LIGHTING SOUND International















SPECIAL ANNIVERSARY EDITION





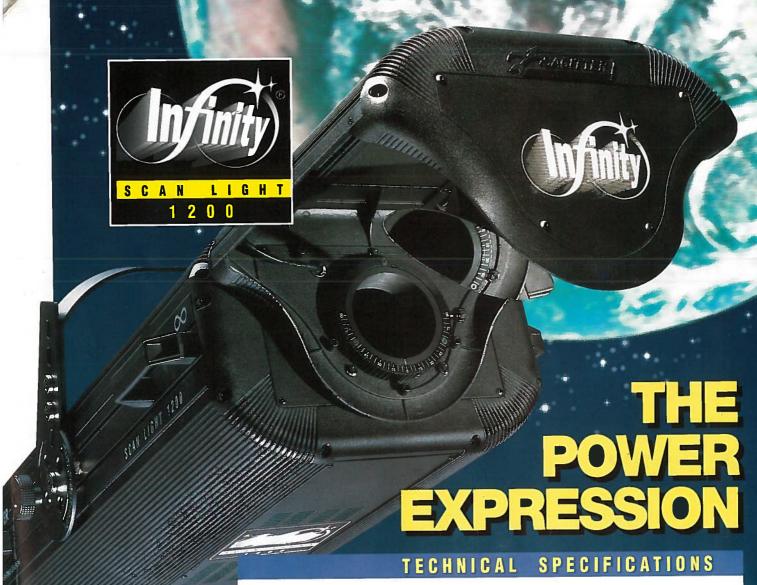




- Past, present and future: Special Feature on L+SI's tenth anniversary
- Fairground sound attraction at Blackpool Pleasure Beach
- Les Miserables: Anniversary Concert at the Royal Albert Hall
- On Tour with Marillion and Thunder
- Ian Herbert reviews Riverdance



NOVEMBER 1995



LAMP

- 1200 WATT GAS DISCHARGE LAMP (available with Philips MSR 1200 Watt or with Osram HMI 1200 Watt)
- 750 hours average lamp life
- Colour temperature 5600°K
- Flux lumen 110.000

OPTICAL SYSTEM

- High efficiency optical system constituted of high selected double-coated lenses enables INFINITY to perform an extremely powerful and homogeneous light beam
- · Remote focus control for perfect sharp projections at any distance
- Standard objective aperture 10.5 degrees with built-in system that enables access also to 12, 14 and 16 degrees beam projections

MIRROR HEAD

- Rotating mirror adapter with adjustable angle
- High reflective mirror
 Possible control both in normal and in HIGH DEFINITION DMX 512 thanks to the 16 BIT option simply configurable in the dip-switches section (4 DMX channels)
- High definition positioning
- Variable scanning speed
 Mirror rotation by means of two microstepping drived motors to grant the smoothest movement available
- Invert pan, invert tilt and invert pan with tilt option

24 COLOURS

- Colour wheel with 8 standard colours through selected dichroic filters plus 16 colour combinations thanks to 2 colour correction filters (3200°K) and 6000 K)
- 24 fixed positions
- 24 two colour projections available
- The colour wheel can rotate continuously at variable speed till rainbow effect
- . Option for the linear control of the colour wheel for synchronized operations

GOBO SYSTEM

- **4 Rotating Gobos**
- 4 Indexable rotating gobos plus open position
 • Memorizable indexed position on 540
- degrees
- degrees

 Easy interchangeable gobos

 Variable patterns rotation speed both in forward and reverse rotation

6 Standard Gobos

- 3 fixed plus 3 easy interchangeable position
 Fixed position plus variable rotation speed of the gobowheel
 All gobos of both wheels can be
- superimposed obtaining up to 30 static or rotating combinations

IRIS

- Totally noiseless high quality iris for the wished projection diameter
 Totally independent from other
- parameters can be used also to reduce the gobo projection at will
- Linear control from close to open plus variable speed "pulse effect" to reduce considerably programming of Irls effects

VARIABLE FOCUS

- Remote focus control for perfect sharp projection at any distance
 Enable suggestive cross-fade focusing between two superimposed gobs gobos
- Enable interesting progressive defocusing effect of the patterns when needed
- Reduce considerably the set-up operations

FROST

PRISM

- The frost filter enables from a sharp beam projection to obtain a wash projection
- Ideal for coloured backgrounds
- Variable speed "flash frost" effect to reduce programming operations
- Built-in prism for multiplier projections

STROBE/BLACK-OUT

 Variable speed strobe effect
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DIMMER

 Linear mechanical dimmer Fully dimmable from 0% to 100%

CONTROL SYSTEM

- INFINITY accepts standard DMX 512 signal both through CANNON XLR 3 PIN and CANNON XLR 5 PIN
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- 12 DMX channels when the 16 bit HIGH DEFINITION DMX is enabled

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NOVEMBER 1995

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ABC Membership has been approved pending first audit for the period July 1995 - December 1995

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Credits top to bottom: Photo & design by 5 sur 5, Jonathan Park, Jonathan Park

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Jonathan Park

LIGHTING SOUND News

PLASA and P&O Events Celebrate New Deal with Move to Earls Court I

British Music Fair to run alongside

PLASA, the leading association for the lighting and sound industry, has announced that the 1996 PLASA Show will be moving from its current home in Earls Court 2 to the largest exhibition centre in London, Earls Court 1.

The Show has seen phenomenal growth since its more humble beginnings at the Bloomsbury Hotel in the late 1970s. The move to Earls Court 1 is a natural progression for the PLASA Show and is in response to the ever-increasing number of new companies interested in exhibiting at the event.

The relocation will offer greater flexibility for exhibitors, as the amount of floor space will be increased from 17,000sq.m to 23,000sq.m, as well as offering improved access and build-up possibilities.

The 1996 Show will continue the existing theme of having dedicated areas for differing levels of sound, but will also include dealer demonstration rooms, more feature areas and an increased number of hospitality suites.

1996 will also see the start of a new five-year partnership between PLASA and P&O Events. The two organisations joined forces in 1990 to develop the PLASA Show which has grown from 160 exhibitors to well over 260 exhibitors. PLASA and P&O Events will continue working towards creating a lighting and sound technology event that represents the worldwide entertainment technology industry.

PLASA show director, James Brooks-Ward, told L+SI: "The move to Earls Court 1, combined with the long-term partnership between PLASA and P&O Events means that we will now be able to build on PLASA's reputation as the worldwide home for audio and lighting. PLASA is positioned to become the focal point for the industry and is the perfect opportunity for the whole industry to meet together in one place, at one time."

Commenting on the initiative, PLASA chief executive, John Offord, added: "The advantages of moving to Earls Court 1 are immense. PLASA has expanded rapidly over

the past few years and will be increasing in size and importance even more in the run up to the Millennium and the move to establish a forum of entertainment technology exhibitions in London. Earls Court 1 will provide more floor space and the facility for the Show to grow."

Paul Adams, PLASA's vice-chairman, concluded: "We are very pleased to be working with P&O Events into the next century. The partnership will provide stability for the PLASA Show and give us an opportunity to look at other ways in which to continue supporting our members."

Before moving to Earls Court 2, PLASA was held at the Novotel in Hammersmith for several years, and then at Olympia 2 from 1987-1991

Coincidental with the launch of the initiative came the announcement that the 1996 British Music Fair (organised and promoted by the Music Industries Association) will run alongside the PLASA Show in the Brompton Hall at Earls Court (September 7-10, 1996).

BMF chairman Brian Kemble told L+SI: "For many years it has been traditional for BMF to appear in isolation at the end of July, coinciding with the beginning of the summer holiday period. Research has shown that a significant number of exhibitors and visitors would prefer the event a little later in the year. This exciting new package offers a better time of year, the beginning of the main selling season and the prospect of a mini Autumn Frankfurt in the UK."

A new feature of the British Music Fair will be a public preview day on Saturday 7th, followed by the traditional trade-only days on the Sunday and Monday and a combined trade and education day on the Tuesday.

The PLASA 96 Show will open on Sunday 8th September and run through to Wednesday 11th September. For further details on exhibiting or attending the Show, call P&O Events on 0171-370 8179.



PLASA vice-chairman Paul Adams (centre) shakes hands with P&O Events managing director Jonathan Goold at the recent London Motor Show. Looking on are PLASA treasurer Matthew Griffiths (left), chief executive John Offord (second left), and show director James Brooks-Ward of P&O Events (right).

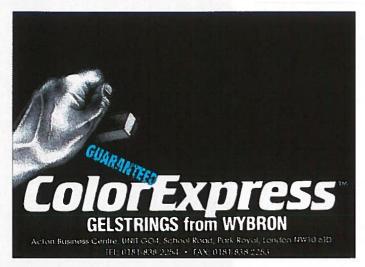


Take two: Paul Adams shakes hands with Gavin Mortimer, president of the Music Industries Association, on the announcement of the new joint initiative. Looking on are Bob Kelly, secretary general of the MIA (left), Matthew Griffiths and John Offord.

Looking Ahead to 1996

Accompanying this issue of L+SI is the 1996 Yearplanner. As you'll see, we've highlighted just the main international shows, but also included the dates and venues for some of the national exhibitions.

If you'd like another copy of the Yearplanner, please fax your request through on (01323) 646905.
First fax, first served.





A Winning Formula

In November 1985, the very first issue of Lighting+Sound International rolled off the presses. In the years since, those presses have gone into action each and every month to print what I believe to be the only magazine which truly reflects what this industry is all about: entertainment in all its myriad guises.

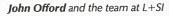
Inevitably, there have been changes in the look, content and editorial team over the last decade, but I hope that one factor has remained constant: our wish to serve the lighting

and sound industry to the best of our ability.

We hope that within the pages of L+SI there has always been something that has caught your eye, made you think or even sent you rushing for the telephone. There's no way of knowing what events we may have influenced over the years, but we do know from the feedback we receive that our professional approach and wide coverage is respected the industry over.

In this issue you will find a special feature marking not only the past and the present, but also the future of L+SI. We have only one

promise for the Millennium: we'll be there to cover it!





Edward Pagett, formerly with Strand Lighting, has joined Vari-Lite Europe as European leasing manager. This is a new position, created to meet the increasing demand for Vari-Lite systems on long-term leases in fixed installations. Vari-Lite New York has been joined by Daniel Bonitsky, previously owner of Zap Production Services. His brief will be to develop sales in new markets off-Broadway. Sister company Irideon has appointed Chris Watts as project co-ordinator and administrator.

SCV London have appointed **Stephen Helm** as northern area sales representative. He brings with him a sound knowledge of the professional and MI markets gained during his time at KGM Studio Specialists. SCV has also been joined by **Sally Haseman**, formerly of Soundtracs plc, who will act as marketing co-ordinator.

HHB Communications has appointed **David Beesley** to head up the company's expanding Advanced Media Production Division. He joins HHB from Sony where he was in charge of the sales and marketing of Sony's media products.

Cerebrum Lighting have appointed **Tracey**O'Mahony to their board of directors. During her time with Cerebrum, she has been personnel manager and PA to managing director, John Lethbridge. In her new role as customer services director, she will act as an internal co-ordinator and liaise with customers.

Nikki Scott has joined Stage Technologies as business manager. The appointment follows almost a decade at lighting specialist DHA. The newly created position at Stage Technologies will combine Scott's skills in management and sales, with a remit to research new markets.

Acousticians Andrew Nicol and John Miller have joined the London office of Arup Acoustics. They replace Finola Reid and Dave Anderson, who have transferred to Arup Acoustics' offices in Los Angeles and Sydney respectively.

Whiteley Electronics has appointed **David Brown** as business development manager to join the team assembled for their entry into the boxed product market for communications.

Linda Robertson has joined the UK sales team of Le Maitre Sales. She will liaise with all Le Maitre customers throughout the UK, assisting UK sales manager Dave Winfield.

Robert Achlimbari has left Rosco USA to join All Access Staging and Productions.

The design arm of TIS Lighting has welcomed lighting designer **Phil Abbott**. He joins Ian Callender and Cliff Williams at TI Services who head up the team whose project work has ranged from grand opera to corporate events.



Edward Pagett, European leasing manager at Vari-Lite.



Stephen Helm, heading SCV's northern area sales.



SCV's new marketing coordinator, Sally Haseman.



David Beesley, the new face at HHB Communications.



more BRILLIANT



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THE DIFFERENCE Lies in a Bright new Idea



The Neutrik Connection - John Offord visits Neutrik's bases in the UK and Liechtenstein

Having had my attention drawn to the tiny principality of Liechtenstein whilst producing this piece, some unusual facts came into view. One, within a piece in the Sunday Times, included the subtle fact that the country is the world's largest producer of dentures at a value of £250m every year. Probably more well known to you is that it has more financial institutions than residents, at a score of 60,000 banks to under 30,000 humans - all within the same 60 square miles.

Another unusual fact, but one of much more relevance to us, is that it is the home of Neutrik, the world's leading manufacturer of audio connectors, with 120,000 a day, six days a week pouring out of a range of increasingly advanced and automated machinery at its Schaan factories.

Neutrik AG began its life in 1975 when design engineer and ideas man Bernhard Weingartner saw a gap in the XLR connector market, especially in Europe, and set up business in an old farmhouse near Vaduz, the Liechtenstein capital. Nowadays, the company also has operations in the USA, UK, Japan, China, Germany and Switzerland.

Seemingly to confuse matters, the starting point for my Neutrik tour, in the company of six other magazine editors, was on the Isle of Wight (UK), as an overnight 'overner', to view the UK facility at Ryde, where 70 people are employed.

In 1986 Neutrik AG acquired the assets of Technical Projects Limited, who were based on the Island and well-known for the manufacture of audio test equipment. A small team of nine personnel under managing director Paul Smith continued production of the already-popular TP401 test system and development progressed onward to the TT402A system, the world's first portable true two-channel unit. A second generation of audio test systems, the A1 and A2, evolved to meet the changing needs of the industry, and according to Neutrik these systems have gone on to become the largest selling portable test units worldwide.

Today, the Ryde factory floods out no less than 5,000,000 connectors of different types, and in addition, Neutrik (UK) Ltd manufactures the Infomatic safety messaging system. Customers for this include the Civil Aviation Authority at Heathrow, Gatwick, Newcastle and Glasgow; British Rail; the Atomic Energy Authority and ferry companies. A third six-channel system has just been supplied to Red Funnel Ferries for use on their new Solent Superferries. It provides for all statutory safety messaging, fire and evacuation messages, as well as entertainment via radio and cassette. Neutrik (UK) also provides audio cables for the European market, patch bays and bantam cables for Japan, as well as serving the UK market via single account handling and additional engineering support.

Having 'done' the Isle of Wight connection, the assembled editors were hovercrafted, bussed and flown onwards to Zurich and driven into Austria ready for the assault on Neutrik AG in Schaan, Liechtenstein.

When Bernard Weingartner started the company he had a total staff of two: himself and Werner Bachmann, an engineer fresh from university who today is the company's vice-president of engineering. And it was Bachmann who took us on the company trail. In 1975 they started life with the production of the already mentioned 'Europeanised' XLRs, and, to keep the cash-flow going, transducers for the hearing-aid industry.

Nowadays, after innovation upon innovation, coupled with excellent engineering skills and close





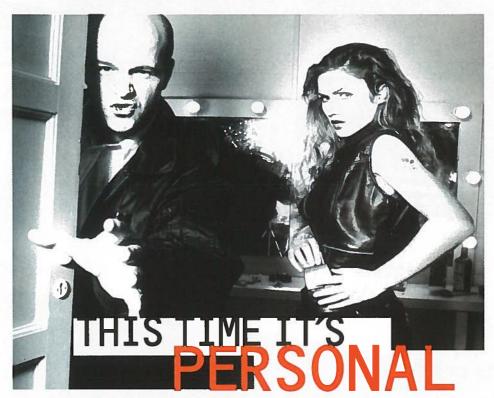


The faces of Neutrik: Bernard Weingartner and Werner Bachmann of Neutrik AG, and the UK connection, Paul Smith of Neutrik (UK) Ltd.

contact with the market, they lead the world in XLR technology, and the company now holds over 50 patents in the field. Highlights in recent years include the introduction of the R Series, the smallest XLR socket, in 1990, and in the same year, the J Series - the first 1/4" jack with separate retention. In 1991 the TT Series provided the first Bantam plug with separate retention and gold contacts. The first combined Jack-XLR receptacle - COMBO - arrived in 1992 and in 1995 came the A/B series, the first EMC compliant XLR receptacle.

