

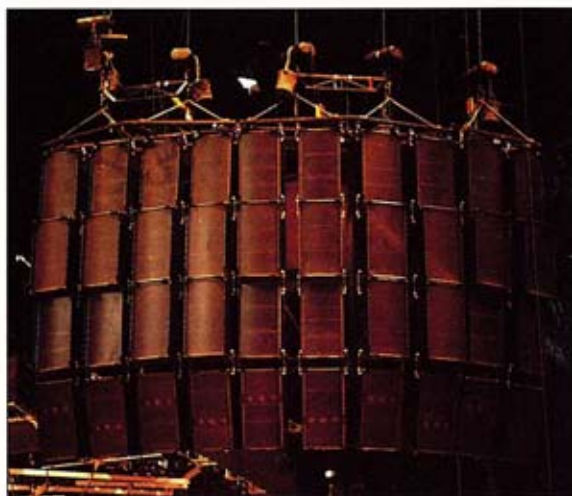
# LIGHTING+SOUND *International*



ROCK IN RIO II, BRAZIL

- Rock in Rio: with Pete Barnes and Patrick Woodroffe
- L+SI at SIEL (Paris) and USITT (Boston)
- Lighting and Sound for Eric Clapton
- Chernobyl – Final Warning: a story behind the filming
- Features on CP&P Germany, MA Lighting Technology
- Encore take the Martin route

MARCH 1991



## TAILOR MADE PERFORMANCE



## FOR ANY VENUE



The Martin Audio F2 is the most versatile high performance loudspeaker system available for large scale sound reinforcement.

The Rack system allows the user to reconfigure the cabinet driver architecture to meet the requirements of any size or style of venue.

A three point flying system integrates this advanced technology allowing the construction of acoustically correct clusters.

The F2 system is based on the experience of

20 years building the world's most advanced and reliable sound reinforcement technology. Major artists and venues throughout the world rely on Martin Audio products to provide the quality they require night after night.

To find out more about the benefits of the F2, contact Martin Audio Limited, 19 Lincoln Road, Cressex Industrial Estate, High Wycombe, Bucks HP12 3RD, United Kingdom. Telephone: 0494 35312 Fax: 0494 438669.



## F2 SYSTEM

ACHIEVING A BALANCE WITH POWER

# LIGHTING SOUND *International*

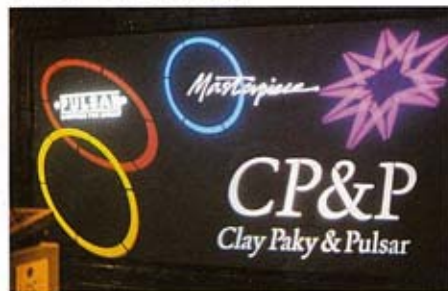
March 1991

**6 News in Lighting + Sound International**

**19 Bonjour Siel**

John Offord reports from the first show of the season

**22 CP+P Germany**



Clay Paky and Pulsar Up and Running. John Offord reports

**24 MA Lichttechnik**

The German force in Concert Lighting Control. John Offord reports from Würzburg

**27 Rock in Rio II**



L+SI gets the generic lighting design information from Patrick Woodrolfe. Pete Barnes discusses how he worked with the 'system'

**37 Eric Clapton: World Tour 1990-1991**

Catriona Forcer on Lighting, Ben Duncan on Sound

**42 Boston Bound: USITT 1991**



Ruth Rossington reports on the Trade Show. Richard Farthing discusses the Conference

**45 Chernobyl - Final Warning**

Director of Photography Ray Goode with the story behind the filming

**49 The Encore Experience**

Louise Stickland visits the London-based hire company

**51 International Directory**

**53 Directory of Suppliers and Services**

**58 Viewpoint**

John Lethbridge on Control Systems

The views expressed in Lighting and Sound International are not necessarily those of the editor or the Professional Lighting and Sound Association.

## LIGHTING SOUND *International*

published monthly by the Professional Lighting and Sound Association

© Copyright Professional Lighting and Sound Association ISSN 0268-7429

Editor: John Offord

Assistant: Ruth Rossington

Advertising: Alison Hunt

Published from the PLASA Office:

7 Highlight House, St. Leonards Road, Eastbourne, Sussex BN21 3UH England

Telephone: (0323) 642639 Fax: (0323) 646905

No part of this magazine may be reproduced without the permission of the Editor.

The magazine is available on annual subscription:

UK: £35.00; Europe and rest of the world £45.00; Airmail £70.00. Single copy price £2.50 plus postage.

Editorial Advisors: Tony Akers, David Bearman, Andrew Bridge, Peter Brooks, Jenny Cane, Tim Chapman, Mike Gerrish, Kevin Hopcroft, Tony Kingsley, John Lethbridge, Iain Price-Smith, Neil Rice, Marion Smith.

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

**THE PLASA LIGHT & SOUND SHOW 1991**

OLYMPIA 2, LONDON  
8-11 SEPTEMBER 1991

The International Entertainment and Leisure Technology Show

The International Entertainment and Leisure Technology Show. If you are involved with equipment used in discotheques, clubs, theatres, leisure complexes, symphonique halls or presentation arenas, then you cannot afford to miss the **Light and Sound Show.**

Organised by  
Philbeach Events Limited • Earls Court Exhibition Centre • Warwick Road • London • SW5 9TA

Contact Tanya Simmons  
**071 - 370 - 8215**

## Plus ca Change

Following last year's decision to switch UK distributors from Avitec to Lightfactor, Lightwave Research, the manufacturing arm of High End Systems of Austin, Texas, have recently made a similar move in France.

This time, however, it appears to have caused a knee-jerk reaction from the losing party, and has led to a veritable tale of smoke and mirrors, reminiscent of the rumpus which followed when High End first broke with Clay Paky. (Readers will remember that this led to Lightwave producing the Intellabeam in direct competition to the Golden Scan, and eventually to Coemar setting up their own operation in North America, though the latter was billed as an entirely amicable split).

The slighted party on this occasion are the long established French manufacturer and distributor of entertainment lighting products, J. Collins, who were given their marching orders on January 1st.

Explains Bob Sachacherl, Lightwave's marketing director: "We had been thinking about it for some time because Collins have too many other products which are competitive with ours, for example smoke machines and strobes. This has led to Collins cherry-picking our product."

A similar experience in the UK, where Lightwave products were originally split between two distributors, led to the eventual appointment of a sole agency and a subsequent three-fold sales increase, claims Sachacherl. "We believe that result was achieved by creating a clear identity in the market place, which only comes from a mutual commitment which we didn't feel was possible with Collins in such circumstances."

Sachacherl and his colleagues identified Ever Radio, the old Radio Violette, as a better bet for their products. Although based in Brussels, the company had long been marketing aggressively in France and were keen to take the products. Only one snag, they were also the Coemar distributor and had enjoyed a close relationship with the Italian company for several years, even before the notorious Robot which started the entire affair when it was launched at Rimini some five years ago.

Consequently, a new company, Highlight Systems S.A.R.L., was formed by Ever specifically to market the Lightwave products in those territories, and in that way it was hoped to keep everybody, including Coemar's genial supremo, Bruno Dedoro, happy. But nobody, it seems, had allowed for the ire of the French, who had lost no love for Ever over many years, following constant border incursions into their territory.

At Siel last month, they finally exploded a bombshell! Following hot in the footsteps of Taiwanese watchmakers, they would sell an Intellabeam lookalike. And what would they call it? Why, Intellabeam of course. Albeit with a 700JC suffix. "We have every right to sell a product called Intellabeam," sniffed the French. "Not so much an opera, more a pantomime," quoth Bob Sachacherl, "does anybody know what's inside it?" This was a hint at the intriguing, and probably not the final twist, to this international tale of moving mirror machinations. The product is to be made in Italy by TAS, a member of the Coemar family of companies!

When L+SI sought confirmation from Coemar of a further rumour, that the product was to be offered by TAS to other importers in other countries as an own-brand competitor, we were unable to get a clear answer from Luciano Salvati.

Salvati, who was generally credited with responsibility for the break out of the original hostilities, as the architect of the 'sell-to-all' policy forged while sales manager at Clay Paky, has recently returned from exile in the United States, to take up a similar post with Coemar. "I can only say that it is part of a new marketing strategy," he told us, "but what that strategy is I cannot tell you exactly. You will have to address such questions to Bruno." Unfortunately, at the time of going to press, Snr Dedoro was unavailable for comment.

Which leaves us in exquisite suspense for the finale which will, no doubt, come at the Rimini show at the end of this month. Oh, what a tangled web we weave. . .

## Astralloy Group Liquidation

According to a press release received from new company Lite Structures (GB) Ltd, the directors of Astralloy Group Holdings Ltd appointed Cork Gully as liquidators on 4th February "after protracted financial problems". Subsequently, the assets goodwill and products of Astralloy were bought by Adrian Brooks and Graham Thomas on behalf of Lite Structures who are carrying on the manufacture of all the Astralloy product range. Lite Structures are based in Wakefield, West Yorkshire.

The liquidator's estimated deficiency in regard to unsecured creditors of Astralloy Group Holdings is put at £581,108.

## Tough in France Too

In common with their British counterparts, there are companies in the lighting and sound industry in France who are finding life tough at the moment. One such is major rental house RégiScène, who went into liquidation on 21 February, just two days after exhibiting at SIEL in Paris. We understand a rescue package is being put together.

## CCT Theatre Lighting in Administrative Receivership

After more than 25 years of trading, the internationally known name of CCT has a question mark over its future. The company went into administrative receivership on 11 February this year.

In a statement to creditors and suppliers, the joint administrative receivers, G. Baker and A. R. Bloom, said that the business is being continued under their management so that the possibility of disposal of the assets on a going concern basis or of reconstruction can be investigated.

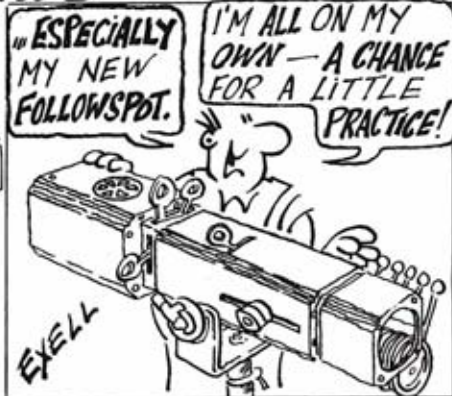
L+SI spoke to one of the joint administrative receivers' representatives, Clifford Matts, and asked for an up to date report on the situation. "We've had a very good response to our advertising and we are now taking people round," he said. "We are very hopeful that a buyer will be found in the course of the next two or three weeks." He stated that directors Don Hindle and David Manners were working closely with the receivers' representatives in a co-ordinated effort to ensure a future for the CCT name and operation. 15 of the company's 60 staff have been made redundant for economy reasons.

Don Hindle told L+SI: "After 22 years with CCT I'm very sad at this situation, particularly for our customers and suppliers. It was with interest that I noted from last month's L+SI that Malham Ltd also banked with the 'listening bank'. I am sure in view of the interest shown in the company that CCT will continue with its internationally renowned range of products."



Don Hindle: saddened by situation.

## Action News



## LIGHTING TECHNOLOGY

For All Your Lantern Needs:

**Action Lighting**

Teatro, Thomas, Strand, ABD, CCT, Altman & Pani.

Stage & Studio Lighting.

Dimming & Control Systems.

and much much more!

London	&	Manchester
2 Tudor Estate		46 Kansas Avenue
Abbey Road Park Royal		Salford
London NW10 7JY		Manchester M5 2GL
Tel 081 965 6800		Tel 061 876 0576
Fax 081 965 0950		Fax 061 876 0517

# At last there's a console you can take anywhere



## Concerts • Theatre • Industrials

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 cuystack 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.



**Jands Electronics Pty Ltd.**

578 PRINCES HIGHWAY • ST PETERS 2044 • AUSTRALIA • Tel: +61 (2) 516-3622 • Fax: +61 (2) 517-1045  
U.S.A. • T.M.B. ASSOCIATES • Tel: (818) 842 9652 • Fax: (818) 842 1064  
U.K & EUROPE • A.C. LIGHTING LTD. • Tel: (0494) 446000 • Fax: (0494) 461024

el nuevo ♦ la nuova ♦ die neue ♦ la nouvelle ♦ the new

**E-System 36 Dimmer Rack:**

- 36 Dimmer Channels @ 10A/channel
- Surface Mounted Hot Patch
- 12 Socapex Outlet Connectors
- Individual Lamp Circuit Test facility
- 6 Lamp Circuit Test facility
- Lamp OK and Fuse Blown Indicators
- Camlok or CEE17 Power Inlet Connectors
- Choice of Analogue Control Patch or DMX 512 Interface
- Incredibly small! Operating mode only 600mm x 850mm x 540mm
- E-System Dimmer Packs, Control Patch and DMX 512 Interface available separately



**E**

steht für europäisch ♦  
comme européen ♦  
es para europeos ♦  
sta per europeo ♦  
is for european ♦

CELCO

**E-SYSTEM DIMMER RANGE**

Celco Ltd, 1-3 Bellingham Road, London, SE6 2PN, England.  
Telephone 081 698 1027 International +44 81 698 1027  
Fax 081 461 2017 International +44 81 461 2017 Telex 927624 CELCO G



Joe Szpin, whose career in the lighting industry began in 1966, has retired from his role as special effects technician with Theatre Projects Services.

Citronic recently announced the appointment of Andy Barnby as Southern Area Executive. Later in the year, Citronic will be appointing another Field Sales Executive.

Chris Gilbert has recently been appointed to the position of sales and marketing director with Trantec Systems Ltd, radio microphone manufacturers. He has joined the company after a long career in the industry with Shure, ElectroVoice and more recently Beyer Dynamic.

## Pro Light & Sound Expo 91

Australia's biggest-ever professional lighting and sound show will be staged at Melbourne's World Congress Centre on June 14-16. The three-day Pro Light & Sound Expo 91 will feature displays from most of the world's leading manufacturers of state-of-the-art lighting and sound technology.

Speakers including Francis Reid, Richard Pilbrow and Larry Goodson will address seminars on the latest special effects and automation, aesthetic appeal and a host of other light and sound topics.

For more information and brochure contact Pro Light & Sound Expo 90 in Adelaide. Tel: 08 296 4189.

## Design Award



Optikinetics' Neil Rice (centre) presents the TrILite award to Shirley Reed (second left). Also in picture are TrILite's Graham Witcombe (left), Debbie Carlton of Confex 91 and David Sinclair of TrILite.

At the recent Confex 91 exhibition at London's Olympia, Optikinetics Limited presented the 1990 TRILITE Design award to Miss Shirley Peel of the BBC Scenery Department London.

Miss Peel's set design for the BBC TV programme 'Question Time' was chosen from a wide range of entries sent in to Optikinetics throughout 1990.

## TAC at Sydney Opera House

Sydney Opera House in Australia has recently taken delivery of four TAC SR9000 sound reinforcement consoles. They will replace their existing consoles which had been in service since the Opera House was opened in 1973. The total value of the contract to install the consoles is approximately £450,000.

## Clay Paky and Pulsar



Julio Savoldi of Clay Paky (left) with Pulsar's Ken Sewell at SIEL, Paris last month. It was the occasion for the launch of the new CP&P logo — see features on CP&P Germany (22-23) and SIEL (19-21).

## Cerebrum at Rimini

"The return of Cerebrum Lighting to the 1991 SIB show after a four year absence has been brought about by the signing of our marketing agreement for the 'Enigma' range with Advanced Lighting Systems," Mark Tonks, sales manager and Enigma product co-ordinator at Cerebrum, told L+SI.

"Although I have visited Rimini every year since we showed the Celco range back in 1987, we felt our products did not quite fit in at SIB with our bias towards the touring market. However, the Enigma deal has given us a new purpose and now enables us to demonstrate products such as Colourmag, Posi-Spot, Super Scans in conjunction with the Enigma and Enigma Micro systems." Cerebrum will be looking for distributors for a number of their ranges, including Sunn and Powerdrive, in a number of countries.

## Workshop Developments

Following closely on the heels of the recent announcement that Richard Lockyer's long-established firm, Audio Visual Systems of Halifax, had changed its name and remarketed its operation, the company has reported major new contracts at home and abroad, and of the incorporation of the company as 'The Sound Workshop Limited'. The company has also appointed a new technical director in the form of David Mitchell, formerly with Mecca Leisure PLC.



Jim Porter is joining forces with Ron Bourque of Global Future Technologies as managing director for GFT's Canadian operation. Jim brings with him 12 years of experience in the professional lighting and sound industry. Global Future Technologies are distributors in Canada and the USA for ALS Enigma and Enigma Micro, NJD Electronics, Lynx Lighting, Memotech videowalls, Rockeffects special effects and Colour Media filters.

London-based HHB continues to report buoyant digital audio business with a number of sales of DAT, digital editing and signal processing hardware to studios, broadcasters and industrial users. London radio broadcaster Kiss FM has been supplied with four Radio Systems DAT recorders, while Anglia TV have taken five Fostex D20 models, plus a number of Sonifex cart machines.

## DIRECT LASERS

*Creative Technology*

FOR

— CONFERENCE —  
— PRODUCTION LAUNCH —  
— TV — FILM —  
— EXHIBITION —  
— CONCERT —  
— OUTDOOR EVENT —  
— HOLOGRAM —  
PRODUCTIONS

ANY POWER OF LASER AVAILABLE  
FROM 100 mW to 25 Watts

Telephone: 081-390 9595

Fax: 081-399 1754

462 Ewell Road, Tolworth  
Surrey KT6 7EL

## The — Fibre Optic — Lighting People

We manufacture and distribute all fibre optic lighting materials, Parglas harnesses and conduits, Partflex polymers, light sources, theatre curtain washers, spot ball and bullet lenses, side emitting fractured fibres, ceiling fittings and large bore fibre optics.

Examples of our fibre optics may be viewed at our Chiswick showroom, from subtle backgrounds to fibre optic fireworks. Leaflets available



Trade & Export call PAUL RAYMOND

Par Opti Projects Ltd

Unit 9 The Bell Industrial Estate

Cunnington Street, Chiswick Park, London W4 5EP

Telephone: 081-995 5179

Fax: 081-994 1102 Telex: 933718 PAROP G

## THE PROFESSIONAL CHOICE IN LASER VISUAL EFFECTS

*LaserMagic*

- + Stunning Beam Effects
- + Animated Graphics
- + Logos
- + Fibre Optic Effects
- + Custom Modules
- + Full Colour Effects

Telephone: (0323) 890752

Fax: (0323) 898311

Unit 39, Cradle Hill Industrial Estate, Seaford, BN9 3JE

A PLASA Member

## MAGIS Rimini

The sixth MAGIS, exhibition of equipment and furnishings for theatres, cinemas and film/TV studios, will be held at the Rimini Exhibition Centre from March 24-27th, 1991.

The '91 show bring together a wide range of manufacturers and buyers, as well as featuring a variety of side events, such as technical seminars and workshops.

For further information contact UK representatives Knights Management Services in Hailsham. Tel: 0323 442747.

## Leisure Resources

In recognition of the high standards of management now expected by the leisure and entertainment industry, Leisure Resources Group, has set up a new division, Leisure Management Services.

The group already incorporates Juliana's and Imagimax Design Consultants and with the new division they will be in a position to offer a complete package of services to the industry ranging from concept design, feasibility study, build and fitout and also pre-opening planning, promotion, staffing and control systems for nightclubs, discotheques, leisure facilities, bars and restaurants.

## Mercia Theatre Services

East Midlands-based Mercia Theatre Services have recently completed a £32,000 contract to supply and install the lighting, sound, stage engineering and drapes into The Brewhouse Arts Centre, Burton-on-Trent.

In the auditorium and performance area Mercia provided luminaires from Teatro and a Sirius control system from Zero 88 Lighting. The sound installation is centred around the Allen and Heath SR Plus 12 desk, which feeds a Harrison Xi600 power amplifier, driving two pairs of JBL Control 12 speakers. They also have contracts to provide a portable sound rig dedicated music/paging system for the bar and restaurant.

## Soul II Soul

The London-based Soul II Soul organisation are now making their 48 track Sony Digital machine (PCM 3348) available for hire. Also available for rental are a pair of Genelec midfield 1033 monitors. For more details contact Soul II Soul on 071-359 6171.

## R&G Group



The recent Siel exhibition in Paris saw Novalight International represented by French agents S.E.D. (France). Pictured above is Greg Moger of Novalight (left) together with Paul Vandanael of S.E.D. displaying Nova lanterns and Dalton equipment.

## Ideal Systems Design Custom Interface Units

The inaugural broadcast of the upper and lower houses of the Irish parliament was made on January 30th, this year with the help of Dublin-based Ideal Systems.

In order to bypass the restrictions that an off-the-shelf system imposes and to fulfill the specific requirements of parliament the company designed 26 custom hardware interface units. These incorporated features such as failsafe back-up transmission capability.

Ideal Systems was established in July 1989, by recording studio designer Declan Coleman to provide CAD-based facility design, equipment purchase and installation through to system training and on-going maintenance.

In July of last year Coleman was joined by two new directors Jim Butler and Declan Goulding, formerly of the Windmill Lane Group.

The company can be contacted in Dublin on (0001) 774663.

## Plasa Yearbook

The PLASA Yearbook is now available to all readers of L+SI who should apply in writing to the PLASA office in Eastbourne.



THE  
BEST OF BRITISH  
ENTERTAINMENT TECHNOLOGY  
1991

PLASA

The front cover was designed by Caroline Chronnell who is of Pritchard's Graphic Design Consultancy, based in Cheltenham. Pritchard's is a well established studio that is currently involved in corporate design projects, company/product promotion and advertising for a number of major lighting companies in both the UK and Europe.

For further information about the company, and the design services they have to offer, contact Pritchard's at Marlborough House, Winchcombe Street, Cheltenham GL52 2NW, telephone (0242) 226316.

# POWER MIST

# T U R B O

## REMOTELY CONTROLLED FLUID SMOKE MACHINE



Probably the smallest high-powered unit on the market

- ▶ Hand-held remote
- ▶ Optional 'variflow' remote for variable smoke output
- ▶ Fail-safe shutdown
- ▶ Portakit available for ease of handling Powermist and its 5 litre fluid bottle

*LeMaitre*  
lighting and effects

Le Maitre Lighting and Effects Ltd  
316 Purley Way, Croydon, Surrey CR0 4XJ  
Tel: 081-686 9258 Fax: 081-680 3743

**marquee**  
**AUDIO** PROFESSIONAL  
SALES  
AND SYSTEMS

JBL

DDA

HH

YAMAHA

ESS

FOSTEX

Soundcraft

COURT

ADAMS-SMITH

RANE

Drawmer

SENNHEISER

Tel: (0932) 566777 · 041 941 3785

Fax: (0932) 565861



# A swatch book over 2 miles high!

**Fact: If PanCommand's new ColorFader used conventional scroller technology, its amazing 16,777,216 colour selection would be equal to a 2 mile high gel swatch book!**

**Fact: Anything less than a ColorFader severely limits your choice of colours - to a mere 11 to be precise, and no ordinary scroller can fade between colours like ours!**

**Fact: With the ColorFader, you "flick" through our "swatch" in about 0.3 second**



PanCommand's **ColorFader** can produce 16,777,216 different colours from just 3 DMX channels. For the less adventurous among you, just 1 DMX channel gives you access to 90 of the top gel swatch colours and 10 special effects pre-programmed in the unit. It can either "snap" from one colour to another in 0.3 second or fade smoothly to any degree! Simply put, it is unique.

The **ColorFader** has been specified by the Lighting Designers of several of the hottest tours of the year, including Madonna's "Blonde Ambition" tour, Heart, Cher and the Grateful Dead tours, to name but a few.

As well as being specified for major tours, the **ColorFader** has featured in many major television productions, films and Broadway shows. Theme Parks like Walt Disney's "Disney World" use PanCommand, and they've even been seen lighting up the Statue of Liberty by a world-wide audience.

Find out more about this and other exciting PanCommand products such as the **ColorRanger**, **ColorCue**, **ParFlector**, **CycFader** and **XL Ranger** from JEM Theatrical Supplies. PanCommand is available through a European-wide network of distributors. Contact JEM for further details.

PanCommand, ColorFader, ColorRanger, ColorCue, ParFlector, CycFader, XL Ranger & CuePort are Registered Trade Marks

## **PANCOMMAND MASTER EUROPEAN DISTRIBUTOR:**

JEM Theatrical Supplies & Special Effects Co. Ltd., Vale Road Industrial Estate, Boston Road, Spilsby, Lincolnshire, PE23 5HE, U.K. Tel. (0790) 54123 Fax (0790) 52102 Telex 37207 JEM SMC G

## **EUROPEAN STOCKING DISTRIBUTORS:-**

### **GERMANY [SALES]**

L.M.P. Lichttechnik GmbH  
Tel (05451) 15211  
Fax (05451) 17205

### **GERMANY [SALES & HIRE]**

[PC SPOT SPECIALISTS]  
Tour Service Lichtdesign  
Tel (05205) 22800  
Fax (05205) 22889

### **AUSTRIA**

Ludwig Pani  
Tel (222) 93 24 62  
Fax (222) 96 42 87

### **SPAIN & PORTUGAL**

[PC SPOT SPECIALISTS]  
Stonex s.a.  
Tel (1) 471-5597  
Fax (1) 471-9703

### **NETHERLANDS**

Jansen & Jansen  
Tel (02907) 7108  
Fax (02907) 6786

### **FRANCE**

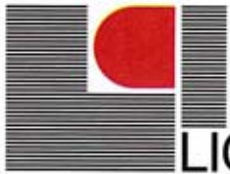
J. Collyns sarl  
Tel (1) 46 66 21 34  
Fax (1) 46 60 04 73

### **DENMARK**

Thalia Technical  
Tel (31) 10 64 80  
Fax (31) 87 65 15

### **FINLAND**

M.S. Audiotron  
Tel (05) 66 46 44  
Fax (05) 66 65 82



# LIGHTPAINT

– Introducing LightPaint, The Intelligent Colour Changer. New features makes LightPaint fast, quiet and easy to use. At a price that many more can afford.

- Colour scroller for up to 11 colours
- A professional product, designed for quietness and low cost
- Totally controlled by its own microprocessor
- Receives DMX-512, SMX, Avab-240 and analogue signal
- Auto-sense between DMX-512, SMX and Avab-240, no switching
- Runs 11 colours in under 2 seconds
- Accepts any length gelstrips between 2 and 11 colours, no blanks needed
- No tape or tools needed to fasten LightPaint's gelstrip to the rollers
- Option to choose between Hi and Lo fan speed for extra quietness
- Option to choose between continuous scroll or frame by frame colour changing
- Made for easier rigging, fed with one cable only, from one distribution box only, containing controlsignal and 24V DC
- The distribution box has a fader, for instant control of your LightPaints, no need to connect a control board to check your rig
- Stores backup states when used with D4 B-Board
- Has a function that enables it to change colour on it's own



**OSCAR  
LIGHTING**

Norra Hamnvägen 3 S-115 42 STOCKHOLM SWEDEN  
Tel +46(0)8-665 65 10 Fax +46(0)8-661 84 80

## New Ritzy for Romford

The much delayed Rank Club, Ritzy, opened its doors to the public for the first time on Thursday, February 14th this year. Originally to be called Skylights because of the unique dome-like structure over the dancefloor, the club had a chequered history long before the opening.

Severe sound leakage problems into the Rank-owned Cinema complex below caused long delays in the building programme, and Rank entered long negotiations with the developers to solve the problem. Finally, with the complex sound insulation installations complete, building work re-commenced, and then there was a change in management structure, following the Rank absorption of the Mecca hierarchy.

This resulted in a name change to the more familiar Mecca brand of Ritzy, and it's the first such venture to be opened under the new company structure.

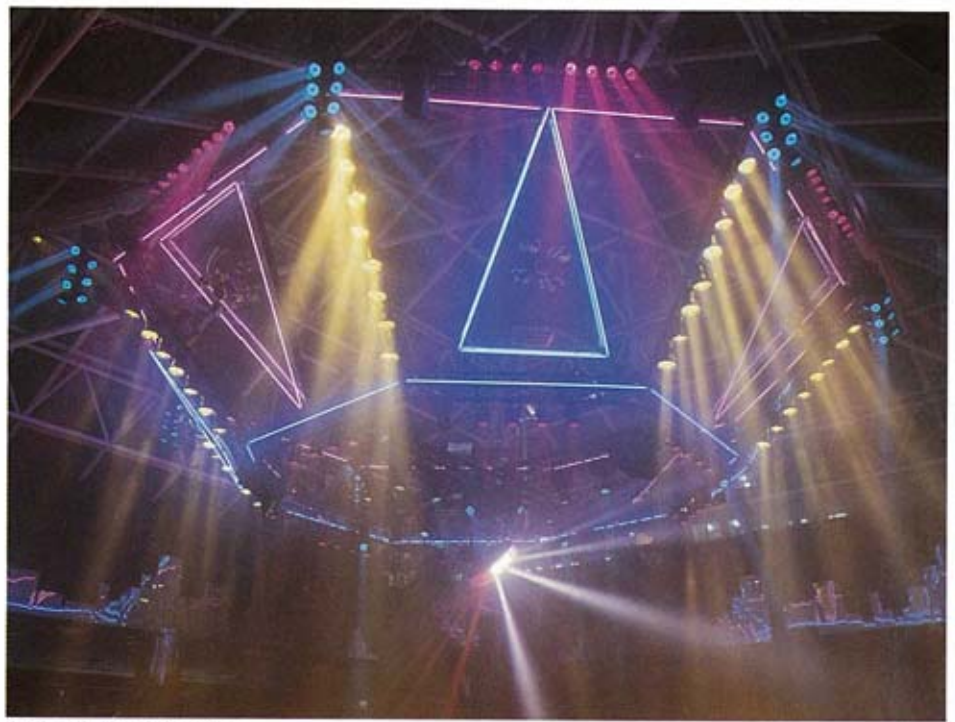
LSD Contracts were awarded the sound and lighting contract by Rank way back in early 1990, before the Rank takeover of Mecca, and several different ideas had to be incorporated in the already approved scheme following the consolidation of the Rank and Mecca executive structure.

The room itself is one of the most difficult to deal with from a sound and lighting point of view, with the entire area dominated by the huge glass pyramid, with all the attendant problems of sound reflection from the thousands of square feet of glass. Coupled with a severe restriction on output necessary by the proximity of the cinemas, LSD Contracts had to overcome the limitations of the overall budget in order to provide both audio and visual excitement in the dancing area.

