipulation, two monitors, one permanently on-transmission and the other switchable between all ten cameras, so I was quietly confident of being able to correct any 'oversights' as we went.

Thirty minutes before showtime I realised that I had not yet had an opportunity to give the spot ops a run-down of the proceedings. So having rushed through that, I grabbed a bottle of water and before you could say 'houselights out' we were away. I had designated four spots (two truss and two FOH) as 'gazza's' to pick up host Gary Davies every time he appeared and, apart from one time when he came on unexpectedly and another time I misread the running order, it all went well. Tom Jones played a blinder; the 'live' atmosphere was great; we raised some £1½ million that night; John and Norma tapped their fingers to the beat; and the BBC thought it looked great.

All in all, the show itself was far easier to handle than the build up to it, but that is often the way with one-off shows.

Without wishing a disaster on anyone, anywhere, at anytime, I'd be quite happy to get involved with another . . . aid. Love that spontanaiety!



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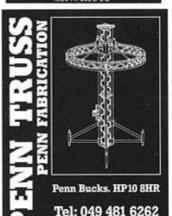
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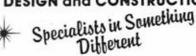
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VIEWPOINT

Making Music Together

Julian Williams interviews Graham Walne

In 1987 while Graham Walne was lighting designer to the Boston Opera, he was fortunate to work with the legendary designer Valeri Leventhal on Sarah Caldwell's festival 'Making Music Together'.

This year it was the turn of the Americans to visit the Soviet Union on a co-production, with the Bolshoi Opera, of Robert DiDomenica's new opera 'Balcony'. This three performance opera was mounted in just three days, in the 2000 seat Bolshoi Theatre in Moscow, run with a staff of some 3000 people. I asked Walne how he crossed the barriers on this project.

Walne communicated his design through an interpreter and worked with a Soviet crew. They changed their system to allow the Americans to have the stage for the whole period without the set being moved. Normally their scenery, which is cut cloths and drops, can be easily struck.

The Americans took a gigantic box set onto the stage with its 70 feet proscenium, which measured 60' × 30' × 40' (there is little wing space but a large rear assembly area) and mounted it onto a false floor with tracks. The set pieces had to be anti-raked to overcome a construction error which additionally tightened Walne's schedule, eventually leaving him with only a combined open dress and tech rehearsal.

I asked Walne how he approached this in terms of the lighting equipment available. "There is an interesting combination of technology which is not very common, and it's all some 30 years old," he explained.

"We had to work within the confines of a standard non-supplemented rig on six bridges which are all motorised to fly into stage level. In fact, all their flying is powered. Each bridge has about 30 luminaires on it, with Strand original Patt 243s, some very old East German 2kW profiles, and some old German Beamlights. Four followspots were positioned some 60 feet high in the proscenium boxes.

With one or two exceptions, Walne was only

allowed the use of the standard colours existing in the equipment, though they allowed him to re-focus to some extent. I asked him how he felt about these standard focusing positions? "They work within a basic area colour wash and there was little time to do much re-focusing. Much of the rig did not pan and tilt with the degree of flexibility we would have liked.

"Their bars are about 15 metres out and the remote control will not permit the equipment to make significant alterations from the vertical. This, combined with the high trim on the bars, obliges one to think in terms of downlights into areas. Highlighting is by use of the Beamlights."

What surprised Walne was the scarcity of circuits. When super-imposing the set over the rig plan he found that he had only 31 circuits over the stage area, which included the No.1 bar, for this vast space.

An interesting feature for side lighting in a ballet set up are the booms which come up on a telescopic system saving much re-rigging time. The Lee Prestige control board was driving the system, though bought originally for their touring system. I asked Walne about the problems of plotting in such a large house. "As we were obliged to plot on the Friday evening dress rehearsal, it was thought it would be easier if I programmed the board myself, as it would not be fast enough working through a translator. I also translated all the cue sheets and instructions on the screen in Russian before leaving the venue to provide a written plot for the board."