Outside the connector market, and mostly from the Isle of Wight, Neutrik's 'Easy Patch' panels were introduced in late 1994 with Rapitest and a digital version (A2 Digital) of the audio test system arrived this year. The latest piece of kit, Rapitest, is a modern state-of-the-art multitone audio analysis system, providing capabilities to simultaneously measure level frequency response, distortion, noise and signal-to-noise ratio in seconds.

As proved by Rapitest, 20 years down the road, Bernard Weingartner and his team are still full of good ideas and alive to new directions. Not content with standing still, other Neutrik ensembles are springing up worldwide, and most particularly in the Far East. Neutrik-SCJ, the Tokyo-based subsidiary, is based in the heart of the Far Eastern electronics market, and the new NingBo plant in China is already hard-put to provide the necessary connectors for the largest and fastest-growing national market in the world.



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Audio Technica to Headline Donington!

Who are the world's greatest band? The title seems to change hands on an almost weekly basis. But a permanent home for the title of 'world's greatest heavy rock band' has surely been found with American group Metallica.

Stuck in the middle of this year's Monsters of Rock extravaganza at Donington was Paul Maher, sales director for Audio Technica (UK) - and he was there checking on the performance of his company's microphones.

Mick Hughes, the FOH engineer for Metallica, is the man responsible for ensuring that 70,000 fans at Donington could hear every single note, event the most distorted and overdriven.

To aid him in this task, he chose Audio Technica's 4050 Microphones. He told L+SI: "Using the 4050's was like plugging the guitars straight into the PA. The 4050 makes no addition to the top end reproduction. The response from the 4050 was totally flat."



Hughes, previously an engineer with Birmingham-based SSE - suppliers of all Donington's sound - has provided front of house for many of the biggest names in music - Def Leppard, Ozzy Osbourne, Tesla, Musical Youth (the man has to eat!) - and is shortly to undertake a major tour with Thunder.

EnTech Expands

Overwhelming demand for exhibitor space has forced the organisers of EnTech '96, the Entertainment and Technology trade show in Sydney, Australia, to announce the opening of a second exhibition hall. The demand for space eight months before EnTech '96 indicates both the growth and confidence in the Australisian entertainment and technology markets.

EnTech '96 is scheduled for 23-25 April 1996 at the Darling Harbour Convention Centre in Sydney, Australia. The '94 event attracted 3,150 trade visitors and 94 exhibitors, and hosted 36 workshops/seminars with 1,611 attendees. From next April, EnTech runs annually with dates scheduled for Melbourne in 1997, returning to Sydney in 1998.

After only six weeks 85% of EnTech was sold out when space allocation began last July. The speed of sales far exceeded expectations.

Renewed confidence in Australia's economy has allowed for aggressive technological development within Australia's entertainment industry. This is particularly evident in the areas of post-production and audio for film and television. The introduction of Cable TV to Australia, and the move into total technical automation of large theatre productions such as Miss Saigon are just a couple of examples. EnTech '96 will host a series of seminars/workshops, and the Entertainment Technology Awards. World renowned guests include this year's Emmy Awards nominee, Bruce Jackson - sound engineer to Elvis, Barbra Streisand, and Bruce Springsteen and the CEO of Apogee Electronics.

PLASA, together with the DTI, organises a joint venture exhibitor group to EnTech. For further details contact Anna Pillow at the PLASA office on (01323) 410335. For further information you can also contact Connections Magazine in Australia, telephone 61-2-876 5715.

New Alternative

Lite Alternative are enjoying a particularly busy period, with Tears for Fears, Massive Attack, Bjork, PJ Harvey and Boyzone among their clients, as well as Marks & Spencer, whose fashion show was held at Wembley Conference Centre recently. New Equipment recently added to the Lite Alternative stock includes two Avolites consoles a Pearl and a Sapphire.

Eagles Land for ESS

Edwin Shirley Staging (ESS) has secured the staging consultancy contract for the Eagles tour of Australasia, the itinerary for which includes dates in eight cities across Hawaii, Japan, New Zealand and Australia. Throughout the tour, ESS will co-ordinate all the staging logistics and manage local staging suppliers.

With a crew of up to 10, the company will supply and build a 24x18m stage roof, along with PA wings (constructed from their new tower system) in Japan and Australia. The Japanese leg will see the first collaboration between ESS and local staging company, Shimizu, who will be providing decking and scaffolding and augmenting the ESS crew with local men.

ESS has also announced its appointment as sole UK distributors of the Mojo crowd barrier and is supplying the Simply Red European tour.

Six Months On. . .

Stagetec (UK) Ltd began trading in April '95 specialising in a sound, lighting and staging design, supply installation and maintenance service. Six months on, turnover has exceeded targets and the company has completed a number of large installations and smaller sales projects.

As the sole UK distributor for Compulite, the company have supplied the theatre and hire industries with lighting control systems, in addition to smaller desks to the educational market. The level of orders has resulted in an increase in stock levels for the Compulite range with a number of tenders out for significant projects over the coming months.

HES Service Centre

Dallas-based Light Bulb Solution recently opened the first service centre for High End Systems' products, offering 24-hour turnaround on all warranty repairs. The company will also honour all Lightwave Research warranties, even if the equipment was not purchased from Light Bulb Solution. In addition to a showroom, the company offers a wide selection of lamps for the entertainment lighting industry.





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photos: Guy Gravett

Howard Eaton Lighting Ltd (HELL) has claimed full responsibility for having set alight both the Don Giovanni set and actors at Glyndebourne. Fortunately for everyone concerned, this was not an act of malevolence on HELL's part, but at the request of the Glyndebourne production team!

Six actors appearing in the production were ignited by HELL for what is believed to be a record 70 seconds. The requirement was unusual in that the length of time that the actors were initially required to be kept on fire is more than double that usually required. HELL therefore began from the safety point of view.



They approached a number of companies who make protective clothing (the type worn by motor racing drivers such as Damon Hill), including Jay brand Racewear - the only firm not to laugh at the request for a suit which could be deliberately set on fire, while offering complete protection to the wearer. A racing driver's suit, with an extra eight layers of Nomex underwear, was selected for the task, but even this needed to be worn with an inner layer of Damart thermals and two Nomex balaclavas - a warm prospect even without the flames! HELL then attached a layer of special silicon ceramic fabric, capable of withstanding up to 1,100 degrees centigrade. In most cases, these were on both legs and one arm, the other arm being kept free to pat out the flames in the event that the actor felt uncomfortable at any point.

At each performance a member of the HELL crew was responsible for spreading the right amount of flame paste on to each ceramic patch. In addition, each of the actors had their own minder to ensure that none of the actors' hair was exposed prior to lighting the flame paste, to monitor the flames at all times and, finally, to douse the flames after each appearance. Igniting the set was, in comparison, an easy task, requiring the use of custom-made-propane gas burners flown from a 15 metre bridge and fixed around the 5x3 metre trap door in the stage.

In addition to all this hot work, HELL has also just completed the installation of two hydraulic scissor lifts at Glyndebourne, to increase the flexibility of the orchestra pit. The installation of the lifts, which were designed by Mike Barnett, included altering the existing orchestra pit floors and the introduction of a safety system which interfaces with the existing elevators' safety override.

Mack & Mabel

A new production of Mack & Mabel opens at the Piccadilly Theatre this month. This is the first time the musical, which transferred from the Leicester Haymarket, has ever been professionally produced in this country. Based in the romantic era of silent movies and the first 'talkies', the show looks at the lives of Mack Sennett, founder of the Keystone Studios, and Mabel Normand who was believed to be one of the most talented comic stars of the silent screen. The musical score of Mack & Mabel has already won critical acclaim following the Leicester Haymarket season.

The production is directed by Paul Kerryson, with lighting design by Chris Ellis and Paul Franklin as production electrician. The lighting set includes 18 Pro Spots and over 400 conventional lights supplied by White Light.

Lighting Awards

Robert Caban, president of the Lighting Industry Federation, hosted the recent Lighting Design Awards 1995 held at The Savoy, in London.

The Awards were presented in four different categories, and many of the major lighting specifiers were there to see the best lighting designs in the UK.

International lighting designer Professor Christian Bartenback presented the awards to the winners. In the commercial category Bennetts Associates Architects received the top prize for their design for the PowerGen HQ in Coventry. In the civic category, Light & Design Associates were the outright winner for their work on Hinde Street Methodist Church, whilst in the Exterior category John Bradley Associates picked up the award for the Royal Pavilion. In the leisure category,

there was no outright winner, but Millwall Football Club and The National Cycling Centre in Manchester were both highly commended. The awards are good news for manufacturers such as Osram, Thorn, Philips and GE Lighting, whose products all feature prominently in the designs.

Two other highly commended designs are of particular interest to L+SI readers. Maurice Brill Lighting Design won a commendation for the De Vere Grand Harbour Hotel in Southampton (pictured top right). In the Winter Garden, the showpiece of the hotel, theatrical gobos were used to project patterns of light.

Also commended were Philips Lighting, who used high intensity metal halide floodlights to

illuminate the 235ft high blue steel structure of the Pepsi Max Big One rollercoaster (pictured above) at Blackpool Leisure Beach (see L+SI, July 94).

The closing date for entries to next year's Lighting Design Awards is 15 December, 1995. For further details call the Lighting Industry Federation on 0181-673 5880.





MOS at Wembley

The culmination of the European Ministry of Sound tour reached its conclusion at Wembley Exhibition Halls at the end of October. During its time on the road, the tour has visited a wide number of venues. As the actual Ministry of Sound nightclub features Harman Audio-installed JBL equipment, is was only natural that JBL dealers Entec, would use a large JBL system for the tour.

The main PA in the 'Rulin Room' consisted of 28 JBL full range speakers, 14 sub bass (TCBs), four JBL Lo in-fill and four JBL Hi in-fills. In the 'Open All Hours' room an Allen & Heath GL4 24-channel console provide the control for 16 JBL full range and eight JBL sub bass (TCBs), whilst in the 'Ambient Room' there were 12 JBL Soundpower P798s, backed by JBL amplifiers and controllers. In all rooms, Crown, Denon, Klark Teknik, Yamaha and BSS equipment provided the effects and system drive components.

Pulsar Seminars

Following the success of last year's programme, Pulsar are once again running their series of workshop seminars.

The Masterpiece course (the first one takes place on January 30th, 1996) is a single-day intensive course for the Masterpiece range of products, covering all aspects ranging from interconnecting systems through to advanced automated programming. The course offers attendees a good understanding of the capabilities of the Masterpiece range and each delegate receives a certificate and programmer's card on completion of the course.

The equipment service seminar (first date: January 31st) caters to a wide range of service requirements and each will be individually tailored to suit the requirements of the delegates.

For details on dates and arrangements contact Pulsar in Cambridge, telephone (01223) 66798.

Martin Audio Theft

On October 2nd, this year, a consignment containing Martin Audio products was stolen in the Romford area of Essex. The consignment included: two Martin Audio ICS300 loudspeakers (s/nos 1005 and 1025), three Martin Audio WX3 controllers (s/nos 1303, 1304, 1305) 10 Martin Audio W0.5 loudspeakers (s/nos 1007, 1011, 1012, 1014, 1016, 1019, 1040, 1044, 1052, 1054), two Martin Audio W3P loudspeakers (s/nos 1020, 1032) and 20 Martin Audio EM25 loudspeakers (s/nos 3496, 3497, 3498, 3499, 3500, 3501, 3502, 3503, 3504, 3532, 3533, 3534, 3535, 3536, 3537, 3538, 3539, 3540, 3541, 3542) as well as various spare parts.

If you have any information regarding any of these products please contact Martin Audio in High Wycombe. Telephone (01494) 535312. All information will be treated in the strictest confidence.

Shure Open Day

With an attendance of over 50, HW International recently sponsored a very successful Shure Open Day. Organised on their behalf by Brenda White of PLASA Special Projects, the programme presented a range of technical information on microphones and their applications. After a welcome from Jon Ruppin, MD of HW International, Terry Billau of Electronic Services recalled an earlier Shure slogan 'Microphones Matter' which reflected the importance of selecting a suitable microphone.

He described all the different types of microphones and showed how to interpret manufacturers' specification sheets which should give an indication of the manufacturer's concept of the intended use for their microphone. He elaborated on the intricacies of microphone matching and connections, balanced, unbalanced and phantom power.

After lunch, Geoff Ingle, of Shure GmbH, highlighted problems experienced with the mixing of microphones and described how Shure have overcome these in their SCM810 Automatic Mixer. Doug Edworthy, chairman of the ISCE Committee, gave an informative description of the principles of Audio Frequency Inductions Loops and the equipment required, whilst Brian Copsey outlined the division on the radio spectrum which led to the formation of ASP Frequency Management.

Vision 95



'Vision' was created as a national UK exhibition for the television industry when the IBC (International Broadcast Convention) moved from Brighton to the RAI Amsterdam (see Second Take feature, page 76). The second show took place at Olympia in October, and a number of PLASA member companies took part.

Arri (GB) showed some interesting museum pieces to demonstrate the long history of the company in film-making, but pride of place was given to the new 435 Camera and the new Compact Series - 200W to 6k lighting.

Autograph Sales had the new, fully softwareprogrammable, broadcast intercom, the Clear-Com Matrix Plus II, capable of supporting up to 100 independent stations or interfaces.

Canford Audio were showing a selection from their vast range of over 9,000 products, whilst CP Cases debuted the Pro Bag range of protective bags for camera, audio and lighting equipment which are available at very competitive prices.

Raper & Wayman had a working demonstration of the new Soundcraft DC2020 Surround (sound) console. Other PLASA members exhibiting included DeSisti Lighting, Harkness Hall, Le Mark TVS, Sennheiser, Strand Lighting, Trifibre and Sound Design.

Despite there having been both Montreux and IBC exhibitions for the film and television industries this year, the number of exhibits and visitors for this specialist bi-annual event showed a healthy increase.

Ken Walker

PIGI Powers Up



E\T\C UK Ltd and Pyramid Logic recently held a joint demonstration of the PIGI high power projection system. The demo took place at the offices of Pyramid Logic in Worship Street, London and was well attended by people involved at all levels of the lighting and events industry.

The purpose of the demonstration was to show the possibilities of the new E\T\C system over the more traditional types of large format projector. Two projectors equipped with double scroller units were set up to project onto the wall of the building opposite and guests were treated to images (produced by Dion Allen at Pyramid) such as landscape paintings scrolling within a picture frame and planets rotating within a moving star field. Inside, the guests were able to see the new PIGI lamphouse up close and have a one-to-one demonstration of the PIGI software.

"We are aware that it is almost impossible to get an idea of what this system is capable of without seeing it in action," E\T\C's MD Ross Ashton told L+SI. "We are hopeful that this kind of event, where we can demonstrate the equipment 'live' will be worth a thousand mailings."

M&S Go Live

One of the biggest retail fashion tours ever to be staged in the UK, launched 'M&S Live' - Marks & Spencer's 1995 Autumn Fashion Tour, which opened at the Central Milton Keynes Shopping Centre in mid September.

By the time it completed its run at the Sports Village in Norwich in early October, over 60,000 people had seen the show, staged in 19 venues across the country, including Edinburgh's Festival Theatre, London's Drury Lane and Birmingham's Symphony Hall.

Putting Marks & Spencer in the spotlight is fashion show production company CJ Spencer Associates. Headed up by producer Chris Spencer, they have been working with M&S for months, developing the show, creating stage designs, sourcing music and choreographing over 20 professional models.

The presentation features a mix of catwalk, dance and theatre, backed by the latest lighting and sound technology. Lighting designer Paul Normandale has skilfully

captured the constant mood changes from hard-hitting rock and roll sequences to more carefully orchestrated theatrical tableaux, where



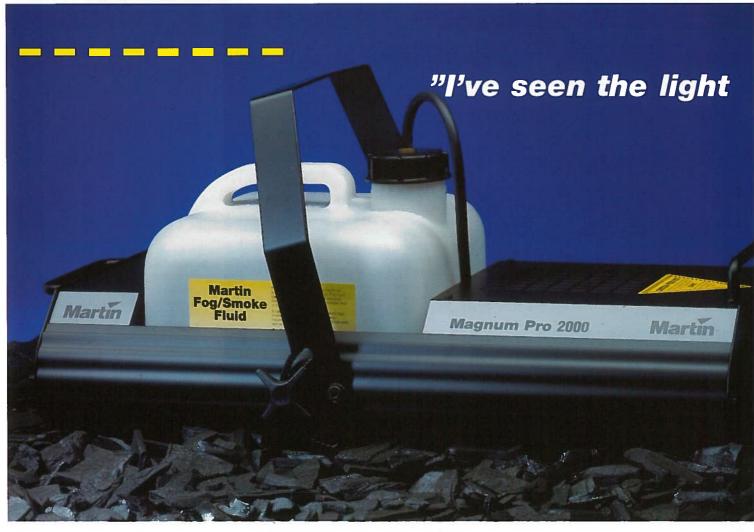


clever use is made of gobos to create highly textured backdrops.