LSD told L+S-I that a D.A.R.E. sound system was chosen because of its ability to produce high energy, high quality sound from compact enclosures and the characteristics of its unique CD horn, which help to contain the Mid/High frequencies on the dance floor, and greatly reduce reflection and beaming problems from the vast acres of glass above. Lighting the floor was also made complex as both the budget and the amount of weight permissible to suspend in the pyramid were limited.

A black powder coated 'Astralite' rig was installed in inverted pyramid form to complement the features of the existing structure, in reverse image, ensuring that a dramatic three dimensional effect was achieved when the banks of beams and floods are activated.

The BPR Electrical flown rig also features Le Maitre Optimist Turbo remote mounted smoke heads blown by a 14 inch fan to create stunning smoke effects within the rig. A very necessary part of the brief was to provide an emergency totally automatic evacuation system, to function when the fire alarm is operated. Part of a complex fire alarm system for the whole complex, involving six floors of shopping mall,



Lights up at Romford Ritzy.

cinemas, bingo club and restaurants, the evacuation system had also to continue to operate in case of main electricity supply failure. The dedicated system used will continue to operate on 24v batteries, for some 45 minutes after an alarm situation, completely automatically.

### Lighting

- 16 × Par 64 cans
- 96 × pinspots
- 64 × Superspots
- 8 × 4 head Windmills
- 4 × Sapro Protons
- 4 × ICE mega strobes
- 8 × Sountec pinpoint
- 1 × Coemar Bello
- 8 × neon triangles
- 8 × pink neons
- 16 × blue neons
- 8 × vertical Harvesters

### Lighting Control

- 1 × Pinpoint controller
- 2 × Light Processor Commanders
- 1 × Light Processor Program Sensor
- 2 × Light Processor rack pack 241
- 1 × Light Processor rack pack 242
- 2 × Light Processor rack pack 242D

### Audio

- 2 × Technics 1210 turntables
- 1 × Formula Sound PM80 mixer with 2 stage limiter
- 1 × Citronic 9-11 mixer
- 1 × Technics SLP 1200 CD player
- 1 × Teac 720 cassette deck
- 2 × PPX 450 amplifiers
- 2 × PPX 900 amplifiers
- 4 × D.A.R.E. NX10 mid/high enclosures

- 4 × D.A.R.E. DR15 floor mounted low bass enclosures
- 1 × D.A.R.E. SC2 system controller
- 1 × Beyer M700 microphone
- 1 × Trantec radio microphone
- 1 × LSD Eprom message panel
- 3 × Toa VP 1240 amplifiers
- 36 × JBL ceiling speakers
- 4 × Toa fashion speakers

### Miscellaneous

- 2 × Le Maitre Optimist smoke machines
- 2 × Le Maitre FDX fluid pumps

## Yamaha Expands

Yamaha-Kemble UK Ltd has a new address and telephone number following the company's relocation to new premises. John Booth, marketing director, attributed the move to the "natural consequence of the expansion of business over the last ten years." He told L+S-I: "We had overspilled into three different sites, and eventually run out of space altogether, so it made sense to centralise all our operations in the one facility. The new premises also offer a significant improvement in working conditions."

Yamaha-Kemble can now be contacted at Sherbourne Drive, Tilbrook, Milton Keynes MK7 8BL. Telephone (0908) 366700, Fax (0908) 368872.

Yamaha has also initiated a new customer service facility. The Yamaha Action Line is a round the clock voice activated product information service. It can be accessed 081-419 5419.

**Technical excellence**  
— rugged reliability  
from . . .

**MULTIFORM LIGHTING**

## Discotheque



INTEGRATED CONTROLLER



CLUB CONTROLLER



TOUCH PANEL

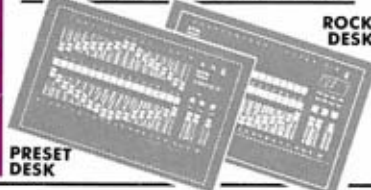


MULTIZONE CONTROLLER



SLAVE PACK STROBE

## Professional



ROCK DESK

PRESET DESK



DIMMER PACKS



**Multiform Lighting**  
Bell Lane, Uckfield  
East Sussex TN22 1QL  
Tel (0825) 763348  
Fax (0825) 763310  
Telex 877173



Full information on our products  
Name  Address  Stage  Disco  Lighting

## Exhibition Diary

### SIB/MAGIS

March 24-27, 1991

**ROMINI** — Tony Andrew, Knights Management Services, telephone (0323) 442747, fax (0323) 840014

### A.B.T.T.

Date and venue to be arranged  
ABTT, 4 Great Pulteney Street, London, W1R 3DF, telephone 071-434 3901

### EXPO MUSICA

April 13-17, 1991

**MADRID** — IFEMA, Avda de Portugal, s/n Casa de Campo, 28011 Madrid 1101, telephone 470 10 14

### A.P.R.S.

June 5-7, 1991

**LONDON** — A.P.R.S., 163a High Street, Rickmansworth, Hertfordshire, WD3 1AY, telephone (0923) 772907

### PRO LIGHT & SOUND EXPO 91

June 14-16, 1991

**MELBOURNE** — PO Box 913, Adelaide, Australia 5001, telephone 08 269 4189, fax 08 377 0564

### SOUND & LIGHT SHOW and PRO AUDIO ASIA

July 10-12, 1991

**SINGAPORE** — Enquiries to the PLASA Head Office in Eastbourne, telephone (0323) 410335

### LIGHT & SOUND SHOW 1991

September 8-11, 1991

**LONDON** — Enquiries to the PLASA Head Office in Eastbourne, telephone (0323) 410335

### VISION & AUDIO 91

September 15-18, 1991

**LONDON** — Emap Maclaren Exhibitions Ltd, 840 Brighton Road, Purley, Surrey CR2 2BH, telephone 081-660 8008

### LIGHTING DIMENSIONS INTERNATIONAL

November 22-24, 1991

**RENO** — Enquiries to the PLASA Head Office in Eastbourne, telephone (0323) 410335

## First for Nomis



Pictured with the new RAMSA S840 stage monitor console (left to right) Ian Sharpe, product manager, RAMSA; Steve Spencer, sales manager, Brit Row; David Panton, managing director, Nomis.

Nomis has become the first rehearsal studio in the UK to install the latest range of Ramsa stage monitor consoles. The company has initially taken delivery of two S840 consoles, supplied by Britannia Row, Ramsa's sole UK distributor.

It is expected that Brit Row will supply further Ramsa desks to Nomis as the upgrade of the six studio rehearsal complex grows.

## First UK Midas XL3

London-based hire company Encore PA were the first UK company to purchase the new Midas XL3. They are currently using the new equipment on the Jesus Jones tour.

## Fluorescent Paints from Rosco

Backlight technology is not new, but there are more backlight sources available now from the major lamp companies, giving new possibilities for uses outside the traditional theatre markets. Rosco have relaunched their fluorescent paint to give more intensity than previously under normal lighting and have added two new colours to the range.

The paints now include a pink and a gold in addition to the existing red, orange, yellow, green, blue, invisible blue and white.

Technical details on both paints are available from Roscolab in London, telephone 081-659 2300.

## Talking Heads

Talking Heads are an extremely effective exhibition presentation tool, which have an uncanny reality which is guaranteed to get avid sustained attention, claim The Definitive Laser Company.

Complex or simple messages in any language can be presented, through a 3-dimensional effect generated by projecting a film of a talking subject's head onto an exact sculpture of the subject's features.

The head can be any size up to two metres and the subject itself can be a representation of a full human being or an alien dressed in costume, a surreal head hanging alone in darkness or in a star field. For further details on this unusual exhibit contact the company in Hatfield on (0707) 266778.



### Wilkes Iris Diaphragm Co Ltd

Widco Works, London Road,  
Bexhill-on-Sea, Sussex, England  
Telephone: (0424) 217630  
Fax: (0424) 215406

Wilkes know a thing or two about iris diaphragms - they have been manufacturing them for over a century. In recent years they have carried that wealth of expertise into the Theatre and TV markets, and now supply some of the industry's leading companies. Find out why by calling Wilkes today

**UNUSUAL  
RIGGING  
LTD**

**RIGGING FOR CONCERT THEATRE  
COMMERCIAL FILM T.V. & VIDEO  
PRESENTATION**

4 Dalston Gardens, Stanmore  
Middlesex HA7 1DA  
**081-206 2733**

Fax: 081-206 1432 Telex: 945470 Riggin G

## Light & Sound Show off to a Bright Start

Philbeach Events, the new organiser of PLASA's annual Show in London at Olympia 2, has reported a buoyant start to sales for this year's event which will be held at Olympia 2 in London from 8-11 September. As we went to press over 60 companies had re-booked space in the 'first' round. And at a tough time for the industry, the total area booked, to date, has shown an increase in space from 2,064sq.m to 2,108sq.m

Stands already booked include:

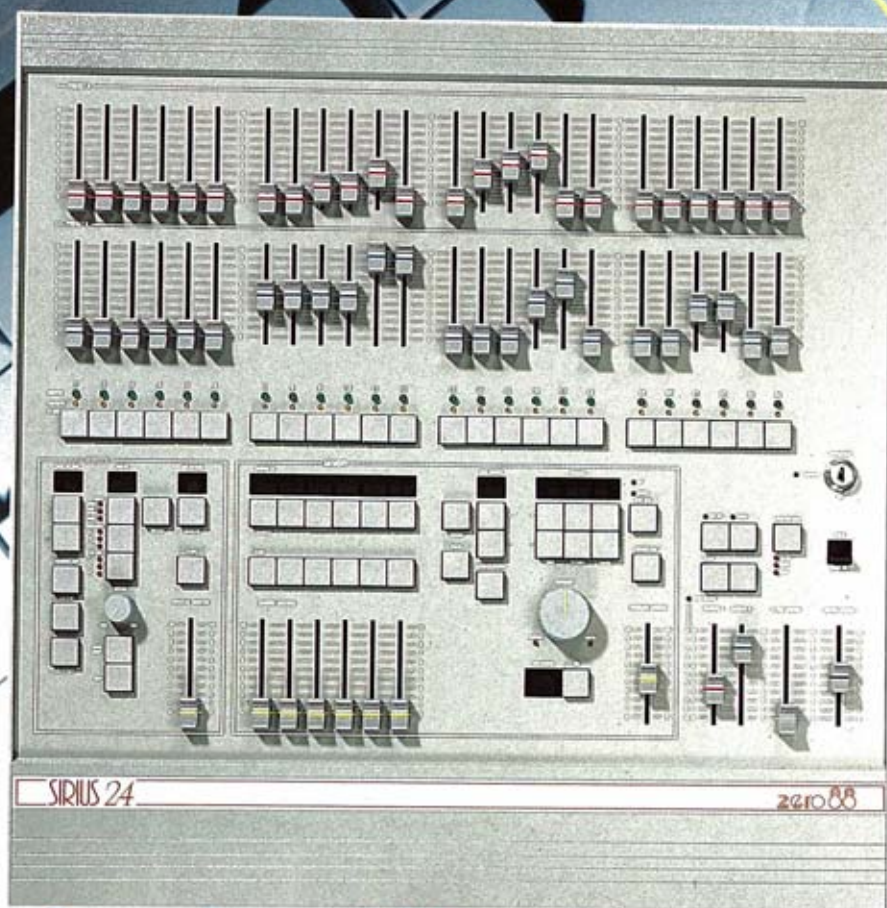
Adda Super Cases Ltd  
Anytronics Ltd  
ARRI GB Ltd  
Avitec Electronics (UK) Ltd  
Avolites Production Co Ltd  
Batmink Ltd  
Celco Ltd  
Celestion International  
Cerebrum Lighting Ltd  
Citronic Ltd  
CLASS  
Cloud Electronics  
Cyberdescence Ltd  
DC Lighting  
DeSisti UK Ltd  
DHA Lighting Ltd  
Doughty Engineering Ltd  
Electronic Lighting and Music  
Eurolight Group  
Formula Sound  
Harman Audio  
James Thomas Engineering  
Lamba Plc  
Laser Systems Ltd  
Lee Filters Ltd  
Light Engineering  
Lighting Technology Group  
LMC Audio Ltd  
London Acoustical Developments  
Lumo Lighting  
Marquee Audio  
Martin Audio  
Mico Lighting  
Multiform Lighting  
M & M Lighting  
NJD Electronics Ltd  
Northern Lights  
OHM Industries  
Oxtron Digital Systems  
Par Opti Projects  
Peavey Electronics  
Pulsar Light of Cambridge  
Roscolab Ltd  
Shuttlesound  
Simon Jersey Ltd  
Strand Lighting Ltd  
Sylvania GTE  
Theatre Sound & Lighting  
Tirfor  
TOA Electronics  
Trifibre Containers  
UKD  
Wembley Loudspeakers  
White Light  
Xylo Ltd  
Zero 88 Lighting

The plans are now open for 'all comers' to book their sites, and Philbeach are advising prospective exhibitors to register their interest now before all the best sites are taken. Contact at Philbeach is Tanya Simmons on 071-370 8215. For full contact information see page 5.

Overseas promotion of the show has already begun, with Clare O'Brien Associates deep into both press and marketing campaigns. They are working closely with Philbeach staff, and both companies reported positively to PLASA's executive committee at its recent monthly meeting.

Following a presence at both SIEL (Paris) and the Frankfurt Music Fair, Italian translations of show literature will be available on the PLASA stand at SIB in Rimini later this month.

- ▶ 24 Channels
- ▶ 2 Presets
- ▶ 99 Programmable Level Memories
- ▶ 9 Level Chases
- ▶ 290 'Insert' Level Memories and Chases
- ▶ 398 Total Cues Available
- ▶ Multiple Chases
- ▶ 6 Memory Masters
- ▶ 32 kb. Memory Card
- ▶ Clic Trac
- ▶ 'GO' Button (the single action playback)



# SIRIUS 24

**Now  
available with  
DMX and  
Softpatch facility**

**zero88**

Hart Road, St. Albans, Hertfordshire, AL1 1NA England.  
Telephone: St. Albans (0727) 833271  
Telex: 22521 ZUCOM G Fax: (0727) 42626



## 1000W SHORT THROW XENON FOLLOWSPOT

MODEL NO. KSX-1000W-S

RIMINI SHOW BOOTH # 145



The KUPO 1000W Xenon FollowSpot Is An Ingeniously Designed Unit Suitable For Small To Medium Sized Venues. Utilizing The Latest Technology And The Superb Performance Of The Xenon Lamp, It Has Been Possible To Produce A Low Cost, Lightweight, Compact, Easy To Use FollowSpot, With Excellent Performance Characteristics.

The 1000W Xenon Lamp Provides An High Intensity Light Source, Balanced At 5,300° K, Whose Output Does Not Decay (Yellow) Throughout Its Working Life (Approx. 1500 Hours). As Well As Being Extraordinarily Robust For A Lamp Of This Type.

The FollowSpot Itself, Has Designed With Ease Of Use Being A Very High Priority. A Therefore The Unit Has An " Instant Strike" Ability, Once The On/Off Switch Is Depressed, The Lamp Immediately Illuminates And Is Ready For Use. Furthermore, The Light Intensity Can Be Easily Adjusted By The Operator, Whilst The Unit Is In Use.

We Fell That The KUPO 1000W Xenon FollowSpot Is One Of The Most " User Friendly" Units Available Today, Whether The Operator Is An " Old Hand" Or A Complete Novice.

**KUPO CO., LTD.**

**P.O.BOX 28-265, TAIPEI, TAIWAN, R.O.C.**

**TEL: 886-2-8360870 FAX: 886-2-8341006**

#### WORLDWIDE DISTRIBUTORS:

U.K.	: TEL: 0425-478961	FAX: 0425-474481
GERMANY:	TEL: 07391-6059	FAX: 07391-5521
FRANCE	: TEL: 1-34-756465	FAX: 1-34-752040

# The Art of Light

## revealed

Lee Filters Limited does much more than manufacture high quality light control media for the film, television, theatre and stills photographic markets. The company offers – whenever it can – to make an additional input to benefit the industries it serves.

That's why it has developed a series of technical posters – available free of charge – to help filter users make the most of its products. To understand more fully how the art of light works. To create better images.

The first poster in the series – shown on the opposite page – has been designed to provide a simple and instantaneous reference for the calculation of filter requirements when converting from one light source to another.

Each type of conversion filter is listed in its appropriate place on the scale together with neutral density, UV and polarising filters.

To get your free poster (size 33" x 23½") simply clip the coupon, and send it to:

**Lee Filters Limited,  
Central Way,  
Walworth Industrial Estate,  
Andover, Hampshire SP10 5AN,  
England.**

This is what you've come to expect from Lee Filters. The art of light. And more.

## MIDI Music 91

The second MIDI Music show is to be held at the Novotel Hotel in Hammersmith, London, 26-28th April 1991. The show combines a programme of technical seminars which cover the range of MIDI-based applications and techniques, with a product exhibition, with a special focus on digital products on the first day.

Roland, Sound Technology, Yamaha and Akai are amongst the presenters of the hour-long technical sessions, with individual speakers including Vic Lennard of the UK MIDI Association. For more information on exhibiting or attending contact the organisers, Westminster Exhibitions. Tel: 081-549 3444.

## Turbosound Service

Turbosound have announced that as from 1st March, 1991 all sales and service enquiries for their products should be directed to Turbosound's UK office in Partridge Green, West Sussex. The decision to bring the sales operation into Partridge Green forms part of a revised sales and marketing programme and is in line with the launch of a number of new Turbosound products. Managing director of the company, Jim Hallington, told L+S: "We have made this move to improve overall efficiency; particular attention will be given to customer liaison."

## Diamond Masterclass

In recognition of the BKSTS 60th anniversary, a season of Masterclass lectures on the techniques of film and video production will be held over nine successive Wednesday evenings at the Museum of the Moving Image.

The season starts on April 24 with Ossie Morris and runs until June 26, finishing with Bob Allen. Admission is open to anyone and is £3.60 for non BKSTS members and £3.00 for members for each class.

## Hill L&S at Rimini

Hill Light and Sound will be exhibiting at this year's Rimini trade fair running from March 24-27th. On the stand will be the full display of Laser Productions Variscans, Dualscans, with the addition of one Laser Pro with Coherent Purelight laser. Hill are currently seeking dealers and distributors in the UK and parts of Europe.

## ABTT North 1991

The ABTT North Trade show will take place between Thursday, October 31 and Saturday, November 2 1991 at the Royal Northern College of Music, Manchester.

This show will be the fourth to be held in the region, and is to include a series of seminars with contributions from Francis Reid, Philip Clifford, Joe Vanek and Joe Parker.

Exhibitors booking application forms and a factsheet are now available. For further information contact Geoffrey Joyce, Palace Theatre, Manchester. Tel: 061-228 0124.

## Juliana's Istanbul

London-based Juliana's recently announced the opening of one of the largest clubs in Europe, Juliana's Istanbul. The club, featuring five bars, restaurant, exclusive VIP lounge, several themed areas and a central discotheque, is also the largest single contract ever concluded in the company's 24 year history.

The entire concept, from initial inception, market feasibility, design and fitout has been undertaken completely by Imagimax, Juliana's sister company and is due to open early in June.

## Cadac Down Under

The latest production of Phantom of the Opera to feature a Cadac 'E'-type console has opened in Melbourne, Australia.



Norman Hunter with his working model of The Theatre Royal, Drury Lane, where miniature stage lighting has been provided by Strand Lighting.

## Magic Theatre

One of Britain's most select theatres is celebrating the installation of stage lighting provided by specialists Strand Lighting. The unusual aspect is that this theatre is a 'three eights of an inch to the foot' scale model of the world-famous Theatre Royal, Drury Lane, built and operated by author Norman Hunter. The

model measures just 15 inches across the proscenium arch and backstage is every bit as complex as the real theatre, with 14 gridlines, and electrically-operated bridges and traps.

Now the stage lighting has been brought right up to date with miniature spotlights, manufactured and supplied by Strand. Both the Minicube and Minispot luminaires are from the company's architectural range.

Please send my free copy of the Lee Filters Light Source Conversion Calculator poster.

Name \_\_\_\_\_

Job Title \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Cerebrum Lighting

# The services we offer

Cerebrum Lighting are the recognised choice for the discerning trade buyer, with everything you need, from a single gel up to the most complex lighting control desks, all available under one roof.

Besides a comprehensive range of products sourced from the most innovative manufacturers around, including Advanced Lighting Systems, Light & Sound Design and Powerdrive, for whom we are *exclusive* distributors worldwide, we also aim to offer exceptional levels of service.

### THE FIRST CHOICE FOR THE STAGE AND EFFECTS LIGHTING BUYER

#### DEMONSTRATION STUDIO

At our premises we have installed a comprehensively equipped demonstration studio packed with the latest lighting control technology, looking out onto a motorised lighting rig, flown from the warehouse roof.



Why not use our facilities to sell to your clients? We are happy to arrange demonstrations and training sessions by appointment.

#### CREDIT CARD PAYMENTS ACCEPTED ON TRADE ORDERS

We are now able to offer trade and professional clients the

convenience of paying by ACCESS or BARCLAYCARD (or associated credit cards), whether calling in person, or ordering by telephone.

#### FULL WORLDWIDE EXPORT SERVICE

We specialise in export sales to trade clients and professional organisations around the globe. Our export personnel are able to source competitive freight companies, advise you on methods of payment, and arrange all the necessary paperwork.

Our warehouse staff are specialists in packing orders fast and in the most economic way to minimise freight costs.

**PLUS A complete range of products from over thirty leading manufacturers**



#### JUST ONE STOP FOR EVERYTHING YOU NEED

Hundreds of satisfied clients around the world have proved that it makes sense to centralise purchasing with Cerebrum Lighting.

We keep our sales counter at New Malden open every weekday from 8.30 a.m. until 6.30 p.m. to trade, professional and retail clients and there is plenty of free parking space right outside the door.

*Worldwide dealer distribution - Cerebrum Lighting Ltd. Units 4 & 5, Shannon Commercial Centre Beverley Way, New Malden, Surrey KT3 4PT England. Tel. 081-949 3171 Fax. 081-949 3649*



Is colour crucial? Trilite pieces can be produced in any shade of any colour, to ensure your structure does the job – in style.



## Trilite

OPTIKINETICS LTD 38 CROMWELL ROAD LUTON LU3 1DN ENGLAND  
TELEPHONE 0582 411413 FACSIMILE 0582 400613



COMPLETE DESIGN, MANUFACTURING AND  
INSTALLATION SERVICE AVAILABLE

#### FILLED CLOTH CYCS ARE A SPECIALITY

BORDERS, GAUZES, TABS & LEGS MADE UP  
FROM FIRST CLASS, FLAMEPROOFED  
MATERIALS AT COMPETITIVE PRICES

LONDON: 081-965 8188  
FAX: 081-961 6348

MANCHESTER: 061-793 5848  
FAX: 061-794 5651



# ARRI

## IMPULS

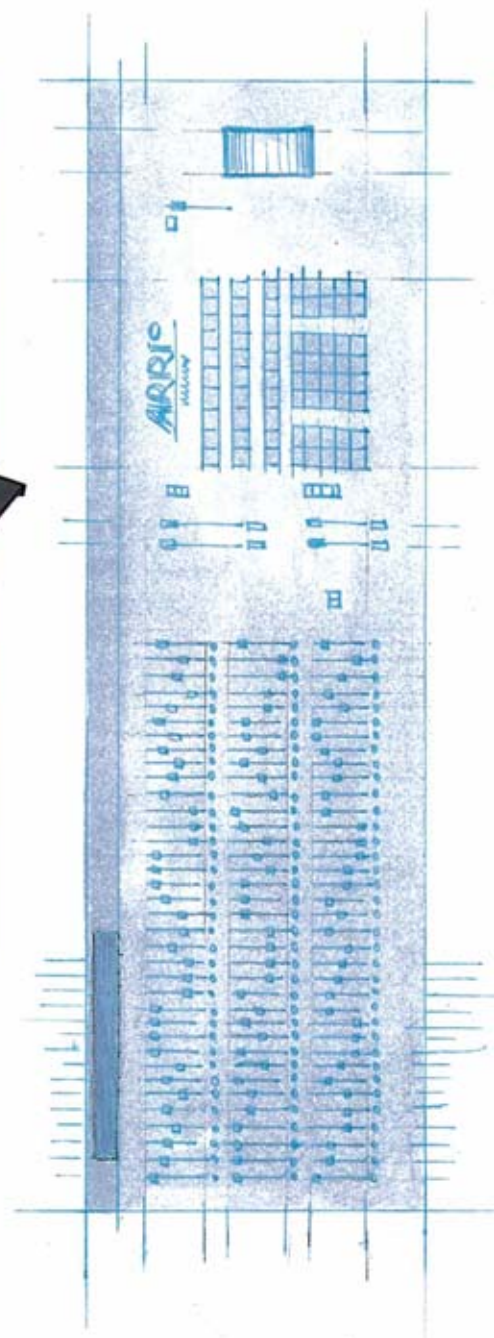


Consider a Lighting Console with all the features of a high-end memory system, but the manual feel of a rockboard.

Think about a Console with 108 Channels, and 108 Submasters, which can also run cue sequences, effects and Macros. And drive 512 Dimmers.

Muse on what you could do with MIDI, or a Designer's Graphic Tablet. Or an Infra Red Remote.

Stop Dreaming! Call your ARRI Dealer for a demonstration.  
**ARRI IMPULS.**



# ARRI

**ARNOLD & RICHTER**  
Cine Technik  
Türkenstr. 89,  
D-8000 München 40  
West Germany  
Tel.: (089) 3809-1,  
Telex: 524317

**ARRI (GB) LIMITED**  
1-3 Airlinks,  
Spitfire Way,  
Heston, TW5 9NR  
England  
Tel.: 081-848 8881  
Telex: 916075

**ARRI ITALIA SRL**  
Via Paolo  
Orsi 47  
00178 Rome  
Italy  
Tel.: (06) 7970797  
Telex: 620339



# BONJOUR SIEL

John Offord reports from the first show of the season

This year's SIEL show in Paris from 16 to 19 February attracted the same number of visitors, a similar number of stands, and pretty well the same range of equipment. It was almost a repeat of the 1990 event. I'd driven the same route: stayed at the same hotel.

You had to dig about, and ask more questions. I did my best, over one long day. I found a few things.

On standard lighting control there were two new boards: the Cantor from ADB and AVAB's Mini-Expert. They both aroused good interest. The Cantor provides the option between memory mode for 48 channels and total manual mode with 2-scene presets of 24 channels. The Mini-Expert, alongside other AVAB control systems on the stand of Robert Juliat, had no accompanying literature and I didn't have time enough to queue. More on both of these boards in future issues of L+SI.

Steve Warren of Avolites, supporting their control equipment, directed my attention to the Midi-Light System making its debut on the Regiscene stand: a versatile lighting and pyrotechnic controller which runs from a Midi signal. It is essentially a software package running under Microsoft windows, an Atari 1040 (Midi input as standard) and rack mounted output modules.

The Midi-Light module will output analogue (0 to +10V) or DMX 512 up to 128 channels and the Midi-Fire module contains 64 channels of 18 Volts (2 Amps of drive current) for firing pyros - ideal for son et lumiere and such things. System designer Julius Tassarach was on hand to explain the system's many features: 128 channels, 256 memories, timed fades, chases and time code control.

SIEL is a national show for an important market. Most of the 'regulars' were about, but you had to look up and remind yourself of the distributors' names. Zero 88 had their full range under the LCB banner with Jean Paul Querry. Zero's David Catterall had counted no less than seven Sirius units at work controlling lighting on stands scattered about the show. On the stand of Pariscene Arri controls were demonstrated by Tim Burnham: he speaks



Typical SIEL: structures and colour.

excellent French, so he always gets the job.

Surprisingly, Strand Lighting's appearance was limited to a small range on two distributors' stands. Light Palette 90, the new MX board and a few lanterns were present on the Eclalux stand, but the Strand nameboard was fixed at a low level, and easily hidden by bodies. On the CSE stand there was MX again, this time with Gemini 2.

Celco's prime location was on the stand of Pulsar France (now CP&P - keep reading) but there were more systems about the hall if you looked for them. As a venue for touring and production companies, SIEL is an important annual focal point, and there are never many majors missing in this field. It is a show of structures, and if a Thomas wasn't about in person, the name and the system certainly was.

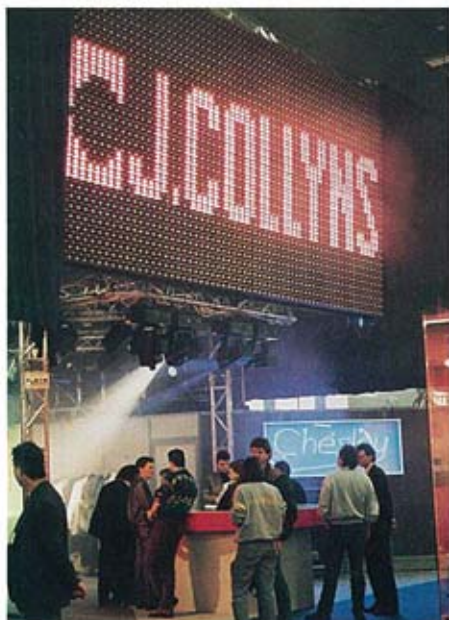
Bytecraft of Australia had their full range of control equipment on view on the stand of their French distributor Texen, following their international debut at the PLASA show last

year. MA LCD 60 and 120 touring boards were on the stand of their French distributors Galatec sitting alongside Galatec's own range of performance controllers. Crystal Equipment had the Compulite range of controls from Israel and Group Panavision International showed the Windsor range of luminaires.

Advanced Lighting Systems' Engima controls were attracting a lot of attention on the small but exceedingly busy stand of Fiatlux, and emphasising the Cerebrum Lighting link with the UK, the Sunn Midi lighting control board was here as were ColorMag colour changers.

Another colour changer that's always around is the Rainbow, and this was evident on the Audioscene stand. A scrolling unit I hadn't come across before is the Diafora, located on the stand of RV Electronique. This unit is designed for larger lanterns: 5k fresnels, 2.5, 4 and 6k HMI's, 1.8k MHD's and 8 x 650W Minibrutes.

Fully automated lighting was less evident



The emporium of J. Collyns, big in the French market.



Christian Leonard of ADB with their new Cantor control board.



Celco's Keith Dale in the driving seat on the Sonoss stand with Rick Romano of Summa Technologies and Philippe Coudyser.