Was he a little scared when he realised how sparse this rig was, for the size of the performing area? "This didn't turn out to be so much of a problem as I had anticipated," he explained. "Realising the lack of FOH cover, the director kept the artistes upstage, being lit by the Pros. Box Boom positions and followspots.

The No.1 Bridge was the only place where the luminaires had their own circuits which provided some flexibility of movement. Walne left this till last to focus to create specials once the positions of the furniture had been established.

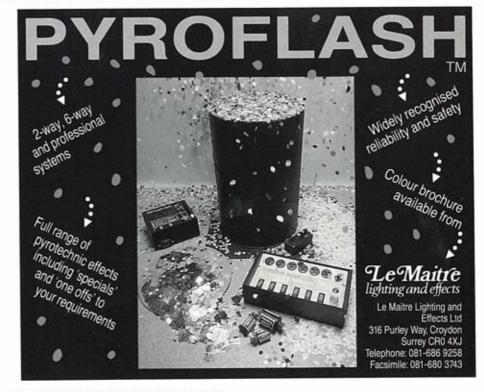
When it comes to crewing productions there are two shifts: 9am to 4pm and then 4pm to 11pm. "The impression I had was that I could call as many as 50 electricians for a morning, or evening, call if I wanted them," said Walne. "In reality, the early shift never actually work the shows, so it was difficult for them to see why they were running technical rehearsals.

"The daytime crew are not allowed to change fuses — there is a special crew that comes in and sits in the fuse room — but they only arrive with the 4pm shift. So if you blow a fuse before this time, which I did, you have to wait!" Similarly, with a smoke machine effect, Walne couldn't have this until the smoke men arrived at 4pm.

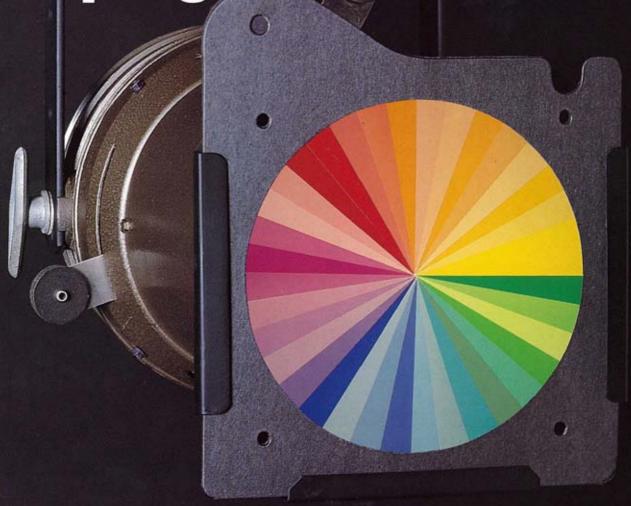
The Russians seemed impressed by the speed with which everything happened — they can take anything up to a year apparently, with crews working in rotation, to put a show on. I asked Walne how he saw things going in Russia, and also if he felt there was a shortage of supply of equipment in view of their recent appeal on the UK national news programmes. "The lack of subsidy must mean that they can no longer support the vast over-manning and this will mean a total restructuring of the way in which they work."

For a final comment I asked Walne what he would like to see happen in Russia in the theatrical field. "If you look back at the history of stage lighting then each time the source became brighter, from candles, to gas, to electricity, and this had a major influence on the style of scenery. The Soviets don't really use lighting designers so perhaps the new freedom and cultural exchanges might change that and lighting designers may, in turn, influence Soviet stage design."

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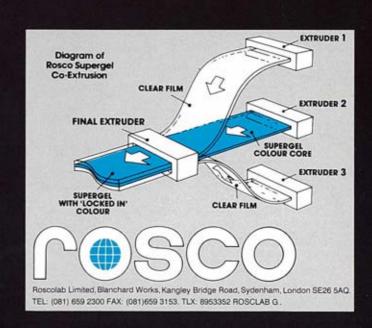


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Beverley Way, New Malden
Surrey KT3 4PT, England
Tel. 81/949-3171, Fax 81/9493649