A technical crew of 11, backed by a local crew of eight in each venue, travelled the country in three 45ft artics. Leading the technical inventory was a combination of Vari-Lite VL5s and VL60s, ably supported by a host of conventional lighting, special effects and smoke machines. An Avolites Sapphire desk, together with Avolites dimming, was providing front-of-house control.

The sound was largely a Meyer rig, with a pair of MSL3s per side, with

delays handled on Nexo PS10s and a Soundcraft Delta doing the mix. The sources for the soundtrack were provided on CD.



Smoother Journey with Osram

The £16 million RAC Supercentre, located at the M4/M5 interchange on the outskirts of Bristol, is using Osram Dulux L 36W Cool White compact fluorescent lamps to provide uniform, shadow-free lighting in its main operational areas. Used in conjunction with Osram Quicktronic electronic control gear (ECG), the lighting system provides high levels of centralised control, enabling considerable energy saving.

The main operational areas house a large number of VDU operators, dealing with up to 300 emergency calls per hour - 24 hours a day, 365 days a year. It was essential, therefore, to have a comfortable, glare-free environment while also

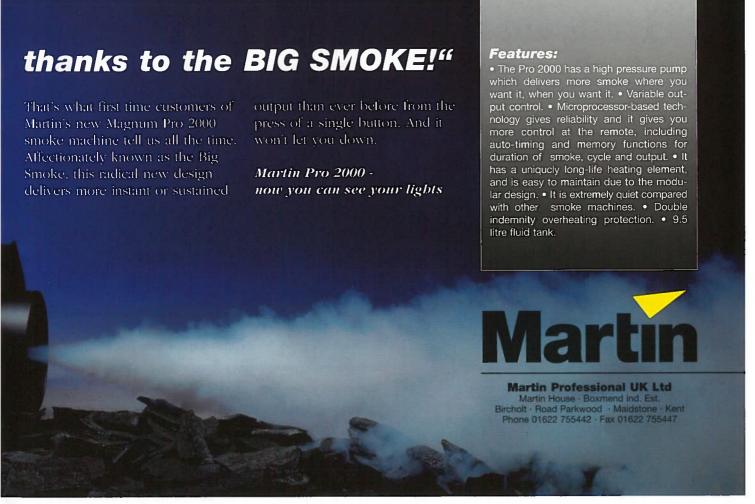
ensuring minimum running costs.

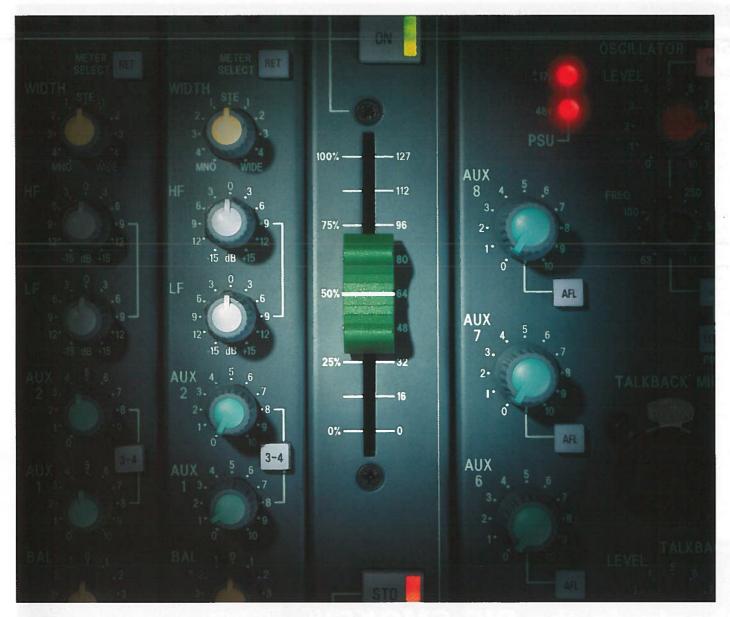
Architects Nicholas Grimshaw and Partners selected Environmental Technology Ltd to design and manufacture a lighting system that met the design concept for these areas. Supplied under the company's Entech trademark, the lighting system is based on booms of up to 8m in length with outriggers carrying up lighter heads at 1500mm separation. The light is then reflected off the white concrete coffered ceiling.

Entech design engineers selected the Dulux L lamps and Quicktronic ECG. Osram Dulux L lamps are one third the length of equivalent wattage conventional fluorescent tubes, facilitating the use of small elegant luminaires for creative lighting, while still maintaining a high light output.

One of the many advantages of ECG is the greater flexibility through the use of a central lighting control system, with switching from a central PC.







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Sarner Masterpiece at National Gallery

London-based Sarner International Limited has just completed a major upgrade for the audio visual facilities in the Sainsbury Wing of the National Gallery.

This project followed on from the original installation successfully completed by Sarner in 1991, when full video and audio facilities were installed. These were also linked to separate outlying conference rooms so that any signal, including computer data, can be patched from any location via the theatre projection room for display purposes. Originally, video and data projection was achieved via a ceiling mounted projector, but this has now been replaced by the latest technology, whereby the projector is sited within the control room.

Joan Lane of the National Gallery commented: "The task of re-equipping the theatre was expected to be a difficult one due to the weird angles and sight-lines around the space." Sarner brought in a range of possible equipment for testing in situ, making the choice for the Gallery easier, as each piece of equipment could be seen in the real environment dealing with the existing problems. The Gallery had to be particularly sure that the equipment would work sympathetically with the material which is shown to the public.

One of the many problems which Sarner faced was that the major works of art and period pieces shown in art lectures can easily be spoilt by the harsh image characteristics of some projection equipment. At the same time the Gallery wanted to be confident that the visuals did not become too soft which is a common problem with many projectors. Sarner also had to ensure that the colour brightness of the art films that are shown could be seen to maximum effect wherever the audience is seated in the theatre.

Sarner was responsible for upgrading the projection room and control facilities for the existing theatre. The range of image projection equipment includes a Barcodata 8100 LCD projector which is now used to provide, amongst other things, effects in theatrical production. In addition, four new Xenon Arc 35mm slide projectors were installed. The original York control system has been upgraded with an AMX microprocessor based control system, including touch panels and master push button panel.

Cool Running

The original Sunset Boulevard production, which opened in London's West End three years ago, is now being recreated in Germany by the Really Useful Group in a purpose-built theatre between Frankfurt and Wiesbaden. The production may be original, but it will incorporate the newest theatre lighting, with Theatre Projects having purchased some 250 of ETC's Source Four lanterns for the production.

Peter Marshall of Theatre Projects explained the reasoning behind the change: "The dichroic reflector in the Source Four reduces the heat so much that the shutters don't burn out,

hence the focus doesn't change. The lens system is better, the lantern gives clearer projection of gobos and effects and thanks to the cool running, moving effects last longer."

DHA recommends a cooler running lantern for use with its products when they are being used in long term projects such as exhibition work or for long running effects during a show. Theatre Projects is using DHA varispeed DMX-controlled double gobo rotators for the Phantom of the Opera in Basle and on the show's UK tour, and has bought 12 ETC Source Fours specifically for these effects.

At M&M Light Solutions' recent successful open day, which was arranged by Adrian Hicks to demonstrate the new 230 240V version of the lantern, DHA displayed a full range of products for these cooler running lanterns, which are now the industry standard in American lighting design.

Our photograph above shows two hundred of ETC's Source Four lanterns at Theatre Projects, en route to Germany, together with, left to right, Nick Jones, production electrician for Sunset Boulevard in Germany; Ally Grant, associate lighting director for Sunset Boulevard in Germany; Mike Odam, Theatre Projects' customer production manager and associate lighting designer for Phantom of the Opera in Edinburgh and Basle; Adrian Hicks, managing director of M&M Light Solutions and Peter Marshall, hire manager for Theatre Projects.

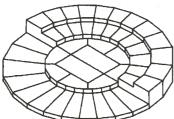


Northern Light at the Business Design Centre

Year-on-year growth in business 'down South' over the past few years, together with diversification into new areas, has motivated Edinburgh-based Northern Light to open a London Project Office at the Business Design Centre. With an ever-growing project list, the company is now working on as many, if not more, jobs outside Scotland as within, including the refurbishment of the Bedford Corn Exchange, on which Northern Light also acted as consultant, and the new Radlett Centre in Hertfordshire.

The company also has a strong background in architectural and outdoor lighting, and the London Project Office, which opens for business this month, will be used to showcase such products from various companies including Strand Lighting, for which Northern Light is a main dealer. The London address for Northern Light is: Suite 305, The Business Design Centre, 52 Upper Street, London, N1 OQH, telephone: 0171-288 6250.

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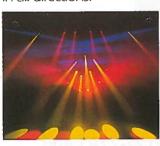


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full magenta/cyan/yellow colour mixing		•	•	•	•	•	•
colour wheel		•	•				
rotocolour effect	•	•	•				
rotating colour effects		2/5	2/5				
indexable gobos	5	5	5				
rotating gobos	5	10	10				
superimposing gobos			•				
multiplying rotating prisms		3/5	3/5				
motorized iris with variable speed pulse facilities	•	•	•	•	•		
totally variable frost			•	•	•		•
variable speed flash frost effect			•	•		•	•
variable speed strobing shutter	•	•	•	=			
black-out	•	•	•				
dimmer 0/100%		mech.	mech.	elect.	elect.	mech.	mech.
motorized high speed focus	•		•	•	•	•	•
motorized zoom lens					•	•	•
light beam angle [degrees]	10.5	10.5	10.5	0-14-28	0-28-45	0-14-28	
typical working distance (mt.)	4 - 30	4 - 30	5-40	4 - 18	4 - 18	4 - 32	4 - 32
lamp on/off remote control	•		•			•	•
coemar digital multicontrol control panel		•	•				<u> </u>
electronic hour meter		•	•			<u></u>	
sixteen bit resolution		•	•				L
DMX 512 controllable	•	•	•	•	•	•	•
manual shutter blades				•	•	•	•
weight (Kg)	34	41	45	22	22	34	34
separate ballast	•	•	•			•	•

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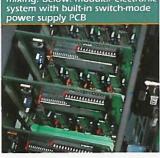


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People at PLASA



Bryan Raven of White Light (left) with John McGraw of ESTA and Jeff Turner of Vanco.



Tom Littrell of Vari-Lite (left) with Bill Gallinghouse of ETC Inc.



Nikki Scott of Stage Technologies with the award-winning Tow Track.



Freddy Lloyd (left) and Peter Brooks from Zero 88 demonstrate two text-book reactions to an L+SI photographer: uncontrolled derision and thinly-disguised exasperation.



JB Toby (left) and Rick Salzedo of Avolites ponder the nature of the lighting industry, while L+SI's On Tour man, Steve Moles (centre), ponders his expenses.



The Trantec team certainly had their hands full at PLASA, not to mention their mouths. 1-R: Matthew Gilbert, L+SI's (empty handed) Barry Howse, Chris Gilbert and Richard Ganley.



Mark Tonks of AC Lighting (left) and Tad Trylski of DHA look suitably pleased to have received their 10th Anniversary L+SI t-shirts.



Man of Action: During a particularly hectic spell of sitting down, Philip Norfolk of Action Lighting stands up to pose demurely for L+SI.



All systems go: the extremely busy trio of High End Systems' Mike Wood (left), L+SI's Tony Gottelier (centre) and Jem's Jon Petts.



David Wilmore and Geofffrey Joyce provide a welcome presence for the Association of British Theatre Technicians (ABTT).



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Paul Raymond and Natasha Ostaszewska of Par Opti, surrounded by their fibre optic effects: can you find a better fibre provider?





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Cerebrum Open New Branch



Pictured above are John Lethbridge (left) and Pete Sherrington (right) of Cerebrum Lighting with David Harwood of CTS.

A new sales office and stocking depot has been opened in Birmingham by entertainment lighting distributor, Cerebrum Lighting Ltd, in conjunction with their local distributor, Central Theatre Supplies (CTS).

The branch is to be run by Pete Sherrington, who joined Cerebrum Lighting after several years with Strand Lighting in their service department and sales team. The day-to-day sales co-ordination is being handled by CTS' managing director, David Harwood.

Commenting on the new partnership, Cerebrum's managing director John Lethbridge told L+SI: "Cerebrum Lighting have always recognised the need for a good local stockist of a broad range of entertainment lighting products who can deliver fast and at competitive prices. When we decided to target the Birmingham area, we saw that a strategic partnership with CTS, who already have an excellent reputation for service and a highly skilled technical team, was a natural option for us." David Harwood welcomed this new initiative, adding: "The joint venture with Cerebrum Lighting offers our company new and exciting prospects for the future. We are delighted to be working closely with a company of such high standing within the industry.

Cerebrum Lighting (Midlands) are based at: Central Theatre Supplies, 1186 Stratford Road, Hall Green, Birmingham B28 8AB, telephone 0121-777 0510.

Playing with Light

Playlight has expanded its moving lights hire stock with the addition of 20 Golden Scan HPEs. These complement the existing large stock of Golden Scan 3s and Mini Scan 300s, which are used for television, theatre and conference projects.

Supplying lighting and labour packages for both network and satellite television keeps the majority of the stock busy. The addition of these latest Golden Scans with many relevant features for television, ensures that the company continues to offer an efficient service for this market.

Credits to date include BBC Manchester (That's Showbusiness and Mrs Merton), BBC Cardiff (Tip Top), Central (Pot of Gold and Freddie Starr Show) and Scottish Television (BAFTA Craft Awards and Wheel of Fortune).

Conferences and product launches utilise the Mini Scans predominantly. Recent projects for production companies include a new product launch for Peugeot and events for Umbro and IBM, the latter including a set which relied totally on the lighting for its effect.

W&T Relocate

W&T Ultrasonics Ltd, loudspeaker enclosure and flight case manufacturers have moved to new premises after 27 years based in the city of Brigg, South Humberside. The constant expansion of business has made necessary the move to Island Carr Industrial Estate on the outskirts of Brigg. The 2200sq.ft premises will hold the administration and R&D with a purpose-built 'Audio Lounge' demonstration room which will enable clients to hear their commissions in development and also allow for the demonstration of a range of brand name products, including the recently launched AP3 concert system. Island Carr already houses W&T's manufacturing division, but the company will retain its town premises for storage purposes.

An open day will take place in late November 1995. Further details are available from W&T Ultrasonics, telephone (01652) 652850.



'Space Cowboy' Steve Miller rides Cyber Range

Steve Miller's hits may reach back a decade or two, but on his recent tour, he enhanced that retro-repertoire with a stage set featuring the latest in lighting technology.

Lighting/set designer Chas Herington, who's racked up five tours with Miller, had much to do with the artist's acceptance of new technological toys.

B&R Scenery in Newbury Park, California built the set. The dominant structural pieces are four white architectural columns with a flowing white drape gathered at each top to swag down to the stage floor. Behind the band are seven textured flats, which look like garden

trellis-work, but which are made out of 2-inch PVC tubing. Herington explains: "We took a saw to them and cut them into weird, irregular shapes. It creates an incredible kind of rippling effect through the trellis work. We uplight, downlight and backlight the set; it's very effective." Cable Lite Corp of Dallas supplied the four 40-foot runs of fibre optic cable which outline the stairs on the drum and keyboard risers.

Illuminating the stage are 24 High End Systems/Lightwave Research Cyberlight automated luminaires, 24 Intellabeam automated luminaires, 43 VL5s, 32 ACLs (eight with colour faders), 24 Par cans, four 8-lights, six FOH spots, two short-throw Lycians, and of course, the fibre optics. The Status Cue lighting console and the



mini-Artisan 2 control the show. The Lightwave Research equipment was supplied by Paradise Sound & Light in Orlando whilst Clair Brothers Audio provided the sound. The gobos from High End's regular stock inventory paint the stage with strong patterns.

Herington has used other High End fixtures on past tours with Miller and Dire Straits, but this was his first time using Cyberlights. The shed tour with co-headliners The Doobie Brothers ended in September. However, on Oct 29, Steve Miller revamps the show to head out on an all-blues tour. And like the blues, which is all about getting down to basics, the production gets pared down to the "bare bones," Herington adds.

photo: Amy Davidson

WL Burning Bright

White Light report a growing list of autumn hire contracts. London transfers have bought in a number of jobs, including Burning Blue (see L+SI, September 95) which is now in the Ambassadors Theatre (lighting design by Jenny Kagen); Hobson's Choice at the Lyric Theatre (lighting design by Nigel Hollowell-Howard); and An Inspector Calls at the Garrick Theatre (lighting design by Rick Fisher).