More Sonoss structures.

this year, but Celco's Keith Dale and Colin Whittaker were commuting between the stands of Pulsar France and Sonoss to keep the flag flying for the SummaHTI system from California — the first automated lighting instrument designed exclusively for the USITT DMX512 protocol.

On the subject of mirror-wagging lookalike units, or near lookalike units or any unit with a mirror at the end, my interest is fast waning, and I've simply stopped counting or listing how many there are around. TAS of the



Strand Lighting control on the Eclalux stand.



AVAB's Mini-Expert.

Coemar family have now developed the ultimate: a lookalike — I'll have to leave you to decide like what — that can be badged by distributors with their own brand name. It won't be long before it takes a dedicated mirror-waggle buff to keep track of it all. Despite all this the big names keep their identity and their style. Now CP&P in both France and Germany (more of which in a separate feature in this issue), Clay Paky and Pulsar had their usual professional exhibit, with a suitably French performance from Carl

Dodds and John Lindsell on the OSKA control with the you-know-what Scans wagging their particular mirrors to excellent artistic effect. Coemar competed on equal terms with a varied rig of their latest units as did Martin with a full range of Roboscans. High End Systems from Texas had their Intellabeam 700HX working along with Dataflash on the back wall, Emulator, and the Viper dual beam laser projector.

Among the French manufacturers, J. Collins showed their Light Operator controllers for the smaller discotheque, cabaret and bar sector. They come in four versions, with the larger MX4 and SX8 units launched at the show. Also new from Collins was the Flashline system. Each bar contains four long life Xenon strobe tubes mounted inside a 1.20m trapezoidal PVC tube. Up to 50 can be plugged together and the dedicated control system comes in two versions, depending on the size of system installed. Also on the Collins stand, JEM had some of their big smoke gear, with Mike Wood and Jon Petts frightening the life out of casual bystanders with the power of their Roadie unit that looks vaguely like something out of Chitty Chitty Bang Bang.

The Hallier stand was taken over by their new line of architectural lighting units — a total of six basic units with numerous variations, add-ons and fittings.

Sapro were showing their new 'French CanCan', another multi-mirror projector, a dichroic sound to light unit with six colours. Obviously there's another CanCan unit on someone's list, so this has to be the 'real' thing!

There is little to report on lasers or searchlights. Espace Laser had a good graphic



Midi-Light explained by Julius Tessarach on the Regiscene stand.



Teatro's Mike Lowe (left) with Coemar's Bruno Dedoro.



The TAS range from Italy — give it your own name.



Pulsar's Masterpiece on demo.



Scale actors, scale stage and scale lighting — all designed 1:25 by Jean-François Salieri and controlled by a Zero 88 Sirius on the LCB stand.

show in a neat structure from **Albret Industrie** of Montpellier, and **Mitecom** had the latest in their Xenon searchlights. In **Axel's** Ariane range the Louisiane simulator is a powerful unit at a low price. **Hardware Xenon** flew the banner for projection (see story in General News this issue).

Sound plays a big part in the SIEL show; not on noise levels, which the management have somehow managed to drastically reduce, but in the presence, largely on various distributors stands, of most of the major names. I deliberately left coverage of these out of this report because the real news would come up just two weeks later at the Frankfurt Music Fair. I'd only muddle my mind, and



Advanced Lighting's Enigma on the Fiatlux stand.

most probably yours, if I attempted to report on sound in this feature.

In the tough times of recession I applaud the efforts of some smaller UK manufacturers in particular who find the time and cash to toil away at new markets — and the French market is a difficult one to bust into at the best of times. Prior to their regular joint performance two weeks later at Frankfurt, both **Multiform Lighting** and **Cloud Electronics** were represented by Iain Price-Smith and Roy Millington respectively, on the stand of their distributor, C.D.S. Details of their latest products will appear in our Frankfurt Music Fair report in the April issue. Other UK equipment on the stand of C.D.S. included Abstract's lighting



Kupo Lighting is distributed in France by LCB.

units and Ryger controls. The **Databeat** system was demonstrated on the stand of DCI.

If you haven't visited SIEL before, then to complete the picture of the show you have to realise it's more than just sound and lighting. It has almost everything — from theatrical costumiers to bar furniture — that the broad span of the entertainment industry requires, either in services or products. It is the big national show for France.

And because France is one of the few countries in the world that can come up with things innovative and artistic on occasion, you have to go. Certainly the French do — well over 20,000 of them, every year.

**À bientôt!**



Cloud Electronics' Roy Millington (right) with their CXM modular mixer on the stand of C.D.S. with Martin Longley.



Hardware Xenon: projection talk.



David Caterall (left) did a solo effort with the Zero 88 range.



JEM's 'Roadies' Jon Petts and Mike Wood on the stand of J. Collins.

# CP&P GERMANY

## CLAY PAKY AND PULSAR UP AND RUNNING

John Offord reports

In November last year it was announced in L+SI that Pulsar Light of Cambridge and Clay Paky of Italy would be forming a jointly-owned company to supply and service the German entertainment market. Our story also carried the news that Clay Paky and Pulsar GmbH would be managed by Ralph-Jörg Wezorke, a director of Lightpower.

Whilst at the recent Frankfurt Music Fair I spoke to Pulsar director Ken Sewell about their decision to attack the German market in this way, and how they came to take this particular.

"We've worked very closely on the technical front with Clay Paky over the last two or three years," he explained, "and this side of things has got better and better with close liaison now working extremely well at all levels of operation within the two companies.

"Taking this a stage further, commercial co-operation can assist greatly and is based on a logical co-operation on things like the sharing of exhibition stands and promotion which is now becoming more and more closely linked," continued Ken Sewell. "On the subject of distribution, the two companies' policies have been divergent in the past in terms of who they sell to and the prices they sell at, and so on.

"Our commercial operation is designed to bring together these diverse philosophies and make sure we build a commercial structure with the same sales support and promotion — across the world. This takes time, but we are making very positive progress.

"When Pio Nahum started with Clay Paky we went to visit various people because we felt we needed someone in Germany who was capable of giving a full level of support we felt was needed to build up the market. We went to Lightpower they had been quite a big distributor of Clay Paky equipment.

"I was immediately impressed with the set-up as I saw it. The building strikes you as being professionally organised, with people who knew what they were doing. We were also impressed with the team of staff, who all seemed to be extremely efficient. Within about 10 minutes of walking into the place I felt that as long as we could sort out a suitable arrangement, this was what we wanted.



Günther Olbricht, sales manager for CP&P Germany.



The CP&P image. A new flag for the nineties at the Frankfurt Music Fair.

"CP&P is owned jointly by Clay Paky and Pulsar, but obviously we had to sort out a deal with Ralph-Jörg which made it interesting from his point of view."

Obviously negotiations were successfully concluded and Ralph-Jörg was appointed as managing director of Clay Paky Pulsar GmbH with Günther Olbricht recruited as sales manager. "Günther's a very conscientious and efficient guy who fits in extremely well with the rest of the team," said Ken Sewell.

"In just exhibiting at this show in Frankfurt we can see the advantages of working with him. The design of the stand has been well-

organised and Günther has been able to call upon the resources of Lightpower for the supply of trussing, manpower, and so on. Derrick Saunders and Andy Graves arrived on the afternoon before the show, and had a lot less to do than in previous years!"

In the near future, Pulsar, Clay Paky and their joint operations in both Germany and France will all be using the same computers, running the same programmes, and also capable of transferring the data not only on tapes but by direct Modems. "Communication is vitally important," explained Ken Sewell.

"We intend building up CP&P as a symbol of service and support, and in the future it may be



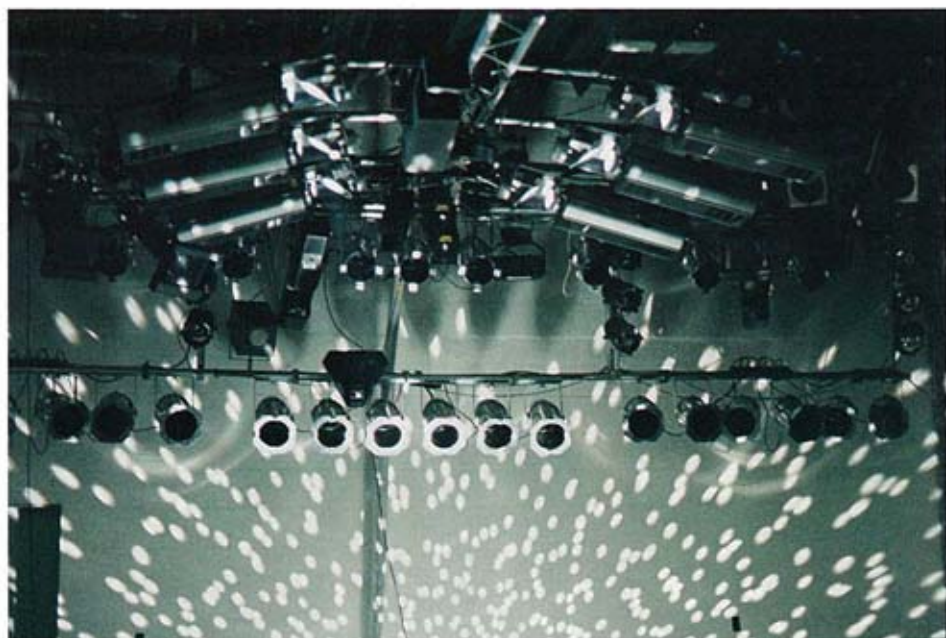
CP&P managing director Ralph-Jörg Wezorke (right) in the Paderborn demonstration studio with Günther Olbricht.

possible to apply that symbol to other distributors world-wide, similar to the idea of franchising a name. However, I've always been a believer that each step should be commercially self-justifying on its own, and we have no great world plan. If you've got a good man doing a good job in a certain place, why upset the apple cart?"

Returning to Germany, I asked about the first response to CP&P and how well initial sales had started, bearing in mind only two months of the new operation has passed. "It looks quite promising, and it's going to plan," responded Ken Sewell. And in Ken Sewell speak, that usually means things are better than just good.

MD Ralph-Jörg Wezorke told L+SI: "There has already been a very positive response from customers. With the flexibility of CP&P we are able to supply nearly every product from stock. Due to the intrinsic quality of the products, source and back-up is easy to arrange, and due to this their high class image world-wide this greatly influences customers' confidence.

We have at our disposal one of the best sales teams in Germany — and I don't think we can avoid a major success with CP&P products in the future!"



Another view of the demonstration studio.

## Lightpower Goes International

Lightpower of Paderborn in Germany has come to prominence on the international scene over the past two years in parallel with the introduction to the market of MA lighting desks, described in the associated feature in this issue.

The company has a new and very smart custom-built base, and partners Jürgen Proppe and Ralph-Jörg Wezorke have organised a highly efficient sales operation dealing in the touring, theatre and discotheque markets. Stock and despatch of goods is very neatly organised, right down to special small volume packaging of Rosco Supergel, for instance, and there is an excellent demonstration studio.

Other products distributed include Lycian followspots, Safex smoke machines and pyrotechnics, Slick trussing, and their own range of stage equipment and lanterns in the 'Major' range.

The company was originally formed by Jürgen Proppe in 1979 with a partner, and Ralph-Jörg Wezorke joined in 1981. Proppe and Wezorke are now equal partners in Lightpower, and they have a staff of 12.



The Lightpower team: (left to right) Ralf Vockel (partly hidden), Andreas Witt, Michael D'Antonio, Jürgen Proppe, Franz-Josef Glahn, Ralph-Jörg Wezorke, Franz-Josef Wewer, Gabriele Korsten, Gunther Olbricht, Ulrich Speckemeter, Markus Reddeker, Oliver Rump and Martina Schallinat.



Ralph-Jörg Wezorke sells Supergel.



Lightpower's partners: Ralph-Jörg Wezorke and Jürgen Proppe.

# MA LICHTTECHNIK

## THE GERMAN FORCE IN CONCERT LIGHTING CONTROL

John Offord reports from Würzburg



Ralph-jörg Wezorke of Lightpower (left foreground) with the four directors of MA Lighting Technology: Ernst Ebrecht, Thomas Stanger, Michael Adenau and Werner Hauptvogel. Also in picture is John Lethbridge of Cerebrum Lighting (extreme right).



Ernst Ebrecht is MA's software specialist.



Tracy Morton is test and production engineer.



Michael Adenau (above) formed MA Lichttechnik in 1983 with Thomas Stanger.

MA-Lichttechnik (MA — Lighting Technology) of Eisingen near Würzburg in Germany sprang to international attention at the Frankfurt Music Fair held in January 1989 and confirmed their presence with an appearance at the PLASA Show in London later the same year. Production of their now well-known black and red liveried LCD consoles began in May 1989 following the successful prototype showing at Frankfurt, and 70 were produced up to January 1991. Along the way, in January 1990, they moved to new premises so that production capacity could keep up with the demand.

The company was established in 1983 by Michael Adenau and Thomas Stanger, and in the early days the product range covered power packs and several smaller desks with matrix memories. "By late 1985 our popular Lightcommander was one of the first reasonably priced real level memory desks on the market," said Thomas Stanger. "To date over 600 units of Lightcommander 24 and 48 have been sold to various European countries."

The company is now run by four directors who are also the only shareholders. Michael Adenau studied electronics and then began designing and repairing sound equipment for the music industry. For four years he was engineer for a German rock band and gained valuable on-the-road experience. He looks after MA's electronic and product design. Thomas Stanger studied mathematics and economics and looks after the company's commercial operations and the vital links to users of MA equipment.

Joining the operation as it grew were Ernst Ebrecht and Werner Hauptvogel. Ernst also studied mathematics and worked in the industry as a sound mixer/engineer for over 10 years. His role in MA is as software specialist. Finally, Werner Hauptvogel, a trained electrician and mechanic, is responsible for MA's production and product design, and the robust but light construction of all the company's products is down to him.

These four technical men with no suits have from the beginning channelled all surplus funds back into the business, and made relatively slow but very steady progress. However sure they may be of their own immense strengths in electronic design, they have been careful not to rush onto the world scene. "We've had good experience with the German market," said Thomas Stanger, "and the problems are the same anywhere. Now we're very excited about the international market."

Up to now MA has let things happen at a natural pace, but when the speed-up began they decided to ensure their future was planned as carefully as possible. The men with sales and marketing experience were due to take their place in the scheme of things.

Lightpower of Paderborn now handle all MA



Part of the assembly area at MA's at Eisingen near Würzburg.



sales. The two companies had met in 1986 and selling arrangements for small control systems commenced in 1988. The involvement continued, and in 1989 a full agreement was reached for world-wide sales with the 1989 PLASA Show the venue for the LCD control console's first showing outside Germany, and where their 120 channel console had its official launch. Ralph-Jörg Wezorke of Lightpower was the man (in the suit) who ran the stand and brought it to market.

"It's the only 120 channel rock desk that exists," said John Lethbridge of Cerebrum Lighting, who handle MA sales in the UK and who will work together with Lightpower on the development of US sales. "It fills a niche."

Ralph-Jörg Wezorke, sales director of Lightpower considers that the boards can take their fair share of the market and make a profit. "There is room for everyone," he said.

Back-up for MA desks is now assured in many major European countries. France, Spain, Belgium, the Netherlands and Austria have dealers with boards and the necessary expertise, in addition to Germany and the UK. So far, the vast majority of LCD's have been sold in Germany and France. Obviously their main home has been with hire companies but two have been installed in major discotheques in Germany and in France a couple have found their way into the theatre market.

So, what makes the LCD range special? And why buy an MA board rather than one of the big name long-established boards. At the end of the day it comes down to the personal choice of key hire companies and lighting designers. If it gets specified, it's got a chance.

Running down a list of key features of the LCD120 it scores extremely well: 120 channels, 25 memory pages, 600 memories and up to 99 chases. It can address 240 dimmers and has soft patch built in as standard. Amongst other things it has SMPTE time code synchronisation included and a sound to light unit is standard. The price is highly competitive.

It will now be interesting to watch developments and see how it fares in the hard cut-and-thrust of world touring. And equally intriguing to watch how Lightpower and Cerebrum bring it to the international market.

#### Stop Press

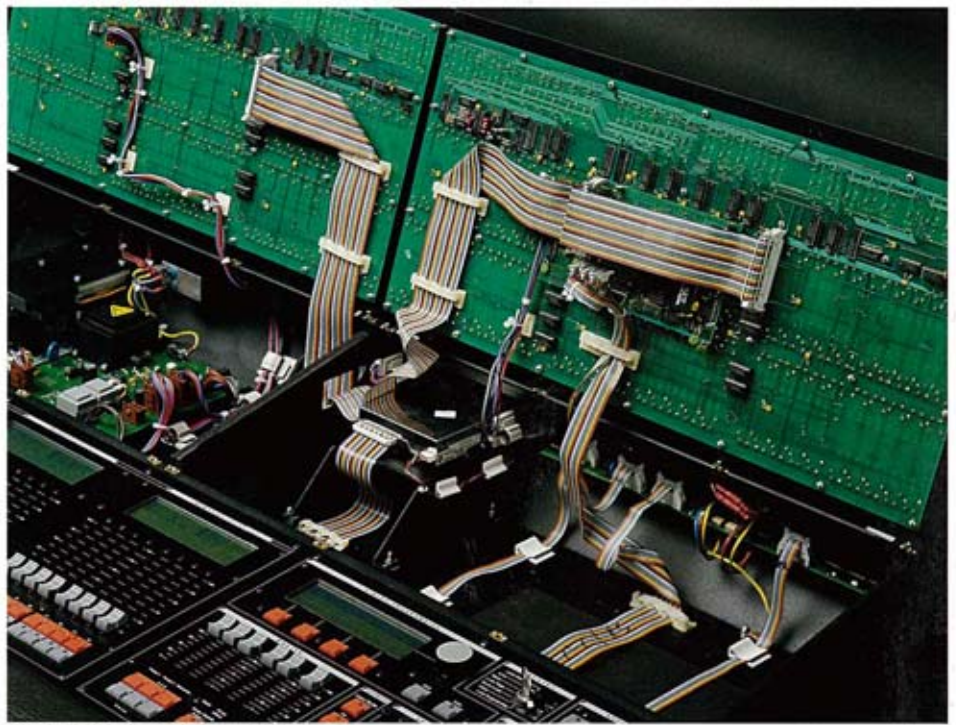
As we went to press MA launched Lightcommander II 24/6 and 48/6 at the Frankfurt Music Fair. With two presets and six additional channels, controlled by potentiometers, the MA Lightcommander II actually features 30 resp. 54 analog outputs. Using DMX 512 (1990) these channels can be patched to 120 dimmers with patch table on display.

Beside easy use of basic features the consoles provide a wide range of special effects. A large LCD display offers a good documentation on all functions, from 'Programming Memory' up to the listing of single channel intensity during preview or modify. In addition to 192 memories on eight pages the dynamic storage handling allows up to 4000 real level chaser steps to be saved. The speed of one assignable chases can be set or modified even by a 'Learn Speed' button.

From timed autofade between the presets, to pre-programmed sequences with individual fade times per step, the Lightcommander II offers a wide range of cross-fade operations, which are shown by a moving bar in the display. A real time clock on display, sound input, MIDI In-Out-Thru and a high speed cue card increases the new consoles' flexibility.



An LCD120 in the early stages of manufacture.



Inside view of an LCD control console.



This LCD120 desk was installed at 'M' discotheque in Cologne in October 1990.



Thomas Stanger, Ernst Ebrecht, John Lethbridge and Ralph-Jörg Wezorke discuss the latest software developments.



## The Spirit range is now available from **Marquee Audio**, call us for a demonstration

Soundcraft is one of the world's leading console manufacturers, with a design philosophy that has been the foundation of our success for over 17 years.

The Spirit range epitomizes this philosophy.

Innovative design. The finest components. Advanced circuit design.

It comprises three PA consoles (featuring a unique Mono

Bus), and two multitrack consoles (with up to 56 inputs in the larger frame size).

Such ingenious design has produced consoles of unrivalled audio quality.

Such ingenious design is only available in the Spirit range.



# ROCK IN RIO II

L+SI gets the generic lighting design information from Patrick Woodroffe

Pete Barnes discusses how he worked with the 'system'

I first learned about my involvement with Rock in Rio II whilst on tour with Lisa Stansfield last summer. Tim Hook, Lisa's tour manager, showed me the lighting specification as designed by Patrick Woodroffe. Mentioned in it was the fact that the system would be assembled in miniature at Patrick's 4:1 Studios and that any designers involved in the shows would be able to visit the studios to check out the system.

So in November I went down to 4:1 Studios in Battersea to take a look at what I would be operating for Lisa's show in Rio de Janeiro. The system that Patrick had designed was, needless to say, very large – it had to cover a 100ft stage. The basic system comprised three overhead trusses ranging from 80ft to 40ft, on which were positioned 180 lamps and 26 Vari\*Lite VL2Bs. Around the back and sides of the stage was a three-tier trussing arrangement encompassing 540 Par 64s and 42 VL4s. All the trussing, both in the wall and overhead, was painted silver and lit from within by Colormags.

In addition to the lighting system set up at 4:1 there was additional lighting for the audience and PA scrims. Outside the performing area of the stage were two large PA scrims lit by 40 VL4s and 16 Molemags. As the show was being televised by TV Globo, with an expected audience of 70 million in Brazil alone, a considerable amount of

audience lighting was installed. 96 VL3s were positioned on lamp posts dotted around the audience, along with a number of Par 64s, positioned in between the PA and the performing area and on the stadium roof. On the special effects side, Laser Media provided a double laser system, controlled and positioned upstage centre and there were four cracked oil machines and four JEM smoke machines remotely controlled from the desk.

I decided that I would wait until Rio to do my programming, as most of the time consuming work involved the Vari\*Lites. In January I did however pay a visit to Vari-Lite Europe's London training studio together with Fraser Elisha, the Vari\*Lite operator, so that we could refresh our memories of Lisa's show and also select some colours to utilise in the VL4s, as on the previous tour we were only using VL2s. This proved to be a useful exercise.

On Sunday 20 January I made my way to Terminal 3 at London's Heathrow Airport. Walking between the tanks, I entered the terminal and made my way to Varig Airlines' check-in. The scene here was like an old school reunion, as on the same flight were the band and crew of Lisa Stansfield, George Michael and A-ha. The Stewardesses didn't know what they had in store!

It was at this time the reality of what we were all in for began. I was informed by our production manager that the rolling stage,

which each band were to set up on, while moving perfectly well with no equipment, had collapsed on the first occasion a band had used one.

The flight was relatively uneventful and we all landed safely at Rio, to be ushered into three separate coaches which arrived simultaneously at the Rio Palace Hotel, amidst hordes of screaming fans. For our crew the Monday was a day off, but for George Michael's unfortunate crew on arriving at the hotel they were informed that they had had to go back to the airport to unload their equipment.

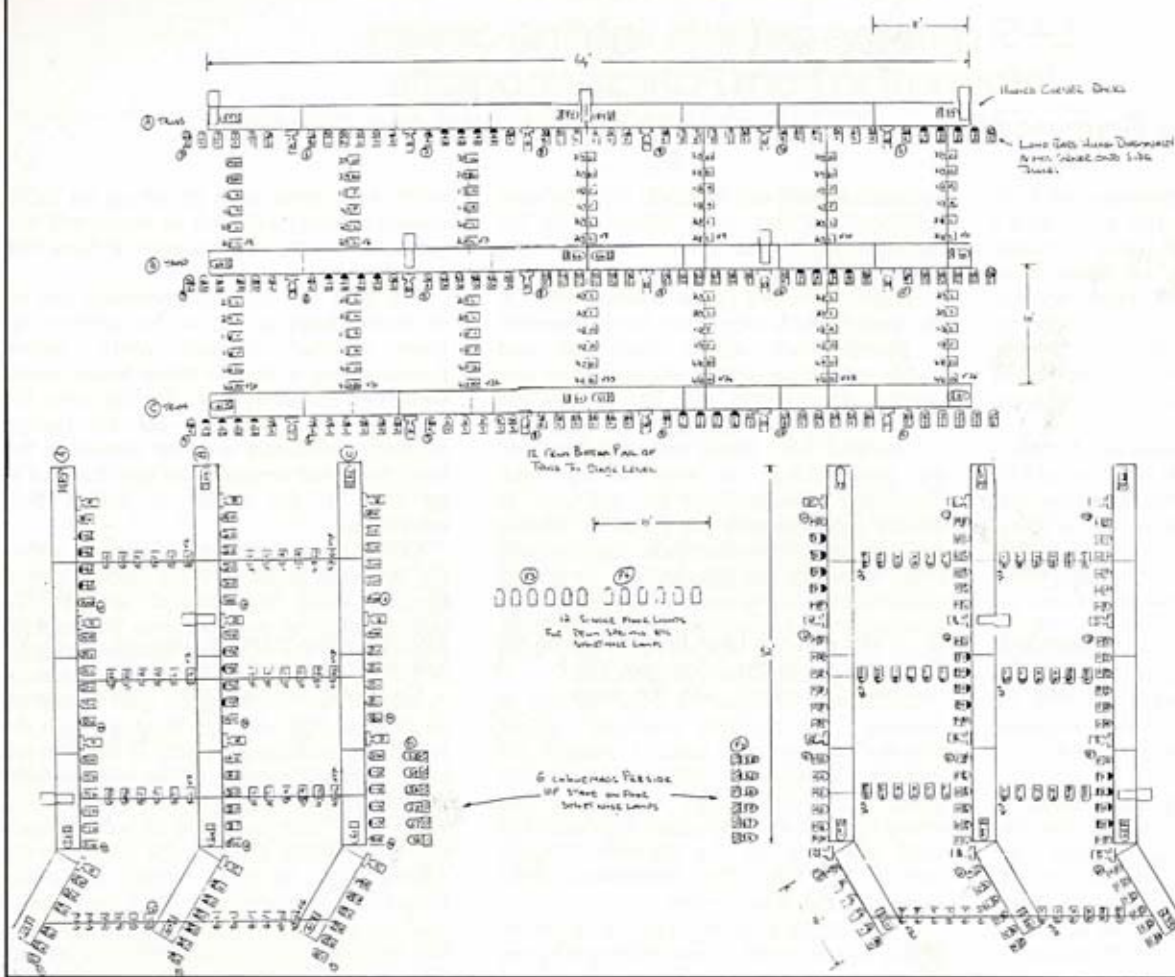
On the Tuesday we decided to pay a visit to the Maracana Stadium. At first sight, it looked like any other large football stadium. On walking onto the stage we were informed by Rick O'Brien, one of the production managers, of all the problems they had encountered. Apparently, on the first night, after having set up Prince's stage set, they went to move the rolling stage into position, only to find that the locals who had constructed the unit had used wheels without bearings, and it would not move. They then attempted to pull the stage with chain hoists. It was at this point that the castors started to break, turning the whole thing into a 10 ton sledge. They then had to jack the stage up on palette trolleys and using tow trucks on the football field, pull it back down to the position for Prince's show. The



Capacity crowds enjoy the Rock in Rio experience.

# Samuelson CONCERT PRODUCTIONS

20-22 Fairway Drive  
GREENFORD  
Middlesex  
UB6 8PW  
Telephone: 081-575 8888  
Fax: 081-575 0105  
A MEMBER OF THE LIGHTING AND SOUND  
DIVISION OF SAMUELSON GROUP PLC



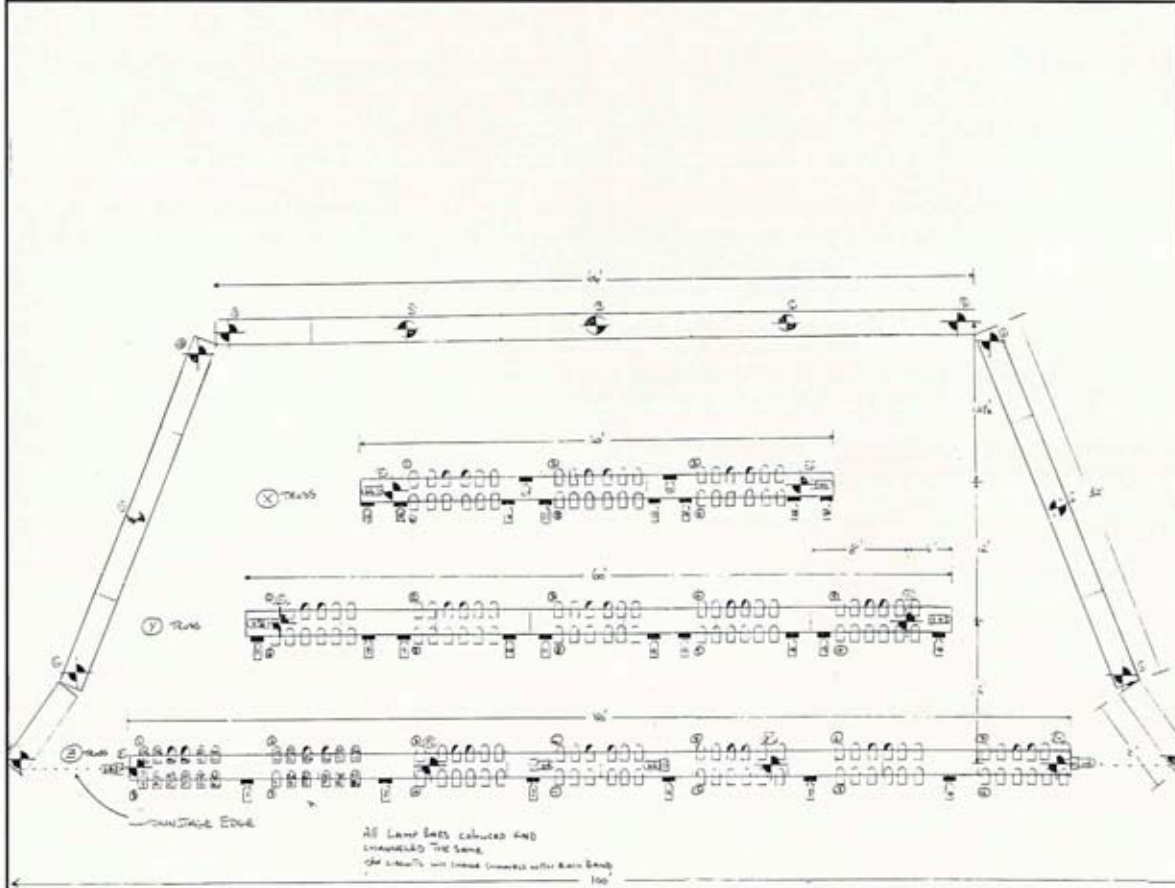
- Light fixture
- Cable tray
- Cable tray with cable
- Cable tray with cable and label
- Cable tray with cable and label and note
- Cable tray with cable and label and note and note

Colours	Spot Colours
T = 500 W	1000 W
A = 1000 W	2000 W
E = 1000 W	3000 W
P = 1000 W	4000 W
B = 1000 W	5000 W
W = 1000 W	6000 W
C = 1000 W	7000 W
D = 1000 W	8000 W
L = 1000 W	9000 W
Other other white	

Design: Patrick Woodhouse  
Date: 2 November 1990  
Drawn: Steven Adams  
Scale: 1/4" = 1'0" / 1/50  
Drawing Number: 1 of 3  
Drawing Reference:  
© Samuelson Concert Productions 1990

# Samuelson CONCERT PRODUCTIONS

20-22 Fairway Drive  
GREENFORD  
Middlesex  
UB6 8PW  
Telephone: 081-575 8888  
Fax: 081-575 0105  
A MEMBER OF THE LIGHTING AND SOUND  
DIVISION OF SAMUELSON GROUP PLC



- Light fixture
- Cable tray
- Cable tray with cable
- Cable tray with cable and label
- Cable tray with cable and label and note
- Cable tray with cable and label and note and note

Colours
T = 500 W
A = 1000 W
E = 1000 W
P = 1000 W
B = 1000 W
W = 1000 W
C = 1000 W
D = 1000 W
L = 1000 W
Other other white

Design: Patrick Woodhouse  
Date: 2 November 1990  
Drawn: Steven Adams  
Scale: 1/4" = 1'0" / 1/50  
Drawing Number: 2 of 3  
Drawing Reference:  
© Samuelson Concert Productions 1990

nett result was that every other band had to perform in front of Prince's set. Needless to say, after the show the rolling stage was dismantled, never to be used again.