Meanwhile, tour business is still going strong with The Rocky Horror Show and Arcadia going out on the road, whilst Tommy Steele is on his way back to the West End. Both the Rocky Horror Show and Tommy Steele are using Pro Spots from White Light's subsidiary - The Moving Light Company.

Other new business includes The Rat in the Skull at the Duke of York with lighting design by Rick Fisher; Wild Oats at the Royal National Theatre with lighting design by Mark Henderson; Dead Funny at the Savoy Theatre with lighting design by Simon Opie; and Eddie Izzard at the Shaftesbury Theatre with lighting design by Amanda Garrett.

White Light's sales desk is also reporting brisk business with a Strand Architectural system installed in the Royal Gardens Hotel in Kensington, lanterns and effects for the Hertwood House College of Further Education, and a complete touring control system for Kent Opera.

AMS Directory

AMS Neve have published the fourth edition of the World Digital Desk Directory, with contact details for studios equipped with AMS Neve consoles, featuring over 225 consoles worldwide.

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Fireworks Fiesta

Shell Shock Firework Company was behind the spectacular fireworks display that helped Vauxhall launch the new Vectra car on the Thames in mid October.

Spectrum Communications devised the launch celebrations that began with a helicopter flying in over the Thames with a huge silver 'V' and a new Vectra hanging beneath it. As the car landed on a separate pontoon, the stunning set-piece ignited and the show began. There were 1,775 fireworks in the display that produced over 2,350 principal explosions and hundreds of subsidiary bursts and bangs during the six minute display. Hot on the heels of the Vectra launch, Andrew Smiley, managing partner of Shell Shock, was catching a plane to Tanzania to join his crew who are setting up a display to celebrate the opening of a new Sheraton Hotel in Dar Es Salaam.

Sidney Shure

Shure Bros Inc have announced the death of Sidney N Shure, founder and chairman of Shure Bros.

Until his death in Chicago on October 17th, Shure, who was 93, still took an active part in the running of the company he founded. The company remains in the ownership of the Shure family, and Shure's widow Rose will continue to be actively involved in its management.

Shure Brothers Inc, which celebrated its 70th Anniversary earlier this year, will remain an independent company manufacturing audio products worldwide.

LMP's Latest Arrival



Pictured above at LMP's Ibbenburen HQ in Germany are Rick Wilson (left) of Le Maitre with Uli Petzold of LMP who has just taken delivery of Le Maitre's new G300/DMX smoke machine.

Lights Keep Burning

Movements of lighting equipment in and out of Theatre Projects/Concert Production Lighting's warehouse, and the supply of crews, continue apace with the two sister companies currently involved in a diverse variety of projects.

Currently scheduled are Take That's Australian Tour; the UK tour of Squeeze; the European club and part of the world tour for Lenny Kravitz; tours for Chris Isaak and Julian Cope; a live video recording for Chris de Burgh; the Phantom of the Opera in Basle and Sunset Boulevard in Wiesbaden.

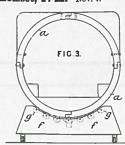
TP were also awarded the lighting contracts for Prisoner Cell Block H, which opened at The Queen's Theatre, Shaftesbury Avenue at the end of October with Lily Savage in the starring role and Barry Humphries' nine week UK tour.

ONE HUNDRED YEARS AGO THIS MONTH

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Intro to Patent 21,101 of 1895 by W.W. Boisset, A.H. Boisset, & F.M. Boisset

21,101. Boisset, W. W., Boisset, A. H., and Boisset, F. M. Nov. 7.



In 1895, sensation drama was in great demand by the theatre-going public of Great Britain. Theatre managers competed for the most spectacular and the most realistic effects. Quite often, such productions took place upon a ship, and this patent demonstrates how the Victorian stage machinist produced the alarming effect of a ship pitching and rolling in stormy seas. Almost inevitably, the ship would, of course, sink, the captain went down with her, and the hero would rescue his beloved.

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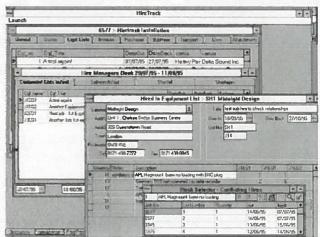
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NYT 1995 Season

Another year of general lack of interest from sponsors meant that the 1995 National Youth Theatre of Great Britain season was the smallest for several years consisting, as it did, of just two shows. But the support of the Hanson Group ensured that a season did take place, and the generosity of a number of leading industry suppliers also ensured that it was up to the company's usual high standards.

Though both shows were produced to a tight budget, neither made any concession to that limitation. *Pippin*, a musical by Stephen Schwartz (who also penned *Godspell*) was last seen in London over 20 years ago. Directed by Edward Wilson and choreographed by Cristina Avery, the NYT production used a fairly minimalist open-stage design by Anthony Lamble leaving the work of setting mood, atmosphere and location divided evenly between the strong cast and the fine lighting of Kevin Fitz-Simmons.

Designed using the MacLux Pro lighting programme, which is now his constant companion, the rig was composed largely from the Bloomsbury Theatre's in-house stock of Sils and Pattern 264s, 243s and 743s. Extra Par cans, three VSFX cloud disks and 24 Rainbow scrollers were provided by White Light. Decoupe provided one of their stunning Robert Juliat HMI profiles, which DHA topped with the first Juliat-sized animation disk, to help with one particular effect. And just to prove that this was a production for the nineties, the rig was completed with 12 VL5s, through the generosity of Brian Croft, David March and everyone at Vari-Lite Europe.

The complexity of the lighting meant that separate control of the conventional and moving lights was required; conventional lighting was left to the theatre's Arri Imagine 250, while the problem of moving light control was solved by Dave Cusworth and Bill Richards of Strand Lighting and their 430 console with Tracker software. Having already been put to use on the UK tour of Blood Brothers, where it proved it could handle a mixed light rig in a touring environment, the 430 here showed that it could let its hair down and rock 'n' roll; the VL5s were kept very busy by this show. The desk isn't quite perfect for this style of production, where the moving lights are used for effect as well as for re-focusable specials, but ways were found to do everything we needed, and the system was very quick to learn because it operates in a manner similar to Strand's conventional desks.

The sound for the show was designed by Steve Jonas, using a Soundcraft desk, Sennheiser radio-mic rig and mixture of Apogee and E-V loudspeakers, all supplied by Farrahs. Farrahs also supplied the extra front truss, rigged by Rod Clay, which allowed the front-of-house lighting and sound equipment to co-exist happily.

Pippin was followed into the Bloomsbury by a more serious piece - a new production of Othello, co-directed by Wilson and Hakeem Kae Kazim and designed by Lotte Collett. Lighting for the show was by Howard Harrison, who retained the scrollers and VL5s, added a 5K with scroller to give strong backlight into the enclosed acting area, and a battery of M16 battens to treat the huge wrap-around cyclorama which backed the set. The cyc was completed with a DHA glass moon, projected from one of the first 240V ETC Source 4s to appear at M&M. The entire rig was controlled from the Strand 430, whose attribute-based approach to scrollers quickly won a new fan in the lighting designer!

The show's sound design was by Frank Bradley, who used the Bloomsbury's in-house Soundcraft desk, Bose loudspeakers and Pioneer CD player, but added two Denon Mini-Disk machines as his main effects sources.

So a successful, if small season. Next year promises to be on a larger scale, especially since it will be the company's 40th anniversary. Which means there are 40 years' worth of ex-NYT technicians out there. Could make for a hell of a party . . .

Robert Halliday

Searchlight Prize

Use of a Space Flower multibeam searchlight for a week was the prize in a recent draw held by The Searchlight Co. The entries were made on The Searchlight Co's stands at exhibitions in September and the lucky winner, Gary Newman of Cheltenham Borough Council, was delighted with his good fortune.

He told L+SI: "We are looking forward to

He told L+SI: "We are looking forward to letting Cheltenham know their Christmas lights have been turned on by using the Space Flower which will be a central part of their festivities when Father Christmas throws the switch."

From other enquiries received at the shows The Searchlight Co have been busy with searchlights at the Goose Fair in Nottingham, Chessington World of Adventures, Hull Fair (the largest fair in Europe) car launches for Vauxhall, Mercedes and Nissan, The Victoria Palace Theatre in London and various pub, club and restaurant openings.

King Soloman



Stagetec recently completed a major installation of sound, lighting, curtains and staging at King Soloman High School in Barkingside, Essex. The project specification was put together in association with Redbridge Drama Centre, one of the country's leading drama advisory bodies to education.

Although the hall is a conventional set-up with a stage at one end, the scheme was designed to provide the right technical equipment to work with performances in-the-round or in channel formats. The lighting package consisted of seven internally-wired lighting bars providing a total of 58 socket outlets wired back to a cord patch unit at the side of the stage. A range of CCT 650W and 1000W luminaires were suspended from the lighting bars. Light Processor Q-Pack dimmer units were chosen as these incorporate a neon indicator which illuminates when a load is present. The control desk is a Light Processor Q24.

The sound system consists of a pair of OHM MR228 speakers installed either side of the stage and a single KS3 cabinet at the rear of the hall to provide additional coverage for non-proscenium productions. Three microphone sockets were installed across the front of the stage and wired back, along with the speaker cables, to the rear of the hall where the control systems were located. The equipment was mounted in a portable flight-cased equipment rack which can be removed from the hall when not required to avoid the inevitable interference from 'inquisitive hands'. The equipment rack contained a Soundcraft Spirit Folio 12 channel mixer driving a Crown 460 CSL amplifier. Source equipment included a Denon CD and twin Cassette deck and two Trantec radio microphone systems.

Velour curtains were installed on Hall curtain tracks around the perimeter of the hall and on the stage, with the school's logo applied to the main stage curtains. Doughty Easydeck staging was also supplied to allow the stage to be extended by 2m when required.

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BBM Scoop Top Awards



TV personality Carol Vorderman presented the Manufacturing Industry Achievement Award to the BBM Electronics team of Steve Baker, Chris Gilbert, Dave Binks and Trevor Crawford.

BBM Electronics has won two top awards in the prestigious Manufacturing Industry Achievements Awards (MIAA) presented in Birmingham in mid-October and organised by Miller Freeman Technical with support from the DTI and The Engineering Council.

The company's Trantec S5000 UHF radio microphone won two categories - the Electronics Innovation of the Year and Design Innovation of the Year. The MIAA reward innovation and commercial and technical achievements across all manufacturing industry. UK publisher Miller Freeman Technical worked with sponsors Omron and Shell Oils, and a judging panel drawn from the DTI and The Engineering Council, to decide the

winners across 21 categories.

BBM Electronics won the awards against stiff competition from some major organisations including ICL, Psion and South West Water. Judges praised BBM Electronics' development of the S5000, highlighting in particular the use of microprocessor controlled phase-locked loop techniques which synthesise all channels on the 25Hz grid reference which is used worldwide for UHF wireless microphone application.

These MIAA accolades mark the second and third awards which the S5000 has won so far this year. In September, the M5000 computer control system for the S5000 was awarded a Product Excellence award by PLASA at its recent show.

Shure Footing

Shure continue to find favour among the popular performers of the day, and in recent months a number of new additions have been made to the Illinois-based company's roster of endorsing artistes.

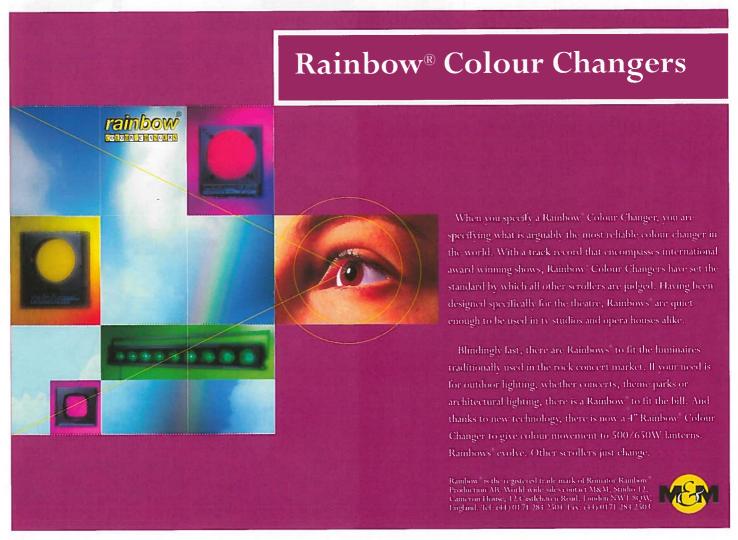
First among them is The Cranberries, who use a total of six SC 14 guitar wireless systems, while vocalist Delores O'Riordan resides up front with a SC/2 Beta 58 wireless unit. The band also relies upon hard wired Beta 58s for backing vocals.

With a second solo disk due for release in the near future, Bjork is probably one of the few prominent rockers who performs without the presence of guitars on-stage. Bjork's vocal mic choice is the Beta 87, while a combination of VP88 stereo mics, SM98As, SM91As, and an SM7 are used for the drum and percussion sections backing her latest efforts.

Along with an EC/2Beta 87 wireless system which is seen frequently in the hands of P.J. Harvey lead vocalist Polly Harvey, a full complement of Shure drum microphones has found its way into the band's equipment.

High End on the Web

High End Systems, now has its own World Wide Web site. The project was directed by Peter Cutchey of Lightwave Research, whilst additional graphics were provided by HES's art director Riki Rushing. HES' URL is http://www.highend.com. The company also has a bulletin board (BBS) number - 512/339-3043. You can also access the company's pages via PLASA's own WWW site.



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Cue The Next Move

Cue Pro Audio Services Ltd have moved to new, expanded premises just off City Road, in central London, to accommodate their rapidly growing business.

The move has facilitated four fully equipped work-stations, a separate service area for large consoles and ground-level entry for deliveries. The new building has more than tripled Cue's available space, and will, in turn, enable greater throughput of work, allowing even tighter deadlines to be met. Accordingly, the personnel have also increased.

The re-location has already paid off in that Cue has just landed three major service contracts to provide full technical support for all Crest Audio products, Hartke (Samson) amplifiers, and Carver amplifiers.

The company continue to be actively involved in installations. These include design and supply of audio systems to three restaurants in the West End - Break For The Boarder, Howl at The Moon and Dick's Last Resort. Cue are also servicing the needs of rental companies with Sensible Music, JHE's, Atlantic Hire, and Tickle Music all recent additions to the list.

The company are now based at: Unit A6, Wharf Road, London N1 7UX, telephone 0171-336 6050.

Vestax DJ Competition

Soundivision, in conjunction with Disco Supplies in Essex, will be staging their heat of the UK section of the Vestax International DJ Competition for London and the South-East at the Gardening Club, Covent Garden on 20th November 1995. Doors open at 7pm.

The competition, also being run as a Vestax promotion, is supported by a multiple sponsorship that includes Ortofon UK, DJ Magazine and Converse Activewear. Winners of the regional heats will both receive a Vestax DJ product, 'winners jackets' with a host of related Vestax/Ortofon goodies and go on to compete in the UK final, also to be held at the Gardening Club on 27th November.

Special Guest appearances are planned and the outright UK winner flies to Tokyo during December for the Grand International Final. For details contact Soundivision on 0171-609 6639.

PLASA Plus



For the third year running Light Engineering held their PLASA Plus fringe event during the PLASA Light & Sound Show.

Many attending the main PLASA Show would have noticed the location, as they adorned the venue with a 35 feet high inflatable Gorilla and this, along with 3000 invitations, ensured a steady flow of visitors.

On show was 'Eric' - a multi gobo, multicolour sound animated, projector with 250W light source. Also shown was the new 'Partylite', designed for the home market.

Other new products on show were a pebble convex theatre lantern featuring a wide adjustment of beam spread, a range of updated merchandise, and the universal telescopic tripod stand.

But the show stopper as far as most people were concerned was the range of 'Glowline' U/V activated signs.

Stop Press:

Avolites Not Bigger Than IBM

Last month it was reported in PLASA's Membership News that Avolites had shipped equipment to the value of £250 billion in the month following the PLASA show. Of course, we meant to say £250,000! Financial analysts comment that although Avolites turnover has been rising dramatically over the year, monthly turnover figures in excess of 250B are not predicted until the Millennium.

Riga Restores Operatic Heritage

The Latvian National Opera in Riga has invested in a Cadac J-Type mixing console, as part of a massive refurbishment programme for its historic opera house. Supplied and installed by Amptown Sound & Communications (ASC) of Hamburg, Germany, the J-Type is the central component of a completely new sound system for the 130 year old venue, following a five year restoration project. The 32-input Cadac J-Type mixer is located in a prime FOH position - just 15m from the pit - and is specified with an 8 x 16 matrix.

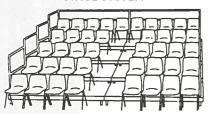
Scheduled to open in late 1996, the Opera House is intended as a multi-functional venue, staging productions as diverse as opera, through to specialist jazz and major conferences. The highlight of the gala opening in 1996 is to be a new production of Wagner's The Flying Dutchman. The restoration has involved painstaking attention to detail, from major rebuilding to renovation and replacing the original 19th century stucco work, painted murals and ornate gilding - under the ever-watchful eye of the technical project manager, Edouardis Raubisco, and the architect, Jeromin Giertmanis.

On the sound front, ASC is responsible for all aspects of the new system. During the project, the team has had to contend with some unusual working circumstances, as Michael Kort of ASC told L+SI: "The whole project is on an enormous scale, involving a truly international cross-section of expertise - Russians, Latvians and Germans to name just a few! On a number of occasions, the Latvian workmen only managed to achieve what they did by sheer enthusiasm - the size of their task and the difficulties they faced were simply unimaginable by our standards. Problems with equipment, matched by a shortage of materials, were countered by their absolute determination to win through. This has undoubtedly been one of the more unconventional projects from ASC's point of view - it has also been very rewarding, bringing together two very difficult working cultures and creating a real team result."

Sound reinforcement for the 1000-seater auditorium is designed along classic theatre lines. The main system comprises a pair of d&b 602s, which are positioned left and right of the proscenium arch, complemented by six E1s as front fills and a central cluster of d&b 602s as a passive two-way system.

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NEWS IN LIGHTING+SOUND INTERNATIONAL

Tall Trees from little Acorns Grow

Shuttlesound's systems engineering department, working with Goodwin Audio Services, have designed and engineered the predominantly Electro-Voice sound system that was recently installed into the latest venue of club entrepreneur, Javed Ahmed Majid of Maher Entertainments Ltd. Tall Trees is a multi-purpose complex in Yarm, Cleveland, which has been designed to cater for every need. It incorporates a conference centre, a health academy incorporating swimming pool, male and female gymnasiums, a beauty therapy centre, a tropical bar, two reception bars, and a new 2,400 capacity nightclub.

A total of £120,000 has been spent on the venue's sound system, £55,000 of which was devoted to the massive 20k rig found in the nightclub. Built on two-and-a-half levels, the Club M nightclub is the first ever installation to feature Shuttlesound's newly-developed Greystone P16 cabinets. The F16 is essentially a compact five-sided full range cabinet using a single 15" driver and compression driver passively crossed over to a 2" compression driver

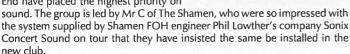
shoehorned into a compact enclosure.

The nightclub contains 12 F16s, six of which are hung around the balcony and point towards the dancefloor. There are a further three flown at either side of the stage, one to cover the dancefloor and two for the balcony areas. Two SX200s flown from the roof cover the upper balcony, whilst a further four are mounted in the corners of the ground floor to provide an additional surround-sound system. Just to make sure that the place really does jump, a total of 16 Gauss B-52 bass bins have been installed! Four subs each are mounted in a podium on both corners of the dancefloor facing the stage, and a further four pairs of bins have been mounted into the stage front itself. Should the capacity for live acts be required, a live desk can easily be plugged into the system and the surround sound system muted for live use. A range of Electro-Voice Precision Series amplifiers have been used to drive the system.

The Beginning of The End

Following the appointment of two new directors, Alastair Morton, of Sonix Audio Systems and Tim Harnden of Pyramid, Thunder Ridge Audio of Bristol have landed the enviable task of creating and installing the sound system at The End, a new nightclub venue opening this month in London's West End.

"The End isn't going to be billed as the best club in London," says Morton. "It will be the best club in the World." With this in mind the consortium creating The End have placed the highest priority on



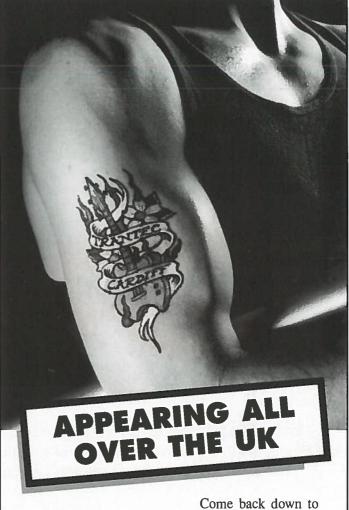
The system will feature 32 Thunder Ridge cabinets (the preparations for which are pictured above) and BSS system control (featuring the OmniDrive), which is powered by 30k of PSL Vp Series power amplifiers.

Soundcraft Reschedules Course

The dates for Soundcraft's Going Live Theatre training course have been changed. The new dates are 26 and 27 February from 10am - 5.30pm at The Players Theatre, The Strand, London WC2. Tickets available in advance at a cost of £125, will include all meals. Contact Katrina Davies at Soundcraft Electronics on (01707) 665000 for details of enrolment.



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NEWS IN LIGHTING+SOUND INTERNATIONAL

Autopilot at 'Momarkedet'



The annual festival known as Momarkedet in Norway is one of the biggest events of its kind in Scandinavia. The highlight of the week-long festivities is a gala Red Cross benefit concert which in the past has attracted such international stars as Bing Crosby, Tina Turner, Michael Bolton and Dame Edna Everage no less. Topping the bill this year was Morten Harket of A-Ha, Carlene Carter and the Eurovision Song Contest winners, Secret Garden.

The event was televised live by NRK - Norwegian Broadcasting - and ARTlight of Norway was the main lighting contractor. Having invested in their first large format Coloram colour changers, the company had suggested that the show might also provide an interesting application for Wybron's Autopilot system. The company duly despatched a system to Oslo and Daryl Vaughan joined the ARTlight personnel for the show.

ARTlight's Arild and Ragnfrid Brandt told L+SI: "This is a prestige project for us and one in which we have been involved for several years now. The show takes place on Scandinavia's largest outdoor stage in a small village called Mysen some 30 miles outside Oslo." The production - which is a cross between the Royal Variety Performance and The Last Night of the Proms - attracts an audience of over 20,000 as well as topping the television ratings as it is broadcast live throughout Norway, Sweden, Denmark and Finland.

ALD on the Internet

The Association of Lighting Designers, in association with PLASA, now has its own 'home page' on the World Web Web (WWW), part of the Internet.

"There were two main reasons for 'going on the Internet," explained Secretary Chris Watts. "Firstly, as the most rapidly growing publishing medium, it allows us to spread the news about the Association to a worldwide audience. Secondly, a survey of our members showed that a growing number have computers with access to communications, and therefore it will be an extremely effective way of keeping the membership up-to-date with activities."

The ALD's WWW site is divided into four main areas: latest news from the Association, including details of meetings and extracts from the Association's magazine, 'Focus'; details of the ALD's membership structure and the benefits of membership; a section on education and training for lighting designers and lastly, a membership directory currently a directory of corporate members of the Association, but shortly to feature the entire directory section of the Association's Yearbook, with contact details for over 500 lighting designers.

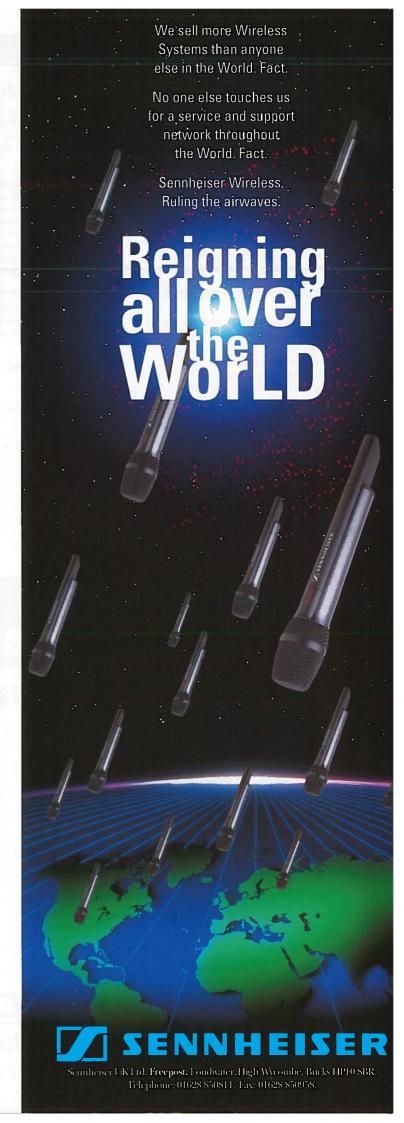
The ALD are at: 'http://www.plasa.org.uk/plasa/aldhome1.htm'.

PA Exclusive for RJ

Production Arts Lighting was recently appointed the exclusive distributor for Robert Juliat fixtures. This line of fixtures from the French lighting and dimmer manufacturer complements Production Arts' current exclusive distributorships with Ludwig Pani in Austria and E\T\C Audiovisuel in France, two large-format projection companies.

Among the items now available in the Robert Juliat line is a 2,500W HMI profile spotlight featuring full condenser optics, unlike a standard ellipsoidal, which uses one or two lenses. This optical system resembles a projector more than a spotlight, permitting the use of detailed gobos and templates.

Robert Juliat also designs a line of advanced dimming shutters for HMI fresnels. With precise computer control, these dimming shutters provide a stepless fade for the HMI fresnels. They also accept DMX512 control protocol directly.



Destination Gatwick

BAA, the British Corporation that owns and operates most of the major airports in the UK, has contracted with Richard Crane Productions of Orlando, Florida, to provide the design for a new indoor visitor attraction at Gatwick Airport in London to be known as Destination Gatwick.

The theme for Destination Gatwick is to be based on Gatwick Past, Present and Future. Members of RCP and BAA have teamed up to design and provide these facts in an entertaining manner. Visitors can now go back in time, and through simulated technology, they will experience the years when every backyard mechanic tried building his own flying machine, or take a ride into the future on the Astral Voyager, an exciting catapult coaster dark ride loaded with great sound effects.

Visitors will also enjoy the wide variety of interactive exhibits, great photo opportunities, and the chance to view Destination Gatwick from 15 metres high on the Balloon Ride.

Not only are there opportunities to fly using a real-time flight simulator, but visitors can also take a simulated ride in an old Ford Tri-Motor, a modern jet, or an aircraft of the future. There is also a chance for visitors to see (and feel) what their luggage goes through while visiting the simulation theatre and they can even don a pair of wings and feel the lift in a wind tunnel.

In connection with Destination Gatwick, RCP has also been contracted to provide the conceptual design for the entrance feature and the atrium which will connect the Visitor's Attraction with the existing South Terminal. Destination Gatwick is scheduled to open in 1997.

Stage Technologies Slice of Carnival Contract

Stage Technologies will be supplying the stage rigging control system on the new Carnival Cruise Line cruise ship, the Carnival Destiny.

The sub-contract, awarded by Glantre Engineering of Reading, is part of a multi-million package of state-of-the-art entertainment systems for Carnival Destiny. Glantre is to oversee the supply, supervision and commissioning of

this major project and has specified Stage Technologies' equipment for automation systems.

The Carnival Destiny, built by Italian shipbuilder Fincantieri, is due to come into service late next year and will immediately

"The world's first on-board theatre to feature a three deck height, two tier auditorium and a four deck height stage with full flying."

enter the record books as the world's first 100,000 ton cruise ship. Stage Technologies will supply controls for 25 variable speed hoists, the orchestra lift, the stage revolve, six traveller tracks and nine fixed speed winches.

In addition to a full back-up system, the contract will include Stage Technologies' Acrobat! control desk and its new racking system.

The entertainment system includes a 1,300 seat main show room, which is also due to take its place in the record books as the world's first on-board theatre to feature a three-deck-height, two tier auditorium and a four-deck-height stage with full flying.

Vari-Lite Inc in Windy City

Vari-Lite inc has expanded their family of offices to include a new location in Chicago, Illinois. Eric Hanson, who joined Vari-Lite earlier this month, will manage the new office. He has worked in the lighting industry for more than 12 years, and was previously vice president of Pete's Lights, Inc. With this most recent addition, Vari-Lite now has 42 locations worldwide including offices, distributors, dealers, and sub-distributors.

The new location is: Vari-Lite Chicago, 1454 Elmhurst Road, Elk Grove Village, Chicago, Illinois 60007, USA. Telephone: +1 708-806 1116.

PA at IMF Awards

Sensible Music provided the PA system for this year's International Managers Forum (IMF) dinner awards. The awards recognise the contribution of managers in the music industry. The ceremony took place in September at the London Hilton and featured performers such as Let Loose and Suggs.

In order to set up the PA system in time for the awards, Sensible staff arrived at the crack of dawn - 5.00am! - and by 12.00pm had eight Clair Brothers R4 III full range speaker systems, 12 Clair Brothers 12AM floor monitors, a Soundcraft Delta 32 channel monitor desk, a Yamaha ON4000 mixing console and several AKG Lectern microphones set up and ready to go.

SCOTTISH LIGHTING EXHIBITION

11TH & 12TH FEBRUARY 1996

The Scottish Lighting Exhibition, organised by BBC Resources Scotland in association with Scottish Broadcast and Film Training LTD and PLASA will be held on Sunday 11th and Monday 12th February 1996 in Studio A, Broadcasting House, Glasgow.

The exhibition has been established to enable anyone with an interest in lighting not only to view the latest equipment available, but also to gain hands on experience of using it.

The exhibition will be interspersed with seminars hosted by leading lighting designers of the lighting world who will impart invaluable advice and knowledge.

Among the confirmed exhibitors are Strand Lighting, Northern Light, Vari-Lite, Cirrolite, M & M Group, Blacklight, Total Quality Lighting, and Lee Lighting.

Put the 11th and 12th February in you diary now - the opportunity is too good to miss!

For further information on the Scottish Lighting Exhibition contact
Joe Breslin, Room G109, BBC Resources Scotland, Glasgow, G12 8DG, Tel: 0141 338 2269.







Disney's Fantillusion

There are few organisations in the world, if indeed any, more widely known for their expertise in putting a show together, than Disney. The popularity of their theme parks around the world reflects their flair for entertainment on the largest of scales and their latest entertainment extravaganza from Disney to be put forward for public approval can be seen every evening at their south-east Asian 'branch', Tokyo Disneyland.

The show, called Fantillusion, takes the form of a parade, which leads through the park. As you may by now suspect, this is not just any old parade. There are 35 floats, all of which are bedecked with actors and dancers in the finest and most advanced costumes Disney has ever created. Fantillusion tells a story in three parts, every stage of which is accompanied with its own individual, specially written musical score.

The show is the culmination of the first collaboration of creative talents from all four Disney theme parks - Disneyland, Disney World, EuroDisney and Tokyo Disneyland - and has taken two-and-a-half years from conception to fruition. Initial discussions about the project were held in early 1993, after which an international team began work on developing the basic creative

direction, philosophy and story line of the parade. The team included Ken Dresser, creator of the original electrical parade for Disney and artistic director for every one since (who sadly died in September of this year), Diana Kuriyama, who was responsible for costumes, David Stephens, responsible for float lighting direction and Bob Owens, responsible for audio direction. The objective was to create a night-time entertainment that would challenge the entire idea of a parade.

Actual construction of the show began in August 1994, with the production of four prototype floats. These floats represented a new generation in the design and technology of moving

show-pieces. Based on the results of research and development conducted for the 'SpectroMagic' show in Florida's Magic Kingdom, the new floats also included original concepts and technology developed for Fantillusion. After the prototypes were finalised, the remaining 31 floats were constructed in the six-month period between September 1994 and March 1995.

With Fantillusion, the creative team have succeeded in producing a parade that goes beyond the simple idea of a string of colourful floats moving along a route: this is what they prefer to call 'an experience'. The show is described as "A fantastic dream world of visual delight", and includes a high concentration of light effects, including fibre optics (from which many of the costumes are woven), black light (Ultra Violet) painting and LEDs, with the latter pair in use for the first time in a Disney parade. Another first for Fantillusion is the use of computer controlled digital audio systems that enable the exact synchronisation of the many different individual pieces of theme music that accompany the various floats, with the three main signature tunes that run through each stage of the Fantillusion story.