Another piece of local ingenuity was the PA scrims. Apparently the first scrims were made from what was described as duffle coat material. Whilst looking all right, they did nothing for the sound! Luckily, Gerry Tickells had brought some black scrims with him and the night before the first concert, Keith and Miranda Payne painted these with the Rock in Rio logos.

In view of the problems with the rolling stage we worked out a way of utilising the pieces of stage set we had brought with us for Lisa's show, along with the individual rolling risers which were available at the stadium. The only parts of the set we had brought from England were a set of six stair units incorporating architectural lights. To power these lights I had brought a Socapex spider cable and the relevant pieces of TRS, so all I needed from the festival lighting company was a Socapex cable with six channels at 220 volts.

After having resolved any problems connected with our show, we departed from the stadium and headed for the hotel swimming pool. We decided not to venture down to the gig until our allotted programming time on Saturday night, so it was sight-seeing for five days. In reality it only takes two days to see all the sights of Rio. The festival organisers were, however, very good at organising trips, many of them free of charge, for the bands and crews. We did try one day to go jet skiing. On assembling in the hotel lobby we were told that the lake was rather dirty at the time because of the wind direction. We enquired as to what their definition of dirty was, and they informed us it was sewage. We decided that maybe it would be safer not to go.

Ten o'clock on Saturday night, together with Fraser, I catch the shuttle bus to the Stadium. Rio traffic seems to get worse as the night goes on. Whilst sitting in a traffic jam I noticed a pub called the Queen's Legs; surely only an ex-Brit would use this name for a pub. I glanced around to see if the King's Head was anywhere in the vicinity. The landlord was probably a friend of Ronnie Biggs.

On arriving at the Stadium A-ha were on stage, so we made our way to the lighting mixing tower. Mick Healey and Bruce Ramis were busily operating the Celco Gold and Artisan respectively. The lighting system looked impressive; I particularly liked some of the movements by the VL4s on the PA scrims.

A-ha finished their set at approximately 12.30, so we had half an hour to familiarise ourselves with the system before a Brazilian act went on and a further half an hour between 2.30 and 3 am before the Happy Mondays' set. During the Happy Mondays, the heavens opened and a tropical rain storm began which was to last most of the night. I have a vivid memory of looking up at one of the TV monitors and seeing the Happy Mondays' bass player looking more like a member of the RNLI. The shot was taken by a camera on the stage aiming into the follow-spot and he had his anorak hood up with the cords drawn tightly around his chin. As well as seeing the rain teeming down in the beam of the spotlight, you could also see it bouncing off his head. Happy Mondays finished at around 3.30 am and we then began some serious programming.

I decided to keep the conventional lighting reasonably simple and only programmed around 30 memories. Fraser, however, had his work cut out going through the Vari\*Lite cues, song by song. At around 4.30 am Roy Bennett and Gary Westcott arrived on the tower to start

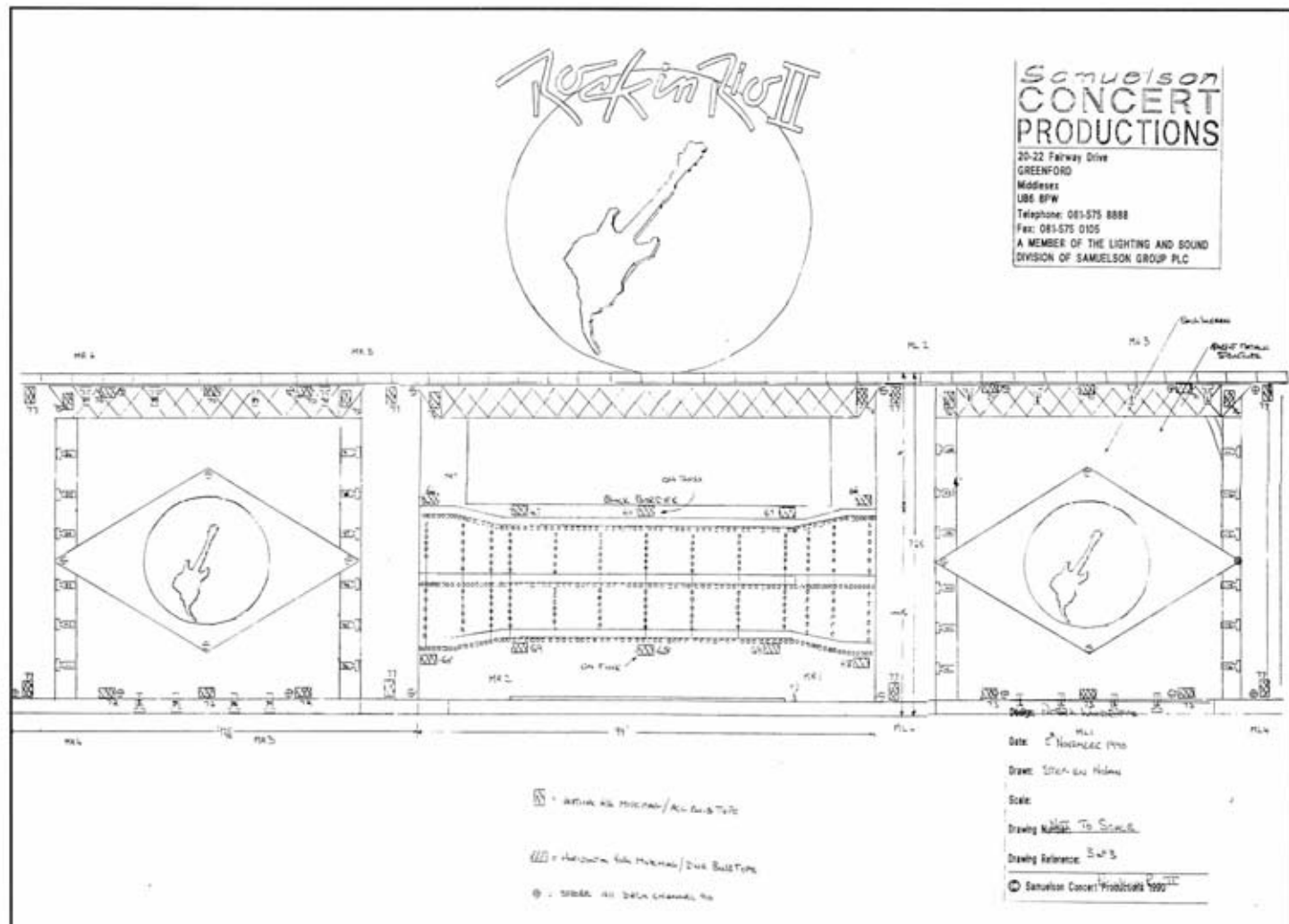
programming some additional cues for George Michael. Roy generously told me to take as much time as I needed but at this point I had almost finished what I needed to do. Fraser however, was still frantically pushing buttons and examining memories in the Artisan which already existed. We conferred about what we should do for each of the songs.

At around 5.00 am we decided we had programmed approximately 75 per cent of the show and it was time to let Roy and Gary do their bit. On trying to store the cues from the Vari\*Lite to disk, we discovered a serious problem; almost every lamp was showing a 'communication error'. Out of 120 lamps, we managed to save the information from only three. We all stared blankly at the display as the Artisan kept on coming up with the same message.

To say the least, we felt dismayed at the prospect of having wasted our time. Roy and Gary, however, decided not to attempt to load their information to the lamps as they previously had a problem with the system corrupting their disks. At 6.00 am we went to catch the shuttle bus to find that a dozen of the local workers were using it as a camper. After we woke them up, they left reluctantly and we returned to the hotel.

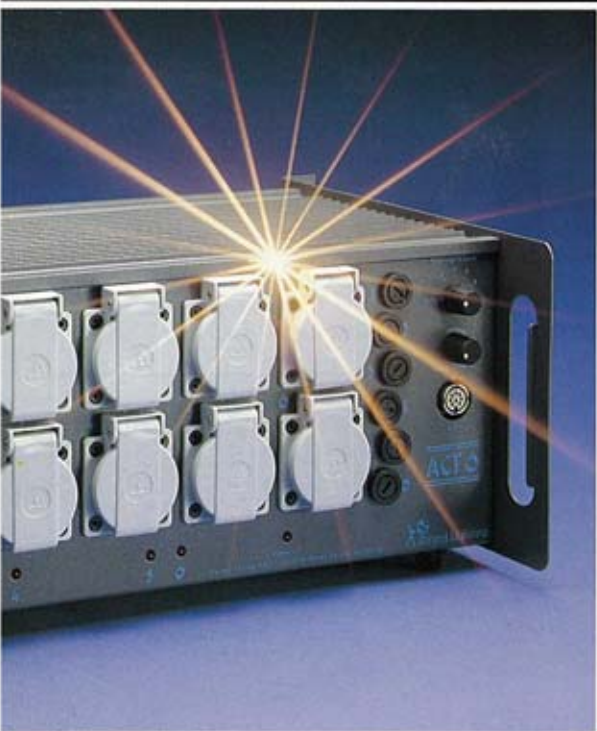
On Sunday, our show day, I trekked down to the gig at around 3.00 pm to see if the architectural lamps in our stage set had survived the trip. Luckily there were only five tubes which needed replacing. Tonto, our stage manager, was at this point re-wiring all the 15 amp plugs.

When the Vari\*Lite technicians turned up, they began to investigate the problem and found that a waterlogged repeater box was the cause. Fraser then ventured out to the tower to see if the lamps had retained their memory from the previous night. Much to our relief, we





# Strand's new stars make professional lighting a luxury you can afford.



Strand, the world leader in entertainment lighting, is proud to announce three exciting new ways to add professional sparkle to your performance — without breaking the bank.

- MX 2 - scene preset+memory controls with 12, 24 or 48 channels of 2-preset faders and scene masters; flash button per channel; split manual master faders with LED column display; timed fades; up to 192 memories in 4 pages; and much, much more.
- The Quartet Spotlight range, including top quality zoom and fixed angle profiles with a host of impressive features.
- Act 6 Dimmers with two output sockets and taking either positive or negative analogue control input.

Find out more about Strand's new stars, by calling today, or returning the coupon.



**Strand Lighting**  
A REPUTATION BUILT ON BRILLIANCE

**Strand Lighting Limited**  
Grant Way, Isleworth, Middx TW7 5QD  
Telephone: 081-560 3171  
Telex: 27976. Fax: 081-568 2103

**DYNAMIC  
AND  
DEPENDABLE**

Please send more information about:

- MX Control Boards     Act 6 Dimmers  
 Quartet Spotlights

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Telephone \_\_\_\_\_





The massive rig structure.



The Maracana Stadium. The Vari\*Lites on the lamp posts were used to light the audience.



Gun's & Roses in performance in Rio, with lighting design by Phil Ealy.

were able to load all the information from the previous night's programming.

Feeling much more confident, I began to work out how I was going to utilise the 17 followspots. As the whole show was going to be viewed by considerably more people on television than in the stadium, I decided to use spots on each of the band members, and to keep things simple I split them into four groups, Lisa front and rear, and band front and rear. This proved to be the best way as none of the operators spoke English and all had to be cued via an interpreter!

The show itself went off with very few hitches. I was slightly confused in the second song, when I faded up the trussing luminaires and nothing happened. I then realised that the over-ride on the Celco was turned on — a feature I do not normally use. As the show went on, both Fraser and I became more confident. By the time we got to Good Morning Heartache, we were even smiling as Bob Batty leaned over to check the temperature of my beer, asking if I would like a colder one.

The two guys from Laser Media did a couple of great effects for me during the show. In one song I asked for a slow moving red laser effect and in another the normal blue/green lasers darting around the stage, and these effects dramatically complemented the lighting for the show.

After Lisa's set I wandered out to have a look at what Roy was doing for George Michael and noticed that he was suffering from a similar problem to me, in that the wind was blowing the smoke first from one side of the stage and then to the other, making it difficult to predict which machine to trigger. As he had brought over an additional 12 VL2s which were placed at the rear of the stage set, this was a particular problem as any gobo effects were proving difficult to see.

One thing that amazed everybody was the stamina of the audiences, who had danced for almost 12 hours on each of the nine days of the event. I think they all had a good time and appreciated the amount of work everybody had put into making the festival a success. No doubt people in Europe and the rest of the world will get a chance to see clips from the festival on their respective TV channels in due course.

On Monday I left Rio before the rest of our crew. I had to travel to San Francisco to make sure everything was going well with Sting's equipment set-up and first shows. A complete change of scene!



Pete 'Pele' Barnes in action.

## ROCK IN RIO II — PART II

The basic lighting scheme for Rock in Rio II, designed by Patrick Woodroffe, is detailed on these pages. His notes and schematics were provided to each lighting designer involved with the event

### Design

The basis of the design is a large wall of lights which stretches around the back and sides of the stage on three levels. This wall contains 540 Parcans and ACLs arranged in 10 colour washes which can then be broken down into different focus areas. The bars of lights are arranged both vertically and horizontally and are circuited to provide lots of different chases and colour permutations.

The wall structure also holds 42 Vari\*Lite VL4s scattered around the rig. Their positions will allow focuses on the stage and audience as well as on the structure itself. There are nine 400W HTI followspots with operators, again arranged around the wall on different levels.

In addition to the wall there are three overhead trusses, 80', 60' and 40', that work from downstage to upstage. They will be trimmed in such a way as to form a sort of perspective view. The last 16' on each end of the front (80') truss can be hinged down to help contain the stage a little for some of the smaller sized bands. The overhead lighting contains some colour wash fill but also has a lot of single circuited VSNP lamps. These are for specials and a limited number can be re-circuited or re-gelled over the eight nights of the festival. The trusses also contain 26 Vari\*Lite 2Bs for specials and for gobo work over the stage and structure.

All the trusses, both in the wall and overhead, are painted silver and lit internally with Colormags.

There are some low floor wash lights with Colormags on each side of the stage and also some floor cans which can be changed for each act. There is a full white cyc behind the light wall and this is lit top and bottom with Molemags.

Each side of the stage there is a large PA wing the same height as the stage and roof structure and almost as wide. These wings are modelled with some sort of metal mesh and scrim and are lit top and bottom with Molemag colour changers. They also have 40 Vari\*Lite 4s scattered over them which can be used to light the structure itself and the audience. The spaceframe which surrounds both the PA wings, and the stage and roof, is lit by ACL Molefays with colourchangers.

There are eight front-of-house Supertrouper on the mix tower arranged on two levels.

### Television

Every act on every night will be filmed for broadcast on Brazilian National television. Three songs from each of the international acts will also be broadcast live by MTV and then subsequently used for various TV specials in another 30 countries. The broadcast side of the event is obviously very important. TV Globo is the television company responsible for the filming of the concerts, and I think it's important to have an idea of their background and also of their importance in the scheme of things.

The viewing figures for the show are estimated to be upwards of 70 million people in Brazil alone (Brazil has the largest TV audiences in the world) and because of this Globo's position is quite powerful. They are an important element of the show and it is unlikely that the festival would take place without their involvement.

This situation affects us all as the lighting designers in two predictable ways: the concerns of the TV company with regard to the lighting levels onstage and the lighting of the audience. Globo have given me specific parameters in which they want us to work, f-stops they must attain, colour saturations that are acceptable, etc. I have explained that none of the lighting designers could possibly work under such specific conditions but that they are all aware of the problems involved in filming and that they all have had experience of doing this sort of thing in England and America. I believe that the way the lighting is laid out will give us all ample opportunity to get good pictures on the television without compromising the integrity of the performances, but please be aware of how important this is to the success of the festival.

The audience lighting is being provided and operated by a Brazilian company under the direction of Peter Gasper, a German who lives in Rio and speaks good English. The system is quite large and involves almost as much lighting in the stadium as there will be on stage — lots of Pars and ACLs and also 96 Vari\*Lites. The intention is to turn the Maracana Stadium into the biggest club in the world both between acts and also at various points during the performances. The control for this lighting will be from the main lighting control position and will be run by Peter, albeit with direction from the lighting designers.

Anyone who has worked in Rio, and especially at the Maracana, will know that the Rio audience is one of the best in the world and the shows there invariably become a whole event rather than a simple performance. I think this justifies putting more emphasis on the crowd than normal and the results on TV are usually pretty spectacular.

### Operating and Programming

As the programming time available on the night before each show is very limited we hope that you will all try and use the lighting system in quite a general manner rather than trying to reproduce in detail the shows that you may already have.

The preceding night's show will often not finish until 2 am and as it gets light by 5.30 you can imagine the scheduling problems involved. We will have programmed a series of generic cues into the Celco board before you arrive: full washes, side washes, simple combinations of colour and also some chases.

This will be a good basis to start from when you come to run the shows. We will be able to allocate a certain amount of pages on the Celco to each act. There are a limited number of Celco Q-Cards available, but if any designers have their own with cues or legends already on them then of course they should feel free to bring them along.

The Colormag board will have the main colours programmed into the first 16 channels with a further group of cues assigned to each act.

We will take the same approach with the Vari\*Lites as we do with the conventional lighting, making up general focuses and colours along with some chases. Dave Hill and Rusty Lowrie are looking after the programming and will be able to assign blocks of memory to all the acts. If you don't have your own Vari\*Lite operator Dave or Rusty will be happy to help out and run the show for you.

There is the option of a black or white backdrop behind the wall and the possibility of some different scenic finishes is also being explored at this time. The idea of these different looks is to give some variation to the television broadcast over the period of eight nights and although we will try and include all the lighting designer's in the choice of who uses what, please understand that we must look at the festival as a whole when making these decisions.

A quarter scale representation of the lighting system will be set up at the Four To One studio in London during the last week of November and the first week in December, during which time we will be doing a lot of generic programming for the festival. You are welcome to come down and see the work in progress and also to make a start on your own programming for the shows. It will also be useful if you or your production managers want to see how the stage layout looks in relation to the lighting system.



Prince in action in Rio.

### Special Effects

There are four cracked oil machines and four JEM Smoke Processors placed around the stage. Control for the Smoke Processors is at the control desk.

Laser Media is providing a double laser system with one table onstage and one at the mix position. This is primarily to provide a laser display during the set changeovers but it may also be used in some of the headline acts. If lasers are normally part of your shows you may want to discuss the idea of trying to reproduce some of the effects. Please let us know as soon as possible if this is the case.

Air Artists from England will be providing a series of inflatables for entre-act entertainment.

There will be a firework display at the end of each night's performance. Please let me know if you are planning to use pyro in your show.

As has already been mentioned there is a 96-lamp Vari\*Lite system already in the arena for effects and audience lighting. If you have any specific ideas as to how you may want to use this during your show please give it some thought so that we can co-ordinate with the (English speaking) system operator.



## COLOUR INFORMATION

### Wash colours (Roscolux)

Yellow - 15	Lavender - 58a
Amber - 22	Blue green - 95
Red - 27	Green - 75
Pink - 42	Congo - 56
Blue - 62	

### Colormag colours (Lee Filters)

1 Clear	9 True blue - 196
2 Deep amber - 104	10 Dark blue - 119
3 Deep orange - 158	11 Medium blue green - 116
4 Primary red - 106	12 Dark green - 124
5 Bright pink - 128	13 Dark lavender - 180
6 Rosy amber - 193	14 Smokey pink - 127
7 Surprise pink - 194	
8 Congo blue - 181	

### Molemag colours (Lee Filters)

1 Clear	8 Congo blue - 181
2 Deep amber - 104	9 True blue - 196
3 Deep orange - 158	10 Dark blue - 119
4 Primary red - 106	11 Medium blue green - 116
5 Bright pink - 128	12 Dark green - 124
6 Rosy amber - 193	
7 Surprise pink - 194	

### Followspot colours (Roscolux)

1 Bastard amber - 01	4 Pink - 42
2 Amber - 22	5 Lavender - 58a
3 Yellow - 15	6 Blue - 62



Billy Idol.

## CREDITS: Rock in Rio II

### Festival organisers:

Artplan SA, Rio de Janeiro

### Production company:

GLS, Los Angeles

### Lighting designer:

Patrick Woodroffe

### Lighting companies:

Vanco Inc, New York  
Samuelson Concert Productions, London  
Vari-Lite Inc, Dallas

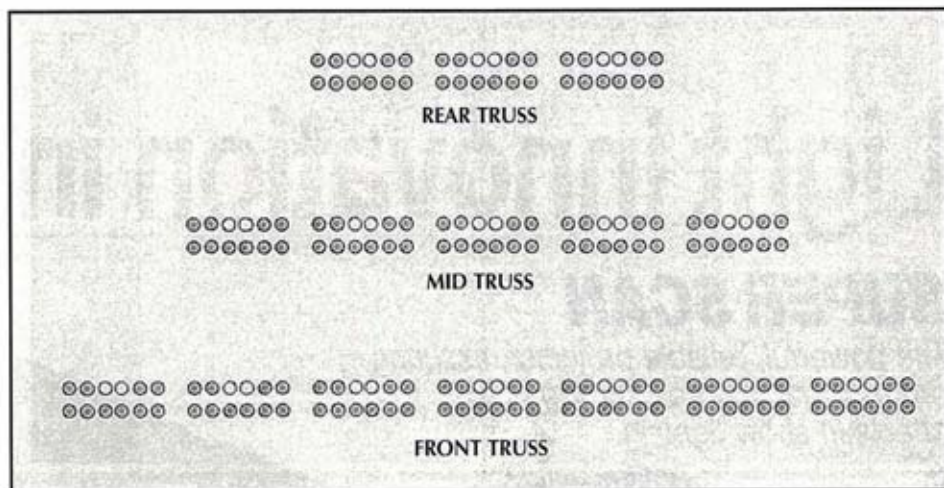
### Scale rehearsals:

Four To One Studio, London

### Laser company:

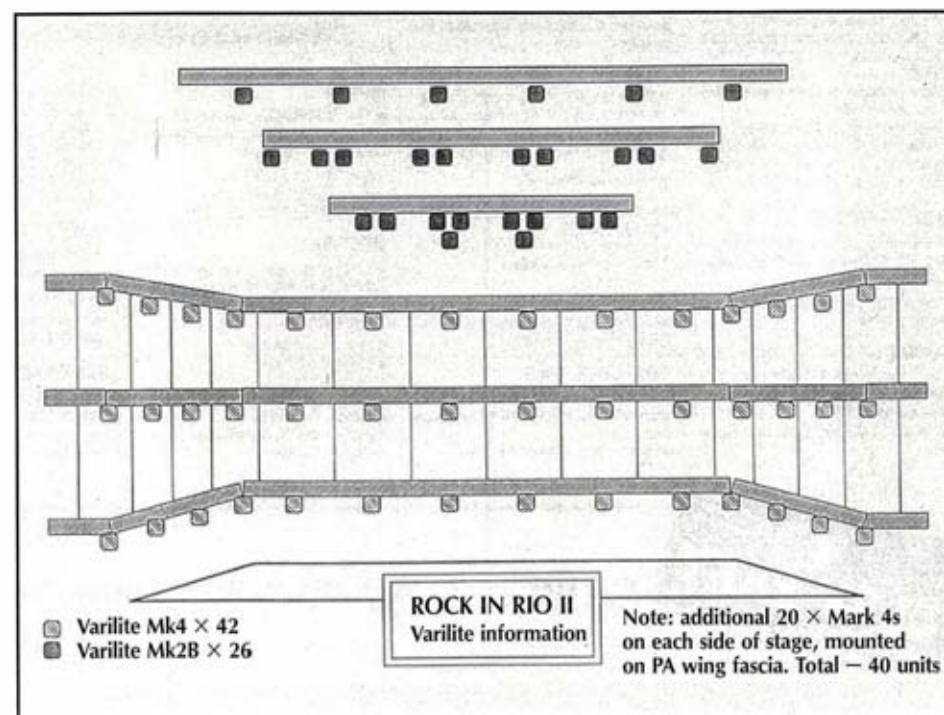
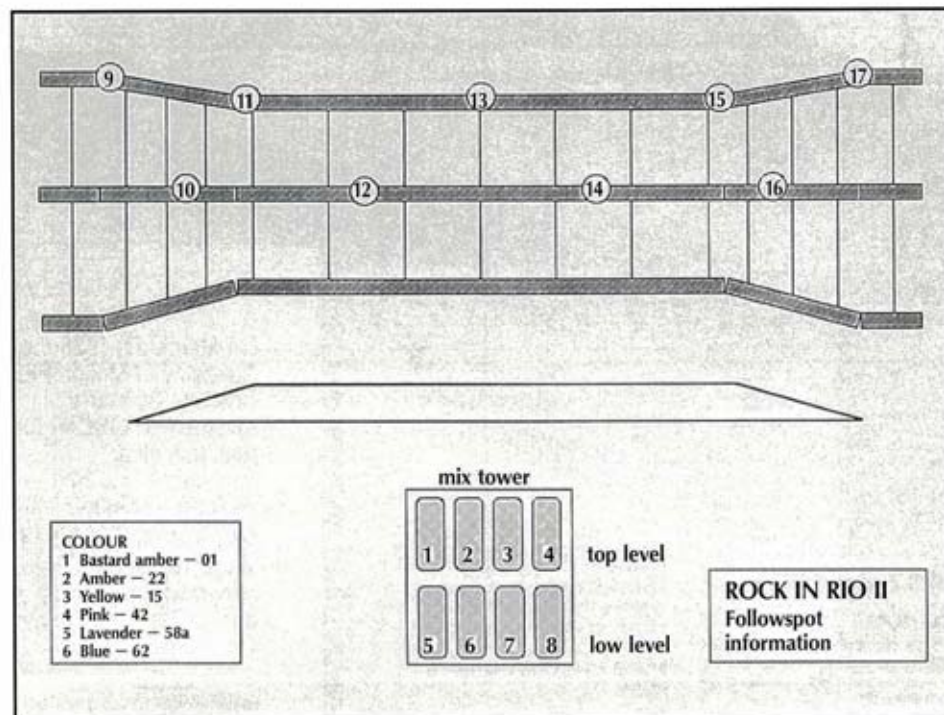
Laser Media, Los Angeles

Exclusive 'live'  
photography of  
Rock in Rio II  
by Neal Preston  
including this month's  
front cover



## SPECIALS

Units with no shading are single par 64/VNSPs which may be recircuited, regelled and refocused from night to night. Control channels 78 to 89 have been left clear for this purpose but bear in mind that these channels must also include the 12 loose floor cans which can be repositioned for each act. (You don't have to use all of these units if you don't need them. Changeover time is short and we would like to avoid too much refocusing and regelling between acts!)



# Light innovation in a system

## SUPER SCAN

The powerful, reliable projector, assuring professional features, for top quality effects in show lighting.



### BUILT-IN EFFECTS

#### COLOURS

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

#### COLOUR MIXING

- Waste range of colour available by mixing the primary colours Red, Green and Blue.
- Virtually all possible hues and levels are obtainable.

#### GOBOS

- Two wheels with 4 Gobos each. You can project each pattern separately or in combination.
- A total of 16 different patterns are available.

- Gobos change with or without temporary blackout (\*).
- An evocative rolling effect is available by shifting of two superimposed Gobos.
- Gobos are interchangeable and easy to replace.
- A wide range of Gobos is available on request.

#### IRIS

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

#### PRISMS

- Three trioptic prisms create multiplication and overlapping of projected patterns.
- The prisms have 3, 5, 9 facets.

#### STOPPER/STROBE

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

#### DIMMER

- Mechanical. Full adjustment of light intensity from zero to 100%.

#### OBJECTIVE LENS

- 1:3/250 mm achromatic doublet lens, giving the best colour and transmission performance.
- Focussing remotely controlled.

On March 27, 1988 the Academy of Motion Picture Arts and Sciences awarded an OSCAR for best technical development to HMI daylight discharge lamps.

HMI daylight discharge lamps represent a new generation in lighting design. With their compact



dimensions, short arc, daylight spectrum and long lamp life they are an unbeatable light source and are particularly suitable for projection units and effect luminaires.

## OSRAM



#### INPUTS

- The SUPERSCAN can accept either analogue or digital control signals, from controller or computer.
- analogue input: 0-10 V.
- digital serial input: RS 232/43 - DMX 512.

#### MOTORS

- 17 high resolution steppers motors, controlled by internal microprocessor.

#### CHANNELS

- 12 control channels:
- Channel functions:
- channel 1 = Iris
- channel 2 = Colour disk
- channel 3 = Gobos
- channel 4 = Stopper/Strobe
- channel 5 = Pan

- channel 6 = Tilt
- channel 7 = Fading Dimmer
- channel 8 = Prism
- channel 9 = Focus
- channel 10 = Red colour Mix control
- channel 11 = Green colour Mix control
- channel 12 = Blue colour Mix control

#### SAFETY NORMS

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

#### DIMENSIONS

- mm. 430x230x1320
- weight 50.7 Kg.

(\*) Option to be pre selected directly by users.