Fantillusion involves three acts: 'Mickey's Magical Garden', 'The Disney Villains' and, inevitably 'The Happy Ending'. It is essential that the changes in musical accompaniment that occur during the show are synchronised, so that each individual theme emanating from each float lays perfectly over the continuous 'Fantillusion Theme' that runs through every stage. Although some synthesised elements are present, the music for





the show is largely orchestral in nature. The soundtrack recording was produced in Los Angeles, with over 100 musicians, singers and actors, taking eight months to complete the recording.

The costumes worn by the 160 performers in the parade constantly sparkle and glow in ways never used before by Disney. A total of 88 individual designs, made from 290 different fabrics, incorporate 10 different light mediums to produce the stunning effects seen during the show. Costumes woven from optical fibre make use of the fact that when knotted, the fibres emit light from the juncture of the knot. This macrame of fibre optics is used for the flower petals and the delicate wings of the butterflies and other insects in Act 1's magical garden.

Another light-transmitting technology, electro-luminescence, is used for Mickey Mouse's brilliant cape. For this costume, thin, transparent tubes are injected with a special liquid that transmits a rainbow of coloured light. The use of ultra-violet paint - black light - allows the performers in Act 2 to undergo an unexpected and dramatic transformation, without the need for costume or make-up change, when the float is washed with UV light from special effects pods that accompany the floats.

Fantillusion starts at 7.30pm every evening at Tokyo Disneyland. It's worth noting that the show is subject to cancellation due to inclement weather - presumably because of the risk of mass electrocution. However, one thing is certain, with the Disney empire behind it - Fantillusion will live up to its name.

Citronic Capitalise

Citronic Limited has just completed an important phase in a redevelopment programme to capture an ever-growing share of the overseas audio market. In addition to a major management restructure, the company is set to capitalise on its R&D investment programme which continues to win the company major new overseas customers in both Europe and the Far East.

The company's growing upturn is also accounted for by significant investment in quality sales and engineering personnel which is enabling them to develop and launch a new product every two to three months.

Substantial investment has been made in high technology CAD systems, manufacturing control and testing techniques. Citronic's commitment to quality has received further endorsement by their entry onto the Lloyds Quality Register, following accreditation to IS09001 (BS5750 Part 1) and EN29001.

Effects PLASA Success

A first-time exhibitor at the recent PLASA Show, The Effects Company have reported an instantaneous increase in turnover - no less than 70% up on their average previous monthly trading.

There was particular interest in the Cirrus Lowsmoke, which despite ever-present draughts and the movement of visitors past the stand, still performed extremely well and, more importantly, staved low.

Said Chris Sattler, UK and export sales director: "We were really pleased with the level of interest in our products and from prospective new distributors. Also, many existing users made complimentary remarks about the product quality - which is particularly rewarding as we have made strenuous efforts to maintain a high standard of design and build.

"Interest in our new DMX Converter and Cyclone 4000 Turbo was surprisingly good, especially as the latter is almost £1,700. However, it is incredibly powerful and we feel it is the most sophisticated machine on the market."

The Effects Company are already looking forward to PLASA 96 with a new product that is not a conventional smoke product, but 'moves about/has DMX control' and is "so spectacular it will knock your socks off."

The DN-610F 2 into 1 does go!



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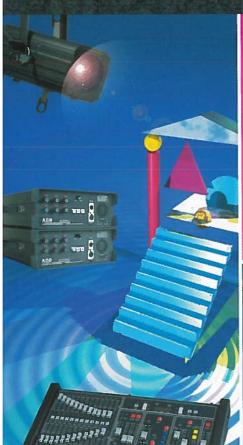
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AS TIME GOES BY . . .

In this special feature we look back at some of the highlights of the last decade, and those still to come as we approach the next Century

To mark the tenth anniversary of L+SI we have collated a wealth of memories, anecdotes and photographs that we hope will give a fair indication of the magazine's coverage and outlook over the last 10 years. We've also invited Tony Gottelier, Ken Sewell, Peter Brooks and Graham Walne to offer their own personal recollections of the magazine, the PLASA Show, the Association and the decade respectively. We hope you enjoy this trip down Memory Lane.

TEN YEARS AFTER

Tony Gottelier looks back at the last decade and forward to the decade which will span the Millennium

It certainly is extraordinary, what has happened in the last 10 years since L+SI made its first faltering steps across our communal thresholds, and perhaps just as extraordinary for some of the things that haven't happened, as for the things that have.

But first, I must make an admission. Perhaps it's because I spend my life meeting forward deadlines, if not for this magazine, then for the projects which are my bread and butter, that I have no time for the past and almost no concept of the temporal continuum. As a time-traveller I am condemned to be permanently lost in a chronological fog without a navigational chart. I search for the signposts in vain, and the milestones, that often looked more like millstones at the time, flash by so fast that one can't register their messages.

In fact, as a forward thinker it can be rather depressing to look back. After all, even if hindsight is 20:20 vision, as they say, there is sod all that you can do about it, so it's unproductive to waste your time on it - except for the nostalgia. So this will be a nostalgic ride through the misty memories of the recent past, but without strict adherence to the calendar (so please don't pick me up on it). It's as if the memory banks function but the archived discs, which could provide the definitive order of events, have long since been misplaced.



L+SI, August 1987 with OSKA.

The mechanism I have used is to interrogate myself as to what I think I was doing in 1985, and after that it will be first-come, first-served as the thoughts come in - a bit like the sixties, most of which, by common consent, happened in the seventies.

". . . at the end of the period we are still an industry divided by a common protocol."

In fact, circa 1985 probably marks the great renaissance in modern entertainment lighting with the genesis of automated luminaires. After all, by then the Vari*Lite and the earliest surviving driven mirror device, the Telescan, were already on the move, Peter Wynne-Willson's valiant efforts to bring the technology to the theatre via the Pan Can 15 years ahead of the actuality had already been counted out,

and the Coemar Robot, which started the revolution in the disco market, was already 18 months old and known to be fatally flawed.

Personally, I had just started to grapple with the issues of the control of these new beasts in the full knowledge that the luminaire makers would get it right in the end and a first, and not altogether unsuccessful, attempt (sans DMX-512) had already been made. We managed to run 192 multiplexed dimmer channels from a digital control box no bigger than a briefcase and Axon Digital had installed what, we now realise, were the first plug-in, digital dimmers at the London Hippodrome. On the front cover of the issue of August 1987 its progeny, Axon's OSKA controller, marketed by Pulsar Light and leading eventually to the ubiquitous Masterpiece, appeared photographed in splendid isolation in the grounds of Pembroke College, Cambridge.

OK, so all this so-called disco related stuff may seem to have little relevance to those of you who have other priorities, but there is a thread. OSKA can claim a place in the chronological chart which resulted in the Wholehog, especially now that they have come back to the touch screen. At the same time, I was also banging on about the anticipated influence of the PC on lighting control and being generally vilified. Now, of course, virtually every lighting board worth the name has a computer buried within. Shortly afterwards, in an attempt to attract people's attention to the technological revolution which was going on under their noses, I compounded the felony by declaring the linear fader dead. Better to have said semi-retired, for today, while many of its functions have been supplanted, it is still by far the most effective and popular hands-on device due to the tactile nature of tracking.

Factually, disco did play an important role because at the time the UK was only slowly emerging from the first Thatcher-inspired recession and about to see-saw straight into another. I suppose that it's pretty amazing that there was an industry left at all after that lot. But those were still the golden days as far as the dance business was concerned and the

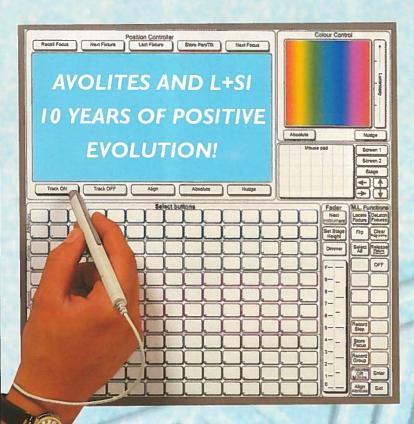


November 1985: L+SI ran a feature on The Dome Nightclub in Birmingham. Exactly 100 issues later, we were back to report on Dome 2.



In November 1986, L+SI ran an exclusive on Andrew LLoyd-Webber's latest London spectacular, the Phantom of the Opera.

AVOLITES 4D TRACK



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The truly revolutionary Avolites 4D Track introduces the fourth dimension - time - into the realisation process of the show. 4D Track provides a unique and unrivalled interface for controlling moving lights, creating an interactive stage plan, alleviating the need for button presses and enabling the lighting designer to map out the stage and focus positions as desired, saving time in the process.

The XY tracking allows you to move as many lights as you wish as one -representing huge time savings when it comes to preset focuses.

More importantly, you can now 'follow-spot' performers ...it has already been used successfully to track ice skaters, and it's only a question of time before this function becomes a commonplace 'live' requirement in all types of performance.

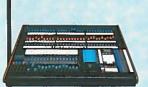
Now, when a performer moves off the target position, you use the 4D

Track in 'nudge' mode to move the beams and pull the moving light memory back into focus on the artist.

Massive amounts of time can also be saved in colour mixing. Virtually all moving lights offer colour mixing that is powerful but extremely difficult to manipulate manually. However with the 4D tablet you can build up a complete palette of colours, within minutes, without having to touch a wheel.

Experimenting with colour becomes a pleasure rather than tedium!

All the lighting designers who have worked with the Avolites 4D Track estimate that it is at least 30 times faster then using previous technology.





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JUST SOME OF THE FACES THAT LAUNCHED OUR VERY FIRST ISSUE . . .



'Mystic Meg' Tony Gottelier.



Richard Pilbrow at Theatre Projects Long Acre offices in London.



Peter Brooks, PLASA Chairman 1985.



Richard Harris: early retirement from Strand, but continuing with TABS.

entrepreneurs were in the throws of a great love affair with the City which, I suppose, was always destined to end in tears, as it did.

A sad reminder of those days came recently with the confirmation that the founding chief executive of European Leisure was to be jailed for 12 months for his role in hyping the company's share price during a take-over battle. Nevertheless, in those halcyon days disco was a booming business, and even Mark Fisher designed one, so if other areas of the industry were a bit flat, there was plenty of money coming in from the refurbs galore on the nation's dancefloors, to fund the development of proper moving lights.

And so it went, the Coemar Robot begat the Clay Paky Golden Scan, which begat the High End Systems Intellabeam, which begat the Roboscan from Martin Professional, which cheekily assumed the combined names of its progenitors. By 1990, these instruments had made the crossover into the theatre via the musical, and into television, witness Top of the Pops, as well as into rock and touring as lighting designers began to appreciate the benefits of using them alongside the well established Vari*Lite.

None of this would have been possible without the USITT protocol committee's delivery of DMX512. Lowest common denominator it may be, but it has served a generation well, and survived. Inadequate it may be in many areas of moving light performance, but we are still discussing where to go from here years later and, in the meantime, everything seems to work pretty well.

Obviously, if there was any real pressure from the manufacturers something would have happened by now. Instead, thank God, they are all abandoning their own protocols in an ego-defying procession. If you expected

progress on this front during the last 10 years, how wrong you were, but then we left it to the engineers, and I warned at the time that this would ensure that nothing would happen. The fact is that these things are driven by the users, not by the theorists, so until the guys at the coal face perceive a need, the talk will simply go on . . . and on . . . and on . . .

Nevertheless, the protocol represented a giant step for the industry and moved us forward light-years from the vast steam driven lighting desks with single digit outputs and the analogue dimmers of the previous generation. The scale of its impact was of Microsoft proportions. De-multiplexing bi-lingual interpreters, which spoke both DMX and analogue jargon, came and went as everyone grabbed for the data line and a whole industry grew around it supplying essential accessories. Yet, at the end of the period we are still an industry divided by a common protocol.

One is still confronted with articulate instruments whose designers have taken the rational approach and gone for a three-pin configuration, in the face of the protocol. God what a pain! But in a way, who can blame them, those other two pins will never be used as far as I can see, anyway not for this protocol, and it seems that expansion was a dead duck from the beginning. So why bother? Answer: To save us, the long suffering users, a load of grief.

If something so fundamental can screw us up, then there should at least be some recommendations for the tweaking with the standard which is going on right now, for example a recommended procedure for 16-bit applications, before we end up with even more diversity. The rest of it resembles the argument over the common European currency, inevitable, but boring.

Realistically also, the automated luminaire couldn't have happened without a whole new generation of lamps which have emerged during the decade. Who in 1985 would have expected the lamp manufacturers to start treating us seriously after several years of shunning? At least they now see the entertainment lighting business as a test-bed for other things. And who, in 1985, would have imagined that users would be prepared to pay up to £300 for a lamp with a finite life of as little as 300 hours (or even 25 hours at one stage)? It seems that discharge lamps with the ice cold edge of 5,600 degrees Kelvin are a valued commodity indeed, though theatre people still prefer the warmth of incandescent. The good news is that the rated hours are improving all the time, with 2,000 hours a reality already and 6,000 probably an achievable target.

Theatre people also still prefer the character of the 'dirty' colour medium of gel filters rather than the ultra-pure dichroics, another item which is an essential part of automated lighting. In fact, dichroics had made the leap from the pages of the Edmunds Scientific catalogue into the first Vari*Lites, yet curiously the man responsible, one Keny Whitright, went off on his own to make gel scrollers. Scrollers were also the product of the decade, making a huge impact in every area of the business, and only at the end was any threat perceived. Now we can see dichroic colour changers, some with mixing on board, and all with mechanical dimming, starting to pose a real threat to the primacy of the scroller.

On brushes with the City, it also took less than 10 years for a certain production company, named after a psychedelic drug and the acronym for sterling, to become the subsidiary of a publicly quoted company, develop a new automated luminaire at their



then running Tim Burnham Associates.



First night at the Dome: Martin Tasker (technical manager) with Colin Whittaker (then Cerebrum) and Keith Dale of Celco.



Jonathan Allen (left) and Mike Smyth of Northern Light with a bearded Jon Reay-Young of DeSisti.

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1985 - What a Year!

To the lighting and sound industry, 1985 may have been significant for the first issue of L+SI, but to the rest of the world the 12 months were memorable for different reasons . . .

Jan 23 - the first televised House of Lords debate is broadcast Jan 29 - Oxford University refuses Margaret Thatcher an Honorary

Feb 11 - 20 RAF band members killed in bus crash in W. Germany Mar 10 - Soviet President Chernenko dies: Gorbachev named as successor

Apr 6 - President Numeiri of Sudan deposed in military coup Apr 30 - Britain's first black bishop, the Venerable Wilfred Wood, is appointed

Apr 29 - Prince and Princess of Wales have audience with Pope John Paul II

May 11 - Fire at Bradford City FC leaves 55 dead and many more

May 29 - 38 killed after wall collapses during soccer violence at Brussels' Heysel Stadium June 10 - Israel announce completion of withdrawal from Lebanon

June 23 - Air India Boeing crashes in Irish Sea killing 329

July 8 - Britain lifts ban on trade with Argentina

July 10 - Geenpeace ship Rainbow Warrior is sunk by French special forces in Auckland, New Zealand

Aug 22 - 54 die when Boeing 737 bursts into flames at Manchester Airport

Aug 29 - Benazir Bhutto held under house arrest after returning to Pakistan for her brother's funeral

Sep 1 - President Reagan announces sanctions against South Africa: PW Botha later restores citizenship to 8m blacks in tribal 'homelands'

Sep 17 - More than 4,700 are killed by an earthquake in Mexico Oct 7 - Italian cruise ship Achille Lauro hijacked by PLO terrorists Nov 19 - Summit meeting begins

between Presidents Reagan and Gorbachev

Nov 27 - Anglo-Irish agreement approved in Commons by massive majority

Dec 25 - Mount Etna erupts

expense, and exit again at a discount. Great trick if you can carry it off! I have to say that one of the highlights of the last 10 years was witnessing a speech from Simon Austin, LSD's erstwhile cheer-leader and well known bon viveur, inaugurating the take-over with the following words: "As most of you no doubt know, it is but a few months since we sold the company in a whale of a deal . . . " And this in full earshot of a board member of the proud parent. RIP corporate rock and roll.

However, the era also ended with a conspicuous success in the City department, when a Danish company called Martin Professional, which started out making smoke machines and disco lighting, offered shares to the public. Still virtually unknown in 1985, the company had managed the transition from ground zero, to a recent public issue on the Copenhagen exchange which was 11 times over-subscribed. The times they certainly are a-changing!