CLAY PAKY s.r.l. - Via G. Pascoli, 1 - 24066 PEDRENGO (Bergamo) Italy - Telefono 035/663965 - Fax: 035/665976 - Telex 305242 CLAYPA I

# CONTROL BEYOND IMAGINATION



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

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

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

## MASTERPIECE

### • 108 CHANNEL MEMORY LIGHTING DESK

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

### • DESIGNED FOR:

Theatres, Bands, Discotheques, Intelligent Spotlight and Environmental control.

### • CONCEPT:

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

### • STRUCTURE:

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

### • FOR THEATRICAL USE:

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

### • INPUTS:

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

### • OUTPUTS:

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

### • SPEED:

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

### • MEMORY:

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

### • SOUND TO LIGHT:

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

### • SECURITY:

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

### • OTHERS:

18 Keyboards of 18 pads, Lanch/Flash/Swoop/Solo keyboard modes, Sound to Light monitor, Joy stick with position/velocity, Change security code, Freeze output, Master/Slave desk, Chase section: Manual step fwd/rev, Speed, Slope, Burst/hold, One-shot/repeat, Use scene fade times, copy chase...

... THE  
SPECIFICATION  
SAYS IT ALL

FOR FULL SPECIFICATIONS CONTACT

**PULSAR**  
LIGHTING FOR EFFECT

United Kingdom,  
Pulsar Light of Cambridge Ltd.,  
Henley Road, Cambridge CB1 3EA,  
Tel: 0223 66798 Fax: 0223 460708

France,  
Clay Paky & Pulsar Surl.,  
10 Ave du Fresnoy, 14760 Breteville sur Odon  
Tel: 31 741001 Fax: 31734729

Germany,  
Clay Paky & Pulsar Vertriebs GmbH  
An der Talle 26, 4790 Paderborn  
Tel: 05251/409051 Fax: 05251/409931



LAMP M28  
M33 MSR 200

**powermoon**

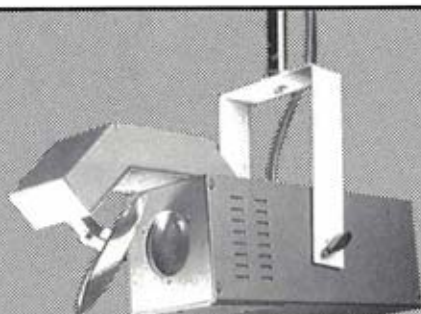
**'Installation Quality'  
'Affordable Prices'  
'Mobile Appeal'**

"Branded a revolution within  
the UK disco lighting industry."

**MOONSCAN  
100**

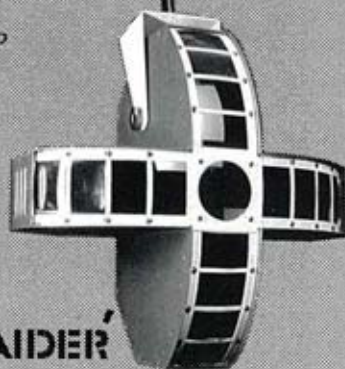


LAMP  
M28



LAMP  
M28 **ORBITOR**

LAMP  
M28  
M33

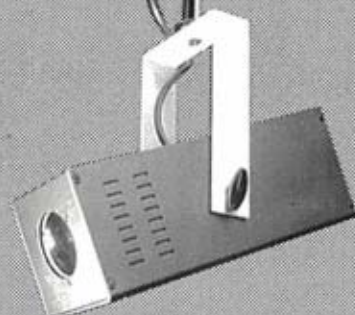


**THE  
RAIDER**

....."most creative  
lighting patterns seen  
anywhere in clubland"

Crouzet Motors Ltd

**INNOVATIVE**



LAMP  
M28 **SS100**

CALL US NOW 0533 357219 or FAX US ON 0533 340536

If you don't see INNOVATIVE on your spec. sheet, you may be  
sold short because we've got the POWER ! See us at RIMINI

"Overseas distributors" don't miss out. Call us to arrange a meeting at S.I.B.

## CONVERT A PAR CAN INTO A PROJECTOR

Why use a gobo when you can  
project a full colour  
transparency?

Image Pro fits the colour filter  
position of a standard fixture  
and converts into a projector  
for colour slides, logos,  
patterns and other images.

To find out more about the

**IMAGE  
PRO**



contact European Distributor:  
Optikinetics Ltd, 38 Cromwell Rd,  
Luton LU31 1DN ENGLAND  
Tel: 0582 411413  
Fax: 0582 400613

Image Pro available from:

Belgium  
Radio Violette  
Tel: 02 4283100  
Fax: 02 4282165

Finland  
Light & Sound Technology  
Tel: 0912 12189  
Fax: 0912 12089

France  
Radio Violette  
Tel: 27449877  
Fax: 27318683

Germany  
Light Effects  
Tel: 0234 294436  
Fax: 0234 285525

Holland  
Jac Van Ham  
Tel: 013 638585  
Fax: 013 638435

Italy  
Etabeta Electronics  
Tel: 031 773539  
Fax: 031 773798

Switzerland  
Electric Claudio Merlo  
Tel: 091 932561/2  
Fax: 091 933809

U.K.  
Optikinetics  
Tel: 0582 411413  
Fax: 0582 400613

# ERIC CLAPTON: WORLD TOUR 1990-1991

Catriona Forcer on Lighting  
Ben Duncan on Sound

Whilst in his native Ireland Tom Kenny fixed himself into the stage crews for many major Irish bands such as U2 and The Boomtown Rats and it wasn't long before he realised that his interest lay in lighting design. He built up a reputation of being good at his work and easy to get on with. At the age of 21 he decided there wasn't enough scope for him in his home country and armed with the following reference from Bernard Griffin of Lighting Dimensions of Dublin (see L+SI February 1991) he moved to London:

"Tom Kenny first came to my attention when, whilst still in the womb, he invented the electric light bulb. Tom spent his early years seeking a creative application for his invention, with little initial success. In the early 1950s, disillusioned by the lack of imagination shown by his contemporaries, he invented Rock and Roll, thus paving the way for Lighting Design as it exists today."

After a brief spell as Pope, Tom joined Lighting Dimensions in 1985, after having previously worked with every major touring act in the world. Since joining the company, Tom has shown himself to be hard-working, resourceful and efficient. He has never stolen anything of great value, and seems to have his drinking problem under control."

The first company Tom worked with in London was – surprise, surprise – Supermick Lights, where he obtained his first major design, for the Communards. He then went on to work for bands such as Tanita Tikaram, Alexander O'Neal, Fairground Attraction and T'Pau. Through Andy Zweck, Keith Bradley and Peter



Tom Kenny, lighting designer.

Clarke, Tom Kenny got involved with Eric Clapton in June 1989 when his previous lighting designer was busy on another tour.

"I had an interview with Eric's manager," explained Tom. "We never even spoke about lights; he just liked me immediately. We did a small European tour followed by Israel and five countries in Africa, which was great. They asked me before the tour ended if I would work on this current one. They'd never been that interested in lighting before, but decided it was time to try something."

"In between the two Eric Clapton tours I had a five month break where I worked for David Byrne of Talking Heads. Originally I was working

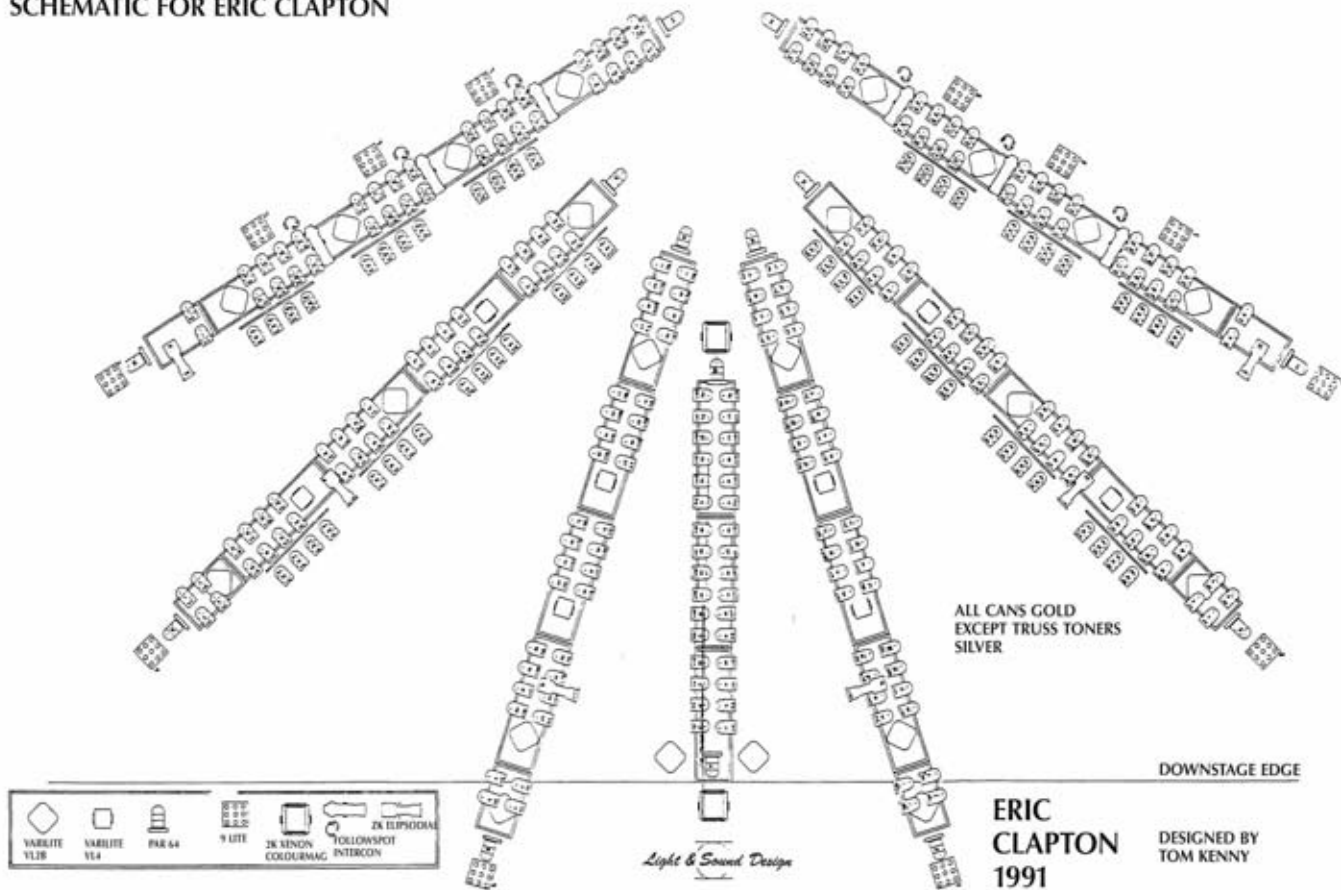
as the lighting director but I ended up as the designer. David Byrne is quite a paranoid chap when it comes to new people. He knows every instrument and every lamp. He would turn to me and say: 'Tom, I think that Leko is a little out of focus!' Also, he doesn't usually use colour, but he decided to on that occasion because I'm really into deep colours."

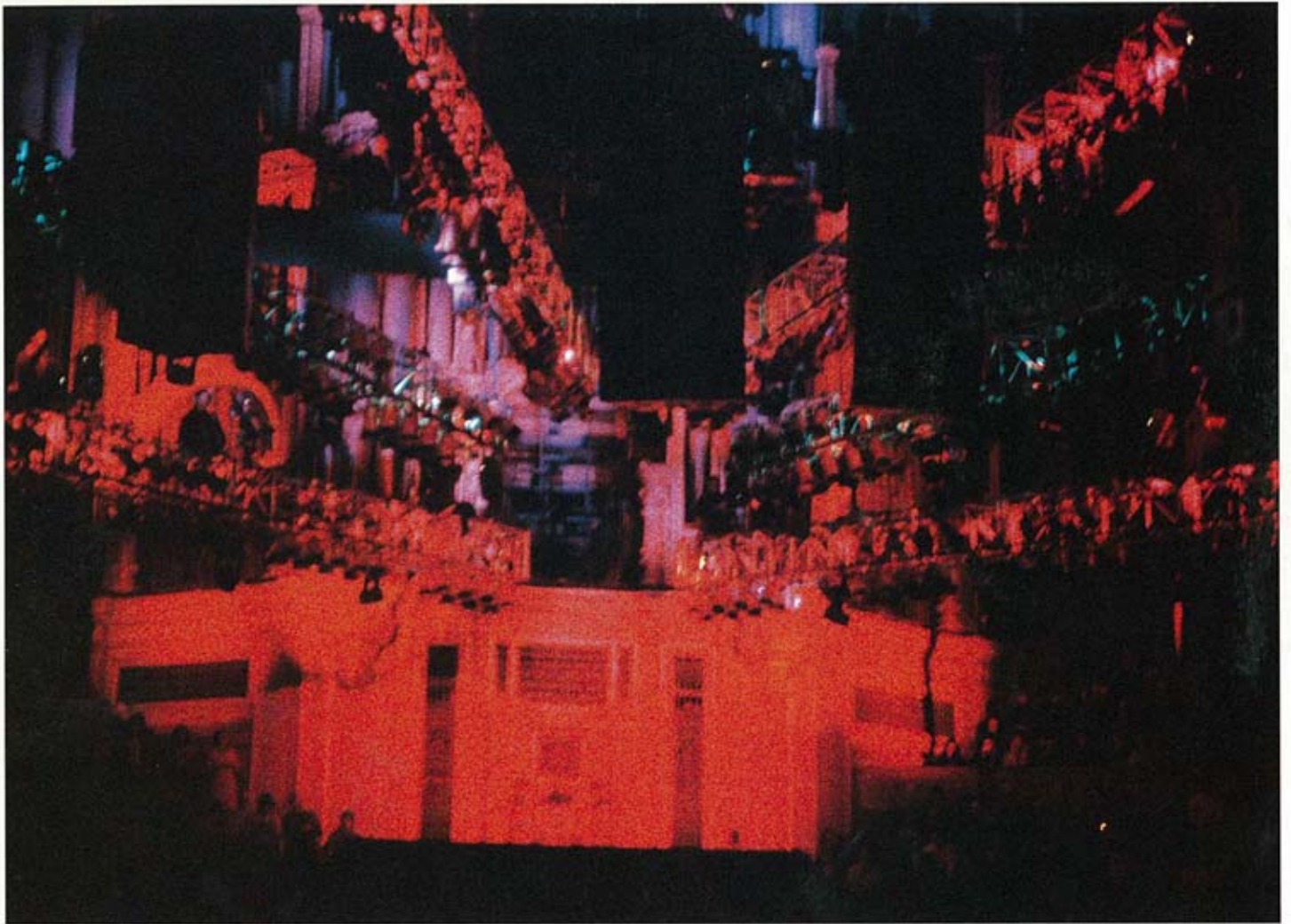
The current Eric Clapton tour started with rehearsals in Bray Studios in December 1989 followed by 18 nights at the Royal Albert Hall in London. 1990 was spent touring 25 countries including South America and the USA twice.

"The rig in the States was basically a box with staggered, split single trusses," continued Tom Kenny. "Vari-Lites helped us a lot because Eric Clapton was an account they had lost as the manager wasn't interested in Vari-Lites, and I wanted to use them. They gave us some new dichroic gobos, different colours within gobos, which hadn't been used before. Rick Hutten and John Wiseman from Dallas were very helpful and that's when I met my operator Andy Gibbs, who I think is one of the best operators in Europe. I involve Andy an awful lot in the design. In the USA we play 'in the round' which is more challenging as there's no backdrop and there are a lot more angles to think about."

"In the end it was designed by committee. I came up with one idea, Vari-Lites helped me with others, and LSD came up with a great deal by giving me new equipment which hasn't been

## TOM KENNY'S LIGHTING SCHEMATIC FOR ERIC CLAPTON





Design into reality. The enormous rig featured several new lighting products including Lycian 1200 followspots and LSD's 2k Xenons.

used before like the Lycian 1200 followspots. Together with production manager Mick Double, I also had to design something that could go in and out of arenas quickly and still look effective. So I designed the basic thing, and with help from Vari-Lites and then with the assistance of the chief electrician, the riggers and production manager, we determined how to do it. It worked out really well because everyone felt they had been involved. When you are touring America, getting in and out quickly is very important to the act because of the costs involved.

"When I'd been in Japan with David Byrne I'd noticed that all the colours were really dark and much deeper, so I decided to put them to better use with this tour. I wasn't going to use Vari\*Lites in Japan so I decided to go a bit more theatrical and, for the first time, I was allowed to use a backdrop. I used a lot of projectors, groundrows, etc and it was a completely different show from what it is now.

"We played some really unusual places like a stadium in Uruguay with only three trusses – but then Eric is one of the few artistes who

can get away with only that. In Kuala Lumpur I was told to be really simple with my design because they only have about 100 lamps. So I sent a plot of two trusses and we received faxes back saying 'no problem'. We arrived a day early to the most amazing concoction of lights and all different types of bulb. There's not really much you can do! In countries like Israel you pick up what you can, and I found that by being down to earth and nice, I got the best results from people because they'd be willing to work with you. I've certainly had to be versatile on this tour, to say the least!

"We wanted the Royal Albert Hall shows this year to look a bit different from last year so I've designed a completely new rig. We rehearsed in January at the Point, Dublin and then did two shows there with Phil Collins as drummer. Eric has had so many lighting designers they've probably done everything you can, so I decided to come into the Albert Hall and work around the building.

"My initial thought was that no one had ever done anything concerning the organ although it has been lit before rather boringly. I decided to get a bit arty and make it look as if the rig was coming out of the centre of the organ. I depend on a lot of very deep colours; not dark colours but very strong primary colours. With Andy I brought that through into the Vari\*Lites as well. I design the format of the rig – how it's going to look and what colours we are going to use – and then I give it to Andy to work out his palette and the gobos. Then in rehearsals he works them in; it's very relaxed, with no pressure, and works every time.

"All of us, including the sound engineer, followed the idea of the trussing and then we fitted everything into it. LSD even painted the



Eric Clapton, above and opposite pages, on stage at the Royal Albert Hall, London.



Parcans to the colour of the organ. 'We've got a couple of the new LSD 2k Xenons with colour changers on the rig. They are basically designed to work alongside Vari\*Lite's; they add a new dimension and completely new look. It's a very powerful light; you can change the focus and you can programme in any type of cue you want. They're quite dandy, and I've had no problems with them whatsoever. I've got the prototype desk but there's a new one coming out soon which is great and more like a Vari\*Lite desk.

"I don't move the lights too much during the show because it's not really that type of music. Basically Andy and I have worked out a show with Parcans, Vari\*Lite 2Bs and 4s and followspots, and we use them sparingly. At times it's quite stark with just Vari\*Lite's, and at other times we achieve a 'big' look. Eric's music is very helpful in that sense because it's so well produced on stage that every night it's

the same show, in the lighting sense. He won't play the same thing every night, but for us it's great because he's just so spot on and the band are so good.

"I feel it's a real advancement for Eric Clapton to get to this system. They used to have just two genies and a backdrop and that was it. Now we're moving into the nineties. They never used to get compliments on their lighting, and now they do. I'm not saying that's because of me but simply because of the whole advancement in lighting and the fact that people are now noticing it more. I think it's because we have such a good crew on this show that everything has gone so well. We've been allowed to do almost anything we want, but to be responsible at the same time.

"This tour finishes on March 9th after a 15 month run and I've got a few other acts in the pipeline. I can't really say who they are because it might upset a few people! I'm

looking forward to a new challenge — not that I'm bored with this music! The nice thing about working with Eric Clapton is that from the production manager down, everybody is great and very helpful. It's very rare, but I think the business is changing that way as miserable people and the whingers are being weeded out. Personally, the management and production manager have really given me space to develop.

"I don't really know who I'd like to work with in an ideal world. I might be doing some stuff with Marc Brickman later on this year; it depends on what comes up. I really liked Marc's work with Pink Floyd and I also admire Patrick Woodroffe, Allen Branton and Jonathan Smeeton's earlier work. Shows that have really impressed me include Roy Bennett's Sinead O'Conner, Andy Doig's Chris de Burgh, and a show that Keith Dale did for Joe Jackson about four or five years ago."

## Ben Duncan on Sound

Eric Clapton's musical history is long enough to deserve a recap. It reaches back into the depths of British R'n'B, beginning even before he joined a Kingston Art College band called the Yardbirds in 1963. Clapton's first experience of residency occurred when the Yardbirds took over the residency vacated by The Rolling Stones at the Crawdaddy Club in Richmond. In 1966, he quit to join John Mayall's Bluesbreakers. Later that year, he left to form Cream, gaining critical acclaim at the 1967 Windsor festival. After Cream finished in 1968 and he went solo, he had already in the space of five years played with a dozen pivotal musicians who would form Britain's original wave of super-groups, from Fleetwood Mac to Led Zeppelin.

### World Tour 1990-91

In 1990, Clapton set out on a world tour, beginning with a four week-long residency in London's Royal Albert Hall, the circular Victorian concert hall famous for its annual Promenade Concerts, and more recently, for the disco mix championships. The tour finished on March 9th with a further, month-long residency featuring Eric Clapton and his band, alternating with The Royal Philharmonic orchestra and winding up with Clapton playing alongside the A-Z of bluesmen, from Albert Collins to Robert Cray. Sound throughout has been handled by Concert Sound. The company was formed by Barry Marshall, Robert Collins, Jeffrey Hooper, Tim

Boyle and David Hall, some 16 years ago. The PA system originated from the Man band. (Footnote: Man was a Swansea band of the late 60s and early 70s, better known in the USA than the UK).

When Man weren't touring, it went out on a rental basis, ending up full-time when Man disbanded in 1976. In the interview that follows, Concert Sound's Mick Anderson and Robert Collins are identified by 'M' and 'R' respectively.

### How did you end up in Watford?

M: "We came to the Watford area a long time ago purely out of a need for storage. It's a good place to be because we're only 25 minutes from stiking anywhere in London, but out of London rent and rate costs. Since then, it's grown and grown. It's been a dedicated slow process, moving forward as fast as we can. We're intent on quality. It's our main goal and it's what's kept us in business so long."

### What's been the most memorable concert on the tour?

M: "At the River Plate stadium in Argentina! It was very enjoyable for everyone concerned. The whole tour has been quite phenomenal. We've done better business than anyone had expected in strange places like Uruguay."

### You've played some unusual places?

R: "Yes, in places like Malaya they assure us 'everything you need will be provided', but we've learnt to take such assurances with a big pinch of salt, and take all our FOH control

gear with us!"

### What else have you been doing in the past year?

M: "We did a six month tour with El Ultimo Delafila in Spain, as well as touring with Spandau Ballet, Tom Jones, Shirley Bassey and Chris de Burgh. Last summer we did a series of large festivals in Germany with Chris de Burgh, Tina Turner and Simple Minds."

### Which speaker system are you using and why was it chosen?

M: "EAW, because it's proved most suitable for the Albert Hall. The KF series is a nice sounding box. It can cover a wide spectrum of music. The KF-850 is a lot easier to install and fly and put into the right positions; last year we'd used a Martin bin, mid and horn system, which was great, but it's hard work to fly. That was only the main system. All the ancilliary sound — the infills — that we put in around the place were EAW KF-300s, because you can put it in corners where you can't get the Martin bin and horn system. So this year, we used EAW throughout."

R: "Another reason is that the show's rigging, lights and sound have to be designed as one. We've got to fly the speakers as high as we possibly can. With the EAW it was a lot easier to meet the aesthetic requirements without compromising the acoustic performance."

### How do you find the Albert Hall's acoustics react with your speaker system?

R: "The Albert Hall is a difficult place. Playing

heavy Rock'n'Roll in it is taking it totally out of context but, of course, it works better with the orchestra. The biggest problem is the sheer volume of space above the stage, and trying to achieve a balance in all parts of the room. The EAW system is ideal for it. Being compact, you can easily put a box or two in places, other than the main stack, that need it."

M: "This year is a little different to last year because there's more in the roof in the way of lighting. All the acoustic baffling has been raised to the roof, so the canopy over stage is 30 feet higher and the sound has changed in the hall itself. So the sound has changed from last year; it's basically a balancing problem."

**Have you used any analytic aids to help the sound?**

R: "No. Nothing special whatsoever. The only thing we've done is to look at the building. Just by looking you can know where to place things. It's not so much trial and error, because we know the hall."

**If it was up to you, where would you prefer to play as an engineer?**

R: "I would prefer to play a theatre, where the sound isn't coming off the stage at all. Where everything is totally dry, so there's separation between the instruments and I can use the reverbs I like. But here, I have to reproduce what's actually happening on the stage, natural reverb and all. You just work at it."

**How consistent is the sound on successive nights?**

R: "It varies quite a bit. It varies with the mood of the artistes, which way they apply themselves to the music, and how hard they play. With the different sets it varies considerably. With the nine piece, it's twice the volume of the four piece, and you haven't got the space in the music. The SPLs have been changing night to night according to whether four or nine piece is playing. At the desk, it's normally running at an average of 102dB. Everyone is more than satisfied with the sound in all corners of the room — and there are no corners in the Albert Hall! Even the council and The Albert Hall people are happy."

**Does Eric Clapton have any special requirements?**

R: "No, he doesn't have any. He is just a great guitar player. He wants people around him that he knows well. Then he leaves it up to them."

**What about on monitors?**

R: "Just quality — and for the monitor engineer to be in tune with what's happening. Our Kerry Lewis is well in tune with everything that goes on, on stage. Monitors are a very personal thing. Basically, everyone up on stage is happy so long as you've got a good sounding monitor system and the right man who's in tune with everything. Steve May is our main patch-man, coping with all the recording and broadcast links. BBC Radio for example have been down two times for Radio One, and filming on four nights; with so much going on, you need somebody on the case all the time."

M: "The monitor console is a Midas Pro-40M, 40 into 20. It's a one off, developed in partnership with Midas and our technical director, Tim Boyle. We wanted a good quality desk that would work for the next 15 years. It has a very high standard of EQ, and VCA facilities. Then on stage we're using our new CSD bi-amp (wedge) monitor, developed by ourselves about 18 months ago. We're planning to



The complete set-up for the Uruguay leg of the tour.



The box rig with staggered, split single trusses installed in the St. Petersburg Arena in the States.

make it commercially available before long."

**Are you using any new or innovative FX or processors?**

R: "We're using BSS's new delay-line, and some of the newer Klark-Teknik compressor-limiter-expanders, good quality Lexicon reverbs . . . but there's nothing revolutionary, just minimal use of good quality FX and the natural sound of the PA. It's a format that works very well for Mr. Clapton!"

M: "We've had help from people like BSS, Klark-Teknik, Sennheiser and Shure — these are all companies that we work closely with. Barcus-Berry from USA have been a tremendous help. We're going to be using their new microphone range for the string section. They're constantly developing new pick-ups for acoustic instruments such as double bass, cellos. They've been very helpful in sending us new samples to try. We're using a range of their new string pick-ups on the orchestra nights. We just try to get it better every time."

R: "Orchestras are our speciality, and incorporating classical instruments with heavy rock'n'roll. I feel certain we've worked with more orchestras in the past two years than anyone else."

**What's next?**

M: "When this tour finishes in March, we're

doing major UK tours with Tom Jones and Shirley Bassey.

**Any comments on the business?**

R: "We've built up a clientele we've been working with over the years. It's difficult with the new bands we'd like to do, as often we've got enough work. Rather than expanding, we feel it's better to have a small staff whose hearts are in it. They work all the hours for the artistes."

M: "The current dip in touring has caused some rental companies to panic and drop their prices to a level where proper service can't be maintained. We would never sacrifice our ability to service our clients in this way. Besides, it doesn't do our industry much good in the long run."

**Eric Clapton World Tour Sound Crew**

FOH: Robert Collins and Paul 'Pab' Boothroyd  
Monitors: Kerry Lewis and Steve May  
String sub-mixes at Royal Albert Hall: Tim Boyle

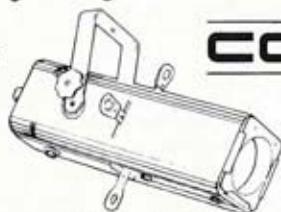
**Equipment List**

Main FOH PA: 40 × EAW KF-850s,  
12 × sub-bass, supplemented with  
8 × KF-300 infills  
FOH Amplifiers: 40 × BGW GTA  
FOH mixing: 2 × Midas Pro-40  
Monitors: 22 × CSD, bi-amp wedges  
Monitor mix: 1 × 40:20 custom Midas/CSD



# **RB** *lighting ltd* FOR

STOCKISTS  
OF CCT  
LANTERNS  
& SPARES



**CCT**

If you have difficulty in obtaining CCT  
equipment ring us first for service

**081 977 9665**

RB Lighting Ltd, PO Box 34, Teddington, Middlesex TW11 9EU  
Fax: 081 943 4375

THE

## **CENTRAL SCHOOL OF SPEECH AND DRAMA**

Central School of Speech and Drama now offers a **One Year Advanced Diploma in Lighting Design, commencing September 1991.**

This course will explore the role of light and the lighting designer within performance, encompassing study areas such as text analysis, design, communication, technology, and the creative team. Students' work will be realised in projects and performance, and they will have opportunity to work alongside professional theatre directors, designers and lighting designers.

As well as providing models of current professional practice and thinking, the course will also encourage students to develop their own approach to working methods and the realisation of design ideas.

The course is intended for those who have studied Theatre Arts or Design to degree or equivalent level or for those who have had considerable professional work experience with light or a related field. Potential students may be aiming to develop the knowledge, skills, and insight necessary to follow a career as a professional lighting designer; alternatively, they may wish to add lighting design to their existing portfolio of skills.

Central School already offers a range of Design and Performance courses, into which the Advanced Diploma in Lighting Design will be closely integrated.

For further details and an application form, please write enclosing an A4 SAE, to:-

**The Admissions Officer,  
Central School of Speech and Drama,  
Embassy Theatre,  
Eton Avenue,  
London NW3 3HY**

- COMPREHENSIVE STOCK OF LIGHTING AND SOUND EQUIPMENT TOGETHER WITH A RANGE OF CONSUMABLES
- UK DEALERS FOR CLEARCOM INTERCOM SYSTEMS

## **SALES**

- OVER 21 YEARS OF SERVICE
- OPEN UNTIL 7pm WEEKDAYS AND 2pm ON SATURDAYS
- CUT COLOUR SERVICE
- SAME DAY DESPATCH TO EUROPE

- CONFERENCE/PRESENTATION PRODUCTION SERVICE
- DUBBING SUITE
- COMPLETE SLIDE/TAPE PROGRAMMING FACILITY

## **HIRE**

- COMPREHENSIVE SOUND, PROJECTION AND LIGHTING HIRE STOCKS
- FULL TECHNICAL SUPPORT
- REHEARSAL FACILITIES

**BE RIGHT -  
FIRST TIME!**

STUDIO B9, 164-180 UNION STREET, LONDON SE1 0LH

**Nik Milner**

LOCATION  
PRODUCT  
PEOPLE  
& SOUND

P  
h  
o  
t  
o  
g  
r  
a  
p  
h  
e  
r

0 7 1 6 3 3 0 9 6 3 0 8 3 6 5 9 9 2 3 3



3 Wigton Place, London SE11 4AN  
Telephone: 071-582 8009  
Fax: 071-820 9584

*Theatre Sound & Lighting  
(Services) Ltd*

**Communicating Art with Technology**

# BOSTON BOUND: USITT 1991

Ruth Rossington reports on the Trade Show  
Richard Farthing discusses the Conference

The city of Boston blends early American charm with twentieth century cosmopolitanism. There is a revolutionary spirit in the city which has sparked new ideas in technology, finance, medicine and arts. It has been called the country's most European city, the Athens of America. Add to this Boston's reputation as one of the most liveable and walkable cities in the States and you have an idea of the diversity that attracts some nine million visitors a year. Not then an entirely inappropriate place to hold the USITT Annual Conference and Stage Expo.

In comparison to other trade shows during the year, USITT is small, yet it represents quite a wide cross section of the theatrical industry. It seems to me however that it's going the same route as the ABTT trade show in the UK, where the imposing presence of a larger, more internationally flavoured show is casting a deep and excluding shadow. Most people would deny it, but whilst I'm sure USITT will make it to Seattle next year and to Wichita after that, there has to be some concern as to whether it can drag itself to Washington in 94, and sustain its independence in the years to follow. USITT won't thank me for saying this but the trade show tends to exist to support the multitude of seminars and international forums padded around it which are rooted in the educational and training elements of the Association. (And when I mention this, I don't mean it by way of criticism, it's just an observation).

However, having started with a negative, it's time to be positive, and there was a lot to admire about the show and its organisation which was exceptionally well handled by Pat Mackay and the Events Production Group who put the whole thing together. Despite its size, it had an extremely professional feel and there

were a few nice touches including the credit card system of enquiry, which eradicated the exchange of business cards or jottings on scraps of paper; the 'after-hours by invitation' sessions where potential clients could be invited to return after the close of the show to view products in the relative quiet of the early evening; and the hands-on computer resources room, stacked with PCs and AppleMacs for use by conference delegates wishing to access electronic mail and try out software presented at the conference.

And so to the exhibition itself. . .

**Avolites** introduced two new dimmer modules to the USITT market to complement the existing TV 12-25 DMX module, namely the TV 24-10 DMX and the TV 6-50 DMX. Both can be built with any combination of the available modules, allowing them to meet a variety of requirements ranging from rock 'n' roll to theatre and television. Also on stand, of course, was the familiar QM 500-TD with integral fully independent back-up and riggers remote, together with a variety of TV series dimmers and the Avolink range of DMX encoders and decoders. Steve Warren, on hand from the UK operation, revealed that the company are planning to launch a major new product at one of the forthcoming trade shows. More than that he wouldn't say, but presumably it will be worth keeping an eye on the PLASA Light & Sound Show this year.

**JCN** of Oakland, California were demonstrating their range of specialist software for the entertainment industry including the Apprentice series designed for technical theatrical application, the Zericon plotter line, and the Generic CADD package. Of particular interest was the JCN Lighting Designer, a full-

featured design tool that will draft a complete lighting plot with relative ease.

Moving on from JCN, I came to the stand of **Teatronics**, who were generating a lot of interest with the first showing of their Echelon memory consoles. The third board of its type on the market, it is aimed at the large theatrical and broadcast sectors. The consoles are the random access type, utilising solid state memory. The hardware platform is micro-processor based, designed and constructed specifically for the processing and control of theatrical, entertainment and television lighting control systems. Also on the stand, the MD-2000, a new modular dimming product to replace the MD-288.

**Kupo & Co** were exhibiting their standard range of par cans, flood lights, scrollers and pin connectors, together with the KSX 1000W xenon followspot — a recent addition to their range. Maico Chang, the company's managing director, explained that his prime reason for being there was to promote the followspot which will be shown at various trade shows throughout the year.

**White Light**, the only UK company to take a stand in their own right, were displaying the new-ish VSF 90 variable speed optical effect launched at PLASA and subsequently aired at LDI. New to the US market is Autolight. Following its screening at PLASA last year, Modelbox (a division of White Light) has continued the development of the software package and produced a version for the USA which includes data on all the luminaires in current American usage together with their USITT symbols. In addition to the US and existing European versions, database add-on packages are also available which convert either version of the programme to dual-nationality. In



Roboshop's Robert Bealmer (centre) doing business with his Dry Fogger smoke machine.



Thomas were showing the 9-Lite and 6-Lite Par 64 spot banks. Lining up for the company were Frances Thompson, Michael Garl and Chris Dutton.



Robert Napier (left) and Al Pfeiffer of CCT Lighting Inc.



This year's show and conference attracted over 3,000 visitors.



Strand were out in force. Pictured above are (from left to right) Alan Kibbe, Steve Norman, Andy Collier, William Groener and David Brooks.



Paul Mulholland (Jands) and Gary Pritchard (LSC) ensure an Australian presence at the show.



The US arm of JBL indulging in some loudspeaker speak.



On the Electro-Voice/Vega stand pride of place went to a new UHF wireless microphone. Assisting its presentation were (left to right) Tom Jennings, Skip Goodwin and James Stoffo.

response to US interest, the company have opened Modelbox Inc, which will be co-ordinated by White Light USA's Peter Simpson.

The presence of the US arm of **CCT Lighting** caused a few second glances in view of the recent rumours circulating about their British counterparts, who are now in administrative receivership. Speculation as to the future for CCT UK kept those at the bar entertained until the early hours. Though CCT UK have a small interest in the US operation, Al Pfeiffer was quick to assure me that their operation is quite independent and will continue to manufacture and market a comprehensive stock of luminaires including the Silhouette, Minuette and Starlette ranges.

A great deal of attention was being focused on the Lil' DMXter, the first complete portable test set meant for field use in testing lighting systems using DMX. The **Goddard Design Company** who have come up with this little gem, which transmits a test signal and evaluates a received signal, as well as functioning as a DMX 512 cable checker, were obviously pleased with the interest registered at the show.

**Strand**, on what must have been the largest stand at the show, have spent the last 18 months working on the completion of their control console range, so enter the LDI-launched **Matrinx MX** — featuring 12, 24 or 48 channels of two scene preset faders, multiple industry standard output protocols, 24 programmable special effects, full MIDI, and much much more according to Steve Norman, Strand's very loud and very dynamic product manager for dimming and control. They say you never get a second chance to make a first impression, and Steve Norman certainly knows this. For a country that describes taxi drivers as 'urban transport specialists' and talks about 'inoperative statements' (lies to you and me) rhetoric is part of

the game and the Strand man is no exception. 10 out of 10 for presentation, 3 out of 10 for the tie. So what else did Strand have to offer? Well this was the first time in America for the new-look Cantata and a brand new range of 650W units which will now be manufactured in the US as opposed to the UK. Another 'first' for the American market was the introduction of the 650W Quartet range, first seen at PLASA last September, but not shown at LDI. I took a moment to have a quick word, over a long lunch, with Andy Collier, Strand's UK business development manager who, amongst other things, made the very pertinent point that control systems in theatre are academically driven in the educational market.

**ETC** demo'd the Expression product line V 190 which enhances software with multi-part cues, alpha numerics, and flexi-channel, alongside which it exhibited its complete line of memory lighting control consoles. As part of its range of theatrical and architectural dimming and controls, **Electronics Diversified** had on show the EnAct control console, incorporating 900 cues per disk, 1000 channels, two effects faders, 2000 dimmers, four manual faders, Fiber-Link (ATM) and eight simultaneous part faders. **Rosco** showed two products of note. The first was a rather interesting flicker-free candle, an electronic creation available as a hand-held unit or direct wired, above which was hanging the new Coloroll automated lighting system that can be run from any control board to change colours between or during scenes.

Martin Moore was on hand to provide the **Kliegl** dialogue. Formerly the general manager of Furse Theatre Products, a division of CCT, he is now responsible for new product development at Kliegl. The company were showing their new K2000 dimming system introduced at LDI and now updated for USITT. The K2000 is a

racked dimming system built around the newly patented VVO dimmer. Since LDI, the 'maximum VVO' feature has been extended to apply to the whole output range, not just the maximum output.

Such a small exhibition doesn't really merit an in-depth appraisal of all the companies in attendance, if only because most manufacturers choose to launch new products at the more major shows and so USITT in the US and ABTT in the UK are often public relations exercises first and product launches second. However, a lot of companies attended the show and so here, in brief, is a quick run-down of those not considered to date. **JBL Professional** had a range of products on display, notably the 2142H full range 12 inch coaxial transducer with titanium dome; showing its complete line of theatrical and architectural lighting systems as well as custom specification systems including Applause and Ovation was American company, **Theatre Techniques**; Bob Gordon was doing the business for **Wybron** with the ColorExpress gel string; **Lee Filters** and **Lee Colortran** were both in evidence, with the latter showing the Scene Master 60 plus console, now expanded to include 120 channels, the Prestige 3000 Plus, which now allows control of the ENR feature for individual dimmers, together with the complete ENR dimmer series; **Union Connector** introduced a new portable power distribution system, the Polybox — a modular design which lends itself to a variety of configurations from a system of under 10 KVA to a power network of 1000 KVA.

**LeHigh Electric** has been manufacturing theatrical and architectural control systems since 1962. Several new memory consoles and dimmers were displayed; San Francisco-based **Phoebus** had the Silverbeam motion picture/special effects xenon searchlight systems on the stand, alongside theatrical and architectural



Steve Terry (Production Arts) gets the low down on the Lil' DMXter from Robert Goddard.



James Wright of JCN discussing the art of design.



Rosco's new Coloroll, noteworthy because of its variable number of colours.



Neal Cartright (left) of P&G Draperies was providing UK back-up to Jim Reich of the company's American distributor, Fox-Rich textiles, who were showing a range of fabrics for scenery, curtains and costumes.



David Ashton of Zero 88 Inc (right) strengthening ties in the US market with the company's ranges of Sirius lighting consoles and Mercury controllers.



Oakland-based ClearCom Intercom Systems (distributed in the UK by TSL) displayed a variety of intercom and remote control audio packages.

followspots; **Leprecon** had a complete line up of dimming and control equipment for live music, theatre and architectural applications; pride of place on the **Strong International** stand was as usual given over to their range of followspots from the 3000W xenon Gladiators to the 1000W quartz Trouperette III, and including the industry standard Super Trouper; and finally, **Theatre Magic** of Columbus, Ohio featured special effects design products for various uses, as well as a bevy of atmospheric fog, haze and smoke.

Away from the main exhibition hall, in a small private room in the far reaches of the hotel, Steve Terry of Production Arts and myself were treated to a private viewing of **Entertainment Technology's** new Intelligent Power System, a dimming system for theatre, studio and touring applications. According to Gordon Pearlman, ET's President, the IPS is a breakthrough in digital power electronics with novel packaging that shrinks power distribution, dimmers and fixture mounting positions into one lightweight unit. IPS is built around the latest in non-SCR 'smart' power technology, and each dimmer channel is controlled by a separate, high speed digital 'power envelope processor'. It integrates six 1.2kW dimmer channels into the connector strip, and because no fans and chokes are present, it really is completely silent. A further feature is channels which report their status back to the console, displaying the operating level, lamp wattage, local line voltage, dimmer temperature and other parameters.

So that, in a rather large nutshell, is the USITT trade show for you. I hope it continues to thrive, because theatre shows are always interesting. Aside from the technology, all the related disciplines put in an appearance, including in this instance costumiers, special effects manufacturers, make-up professionals, wig artistes and a rather interesting collection of theatre seating manufacturers.

**Ruth Rossington**

**Richard Farthing**, part of the research and design team at Strand UK highlights a few of the 130 plus seminars in Boston.

#### The Conference

This consisted of meetings in a number of rooms with particular subjects and speakers appointed. Generally, the meeting would be chaired by somebody intimately associated with the subject in question. In some cases, this extended to downright commercial self-interest. I attended as many sessions as possible. They varied between the bizarre, the yawners, the commercials and the academics. USITT is a semi-academic body, or tries to be, though on a voluntary basis. People tried to present their subjects as ones of academic interest, but it helped if you understood where they came from.

I found the following most interesting, and include brief accounts below:

#### ASCII Light Cues

This is a subject that has been brewing for a couple of years now. The idea is that a lighting board stores its data on disk in human readable form, i.e. ASCII characters. So a cue might be stored as:

CHAN 1,55 2,60, 3,99 4, . . .

Why is this so clever? Well the movement is to get everybody to use this standard format, so that: Cues, patches, etc can be edited or created off-line on a PC or MAC word processor, then brought into a theatre, saving people typing thousands of numbers when time is limited. Data can be used on any make of lighting board.

Brad Rodriguez chaired this one. All was going well until somebody mentioned decimal places of % used to store lighting levels. Oh dear. I suggested that it might be useful to publish the relationship between these figures and actual hex values, so that people trying to

drive colourchangers would stand a chance. We then got deep into philosophical debate about high accuracy (16 bit) dimming, hex number representation, command line parsing . . .

It was agreed that a hex number representation was also required. This session has been going on for about three years, and with any luck we will see a standard at some point in the future.

#### Computer Visualisation

This was a curate's egg. The first part of the presentation was by a man who had been playing with his MAC, Macdraw, and a rendering program in which he had found a bug. The bug was demonstrated in several colours, none of them very illuminating.

Just as I was about to leave, Rob Shakespeare of the University of Indiana got up to do his bit. This was really quite good. He showed how, using ray tracing techniques in AutoCAD, transferred to \$30,000 of Silicon Graphics Workstation with his rendering software, he could do near real-time animation, showing the effect of multiple light sources on a stage and set. Depending on how long you wanted to wait (up to 12 hours), the detail could be made indistinguishable from a photograph. Things that took five minutes to render on this machine took 12 hours on a MAC II.

He showed how sets and characters could be built up for a show such as Johnny Carson Tonight(!) and viewed from any position. The rendering and animation is done in software, and he hopes to achieve 0.1 second animation by the middle of this year by suitable optimisation. The \$30,000 hardware this year was \$300,000 two years ago. It could be a reality sooner rather than later.

#### MIDI Show Control

This session fell into the commercial bracket. Charlie Richmond has put a lot of work into his

show control protocol and expects it to be adopted by the MIDI Manufacturers Association (MMA), and accepted by the USITT as a standard. The idea is to use codes buried in MIDI System Exclusive messages to synchronise lighting, sound, robots, scenery, and a list as long as your arm including animatronics (Ninja Turtles?).

Not much detail was discussed, and he seemed keen for us to approve of his work. I was one of the people to point out that there was about seven years' worth of MIDI equipment out there used to throwing away Sys. Ex. messages, which was why we almost completely avoided them for the MIDI implementation on MX. He was convinced that manufacturers would change course when Show Control appeared, but we disagreed on that point.

Charlie and co. are working on a two-phase commit extension to the proposal to improve data security before it is finally released.

There were no particularly strong feelings either way here, so MSC will probably happen within the next year.

#### SMX and all that

This was a quite uncontroversial meeting mostly because Steve Terry (vice-president of Production Arts, vice-commissioner for engineering with USITT, and co-author of DMX512 spec.) stood up almost immediately and suggested that USITT adopt SMX without further ado. This helped a great deal, as people respect his views. A few people went on about copyrights and lawsuits (could they use the spec. without being in court?), and a few didn't like the idea of adopting a Strand standard without putting their oars in, but this didn't last too long.

Strand Lighting are now conducting a straw poll of the lighting industry, and will shortly report back to the USITT Engineering Commission. Who will maintain SMX and allocate application data types is yet to be decided.

# CHERNOBYL — FINAL WARNING

Director of Photography Ray Goode with  
the story behind the filming

**Wednesday, May 16, 1990.** 0730 hrs at Ringway Airport Manchester, catching a plane to Moscow via Copenhagen without a work visa. Not a sensible thing to do, but after waiting three weeks for a visa and still no sign, action had to be taken. I had been assured by my American production manager that Hard Currency talks and that a visa would be supplied to me in a little office at Moscow Airport before I cleared customs.

They did not believe me at the check-in at Copenhagen, however. Telephone calls were made to SKS, the Russian production company in Moscow, and two hours later I was allowed to board with a final "see you on the next plane back" message. I arrived in Moscow and sure enough, Paul Cameron, my production manager, was waiting — airside. Into a small office, fifty dollars in hand, and a visa appeared straight away. This was my introduction to Hard Currency the Russian way.

**Same day, 1930 hrs.** No time to waste and before checking into my hotel I was whisked away for a quick recce of one of Moscow's fabulous Metro stations. I am here in Russia to work as Director of Photography on a Carolco/Gimbel/Turner 35mm picture re-enacting the story of the Chernobyl Disaster. The picture is called 'Chernobyl — Final Warning'.

**Evening, 2030 hrs.** Arrive at hotel, but room not available until 2300 hrs. We decide to go and eat. There are two restaurants at the hotel. The first one is for Hard Currency only. It is nearly empty, with an average meal costing 25 roubles at 1-1 exchange. \$25 for a very mediocre meal — lots of salad — no choice.

The second restaurant, if you could get in, was the same food for rouble currency only. Since it was normal to receive 10 roubles to the dollar outside, food in this restaurant was extremely cheap — \$2.50. My education in Hard Currency was beginning.

Anthony Page, the picture's English director, seemed to take everything in his stride, with positive thinking and actions. His policy was 'do it yourself or you wait for ever'. This attitude, together with that of the American production team, swiftly led us through our recces and 10 days later we seemed to be in a 'go' position.

At this stage I had only met the Russian film crew and production team at the office of SKS. They appeared to be discouraged by the 'powers that be' to dine with us or even visit our hotel. In the morning they always waited outside until we appeared. I was later to find out that these dedicated film people, totally in love with their work, struggled along with very old film equipment: BL3 Arriflex cameras with zoom lenses — very few primes available — non-crystal sync generators — no new gels for filtering lamps or windows — no glass or even plastic filters for lenses (gel on the back element) — old HMI lamps, colour temperature long gone and the largest being a 2.5 plus an abundance of Brute Arcs in excellent



... up went the shutter, and there was Aladdin's Cave — as far as the Russians were concerned.

condition — their main light source.

Before leaving England, it had been decided to take our own film crew plus camera and lighting equipment, together with a Super Peewee dolly.

The sound recordist, Lee Alexander from Los Angeles, proved to be one of the best by any standard. Very professional and full of humour, he made the days and evenings move along very pleasantly.

The lighting was supplied by Bill Summers of Playlight Film and TV Lighting of Manchester, and the cameras — three Arriflexes — were supplied by John Cooper of Media Developments, together with the Super Peewee Dolly, operated by my own grip Ken Roberts, a friend of long standing.

The London crew, all new to me, proved to be excellent in their work. They were: Tony Woodcock (camera operator), Tony Garratt (focus), Paul Bond (second unit lighting cameraman with a Russian crew), Micky Most (first lighting gaffer) and Tony Wilcox (second lighting gaffer) with an all-Russian crew. All other camera and sound grades were Russian.

The equipment, loaded into a Playlight vehicle and driven by Tony Wilcox, arrived via sea and overland outside the SKS production office in Moscow. The Customs man broke the seal, up went the shutter, and there was Aladdin's cave — as far as the Russians were concerned: 6ks, 4ks, 2½, 1.2 and .575 HMIs, 10ks, 5ks, 2ks, 1ks, mizors, peppers, 70 rolls of various gels, clamps, French flags, bounce boards, safety 6-way junction boxes — all were viewed with great enthusiasm and approval!

Approximately 40 silver boxes containing the three Arriflex cameras, follow focus units, matte boxes, lenses etc were all unloaded and carefully placed into the waiting 1940s camera trucks (with dark room). When every magazine was loaded by our Russian clapper/loader and the cameras checked by Tony Garratt, we were off to our first location.

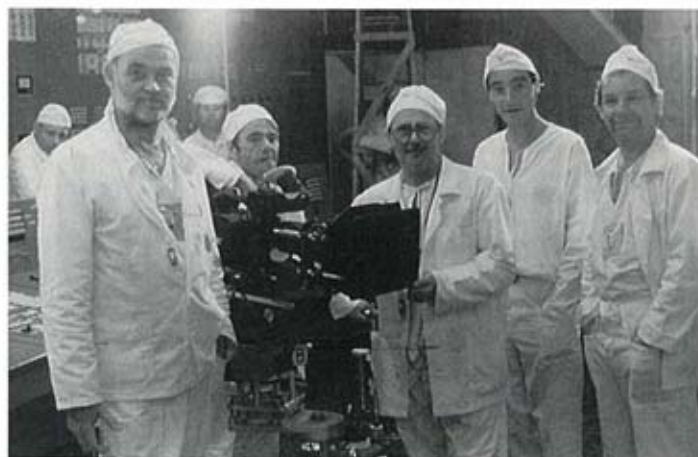
A pre-light of HMI lamps connected to our Russian generator confirmed my worst fears. Despite their assurances, the generator was not crystal sync locked to 50 cycles (I carry a sync lock tester). From that moment and for the next six weeks I had a man sitting by the generator with my tester to hand, constantly adjusting the cycles. Everything went fine. As another safety measure, we also reset the shutter angle in the cameras.

The language problem was horrendous. Every instruction had to go through interpreters, many of whom did not understand the process of film-making and the technical familiarities used, for example: 'Can I have a bounce board on a stand', 'Can you Chinese that barndoor', 'Please will you F2/S2 filter that lamp', 'Will you assemble a butterfly frame for me'.

Slowly, out of the confusion, the willingness of the Russians to work, their constant workwise attitude, and their love of the equipment, won the day. In Moscow we noticed the demarcation that existed between us and the Russians. They had their coach, and we had ours. They sat together for



Director Anthony Page (right) with interpreter.



Inside the control room (left to right): Anthony Page, Tony Garratt, Ray Goode, Paul Bond and Tony Woodcock.



Sound recordist Lee Alexander at work.



A Russian electrician assembles a Butterfly Frame.

lunch, we sat together for lunch. At the end of the day, they went home and we went to our hotel. An invitation to join us for a drink at our hotel was politely refused — we found out that they wouldn't have been admitted anyway. Before meeting up with us in the morning, they had to queue for a packet of Russian cigarettes.

We discovered they had very little food for their families. Salaries were appallingly low at 150 roubles per month for a secretary/interpreter. The Hotel Berioska had American and English cigarettes by the thousand. There was food in the refrigerators and plenty of gin, vodka and whisky — but only for Hard Currency and all at duty-free prices. Cheap to us but out of reach for most Russians.

We left Moscow after one week and travelled 400 kilometres south to Kurchatov where there was an identical nuclear reactor to the one at Chernobyl. The bulk of our filming took place here over a period of four weeks. Kurchatov was a town of around 40,000 people, including a small Polish community. There was one hotel and the demarcation between us and the Russians still remained. Private rooms with bathrooms were scarce, and none of them went to the Russian members of the crew.

One consolation was that now, at last, we all shared one dining room. Ygor Beck, the Russian DOP, established a mixed crew top table. Being Russian, he firmly had the upper hand, and usefully befriended all the kitchen staff. Even so, the quality of food was very poor, and I lost 1½ stones in six weeks!

It was at this time that I became aware that every time I asked to have a lamp filtered, the filter was cut with care to the exact size of the lamp or barndoor, no allowance being made to seal off the unwanted spill light leaking through the barndoors. They considered this to be permissible, because in this way they could save on gels. Every time we finished a scene, de-rigged and relocated ourselves these filters were carefully taken off each lamp, rolled into a tube and stored in their own box for future use. New filters were used each time, so that by the end of the shoot they had amassed hundreds of pieces of gel — about 60 rolls! We had nothing left. Playlight filters will be used by the Russians for years to come!

Another thing that is non-existent in Russia is camera tape. I really don't know how they manage. Ours seemed to disappear at an alarming rate, but was always available back to us at one inch a time! Short ends of film were collected and never seen again.

I was assured that in Russia most of their films are shot on a one to one ratio. Camera movement is by use of the zoom and most tracking shots are hand-held. We never saw any dollies during our visits to their film studios. All their filming is 35mm using Russian neg stock rated at 400 ASA. Sets are lit to accommodate an average stop of T2.8. With the scarcity of



A tracking shot with Jon Voight.

#### Technical terms for our non-film readers

*Primes* — A lens of fixed focal length.

*Non Crystal Sync Generators* — A double system of synchronous filming, not requiring connecting cables between camera/recorder/generator/lights — a precise 50Hz to synchronise with camera shutter speed.

*Super Peewee Dolly* — A wheeled vehicle for mounting camera plus operator and assistant — to move camera from A to B.

*A Grip* — The man that lays the track to operate the dolly/camera from A to B.

*Mizors* — Small 300 or 500 watt lamps.

*Peppers* — Small 100 watt lamps.

*French Flags* — A piece of matte black plywood in various sizes, set on a stand. It removes unwanted light from the camera lens.

*Bounce Boards* — A technique of lighting.

*Matte Boxes* — A combination of filter and/or matte holder and sun shade mounted in front of the camera lens.

*Crystal Sync Locked* — See explanation of non-crystal sync generators above.

*'Chinese That Barndoor'* — To limit and shape the pattern of light with two or four metal shields hinged in front of the lamp.

*F2/S2 Filter* — A type of filter on a lamp.

*Butterfly Frame* — A large net sometimes stretched over an outdoor scene to soften the sunlight.

equipment and lack of technology, these technicians have to be admired for the quality of their work and their constant enthusiasm.

Four final days of filming in Moscow brought 'Chernobyl — Final Warning' to its last Russian location. That evening was given over to ALL the participating Russian members of the cast, crew and their families in the form of a magnificent banquet hosted by Carolco/Gimbel, the American production company. It was a wonderful evening to end a fantastic experience.

There followed a quick return to the UK — just 16 hours to collect my thoughts and an H1 visa before an evening flight to Los Angeles, arriving 0200 hrs local time the next day. After three hours sleep I was on call for 0600 hrs.

It was a beautiful sunny morning and the location was a house up in Bel Air, with a backdrop of Los Angeles. The American film crew, though all complete strangers to me, were most friendly and helpful.

What a change of environment — and the 'butty' wagon was unbelievable!

#### Chernobyl — Final Warning

A Carolco/Gimbel Production Movie of the Week for Ted Turner Cable TV, to be shown 28 April 1991. The cast includes Jon Voight, Jason Robard, Ms Sammy Davis, Annette Crosby and Alex Norton.

#### English:

Director: Anthony Page  
DOP: Ray Goode BSC  
Operator: Tony Woodcock  
Focus: Tony Garratt  
2nd Unit: Paul Bond, Lighting Cameraman  
Grips: Ken Roberts  
Make-Up: Colin H. Arthur

#### American:

Exec Prod: Roger Gimbel  
Exec Prod: Ken Locker  
Producer: Philip Barry  
Prod Manager: Paul Cameron  
Sound Rec: Lee Alexander

#### Russian:

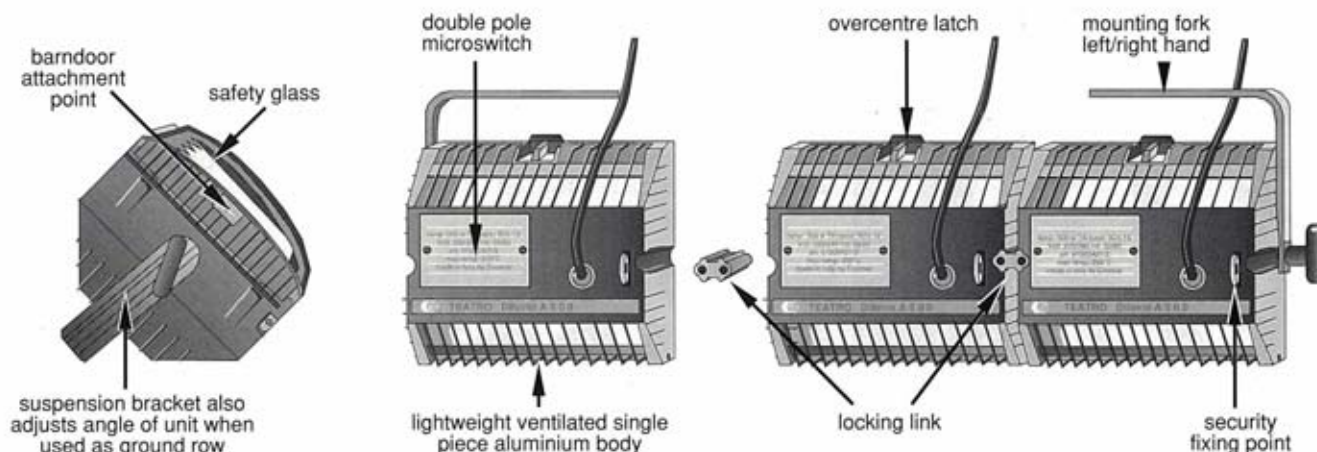
Lighting Cam: Ygor Beck  
Camera Asst/Clapper loader: Andrey Fedorov  
Designer: Sacha Papov



Ray Goode.

# DILUVIO

## 500w + 1000w Asymmetric & Symmetric Floodlights



## Diluvio is unique !

**The Diluvio range is the only modular system of floodlights available today.**

How often have you wished your three compartment cyclorama flood was a four compartment, & vice versa ?  
How many times have you needed single floods and only have battens in stock ?  
Can you convert your single floods into battens or cyc lights ?

**With DILUVIO these problems no longer exist !**

### FLEXIBLE

The 500w & 1000w Diluvio's have identical profiles so they can be locked together in any combination in rows up to eight units long and then suspended in complete safety. If used as a ground row the number of units in a row is as long as you need.

A 'square four' accessory frame is available to mount either the 500w or the 1000w Diluvio in two vertical groups of two for saturation floodlighting.

An accessory four leaf barndoor is available.

### SAFE

Each Diluvio is constructed of lightweight diecast aluminium. The front is enclosed by a tempered glass window which provides complete protection against inadvertent lamp explosion. When the front is opened a double pole switch is automatically activated, isolating the mains supply. This guarantees complete safety when replacing the lamp.

The Firecel® cable is totally flame resistant and does not emit any toxic fumes when subjected to a naked flame.