One immediate dark cloud on the horizon, which has made its presence felt from time to time over the period, returning with increasing regularity of late and possibly threatening to blacken the sky permanently and engulf us all in the fall-out, is the increasing amount of patent legislation we are witnessing in the USA, much of which has no rational, and little moral, justification. Mammon rules. Rational people should be able to resolve these issues, especially in an industry notorious for its generosity of spirit when it comes to exchanging ideas. Maintaining the meteorological metaphor, it is an ill wind, and it blows nobody any good. Only the patent lawyers will get fat on it; for the rest it will mean a huge loss of resources and executive time. Personally, I wish they would take a dose of their own patent medicine for, take it from me, inside the bottle they'll find it's snake oil.

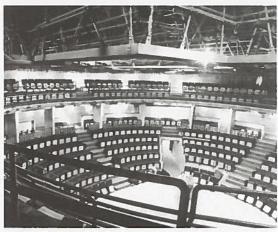
It is curious isn't it that with computer power doubling every two years and the real cost dropping by a half in the same time, there has been a huge revolution in the way we've run our businesses in the last 10 years. In reality, however, the technology has actually been rather slow to catch up with our industry which is supposed to be at the cutting edge. I imagine we should blame a combination of inadequate resource and deep-seated conservatism.

In the next 10 years we will also see a total change in the way we run our leisure time, particularly with regard to entertainment. The revolution in information technology which is at the gate is likely to have as powerful an influence on human behaviour as the previous industrial revolution had on our daily lives. We will have to be a great deal more nimble on our feet to meet these new technological challenges than we have been hitherto.

In one form or another, L+SI will doubtless be there to chronicle it all on a blow-by-blow basis.



Apr 86: LD Andrew Bridge's explosion of light at the Dominion for the new production of 'Time' starring Cliff Richard.



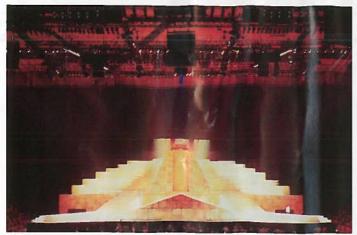
Aug 86: The New Victoria Theatre, Europe's first purpose-built theatre-in-the-round, opens in Stoke-on-Trent.



July 87: The reopening of Hammersmith Palais with an Avitec-designed lighting rig and a Martin Audio sound system.



Feb 88: Taiwan's new National Theatre and Concert Hall in Taipei's Memorial Park is reviewed by Francis Reid.



Aug 88: L+SI attended Vittorio Rossi's spectacular staging of Verdi's Aida at Earls Court - the largest operatic production mounted in the UK.



Nov 88: When Jean Michel-Jarre's two-night spectacular 'Destination Docklands' finally arrived at Royal Victoria Dock, London, L+SI was waiting.



Nov 88: L+SI had exclusive coverage of IllumiNations, a high-tech spectacle, produced by Walt Disney World at the Epcot Centre in Florida.



Jan 89: Tony Gottelier interviews Michael Fink of Magical Designs about their design resurrection of the mythical Studio 54 nightclub in New York.



Jan 89: L+SI celebrated the golden age of movies when it attended the opening of the Museum of the Moving Image on London's South Bank.



May 89: Aspects of Love opened at the Prince of Wales Theatre in London. TPC supplied the mainly Strand-based lighting rig, whilst Cadac, Yamaha, Tannoy and Bose shared the sound honours.

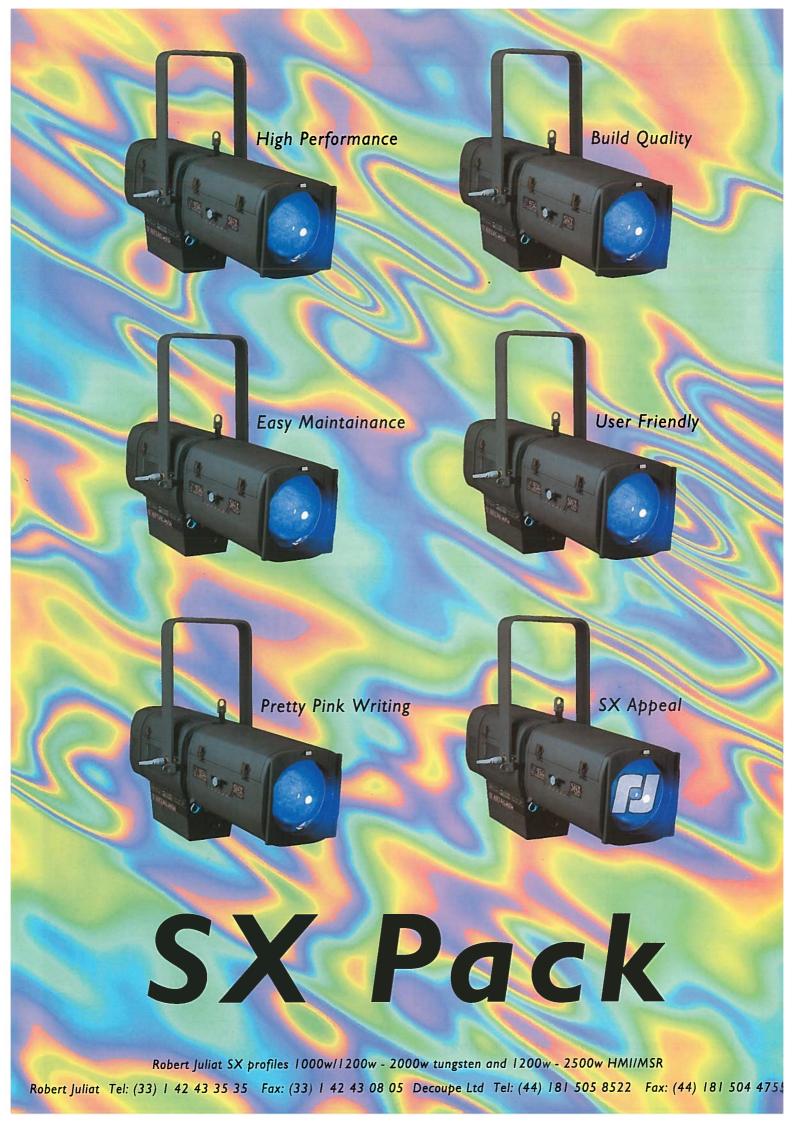


Oct 89: L+SI is waiting in the wings when yet another major musical hits London and Miss Saigon enters the West End arena.



Nov 89: L+SI details the logistics of the largest-ever rock and roll show when the Rolling Stones 'Steel Wheels' tour went on the road in the US.





SHOW-TIME

Ken Sewell charts the PLASA Show from its first faltering steps to its present standing as the leading industry show

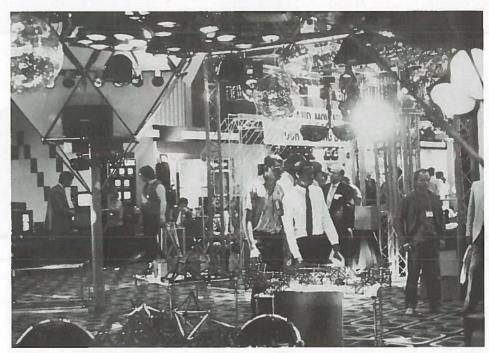
Most people admit to growing scepticism, even cynicism as they get older and the ideals of youth gradually succumb to the pressure of events. I realise with some surprise that the opposite has happened in my thinking about the activities of PLASA over the last few years.

The show was the fundamental raison d'être for the association. Originally organised by a certain Mr. Ben Cree, the show was saved by an emergency meeting of the exhibitors when it emerged that Mr. Cree had flown the coop with the loot. From this inauspicious beginning was the association (BADEM in its earlier days) formed.

That the UK disco manufacturers, as we were in those days, had the determination and foresight to proceed with such a joint activity in the common interest augured well for the future growth and success of PLASA.

So, what is this business about getting less cynical? Well, the show, like all markets since medieval times, was conceived as a gathering place of people in a particular trade to buy from and sell to each other, followed by the traditional retirement to the local tavern to celebrate the deals of the day, or commiserate the lack of them.

My growing awareness is that there are not a finite number of deals doing the rounds, but that the very act of showing the products and attracting the customers increases the size of the market. A well-organised market creates its



All action and interest at the PLASA Light & Sound Show 1985 at Novotel, Hammersmith.

own future for its participants. Competition stimulates innovation and value for the customer, but it also stimulates the customer to invest in new ideas. If our customers use the tools which we create to satisfy paying customers in their own enterprises, then they themselves become part of the creative market-expanding process, as their own businesses grow. To those still sceptical, I recall the days where the budget for the club carpet was three times the lighting budget. It took

years to persuade nightclub owners that what their customers wanted was excitement, not a better sitting room.

Facts and figures: the original Bloomsbury exhibitions had a budget of about £50,000 for the whole show. By 1985, the exhibition turnover had risen to £145,563 as the show moved to Novotel. The communal practice of repairing to the bar at the end of the day's trading reached its zenith during this era.

We're all in the entertainment business and

Glantre's best features are still to be seen.

Over the last decade seventeen of Glantre's projects have been written up in separate issues of L&SI - starting with the Playhouse Theatre, London in November 1987 through to the Europarque development, Portugal, in September 1995.

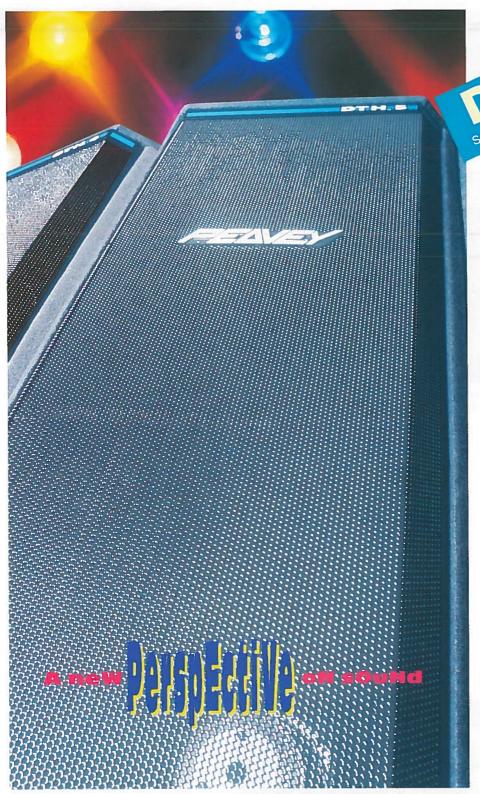
We look forward to showing you some more of our features in L&SI over the <u>next</u> ten years. If you would like some more information about our services, please contact Carolyn Cerrino at Glantre Engineering Limited, 20 Richfield Avenue, Reading, Berkshire RGI 8EQ. Telephone 01734 640000. Fax 01734 640064 Telex 846522.

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The trapezoidal shape of the DTH 2, 3, 4, and 5 facilitates building arrays.

around a reinforced 3/4-inch plywood cabinet. To protect the drivers, the enclosure is shielded by a

heavy-duty, 16-gauge, plasticized metal grille, specially coated to aid in damping vibrations at high sound-pressure levels. And to maximize signal input, each DTH is equipped with 2 internally paralleled, 4-conductor Neutrik Speakon connectors. The DTH Concert Sub features an additional 8-conductor Neutrik Speakon.

Performance Worried about handling those window-rattling low frequencies? With the exception of the DTH 5, each enclosure is equipped with a deep-geometry 1505-8 DT Black Widow woofer fortified by a Kevlar impregnated cone. Bring on the bottom end. But let us let you in on a little secret... Two words: polypropylene capacitor. With the exception of the DTH Concert Sub (because it doesn't have a crossover), all the DTHs utilize polypropylene capacitors in their onboard crossovers. "What's so special about polypropylene capacitors?" you ask. In a nutshell, higher reliability and more accurate reproduction of the program material.

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PLASA 91 at Olympia 2: A turning-point in the history of the Show as it was acknowledged to have 'come of age'.

our association has contained its fair number of natural performers, whose talents needed little liquid encouragement for a willing audience. Disputes arose, most settled amicably - but at least one requiring the intervention of the local constabulary! Such excitement may have diminished with the growth and maturity of the show, as communal after-hours activities have become more fragmented, happily or sadly, depending on your point of view and stamina. For those needing a reason for the traditional 11am start time of the show, look no further. 'Serious trading' at 3am is not compatible with serious trading at 9am. How I wish the good burghers of Frankfurt would take note of this point.

Rummaging through my dusty old boxes brought back memories of the days when I was the association's treasurer. Before the association attained a proper legal status, it was

commonly assumed that I signed the contracts for the Novotel and subsequently Olympia 2 at my own risk, obviously confident of the financial success of the show. But I was not so daft judging from the unsigned contracts still in my file. John Offord will be ever so pleased to learn that the original unsigned lease for 7 Highlight House is still in my possession! Don't worry, it theoretically expired in 1990 and you must have made sure it's all fully legal now. Did I ever sign your contract, by the way? If so, the one I've got here must be just a copy!

By 1995, there were 264 stands, 58 new exhibitors, 14,500 visitors and a turnover of more than £1million! The bare facts speak for themselves for the success and importance of the PLASA show on the international scene. We set out to provide a market-place for the UK disco business all those years ago, and have succeeded in creating a market for the worldwide entertainment technology industry.

A pound a second is roughly what a large stand costs now. How do you measure the results? Very

seldom by sales achieved during the show from our own experience. So what useful pointers are there besides the general level of sales in the following months? Exhibitions have always been the true test of where your company stands in the market. Settled in your comfortable office with your colleagues around you and a decent order book is no test beyond immediate existence.

Stand at a fair where your lights shine brighter than your competitors and you see the market from the point of view of your customer and know you have another good year ahead. When it's only a short step from your stand to your competitor, the natural evolution of the marketplace receives a sudden shot of adrenalin.

Four days at PLASA is the same as four months of office-based market evolution. Is the mains on? (Can't get anywhere without



In 1992, the Show moved to Earls Court 2 and attendance shot past the 8,000 mark for the first time.

LOOK BACK ~ NEWS JANUARY, 1986

Easy Street, Crown Hill

To those who don't really know it, Croydon is just another sprawling London suburb.

Locals know better, though, for one of the longest established entertainment sites in the town is at 12-18 Crown Hill, just off the bustling High Street. In previous guises under such names as Boob's (this would not get through in the politically-correct nineties -Ed) and Scamp's there has been a discotheque operating since at least as far back as the sixties. Now the venue has undergone a major re-fit as Easy Street, under the control of Whitbread's burgeoning Aureon Entertainments subsidiary.

Main contracts were the Michael Gibson Design Group with Dick Carrier of Light and Sound Distribution, handily based in Croydon, responsible for the lavish and very clever light and sound system.

Page Three's most famous daughter, Samatha Fox, was on hand to declare Easy Street officially open at a huge and highly enjoyable celebrity party attended by many industry notables.

The main feature of LSD's installation is a multi-dimensional suspended ceiling over the 17ft by 23ft dance floor, of Deralam mirror laminates on aluminium.

Lighting centrepiece is a Neutron Star surrounded by some 20 100W pinspots, four 16-head helicopters, eight 360 degree spinners, 20 90 degree scanners, 24 70W spots, 32 pinspots, two white lightning strobes, four 12-lamp harvesters and 16 Par 56 300W floods with Diochroic filters on minispot motors.

Four 12" mirrorballs are also used, the whole rig being controlled by a Light Processor 436, Light Processor 434, two Light Processor System Sensors, and one Light Processor 12-way dimmer.

The main sound system comprises six Black Dwarf Pro 2 speaker cabinets, two Black Dwarf sub-bass units, two H/H V800 amps and a CS mixing system. The turntables are twin Technics 1200 fitted with Stanton 680 EL cartridges and styli and there is a Technics CD player and a Philips cassette deck. The in-fill system comprises eight Black Dwarf Pro 1 speakers and a V200 amp.

LSD also fitted all the front-of-house and interior neon and the Tivoli-style illuminated stair nosings, as well as fitting a sound, light and video system in the Office bar and diner which is part of the same complex.

electricity). Do your staff arrive on time in the morning? (If not, they can't stand the pace or can't stand you - either way, only one answer). Is the equipment working OK? (Nothing more de-motivating than technical problems). Does your competitor have a pile of backup units round the back of his stand? (Very encouraging).