Excellent ventilation is achieved by virtue of the ribbed construction of the diecast body.

### ECONOMICAL

Since Diluvio can be made up into different combinations fewer units need be stocked to achieve the same results as many of the competitions 3/4 fixed compartment cyc/flood lights. This is of particular interest to Rental companies.

The heat absorbing tempered glass front extends the life of colour filters.

### EFFICIENT

11,000Cd with a beam angle of 110° from the Diluvio 1000 Symmetric. Similar performance from the Asymmetric when lighting a cyclorama from the top and the bottom.

**FOR FURTHER INFORMATION PLEASE CONTACT:**



via Inghilterra 2, 46042 Castel Goffredo (MN), Italy.

Tel: (0)376 780702 Fax: (0)376 780888

# PRO LIGHT & SOUND EXPO

# '91



## BE HEARD! BE SEEN! BE THERE!

The Southern Hemisphere's biggest-ever professional light and sound show. Three days of seminars, displays, exhibitions and demonstrations, with the very latest state-of-the-art technology from around the world.

Seminar speakers include world experts:

• Richard Pilbrow • Francis Reid • Larry Goodson

**Seminar bookings now open - book early to avoid disappointment**

Sound and lighting engineers, manufacturers and installers, recording studio owners and designers, concert and event managers, nightclub and theatre operators, bands, photographers, TV, stage, studio and set designers, architects and managers of public spaces, do not miss this outstanding event!

See all the new ideas and products. Meet and speak face to face with the experts, make important new contacts and big savings, compare and assess new technologies all in one short visit.

The entertainment event of 1991.

## WORLD CONGRESS CENTRE MELBOURNE AUSTRALIA

### JUNE 14-16, 1991

Free brochure with seminar details and booking form available from:  
PO Box 913 Adelaide, South Australia 5001

Telephone (Australia) **08 296 4189**  
Facsimile (Australia) **08 377 0564**



## DUE TO OUR MAJOR EXPANSION PROGRAMME FOR 1991/92, CEREBRUM LIGHTING LTD HAVE VACANCIES FOR THE FOLLOWING SALES PERSONNEL

### SALES ENGINEER

We are seeking a person with a minimum of ten years experience in either theatrical lighting, concert lighting or night club installation, who has both a good technical knowledge of electrical regulations and a broad knowledge of effects lighting products.

The successful applicant must have the ability to work both alone and as part of a team, the initiative to explore and develop new sales opportunities, and must possess the knowledge, confidence and personality to sell systems and concepts to a broad range of international clients. Remuneration and benefits package is negotiable according to the experience of the applicant.

### TRAINEE SALES TECHNICIAN

An exciting opportunity exists for a young person, living in Surrey or SW London, with an interest in at least two of the following disciplines, to undergo training for an eventual career in international sales.

- An interest in electronics or electrics
- An interest in theatrical lighting
- An interest in computers
- An interest in MIDI systems

The successful applicant must have energy and enthusiasm, and would be expected within a few months to be capable of helping prepare and erect exhibition stands, carry out basic servicing repairs, conduct product demonstrations and process telephone sales orders on a computer.

Starting salary will depend on age and experience, but should increase substantially during the first few years for a person who fulfils our expectations. For either vacancy, please forward your c.v. as soon as possible to:

**CEREBRUM** John Lethbridge, Managing Director  
Cerebrum Lighting Ltd  
Units 4 and 5  
Shannon Commercial Centre  
Beverley Way, New Malden  
Surrey KT3 4PT  
Telephone: 081-949 3171 Fax: 081-949 3649



LIGHTING

*Please state clearly which post you are applying for, and include details of current, or most recent earnings level.*



# THE ENCORE EXPERIENCE

Louise Stickland visits the London-based hire company

Encore PA was formed two years ago, and in that time the company's profile has become extremely high, with a reputation as the enfant terrible of the UK sound hire business.

Yet there's no chic, glamour, gloss or even over-production involved. When one meets Encore people, you meet hard-edged honesty combined with a technically innovative system and a good sense of fun.

The company was formed by Chris Mounsor, and it was trading as an installation company. Simultaneously Pete Kellett was operating as Peak Audio, being involved with touring work on the medium sized circuit. By the end of 1988 they were working so closely together that a merger was the most sensible outcome. The rest, as they say, is history.

In January 1990 Chris and Pete were joined in partnership by the sardonic wit and unquestionable professionalism of John Tinline, who had recently split from his former company, Capital Entertainments.

"Encore had a really good year in 1989," explained Pete. "We virtually re-equipped the company and sold off all the old cack. We decided to buy Martin F2s — the same as John Tinline had been using — because we believe it's the best sound system in the world at the moment." And Pete was keen to stress that they **did** look at every other sound system in the world!

John agreed: "We wouldn't entertain the idea of hiring people something we didn't wholeheartedly believe in . . . and we'd never compromise ourselves by hiring in another system. When I joined forces with Pete and Chris, one of our goals was to be able to service clients with what we considered to be the premier system, no matter how large or small their requirements. And there's only one way to do this properly, and that's to have a big stock. Obviously it means we can do it at a cost effective price too."

Another rationale for the merger was explained "we also know where the F2 system is . . . when it's bought and where it's placed in the world. When we have a client who is going to some far-flung corner of the globe, we can organise an F2 rig for them," said John.

A unique feature of the F2 system is that above bass it's reconfigurable, so it can be tailored to suit the act or venue. The system also seems to enjoy being thrown in and out of trucks and transported thousands of miles over dubious terrain. And if a problem does arise, then it's easy to service.

In terms of truck loading, the F2 cabinet was designed to fit efficiently into both UK and US trailers. It's also an easy PA to stack. Encore provide suggested configurations for clubs, theatres, arenas and stadiums, which are tried and tested, and to which their engineers adhere. These set configurations



The Encore line-up (left to right) Pete Kellett, John Tinline and Chris Mounsor.

take care of optimum coverage and SPL. All updates to the system are designed to be retro-fitted to existing stocks, which also gives it an edge.

"Versatility is one of the words which most readily springs to mind with F2," enthused Pete. When I asked what kind of sound it produced in 'artistic terms' I was met with raised eyebrows! Well, let's face it, sound in abstract terms is artistic.

"It produces a very clear, vital, transparent compact disc sound," explained John. "There's an ultimate degree of clarity, which can also prove a disadvantage, as the reproduction is so accurate that it reiterates bad sounds as well as good. And, let's face it, we'd all notice that!"

In spite of the fact that Encore's current sound equipment stock makes them the third or fourth largest company in the UK, they've put a lot of effort into preserving the 'personal touch'. When you ring Encore's number you get straight through to John, Chris or Pete. Communication is high on their priority list. They are keen to avoid the impersonal criteria a lot of companies fall foul of.

As three strong and independent personalities, they operate separate areas of the company: Pete deals with technical matters, Chris with administration and accounts, and John with logistics, quotes and contacts.

"There are no power trips between the three of us," Chris said, laughing. "We're here to be helpful and bend over backwards to service the client - within reason! We all work really hard."

They all profess to abhor the nine to five and the 'us and them' mentality. "Too many people," mused Pete, "get lost once companies get big, and we're determined that this will never happen at Encore. We all have hands-on knowledge of what's involved in a tour or gig and we'd like people to think we're sensitive and supportive to their problems in that respect."

A fairly integral part of the Encore corporate identity is their reputation for partying. It has also been the source of many a scathing comment passed by rival companies, and undoubtedly they have caused a stir in the business.

Chris continued: "We might be 'party people'; we might enjoy what we're doing, we might want a good time, and we are thoroughly into what we're doing. But . . . the work we do is very professional, and no-one can knock the standard and quality of it — or our equipment, or our engineers."

"We, just like everyone else," said John, "get a lot of our business through social contact with people. There's absolutely nothing to be ashamed of. It's better than giving people back-handers!"

Chris added: "You have to have a level head and a good sense of humour to deal with the music business. This is still one of the few businesses

where you don't have to be serious 100 per cent of the time. There's room to work hard and play hard."

This ethic dictated much of the work Encore did on the rave scene prior to February 1990. Until that time, they did everything they possibly could to get involved, because "we enjoyed it", and they appreciated the vitality and expression it brought to the music business.

"If we want to progress as a company then we feel we have to be fully in tune with musical trends," said John, "and it's beyond me why people criticise us so much for knowing how to have a good party, but also run a successful business."

A friendly working situation and relaxed professional image doesn't seem to have had a detrimental effect on Encore's operations. A look at their client list for the last four months is an indication that the formula has thus far proved to be a winning one.

The disparate nature of this ranges from the job rock of the Happy Mondays to the incandescent jazz of Sarah Jane Morris and to LA rockers, Toto. The system installed for the Happy Mondays gig at Wembley Arena in November was the largest PA ever to have been rigged there.

"Because of the exceptional system we have," continued John, "it means we are breaking new technical ground with the engineers who work for us. In a business where most things have been done, we are initiating and instigating new ideas, rather than just putting out PA systems. We are doing that too, but the PAs we put out do a very specific and diverse job. For example, Encore have the first Midas XL3 sound desk in the UK. With things like this in mind, it's invigorating and stimulating for people to be involved with the company."

Both the technical innovations of the F2 system and Encore's modern attitude to life and progress have converged to create an



Gary Hughes, Encore's sound engineer and technician.

anomalous atmosphere. All this in an industry where, after 25 years, many traditional attitudes and personalities are becoming entrenched and a little staid.

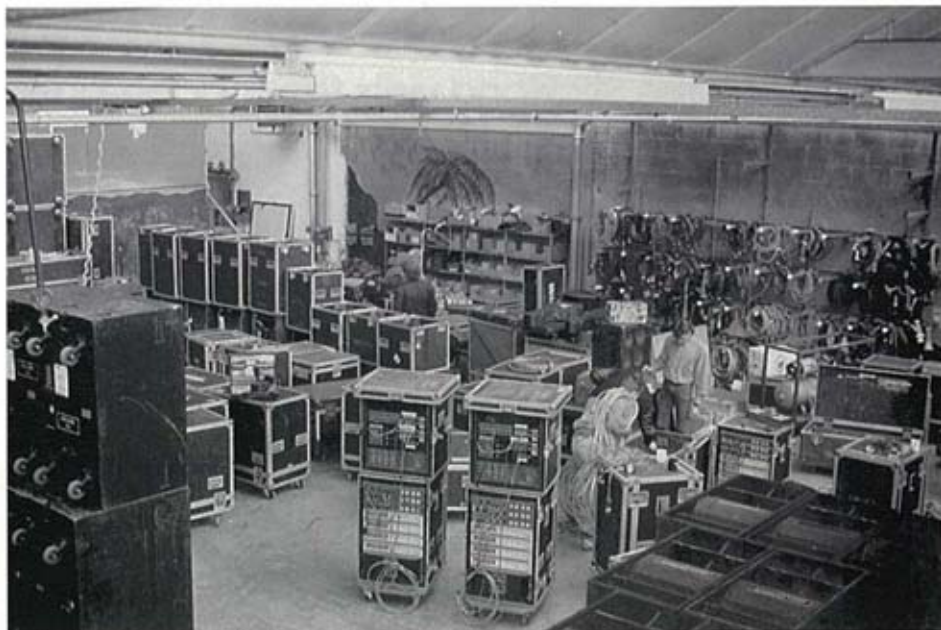
The energy and enthusiasm which abounds at Encore is evident throughout the whole structure of the business, and it certainly isn't just a recitation of empty directoral rhetoric.

"We also offer a multi-lingual staff," stated Pete. "We cater for Hebrew, Spanish, Portuguese, Italian, French, Swedish . . ." "And we're also learning American," interjected John.

We can expect to hear Encore's name more and more in the nineties. For the present, the last word should come from John Tinline: "The bottom line is that we expect the sound quality to be exceptionally high . . . and we like the environment to be fun and positive to get a good sound. We're not interested in bullshit: we just want to get results."

**Late News:**

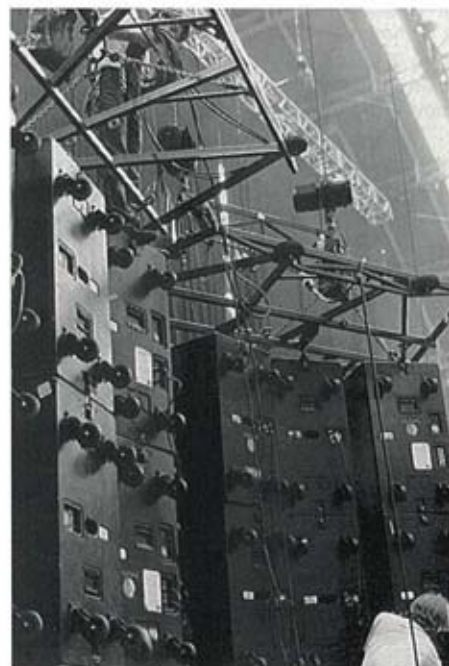
As L+SI went to press Encore announced that it will be opening a depot in Glasgow in March and that this will hold an 18kW Martin Audio F2 system along with all the necessary ancillary equipment. "Encore (Glasgow) will aim to satisfy the Scottish and Northern markets running independently from their sister company in London, but will have the full support of a further 120kW of F2 at their call."



Part of Encore's massive hire facility in London.



Encore were the first UK company to purchase the new Midas XL3 launched at NES in Los Angeles.



The Encore PA being rigged at G.Mex for the Inspiral Carpets show.

**S o f i s c o t e c h**

<b>ROBO</b> SCAN	<b>Martin</b>	<b>NJD</b>	MODE ELECTRONICS
<i>Acoustech</i>	<b>Numark</b>	<b>TEAC</b>	<b>HARRISON</b>
<b>OHM</b>	<b>STANTON</b>	<b>Trantec</b>	<b>LAD</b> LONDON ACOUSTICAL DEVELOPMENTS (LTD)

PROGRAMMING & RE-PROGRAMMING OF ALL  
COMPUTERISED LIGHTING CONTROL SYSTEMS

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

# INTERNATIONAL DIRECTORY

World-wide contact information for import/export, concert touring, exhibitions, etc.

## AUSTRALIA

### STRAND LIGHTING

264-270 Normanby Road,  
South Melbourne, Victoria 3205  
Tel: (03) 646 4522. Fax: (03) 646 5020

## PRO LIGHT & SOUND EXPO '91

The Southern Hemisphere's biggest-ever  
professional lighting and sound show!  
**WORLD CONGRESS CENTRE,  
MELBOURNE, AUSTRALIA  
JUNE 14-16, 1991**  
Enquiries: PO Box 913 Adelaide Australia 5001  
Phone 08 269 4189 Fax 08 377 0564



### L.S.C. ELECTRONICS P/L

4-6 Junction Road, Surrey Hills  
Victoria, AUSTRALIA 3127  
Tel: (61) 3 836 9111  
Fax: (61) 3 830 5187

## AUSTRIA

### SYLVANIA GTE

#### Special Products Group

GTE Licht GmbH, Graf Zeppelinstrasse,  
9-11, Postfach 1740,  
D-8520-ERLANGEN 23, Germany  
Tel: (49) 9131 996 222.  
Fax: (49) 9131 996 418

### LUDWIG PANI

A1070 Vienna, Kandlgasse 23  
Tel: (1) 932462. Fax: 526 4287  
Range of follow-spots and projectors

## BELGIUM

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
P.P.V. Lighting N.V.  
Tel: (32) 2 648 70 45 Fax: (32) 2 648 69 97  
Ets. Bulterys S.P.R.L.  
Tel: (32) 2 466 86 86 Fax: (32) 2 466 96 72

### ADB LIGHTING SYSTEMS

Louvensesteenweg 585, 1930 Zaventem  
Tel: (32) 2 7221711 Fax: (32) 2 7221764  
Whole range of stage lighting equipment,  
systems and projects

### SILICON CONTROLS

LIGHT BEAMS - SILICON CONTROLS  
Gentssesteenweg 152  
B-9800 Deinze, Belgium  
Tel: (32) 91.86.82.55 Fax: (32) 91.86.83.71  
Manufacturers of digital and  
analog dimmer systems

### EVER RADIO VIOLETTE

Rue de Ribaucourt, 154-156, 1210 Brussels  
Tel: (32) 2 428 31 00 Fax: (32) 2 428 21 65  
Disco and stage equipment - import and Export



Tel (02) 4283100 Fax (02) 4282165

## CANADA

### STRAND LIGHTING

2430 Lucklow Drive 15, Mississauga,  
Ontario L5S 1V3  
Tel: (416) 677 7130, 1-800-387-3403  
Fax: (416) 677 6859

## DENMARK

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
BICO A/S  
Tel: (45) 42 84 54 45 Fax: (45) 42 84 20 55  
BICO A/S  
Tel: (45) 86 43 76 00 Fax: (45) 86 43 79 00

## FINLAND

### EASTWAY

SHOW SERVICES OY/LTD  
ATOMITIE 5 B HELSINKI  
Tel: 358-0-503 1022 Fax: 358-0-503 1023  
Professional lighting and sound equipment  
and services in a place you never thought  
they would appear. Thomas, Sky-Tracker,  
Celco, Avo, Verilinde, Yamaha, EV, JBL, etc.

### TFP MARKKINOINTI OY

Import and Export of Lighting and Scenic  
Equipment. Exclusive distribution in Finland for  
Jands, CCT, Rosco and Tomcat. Always  
interested in new product ranges for theatre,  
concert and television.  
Contact Juha Ihanamaki, telephone INT  
+31-143933. Fax INT+31-133077. Address:  
Hatanpaanvaltie 4A, 33100 Tampere, Finland

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Industriepark B-3300 TIENEN  
Tel: (32) 16 80 03 69  
Fax: (32) 16 81 89 45

## FRANCE

### PULSAR FRANCE Sarl

10 Avenue du Fresno  
14760 Bretteville sur Odon  
Tel: (31) 741001

### STRAND LIGHTING FRANCE S.A.

26 Villa des Fleurs, 92400 Courbevoie, Paris  
Tel: (1) 47 88 66 66  
Fax: (1) 43 33 71 75

TO ADVERTISE IN THIS  
SECTION RING  
ALISON HUNT ON  
(0323) 642639

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Loplux  
Tel: (33) 1 34 10 43 43 Fax: (33) 1 34 10 49 63  
L.T.M.  
Tel: (33) 1 47 88 44 50 Fax: (33) 1 43 34 94 91  
Musicalement Votre  
Tel: (33) 1 30 24 25 38 Fax: (33) 1 30 24 06 74

### VARI\*LITE

#### VARI-LITE FRANCE

Tel: (33) 1 45 07 97 09 Fax: (33) 1 45 07 96 79

### COLLYNS

3 Av. des Frères Lumière - BP 120  
Z.I. - 92185 ANTONY Cedex  
Tel: (1) 46.66.2134  
Telex: 270 604 F Fax: (1) 46.66.04.73  
Lighting and Sound  
Manufacturer/Importer



Tel 27449877 Fax 27318683

## GERMANY

### PULSAR GmbH

AM Vorort 23  
D-4630 Bochum 7  
Tel: (49) 234 28171

### STRAND LIGHTING GmbH

Helmholzstrasse 16,  
1000 Berlin 10 (Charlottenburg)  
Tel: (49) 30 39 14516. Fax: (49) 39 39 12317

### STRAND LIGHTING GmbH

Salzbergstrasse 2,  
3340 Wolfenbuttel-Salzdahlum  
Tel: (49) 5331 3008-0. Fax: (49) 5331 78883

### SYLVANIA GTE

#### Special Products Group

GTE Licht GmbH  
Tel: (49) 9131 99 62 22 Fax: (49) 9131 99 64 18  
Steffens Lighting  
Tel: (49) 4031 13 35 Fax: (49) 31 72 96  
Coemar Teatro  
Tel: (49) 731 60 12 05 Fax: (49) 731 62 85 2  
Eckert Bühnenlicht  
Tel: (49) 202 59 20 58 Fax: (49) 202 59 15 03  
L.T.M. GmbH  
Tel: (49) 221 49 10 23 Fax: (49) 221 49 10 25  
Zilz Concerts GmbH  
Tel: (49) 221 58 30 31 Fax: (49) 221 58 43 99  
FGV Panther GmbH  
Tel: (49) 89 613 10 07 Fax: (49) 89 613 10 00  
Feldmann  
Tel: (49) 8142 53 037 Fax: (49) 8142 86 97  
Lee Colortran  
Tel: (49) 8171 70 81 Fax: (49) 8171 20 367

### VARI\*LITE

#### VARI-LITE GERMANY

Tel: (49) 221-582081 Fax: (49) 221-5801979

The complete range  
of professional  
lighting equipment  
for: Stage, Touring,  
Discotheque,  
Trade Shows and  
Exhibitions.

**LMP**  
Lichttechnik

Gildestraße 55  
W-4530 Ibbenbüren  
Germany  
Telefon 05451 4051 54

### TOUR SERVICE LICHTDESIGN

Hanse Str. 9,  
D-4800 Bielefeld 11  
Tel: 0 5205 22 800 Fax: 0 5205 22 889  
Concert, stage, TV and industrial lighting  
Design and Production Services  
Representative of PanCommand systems

### AMPTOWN LICHTTECHNIK GmbH

Wandsbeker Str. 26, 2000 Hamburg 71  
Tel: (49) 40-64600440  
Fax: (49) 40-6412503



Tel (0221) 534081 Fax (0221) 534083

## HONG KONG

### STRAND LIGHTING ASIA LTD

802-4 Houston Centre,  
63 Mody Road, Kowloon  
Tel: (852) 3-685161. Fax: (852) 3-694890

## ITALY

### STRAND LIGHTING SpA

Divisione Trading, Via Paolo Ablera 82,  
00181 Roma.  
Tel: 06 780 6251. Fax: 06 780 9018

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Arri  
Tel: (39) 6 737 07 37 Fax: (39) 6 723 15 41  
Tecnitron Elettronica  
Tel: (39) 831 39 21 36 Fax: (39) 831 39 28 41  
Rank Lighting S.R.L.  
Tel: (39) 6 919 71 23 Fax: (39) 6 919 71 36

### TEATRO

Teatro Srl, via Inghilterra 2  
46042 Castel Goffredo (MN), Italy  
Tel: +39 (0)376 780702  
Fax: +39 (0)376 780888  
Manufacturers of stage lighting. Profile, fresnel,  
PC, flood, cycolorama, followspot  
'With a touch of Italian elegance'



Tel (031) 773539 Fax (031) 773798

## NETHERLANDS

### SYLVANIA GTE

#### Special Products Group

GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Ultrex B.V.  
Tel: (31) 2503 41 724 Fax: (31) 2503 41 220

### LIGHTING SOUND RIGGING

#### Flashlight®

Flashlight Utrecht Holland B.V.  
Gletijzerstraat 5,  
3534 AV, Utrecht  
Tel: 030-44 48 42  
Fax: 030-44 76 06



Tel (013) 638585 Fax (013) 638435

**JANSEN & JANSEN****light sound  
& rigging**Haarlemmerstraatweg 33  
Hallweg, Holland  
Tel: (32) 2907 - 7108  
Fax: (32) 2907 - 6786**NEW ZEALAND****SELECON NEW ZEALAND**40 Drake Street, Freemans Bay, Auckland 1  
Tel: (64) 9 792 583 Fax: (64) 9 770 116  
Manufacturers of high quality stage and display  
luminaires - Zoomspots; fresnels; PC; Cyc; floods.  
LV and metal halide display spots. Distribution in  
Australia and Asia. Rental and production; project  
design and management**NORWAY****SYLVANIA** GTE**Special Products Group**GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Lars Farnes A/S  
Tel: (47) 2 16 29 30 Fax: (47) 2 16 47 39**PORTUGAL****SYLVANIA** GTE**Special Products Group**GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Sylvania Electronica LTDA  
Tel: 35114 18 62 17 Fax: 35114 18 69 25**SPAIN****SYLVANIA** GTE**Special Products Group**GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
MIIM Power A.S.  
Tel: (34) 3 329 80 08 Fax: (34) 3 329 02 99**VARI\*LITE  
VARI-LITE SPAIN**

Tel: (34) 1 470 23 30 Fax: (34) 1 479 58 25

**Trilite**

Tel: (1) 3270966/1536 Fax: (1) 3049165

**SWEDEN****AVAB**Västra Hamngatan 1,  
411 17 Göteborg, Sweden  
Tel: (46) 31 179240  
(UK distributors:  
CCT Theatre Lighting)  
Tel: 081-640 3366**SYLVANIA** GTE**Special Products Group**GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
Tealarteknik AB  
Tel: (46) 8 40 92 90 Fax: (46) 8 40 93 94**SWITZERLAND****POWER LIGHT**Fabrikmattenweg 8, CH-4144 Arlesheim  
Tel: (41) 61 701 82 28 Fax: (41) 61 701 8338  
Equipment rental and services. State-of-the-art  
lighting equipment for TV, stage and concert  
productions, exhibitions and product launches  
throughout Europe: Xenon Trouppers, Panis, Avo,  
Celco, Thomas, Verlinde, Strand, CCT,  
Sky Trackers and searchlights  
At the heart of Europe!**SYLVANIA** GTE**Special Products Group**GTE Sylvania N.V.  
Tel: (32) 16 80 03 69 Fax: (32) 16 81 89 45  
GTE Licht GmbH  
Tel: (49) 9131 99 62 22  
Fax: (49) 9131 99 64 18**UNITED KINGDOM****STRAND LIGHTING LTD**Grant Way (off Syon Lane)  
Isleworth, Middlesex TW7 5QD  
Tel: 081-560 3171 Fax: 081-568 2103**ADB UK**Siemens House, Windmill Road  
Sunbury-on-Thames, Middlesex TW16 7HS  
Tel: (0932) 752994 Russell Dunsire  
Lighting equipment, systems and projects**SYLVANIA** GTE**Special Products Group**GTE Sylvania Limited  
Tel: (0274) 595921 Fax: (0274) 580632  
Action Lighting  
Tel: 081-965 6800 Fax: 081-965 0950  
Lighting Technology Group  
Tel: 081-965 6800 Fax: 081-965 0950  
Valiant Electrical  
Tel: 071-736 8115 Fax: 071-731 3339  
Specialist Lamp Distributors  
Tel: 061-873 7822 Fax: 061-873 8089  
AC Lighting  
Tel: (0494) 439076 Fax: (0494) 461024  
DC Lighting  
Tel: (0235) 770715 Fax: (0235) 770720  
Technical Lamps Ltd  
Tel: 081-979 6652 Fax: 081-979 9007  
Primarc  
Tel: (0734) 596777 Fax: (0734) 505964**USA****STRAND LIGHTING**18111 South Santa Fe Avenue  
PO Box 9004, Rancho Dominguez,  
California 90224  
Tel: (213) 637 7500 Fax: (213) 632 5519**STRAND ELECTRO CONTROLS**2975 South 300 West, Salt Lake City  
Utah 84115  
Tel: (801) 487 6111 Fax: (801) 466 1003**VANCO**

VANCO STAGE LIGHTING, INC.

New York  
Tel: (914) 942 0075 Fax: (914) 942 0099  
Orlando  
Tel: (407) 855 8060 Fax: (407) 855 8059**TMB ASSOCIATES**

PRODUCTION SUPPLIES &amp; SERVICES

2915 Floyd Street, Burbank  
California 91504  
Tel: 818-842-9652  
Fax: 818-842-1064**TOMCAT**Staging, Lighting and Support Systems  
Serving your tour and fabrication  
needs in the USA  
Tel: (915) 686-7029  
Fax: (915) 683-5426**PHOEBUS****MANUFACTURING**San Francisco, California  
Tel: 415-550-1177 Fax: 415-550-2655  
● Ultra Arc II Followspots  
● Silverbeam Searchlights  
Dealer enquiries welcome**THE SCROLLER**

SETTING THE STANDARD FOR ROLLING COLOUR CHANGERS

WORLDWIDE SALES:  
Wybron US 818/880-9329 Fax: 818/880-9107  
AC Lighting UK 0494-446-000  
Fax: 0494-461-024**Trilite**

Tel: (516) 249 3662 Fax: (516) 420 1863

**FOR ANNUAL ADVERTISING  
IN THE INTERNATIONAL DIRECTORY  
TELEPHONE (0323) 642639****INTERNATIONAL DIRECTORY**

World-wide contact information for import/export, concert touring, exhibitions, etc.

**ORDER FORM****YES, please book an International Directory entry for 12 ISSUES from the next available edition**Half Display @ £195   
(12.5mm x 41.5mm)Full Display @ £360   
(25mm x 41.5mm)Double Display @ £600   
(50mm x 41.5mm)All bold entries @ £60 per line Normal entries @ £50 per line 

(ALL PRICES ARE FOR 12 ISSUES)

NAME \_\_\_\_\_ POSITION \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

POST/ZIP CODE \_\_\_\_\_ TELEPHONE \_\_\_\_\_

**PLEASE ATTACH YOUR COPY TO THIS FORM**

# DIRECTORY

Lighting + Sound  
Equipment Sale/Hire  
Installation and Design

## TSL

Theatre Sound & Lighting  
(Services) Ltd

U.K. DISTRIBUTORS  
FOR

### Clear-Com

Intercom Systems

67 DRURY LANE,  
LONDON WC2B 5SP  
Phone 071-836 7877/8

## Southwest Lighting

Manufacturers of Pin Spots,  
Moon Beams, Helicopters,  
Stage Cans, Scanners etc.  
Dealers required.

The Old Smithy, Church Road  
Cockwood, Exeter, Devon  
Tel: (0626) 890806  
Fax: (0626) 891465  
Showroom open Mon-Sat 10-5

## DHA

- Library and Custom made Gobos and Slides.
- Screen Printing onto various Materials.
- Standard and Custom Fibre-Optic Effects and Equipment.

For further information contact:

DHA Lighting Ltd.  
3 Jonathan Street, London SE11 5NH  
Tel: 071-582 3600 Fax: 071-582 4779  
Telex: 935639 GOBOCO G

### The - Fibre Optic - Lighting People

We manufacture and distribute all fibre optic lighting materials, Pargos harnesses and conduits, Parflex polymers, light sources, theatre curtain washers, spot ball and bullet lenses, side emitting fractured fibres, ceiling fittings and large bore fibre optics. Examples of our fibre optics may be viewed at our Chiswick showroom, from subtle backgrounds to fibre optic fireworks. Leaflets available



Trade & Export call PAUL RAYMOND  
Per Opt Projects Ltd

Unit 9 The Bell Industrial Estate  
Cannington Street, Chiswick Park, London W4 5EP  
Telephone: 081-995 5179  
Fax: 081-994 1102 Telex: 933718 PAROP G

## DONMAR Ω

### LIGHTING SYSTEMS

LET US GIVE YOU *INDEPENDENT* ADVICE

- MIX AND MATCH OF ALL LEADING UK BRANDS FOR THE BEST SPECIFICATION AND PRICE.
- NATIONWIDE INSTALLATION & SERVICE WITH TECHNICAL SUPPORT MON-SAT UNTIL 23.00 HRS.
- 25 YEARS EXPERIENCE & 1,500 ACCOUNT CLIENTS.

**DONMAR LTD., 54 CAVELL STREET, LONDON E1 2HP**  
SALES 071-790 1166 SERVICE 071-790 6624 FAX 071-790 6634

**NEC**  
APPROVED CONTRACTOR

## Dial Sound & Lighting

Wholesale Distribution for

**CITRONIC BOSE RAMSA**  
**SOUNDSHOP OPTIKINETICS zero 88**  
**ROSCO COEMAR PULSAR**  
**POWER DRIVE TECHNICS JBL LeMaitre**  
**MODE ELECTRONICS**

and other leading brand names

Specialist supplier of Mini Light Tube

INSTALLATION DIVISION — SHIPLEY DIAL LTD.

**DIAL SOUND AND LIGHTING**  
Unit 4G Wharfedale Road, Euroway Industrial Estate,  
Bradford BD4 6SG.  
Telephone: (0274) 651600 Fax: (0274) 651190

## RAPER & WAYMAN

Audio Systems Design & Installation

Public Address & Sound Reinforcement for Conference, AV & Live Sound Presentation in Theatres, Halls, Clubs & Studios

Equipment Sales & Hire  
Full Service Facilities  
081-800 8288



## FUTURIST LIGHT & SOUND

**HIRE**  
0924  
455586

**SALES**  
**MAKEMAN**  
SERVICE AGENT  
Strand Lighting

**SERVICE**  
0924  
468183

HOYLE HEAD MILLS,  
NEW STREET  
EARLSHEATON, DEWSBURY  
WEST YORKSHIRE. WF12 8JJ

## NORTHERN LIGHTS

Sound & Lighting

Distributors

Trade representation for

**DATA DISPLAY**  
**OPTIKINETICS**  
**POWERDRIVE**  
**ANYTRONICS**  
**LE MAITRE**  
**MULTIFORM**  
**FABTRONIC**  
**ZERO 88**  
**PULSAR**  
**AVITEC**  
**CLOUD**  
**SHURE**  
**MODE**  
**ICE**

89 Scottforth Road, Lancaster.  
Tel: 0524 62634.

## LIGHT WORKS LIMITED

Performance Lighting  
Design and Development

2A Greenwood Road  
London E8 1AB  
Tel: 071 249 3627  
Fax: 071 254 0306

## SPOT ON FOR QUALITY



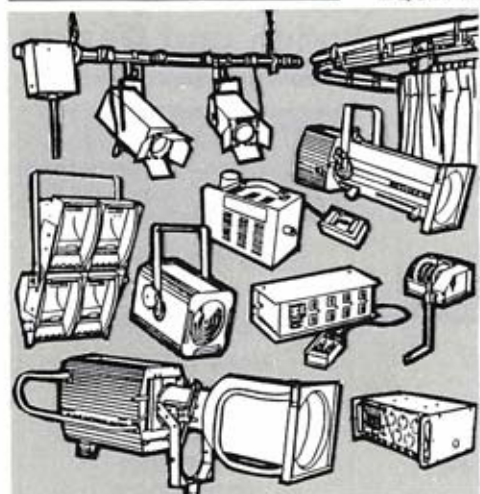
Sound, Lighting and Special Effects for leisure, promotion, entertainment and the arts.

- First class technical back-up.
- In-depth stocking at the best prices.
- Speedy mail order and export service.
- Field sales and installations.
- OPEN MON-FRI 9.30-5.30. SAT 9.30-4 Brochure on request.

**LUTON SOUND & LIGHTING**  
75 & 86-88 Wellington Street,  
Luton, LU1 5AA, England.  
Telephone: 0582 411733  
Telex: 825353/825562 CHACOM G LITECO  
Fax: 0582 391102

# CCT

## FOR ALL YOUR STAGE EQUIPMENT NEEDS...



- Complete range of stage lighting
- Control systems
- Colour change
- Optical effects
- Stage equipment
- Spot bars
- Rigging
- Stage curtains
- Maintenance & Engineering services
- Mobile service teams

**HIRE & SALES**

**LONDON** Mon-Fri 9.30am-5.30pm  
Windsor House, 26 Willow Lane,  
Mitcham, Surrey CR4 4NA  
Tel: 081 640 3366 Fax: 081 648 5263  
Telex: 946648 Int. Dial Code: 44 81

**NOTTINGHAM** Mon-Fri 8.30am-5.00pm  
Hindle House, Traffic Street,  
Nottingham NG2 1NE  
Tel: 0602 862722 Fax: 0602 862722  
Telex: 946648 Int. Dial Code 44 602

# ELTEC

Manufacturers of  
Drama Lighting Control Systems

Eltec Drama Lighting, Unit 2, Coin Valley Trading Estate  
Llanfyllin, Powys SY22 5DD Tel: (069-154) 5501

## The Professional People

Lighting sales and hire to the Entertainment, Conference, Exhibition and Leisure Industries. From Sales Conference to Car Launch, Fashion Show to Exhibition Stand. Contact the specialists in lighting.



### MUSHROOM LIGHTING

76 Tenter Road, Moulton Park Industrial Estate,  
Northampton NN3 1AX  
Telephone: (0604) 790900 Facsimile: (0604) 491118

**LIGHTING HIRE & SALES**

### Philip L. Edwards (Theatre Lighting)

5 Highwood Close, Glossop,  
Derbyshire SK13 9PH.  
Telephone: 04574 62811.



**Big Screen**  
Video projection equipment  
&  
TV Monitors  
(Grundig, NEC, Thomson,  
Sanyo).  
New & Reconditioned

ENQUIRIES

VIDEO MONITOR SERVICES  
071 350 1098

# MICO LIGHTING

The specialist for  
LAMPS used in the  
THEATRE and  
ENTERTAINMENT  
industries.

Excellent Trade terms  
available.

Mico Lighting Ltd.  
Troydale Lane, Pudsey,  
Leeds, West Yorkshire.

Telephone: (0532) 567113  
Fax: (0532) 572358  
Telex: 556469 (MICO G)

**FOR SPEEDY INFORMATION  
TO LIGHTING + SOUND  
Telex (0323) 646905**

# Lancelyn Lighting

## Lighting Hire & Sales

Equipment from all  
major manufacturers  
Hire of Outdoor Equipment  
including Staging and Seating  
Special Effects, including  
smoke machines, snow machines,  
projection, pyrotechnics, etc.

**HIRE: Oxford (0865) 722522**  
**SALES: Oxford (0865) 722468**  
Hire and Sales Northwest:  
051-334 8991

## DC LIGHTING LTD

UNIT 9, W+G ESTATE  
EAST CHALLON  
WANTAGE  
OXON OX12 9TF  
TEL: (0235) 770715  
FAX: (0235) 770720

## TRAFALGAR LIGHTING LTD.

081-443 4960

LIGHTING  
SALES-HIRE  
SECONDHAND KIT  
BOUGHT & SOLD

081-443 4960

### SALE OF EX HIRE EQUIPMENT

14 LOTS OF DIMMER CONTROL  
Lee Colortran/Strand  
Including 36, 24 and 12 way systems  
2 and 3 presets complete with  
racks. Also TV spec racks and small  
amount of 650/1200 watt lanterns  
and effects. Pan Command 8 head  
PC beam system  
Large amount of power cable and  
connectors

For further details contact:  
Hall Green LIGHT HIRE  
Tel: 021 777 5685 Fax: 021 702 2046

**SALE AND HIRE  
of Sound, Lighting and Effects  
IN THE MIDLANDS**

P.A.music

## Disco!

Club! Fun-pub!  
Hospitality!  
Whatever your  
running P.A.music  
can help you  
make it profitable.  
Professional  
Lighting, Sound  
and Special Effects  
Hire & Sale  
172 High Road  
London N2 9AS  
**081-8834350**



### W.B. Group

cover the complete  
lighting spectrum  
from film to T.V.,  
theatre to disco  
special & motorised  
effects

Only the best is good  
enough

### W.B. Group

4 Tenter Rd., Moulton Park Ind. Est.,  
Northampton NN3 1PZ

Tel: (0604) 499331

## WEMBLEY LOUDSPEAKER COMPANY LIMITED

### deuce

Professional Loudspeaker  
Repair  
Specialists for all Makes  
of Power Units

also  
Manufacturers of 'Deuce'  
Mini & Maxi Cube  
'B Line'  
(the ultimate professional  
18" Bass 500 Watt Loudspeaker)

Sound Systems custom designed and  
manufactured for all sizes of venue.  
Mobile Systems from 100 Watts to 20k

Unit 4, Askew Crescent Workshops  
Askew Crescent, London W12 9DP

Tel: 081-743 4567

Fax: 081-749 7957

## NIGHT FLIGHT

Sound and Lighting  
**THE BIG ONE IN  
SCOTLAND**

Installation, Design,  
Hire, Repair and Service  
0389-79261

# Northern Light

Lighting & Sound Equipment Hire & Supply  
Technical Equipment for the Leisure & Entertainment Industry

### Sale • Installation • Hire

Stockists for Strand, Hall Stage, Roscolab, DHA,  
Tecpro, Allen & Heath, Bose, Tannoy, Toa, AKG,  
Le Maitre, Slick Systems Trussing.

Manufacturers of Socket Boxes, Working Light and Specialised control systems

**Edinburgh 031-553 2383** **Glasgow 041-440 1771**  
(Fax 031-553 3296) (Fax 041-445 4406)

## Strand Lighting

- Stage & TV Lighting
- Lighting Control Equipment
- Effects Projectors
- Colour Filters
- Dealers throughout the UK

Grant Way (off Syon Lane),  
Isleworth, Middlesex TW7 5QD

**081 560 3171**



## SPOT ON THEATRE SERVICES

- Supply & Hire of Stage Lighting Equipment & Effects
- Design & Consultancy Work Undertaken
- Complete Mechanical & Electrical Installations (NICEIC) Make-Up, Curtains, Rostra Supplied

ILKLEY (0943) 602979  
ILKLEY (0943) 830574  
KEIGHLEY (0535) 606255  
21A LEEDS RD, ILKLEY LS29 8DP

black light

## «black light»

Scotland's lighting company  
THE OLD CUSTOMS HOUSE, WEST HARBOUR ROAD,  
GRANTON, EDINBURGH EH6 3HA

031 - 551 - 2337  
24 HOUR 7 DAY  
031 - 229 - 1426  
RADIO UNIT 102

### HIRES AND SALES

DEALER FOR CCT  
ARRI  
ROSCO  
ZERO 88  
COEMAR  
LE MAITRE  
DURAPLUG  
POWERDRIVE

## VILLA AUDIO

Professional Systems House

**A COMPLETE PROFESSIONAL DESIGN & INSTALLATION SERVICE**

- Studio Equipment
- Concert Systems
- Computer Division
- Hire Facilities

CHELMSFORD  
(0245) 361694



### Hire • Sales • Service

- ★ Lighting
- ★ Sound
- ★ Curtains
- ★ Track
- ★ Cables
- ★ Connectors
- ★ Make-Up
- ★ Scenics
- ★ Books
- ★ Pyrotechnics

Theatre • Disco • Display • Architectural

Hightown Industrial Estate,  
Crow Arch Lane, Ringwood,  
Hampshire BH24 1ND

Sales 0425 470888 Hire 0425 470088

# LHS

Leslie Hire & Sale

For  
**Stage and TV Lighting  
and Stage Equipment,  
phone**

**081 871 5132**

L.H.S. Limited The Business Village, Broomhill Road,  
Wandsworth, London SW18 4JQ  
Telex 917003 LPCG



Manufacture, Supply  
and Installation  
of Lighting and Sound  
for Clubs and Discotheques

FULL DESIGN SERVICE  
Trade/Export Enquiries Welcomed  
Starlight Design (Light & Sound) Ltd  
Unit 6 and 7, Hardwicke Road Industrial Park  
Great Gransden, Sandy, Beds SG19 3BJ  
Telephone: (07677) 7715/6/7/8  
Fax: (07677) 7730

# LIGHT & SOUND Productions

### EQUIPMENT RENTAL & SERVICES

6 Vine street, St. Helier,  
Jersey, Channel Islands.  
Tel. 0534 78351  
(0860 740584)

To advertise in  
this section contact  
Alison Hunt on  
(0323) 642639

### LIGHTING HIRE & SALES

**Philip L. Edwards  
(Theatre Lighting)**

5 Highwood Close, Glossop,  
Derbyshire SK13 9PH.  
Telephone: 04574 62811.

## S.A.V.

AUTHORISED WHOLESALE  
DISTRIBUTORS

NJD FOR TOA  
ZERO 88 LeMaitre  
PULSAR CITRONIC  
CLAY PAKY coemar

OPTIKINETICS

J E M BOSE

MODE ELECTRONICS  
POWER DRIVE TEATRO

STARDREAM AUDIO VISUAL  
Party House, Mowbray Drive,  
Blackpool, Lancs.

Telephone: (0253) 302602

Telex: 67426 PARTY G

Fax: (0253) 301000



LIGHTING

HIRE

DESIGN

ENGINEERS

London 081-891 4755

## eurolight

Lighting Controls  
Stage Management Systems  
Patching Systems  
Paging and Relay Systems  
Full Installation Service

**Eurolight Ltd.**  
Unit 8, Maple Industrial Estate  
Maple Way,  
Feltham TW13 7AW  
England  
Telephone: 081-751 6400  
Telex: 888941 LCCI LITESYM

FOR ALL  
YOUR  
CONTROL  
REQUIREMENTS

## CHARLES FISHER

S-T-A-G-I-N-G L-I-M-I-T-E-D  
EXHIBITION and CONFERENCE  
DESIGN and CONSTRUCTION

Specialists in Something  
Different

Straw House Farm, Kirkby Road, Ripon, North Yorkshire HG4 3JU.

Tel: 0765 701604 Fax: 0765 701389

## THEATRE LIGHTING AND CONTROL FROM LEE Colortran International

★ Windsor luminaires – unique modular design gives eight Profiles,  
a Fresnel or a PC from just 15 basic components.

Notable features include:

Quick-fit lens tube; Rotating gate; Easy lamp change.

★ Club Light range – luminaires ideal for smaller stages, clubs and  
education venues.

★ Master series dimming and control – including versatile  
Powermaster dimmers and TriMaster control desks.

★ Lee Filters – by the roll or sheet.

★ Replacement lamps – stockists and distributors of all leading lamps.

**LEE Colortran  
International**

Manchester Road, Kearsley, Bolton, BL4 8RL

Tel: (0204) 73373

Trade Counter at: 1 Wycombe Road, Wembley, Middlesex, HA0 1QN.

Tel: 081-902 8835

A Lee Panavision International Company

# SGM

MOVING LIGHT SERIES

SOLE UK DISTRIBUTORS

LIGHT ENGINEERING

64 EDEN ROAD, LONDON E17 9JY

TELEPHONE: 081-520 2336/7

FAX: 081-509 1332



PLUS

VISION 2



SEEN AT PLASA AND  
ALL IN STOCK NOW

# WHITE LIGHT

57 FILMER ROAD LONDON SW6 7JF

FAX: 071-371 0806 TEL: 071-731 3291

NORTHERN BRANCH

CORPORATION STREET SOWERBY BRIDGE

NR HALIFAX WEST YORKSHIRE HX6 2QQ

FAX: 0422 839773 TEL: 0422 839651

## Entertainment Lighting Hire & Sales

LIGHTING DIMENSIONS (WL) LTD

LONG LANE DUBLIN 8 IRELAND

FAX: DUBLIN 530808 TEL: DUBLIN 530204



MODELBOX COMPUTER  
AIDED DESIGN

FAX: 071-371 0806 TEL: 071-731 7021



### LIGHTING SALES/HIRE

Designers, Technicians and Installers  
to the Entertainment and Promotion Industries

NEON LITE ASSOCIATES

Unit 1, Clovelly

Chapel Road, Meppershall, Bedfordshire SG17 5NQ

Tel: 0462 811843 Fax: 0462 817352

## POWER RENT

### GENERATORS-CABLE TRANSFORMERS

Hire or Sale—New or Used  
1 to 3000 KW-50/60 Hertz

Silent Sets—Mobile—Multi Voltage  
24 hr. Emergency Service Worldwide  
Depots throughout UK and USA

Main Depot:

Telephone: (0304) 813555

Telefax: (0304) 813502 Telex: 965324 Power G

Specialist Outside Engineers

LIVE AID U.K. & U.S.A. • GENESIS 1987 EUROPEAN TOUR

AIDA EGYPTIAN OPERA • RUSH U.K. TOUR 1988

BRUCE SPRINGSTEEN EUROPEAN TOUR 1988

Over 40 years' experience in  
ENTERTAINMENT POWER SUPPLY

THE COMPLETE  
POWER SERVICE GROUP

"Our name speaks for itself"

## NOVA



MANUFACTURERS OF  
QUALITY STAGE  
LUMINAIRES AND AURORA  
LIGHTING CONTROL  
SYSTEMS

AGENTS REQUIRED IN  
SOME AREAS

Novalight (International) Ltd  
Foxes Bridge Road  
Forest Vale Ind Est.  
Cinderford,  
Glos GL14 2PQ  
Telephone: 0594-23197  
Fax: 0594-26045

## FABTRONIC LIGHTING

Entertainment and Display  
Lighting Manufacturers

Full brochure and  
price list available  
Lighting for all your needs  
Quality products manufactured

62 Tenter Road,  
Moulton Park Ind. Estate,  
Northampton NN3 1AX  
Telephone: (0604) 790765  
Fax: (0604) 47403

## M:K:V PRODUCTIONS

SUPPLIERS OF THE FOLLOWING SERVICES  
TO THE TRADE

The Pleasure Dome Roadshow  
the largest mobile Nightclub in Europe —  
A sound to light show which has to be  
seen to be believed!

Exhibition Lighting and Sound  
Large Screen Video and Projection  
Generator up to 32K  
Band Lighting and Sound  
Professional Crew Services  
Hire of Lighting, Trussing, Staging,  
Dance Floor, Marquees  
Full Production or Supporting Services  
available

contact: Bob Miller or Martin King on  
(0271) 865618/862789 Fax: (0271) 863020

CALTHORPE HOUSE, BELMONT ROAD  
ILFRACOMBE, DEVON EX34 8DR

FOR SPEEDY INFORMATION  
TO LIGHTING + SOUND  
Telefax (0323) 646905

For annual  
advertising  
rates in  
the directory  
section of  
**LIGHTING SOUND**  
International  
Telephone  
(0323) 642639

### UNITED KINGDOM DISTRIBUTORS

Appointed sole UK distributors for Program/Sistem

Trade Suppliers of Professional Sound,  
Lighting and Special Effects Equipment

Telephone: (0926) 214878

Fax No: (0926) 883120

MOBILE No: (0860) 544934

UKD  
Sited in the heart of England gives us the right con-  
ditions to serve you via the  
M1, M6, M63, M65, M42 and the M40 with their  
facilities.

- Wholesale trade supply to retailers, installers, contractors etc.
- Extensive stock on all major manufacturers and some minor ones too.
- Some own brand products, concentrating on quality and availability.
- Manufacturers trade prices used, sometimes bettered considering delivery service.
- Vehicles travelling the country carrying orders and stock.
- Regular personal contact.
- Regular visits averaging 5/6 weeks to Wales, S.E., S.W., London, East coast, N.W., N.E., Scotland and of course the Midlands.
- No delivery costs when orders coincide with visits (normal in between times).
- No minimum orders.
- Use of our technical staff - for enquiries and help.

If you are not being offered these facilities at the moment, but would like to and would like to know more, we will be only too pleased to hear from you.

Rigby Close, Heathcote Industrial Estate  
Leamington Spa CV34 6TJ England

Supply, installation  
and hire of  
professional  
sound equipment

## RGJONES



SOUND ENGINEERING  
BEULAH ROAD  
LONDON SW19 3SB  
TEL 081-540 9881  
FAX 081-542 4368



**Specialist Technical Equipment and Services  
for the Entertainment and Allied Industries**

**STAGEFLOOR  
DUO**

**Instant Layflat**

The flooring that will go down and not let you down!!

Phone us for samples of our exclusive product.

Enquiries welcome from European/USA distributors. We are looking to expand our agency network.

**CRAIG-LOUTH ASSOCIATES**  
15 Lansdown Place, Frome  
Somerset, England BA11 3HP  
Tel: (0373) 61809

**TRIPLE E**

**CURTAIN AND  
SCENERY TRACKS**

A comprehensive range available for sale or hire, from a wall plaque to a 500-metre system for a product launch at the N.E.C.

ABTT Award winners  
1984 "Product of the Year" -  
Purpose-made LOOSE PIN HINGE  
1988 "Product of the Year" -  
UNITRACK system with linear motors  
*Catalogue available on request*



Triple E Limited

83 Tower Bridge Business Square,  
Clements Road, London SE16 4EF  
Telephone: 071-237 6354  
Facsimile: 071-237 7650

**GERRIETS**

**GREAT BRITAIN LIMITED**

**PROJECTION SCREEN MATERIALS IN SINGLE &  
DOUBLE WIDTH + SCREENS OF ANY SIZE**

**REVIEW  
STUDIO  
OPERA  
OPAQUE WHITE  
SHOW  
ARENA**

Gerriets has been making screens for over 25 years. Always ahead, we now add ARENA to confound our competitors!  
We have your samples ready to send to you.

**CALL US NOW!**

**071 232 2262**

or fax us on 071 237 4916

**KNOCK ON  
KNOBS**



Positive, secure and more economical than threaded fixings. Catalogue on request.

**KNOBS LTD**, 152 St Matthews Rd  
Burntwood, Walsall, WS7 9EL.  
Telephone: 05436 75500

**Trilite  
HIRE**

- o Autocad Design Service
- o Natural aluminium or white finish
- o Experienced riggers
- o Delivery - collection
- o Competitive rates

Occasional used stocks available for purchase.  
For further details contact:

**OPTIKINETICS LTD**  
38 Cromwell Road  
Luton LU3 England  
Telephone 0582 411413  
Facsimile 0582 400613



**FOR SPEEDY INFORMATION  
TO LIGHTING + SOUND  
Telefax (0323) 646905**



*Specialist Suppliers  
to the Lighting, Sound,  
TV and Theatre Industry.*

*products include:*

**PEEL CLEAN  
'TOUR LABELS'  
SECURITY  
'HIRE LABELS'  
PRINTED  
'CABLE TAPE'**

*Main distributors of Standard  
and Specialist Self-Adhesive Tapes*

For UK & Export  
Tel: 0480-494540  
Fax: 0480-494206  
unit 24, stephenson road, st lves,  
huntingdon, cambs pe17 4wj



**LIGHTING**

HIRE  
DESIGN  
ENGINEERS

London 081-891 4755

**TO ADVERTISE  
IN THIS SECTION  
CONTACT  
ALISON HUNT ON  
(0323) 642639**

**THE TOTAL PACKAGE**

- Lighting, sound, communications, rigging, audio visual, conference and projection.
- For theatres, halls, studios, leisure and presentation.
- In-house electrical contracting service.
- Schemes prepared.
- UK and worldwide.



**GLANTRE  
ENGINEERING LTD.**  
2 Cremyll Road,  
Reading, Berks  
**0734 509711**  
Fax: 0734 505808

**SUPPLIERS OF PROFESSIONAL  
LIGHTING AND EFFECTS EQUIPMENT  
TO THE ENTERTAINMENT INDUSTRY**

**MIDNIGHT  
SALES**

**COMPREHENSIVE CATALOGUE LISTING 1,000s OF PRODUCTS - AVAILABLE ON REQUEST**

Midnight Sales Ltd., The Arches, Grosvenor Terrace, London SE5 0NP  
Tel: 071-703 0011 Fax: 071-703 8123

# VIEWPOINT

## John Lethbridge on Control Systems

This article is adapted from an interview with John Offord, part of which was published as a feature on Cerebrum Lighting in the February issue of L+SI.

I think that the top end of the lighting control market is going through an important phase of development, that will probably be beneficial to the end user, but may have serious financial implications for certain manufacturers.

There are two things that seem to be happening simultaneously – first of all, the number of features and capacity of channels on lighting controllers are increasing, to meet the demand created by bigger touring rigs and installations, and at the same time, prices of sophisticated lighting controllers are following a downward trend.

This is not particularly good news for manufacturers (or distributors, such as ourselves) because, in theory in two years time, we could be selling products that do twice as much for half the price.

It will probably not be quite that dramatic, but we've certainly seen the signs in the past couple of years, with products like the Zero 88 'Sirius' and the new Pulsar 'Masterpiece', which has got a phenomenal number of channels and features for a very reasonable price.

The lighting controller market is possibly becoming like the car market – feature dominated. Lighting operators and designers have come to expect a controller to run several chases simultaneously, store hundreds of memories at precise levels, produce infinitely variable dipless crossfades and synchronise to numerous external devices and protocols.

The ironic thing is, that if you watch a typical operator at a rock concert, or in a discotheque, most of the time, they operate the show just by playing the flash buttons like a keyboard, and rarely move a fader other than the master controls. However, it is difficult to sell any new product nowadays, unless it has more memories and chases than the opposition, and has plenty of 'bells and whistles' included.

There are a lot of arguments for bringing lighting desks down in size, but for the live concert market, the consensus within the industry is that designers and operators like to have a big impressive desk out front. The problem one then has is that in places such as theatres, TV studios and most discotheques, space is at a premium and operators want everything to fit within a confined area.

Avolites recognised this situation, and responded with the QM 500-TD (a scaled-down derivation of their QM 500 concert lighting console) aimed very much at TV and theatre users. I am sure other manufacturers see a need to move in a similar direction, but is the market big enough for manufacturers to justify two versions of a console costing several thousands of pounds? I think that more and more manufacturers are starting to recognise the difficulties in trying to design one controller to cover all the entertainment markets.

Also, we are finally beginning to see a trend



John Lethbridge is chairman and managing director of Cerebrum Lighting Ltd. He founded the company in 1970 to provide special effects lighting to the live entertainment and conference markets.

Always highly regarded within the industry, he has, in the past, been a long serving member on the PLASA committee, and also its vice-chairman.

John's principle role nowadays is one of management, marketing and finance, but he maintains an active interest in lighting design and he makes a good cup of coffee.

towards most professional control systems communicating with one another. There are a number of people within our industry, like Tony Gottelier, who have been championing this cause for a long time. As a distributor, I certainly welcome this trend, because we are in the business of supplying solutions to client's control requirements, and we want to sell integrated packages that enable one operator to effectively control numerous devices.

It does not help either the client or ourselves, if they purchase several controllers from different sources, and then find they do not actually work together, as they had expected. How many businesses have discarded expensive office computer systems for similar reasons?

There still seems to be some opposition to complete lighting control system integration, particularly from some of the leading manufacturers of automated fixtures, who want to stick to their own protocols to preserve their market dominance. This can only protect them in the short term, until a more enlightened manufacturer comes along with a similar product that does not rely on their own dedicated control system. Perhaps if more pressure comes from designers and operators, more manufacturers will be willing to respond?

## PAR 64 CANS

A NEW RANGE OF HIGH QUALITY LANTERNS AT VERY COMPETITIVE PRICES

**STANDARD FEATURES INCLUDE:**  
ANTI SLIP SEGMENTED YOKE LOCK WASHER TO HOLD LANTERN RIGID WHEN USED WITH COLOUR SCROLLERS  
FOUR CLIPS TO TAKE STANDARD 250mm (10") SQUARE OR OCTAGONAL COLOUR FRAMES  
EXTRA STRONG NOSE CONE



**KUDO**

WIRED OR UNWIRED  
BLACK OR POLISHED ALUMINIUM  
LONG NOSE, SHORT NOSE, FLOORLITES  
EARTH BOND FITTED BETWEEN BOTH HALVES

**Doughty Engineering Limited**  
CROW ARCH LANE, RINGWOOD, HANTS BH24 1NZ  
TEL: (0425) 478961 FAX: (0425) 474481

## Index to Advertisers

AC Lighting	3	JEM Theatrical	7	Oscar Lighting	8	TSL	41
Ark Light	14	Laser Magic	9	Optikinetics	18/36	Unusual Rigging	14
Arri	15	Lee Filters	16/17	Par Opti Projects Ltd	9	Wilkes Iris Diaphragm	14
Celco Ltd	4	Le Maitre	10	Pro Light & Sound Expo 91	48	Zero 88	11
Central School of Speech & Drama	41	Lighting Technology	6	Pulsar Ltd	34/35		
Cerebrum Lighting	18/48	M&M Lighting	59	RB Lighting	41		
Direct Lasers	14	Marquee Audio	10/26	Samuelsons	60		
Doughty Engineering	12/14/58	Martin Audio	2	Sofistotech	50		
Innovative Product Design	36	Multiform	13	Strand	30		
		Nik Milner	41	Teatro	47		

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

## THE SILENCE

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

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

Rainbow Colour Changers have been used in

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

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

If you would like further information on the full Rainbow range including 1K, 2/5K 8 lite and light curtain contact our London office for our latest brochure - you won't believe what you don't hear.

*rainbow*

COLOUR CHANGERS



# COMPANIES



## SAMUELSON CONCERT PRODUCTIONS LTD

Renowned for the rental of lighting and all associated equipment and accessories along with a comprehensive production service for world-wide concert touring, major musical entertainment events, and television outside broadcasts. Knowledgeable and professional riggers, operators and crew.

Tel: (081) 575 8888  
Fax: (081) 575 0105



## THEATRE PROJECTS SERVICES LTD

For the best in lighting and sound including Sky-Tracker and Sky-Art Automated Promotional Searchlight Systems for theatre, corporate presentations, large scale spectacles, orchestral concerts, trade-shows and product launches. Highly skilled consultants, designers and engineers.

Tel: (081) 575 5555  
Fax: (081) 575 0105



## VARI-LITE EUROPE LTD

Exclusive representation throughout the U.K. and Europe for VARI\*LITE Automated Lighting Systems. Sub-distributors in France, Germany and Spain. Experienced programmers, operators and technicians.

Tel: (081) 575 6666  
Fax: (081) 575 0424



# ADDRESS

20-22 Fairway Drive  
Greenford  
Middlesex UB6 8PW  
ENGLAND