Did you win the industry award for your product(s)? (Immensely gratifying). Do your dealers come and talk to you? (Otherwise you might as well pack up now). Do they come and settle their old accounts? (Means they're gearing up to place a new order). Does everybody lose their voice on the last day? (Mysterious mist-borne PLASA flu, or, if you're lucky, 96 virtually continuous hours talking to customers). Is your order book bigger at the

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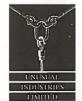
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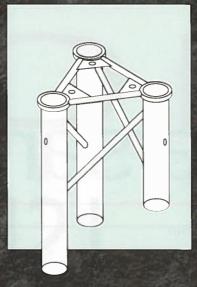
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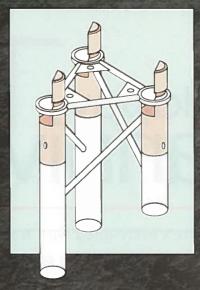
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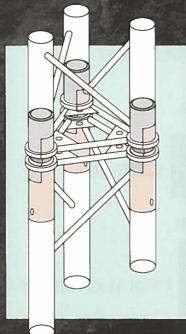
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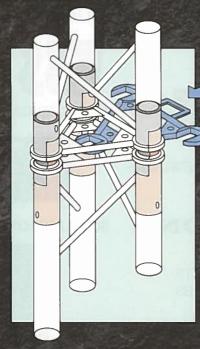
2) The system is fully retro-fit using existing bolt holes.



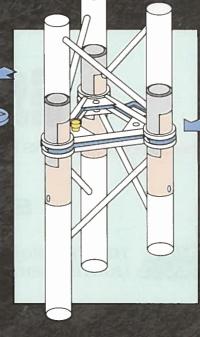
3) The universal connector bosses are fitted into the ends of the truss sections or corners.



4) The two truss sections are then easily



5) The key is then engaged to remove any deflection.



6) For added security a safety pin is engaged in the hole in the casting.

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SOUND TO SOU

1995: Having outgrown Earls Court 2, the show is now poised for a move to Earls Court 1.

end of September than at the beginning? (Uh-Oh...).

Now the crystal ball: the thesis so far is that lots of bullshit makes for bigger business. So what do we want in the future? You're right! We are going to spread it over every industry we come into contact with and count the profits as industry after industry realises it is in the entertainment business and invests in the appropriate technology! World domination, as one well-known lighting manufacturer has already, if prematurely, proclaimed. So where

do we start - well softly, softly of course. We don't want to worry General Motors just yet. Getting our own house in order has been the preoccupation so far.

Creating an umbrella for different industry groupings to benefit helps everyone. The sound engineers have amalgamated with PLASA. BEDA and PLASA are making steady progress in helping each other's members. As we approach the Millennium there are further plans to widen the appeal of the show and co-ordinate related events across a broader spectrum of the

Lighting Lloyds

Interior lighting requirements for the new Lloyds of London provided a whole string of problems, and the 8,500 luminaires are unconventional to say the least. The sprinkler head of the fire prevention system has to be accommodated within the unit, and a more extensive problem that had to be overcome was that the lighting should not create glare or annoying reflections, especially in view of the computer work-stations and data terminals dotted about the building.

The contract was awarded to Siemens, who developed the special luminaires in their own lighting laboratory. The units consist of a deep-drawn metal housing in a matt black shield with a diameter of 1.3m. Every luminaire housing has a diameter of 600mm with a 65mm aperture in the centre for the sprinkler head.

The high-grade, optically controlled specular louvres with parabolically shaped V-cross-shielding and side reflectors are made of high-gloss anodised aluminium. The components of these specular louvres guarantee precise glare limitation is achieved, preventing annoying reflected glare on all computer terminals and visual display units.

entertainment business.

Take heart, therefore. As many of the industry's longest-serving members have known and practised for years, the secret of success is . . . (and PLASA's going to help us with it).

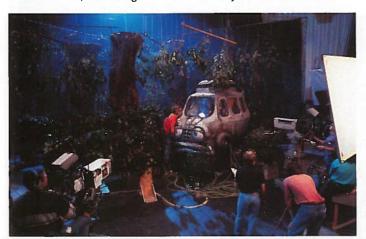




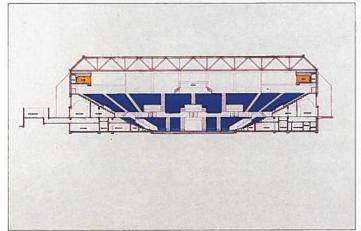
Feb 90: L+SI uncovered the technicalities of Paul McCartney's first world tour for over 13 years.



Aug 90: Fisher Park designed the graphics and Production Arts of New York supplied the Pani projection package for the historic Wall concert at Berlin's Potsdamer Platz, celebrating the historic event of just a few months earlier.



May 91: L+SI delves further into the black art of television with the filming of The Winjin Pom, shot at Stage B, Limehouse Wembley Studios.



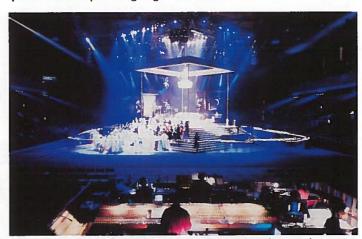
Aug 91: L+SI records the launch of Sheffield's new Arena during its preparations for the opening ceremony of the World Student Games.



Apr 90: The Las Vegas dreams and fantasies of Siegfried & Roy, the all-American masters of magic and mystery, were brought to the pages of L+SI.



Nov 90: Patrick Woodroffe talked exclusively about his revolutionary quarter-scale fully working stage set studio - 4:1.



Aug 91: The fashion for accessible opera on a mega-scale moved up a gear with the production of Tosca at Earls Court.



Sep 91: Pavarotti comes to London's Hyde Park with a Meyer PA and Crest amplification for company.

Congratulations on the first 10 years

We are proud to have been associated with L+SI and PLASA over the past decade



















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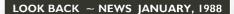
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1989: Peter Brooks (left) and Ken Sewell (right) hand over the PLASA reigns to Kevin Hopcroft and Rob Peck.

HOW FAR WE'VE COME

Peter Brooks, the longest-serving chairman of PLASA, reflects on the growth of the Association

OK - So why did PLASA start a magazine 10 years ago?

After the pivotal meeting of the British Association of Discotheque Manufacturers (BADEM) which took place in September 1983, the committee of the new Professional Lighting and Sound Association (PLASA) realised that their principal - some may say only - asset and activity was the newly named Light and Sound Show held in London at the beginning of September each year.

After about a year of 'bedding in' and promoting the new association, work started on building a progressive forward growth

strategy. We saw the further growth of the association as having a number of different strands, some inter-related, some not.

- Promoting membership to the wider Lighting and Sound Industry
- Promoting increased professionalism in all sectors and aspects of our industry.
- Participation in Overseas Trade Missions, both outward and inward
- Promulgation and influence over national and international standards
- Inter Association work

The common theme throughout, however, was the need for the association to have its own 'voice'. In other words, a method of ensuring that the Association's viewpoint and activities were known and recognised on both a national and international scale. In particular, we

AC Lighting Break £3 Million Barrier

AC Lighting of High Wycombe have reported a staggering increase on their 1986 turnover, with sales for 1987 up almost 70% to just touch the £3 million mark. David Leggett, AC's managing director, told L+SI that 1988 looked even more promising, particularly due to the favourable exchange rate with the United States.

He explained that a major sales drive will take place in the next few months with such products as Pani, Spotlight, Colorwiz, Super Trouper, Altman and Ultra Arc - all distributed in the UK by AC Lighting.

wanted to maximise the benefit of the exhibition to exhibitors, members and visitors alike. Every exhibition needs as much publicity and promotion as possible to ensure a successful show.

One of the easiest and most economic ways of maximising our PR opportunities was seen as having a permanent relationship with a trade publication. Therefore, in May 1985 the committee invited proposals from a wide variety of publishers with a view to either setting up a formal association with an existing magazine or promoting the start of a new industry magazine.

The committee received presentations from a short-list of three publishers - Mountain Lion Productions, publishers of Disco International, with whom we already had a long and mutually



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Looking to Europe - 1992 and all that

Forget 1992 - that's the message from many UK companies as the nineties get underway. Calls to the L+SI offices indicate that the activity will be directed into Europe, but away from the formal agreement to open frontiers planned for two years hence. The UK market is preparing for a decade that has nothing to do with 1992 directly, and everything to do with increased activity on European fronts in general.

That's not to say that 1992 won't herald significant changes for the industry, and the repercussions, good or bad, are bound to be felt at all levels. But the real activity seems to be focusing on countries such as France, Spain, Turkey, a united Germany, and the Eastern Bloc in general, including Russia.

The EuroDisney project to the east of Paris is one such example. Due to open in 1992, it is one of the major leisure schemes of the decade, and spearheads increased activity in this sphere across the Continent. Barcelona in Spain hosts the next Olympic Games, and some UK companies are looking at establishing operations there as the knock-on effect of staging the most prestigious sports event in the World begins to tell. There is a major Expo in Seville, again in 1992, that is already drawing a lot of attention.

Another country that keeps cropping up in the conversation is Turkey. It seems that activity may increase in this once-stronghold of the Ottoman Empire, thereby accessing another new market area. And what of the prospect of a united Germany? Certainly no by-product of Europe being 'Open for Business', but indicative of the growing European cross-fertilisation that was inevitable, 1992 or no.

We'll be bringing you news of these projects as and when they happen, and where possible, before they happen. At the L+SI offices, a list is being compiled based on information already received, of the major launches and projects planned for the early part of the decade.

beneficial informal relationship; Northern and Shell group, publishers of Penthouse and John Offord Publications, publishers of Entertainment and Art Management and the British Theatre Directory.

After much deliberation, the committee preferred the option of submissions for a new magazine and unanimously chose the John Offord Publications proposal as being that most in keeping with our industry. In view of the name of the show, the proposed name of 'Lighting+Sound International' seemed to be most appropriate.

The new publication was launched in November 1985 and in the spring of 1987 after protected negotiations, the Association acquired the magazine and with it the resident editor, that man called Offord.

The magazine's contribution to the Association's strategy as outlined above has been significant. The consistent stability, first class image and confident approach has arguably done more to expand the Association's aims than anything else, and having our own publishing arm soon meant

that we could add new projects quickly and easily, usually on a trial basis first.

By bringing the publication in-house, the PLASA Show Catalogue arrived first, followed by the annual Yearbook - now an industry standard - and finally, the Yearplanner.

To illustrate the success of the Yearbook I only need quote Mike Wood in the Chairman's intro-duction to the 1995/6 edition: "I refer to it so regularly these days that I can't really remember what I used to do before". Membership News and then Standards News have followed recently, whilst 1995 saw the addition of the Sound+Communication Systems International magazine to the stable once again on a trial basis as the editors 'find their feet'. This, at last, addresses the much vaunted criticism of PLASA being too much biased towards lighting.

How has the strategy helped? Membership has rocketed over the years - from 89 in 1987 to 373 (including 82 International members) today. Professionalism and Standards go hand-in-hand. Tony Akers chaired the Standards sub committee from 1987, although the Association really didn't make substantive progress in the area until George Thompson joined us in early 1990. Whereas the subject can be mind-numbingly boring, the effect of having representatives on so many British Standards working groups is beginning to have a real effect on the way our industry is viewed and treated worldwide. Our Standards News is now universally admired for both style and content.

Overseas Missions and our relationship with the Department of Trade and Industry have gone from strength to strength. We used to have a single joint venture to Frankfurt each year; now we have our own joint ventures to Singapore, USA, Australia and Italy, together with involvement with MIA missions to the US, Frankfurt and Beijing, and APRS to the AES conventions. At all of these, L+SI enthusiastically promotes the event and is available to exhibitors and visitors alike to promote member's products and services.

Finally, we seem to have gone full circle with our work with other associations. I can remember talking to the Music Industries Association (MIA) in 1980 with a view to co-operation over the Discotek 80 show (as the Light+Sound Show was then known). Since then, the Association has, at various times, talked to and/or co-operated with nearly all of the sister trade associations in the world.

From APIAD (Italy) through EFET (European Federation of Entertainment Technology) to USITT (US Institute of Theatre Technicians). Today, PLASA is the founder of the Entertainment Industry Forum and MIA are holding their trade show (the British Music Fair) in 1996 in the Brompton Hall at Earls Court at the same time as PLASA!

I love it when a plan comes together!



PLASA Show 91: Pam Revington (left) and Sheila Bartholomew (right) of PLASA play host to Nicolas de Courten of Powerlight.



Mike Wood (PLASA Chairman 1994-1995) pictured on the PLASA stand at the EnTech show in Sydney in October 94 with Steve Rawlins of Martin Professional, PLASA's John Offord and Andy Graves of Pulsar (seated).

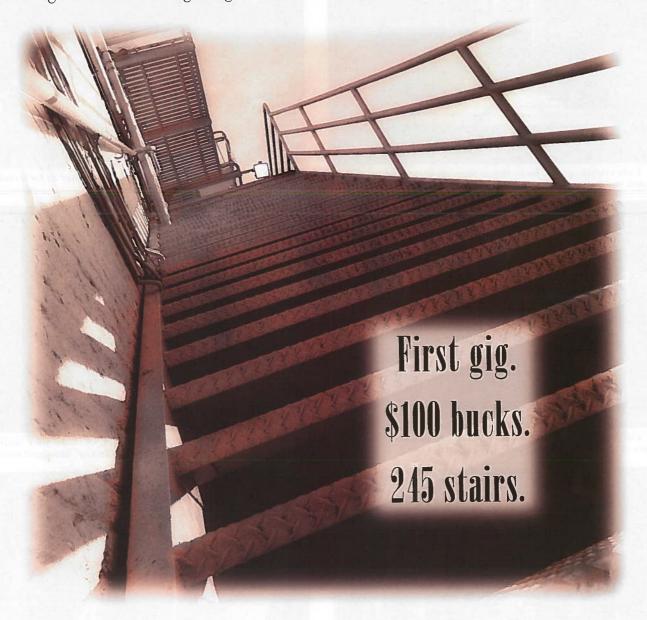


The organisers of AVL '94, Tom Borromeo (left) and Khalil Khodor (right) of the TGE, pictured with PLASA's Nicola Evenden (second left) and Ruth Rossington at the 1994 Pro Audio & Light Asiai Show in Singapore.



PLASA show director James Brooks-Ward addresses a meeting of exhibitors prior to the decision to transfer the PLASA Show to Earls Court 1.

Congratulations to Lighting + Sound International on their 10th Anniversary



SOMETIMES THE DIFFERENCE between taking a gig and not taking it isn't the money. Or the exposure. But the schlep. Which is why we created the new EON Portable System. At about half the weight of any other system, it's made to be portable. Yet it gives you all the sound quality and reliability that JBL is known for. At a price that is noticeably lighter. In fact, it may be the perfect first step for any rising star who's just starting out. And plans to get to the top.

H A Harman International Company

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For more information contact Harman Audio on 0181-207 5050



Dec 91: L+SI catches up with Rocky Horror Show originator Richard O'Brien in his latest incarnation as the host of The Crystal Maze.



Jan 92: A majestic launch for 'Monarch of the Seas' as L+SI reviews how performance technology goes to sea.



Apr 92: The American leg of U2's Zoo TV tour, one of the major touring highlights of the summer of that year, chronicled in L+SI.



May 92: The celebrations for the opening of EuroDisney reached epic proportions with the fabulous 'Spectacle du Lac', broadcast worldwide.



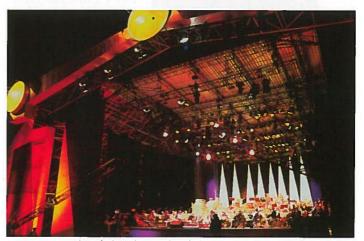
June 92: L+SI went around the world in eight pages as it reviewed a world within a world at the Expo in Seville.



June 92: When the Empire nightclub became the Equinox, L+SI went to Leicester Square in London to view the facelift.



Aug 92: There were Vari*Lites in operation alongside Telescans, and a Clair Bros sound rig, but it was the Versace-inspired sets on the Elton John 'One' world tour that caught the eye of L+SI.



Aug 92: At a pivotal time in Russia's history, L+SI was in Moscow for a remarkable concert which took place in the shadow of the Kremlin.

Déjà Vu?



Aviator EPX



Celco Hawley Mill, Hawley Road, Dartford, Kent DA2 7SY England telephone + 44 (0) 1322 282 218 facsimile + 44 (0) 1322 282 292 Celco is a division of Electrosonic Limited



July 93: L+SI is offered an insight into the 'Secret World' of Peter Gabriel as he embarked on a major world tour.



Aug 93: When the Savoy Theatre, Gilbert & Sullivan's original London home, reopened, L+SI was the first to review the refurbishment.

THE INSIDE VIEW

John Offord offers his own view of the history of the magazine and its enduring popularity with the industry.

It seems hard to believe now, but the very first issue of Lighting+Sound International in November 1985, was put together without the benefit of the desktop publishing software that we take for granted today. It's funny how priorities change. In 1985, we cursed the Compugraphic system for not churning out a galley of text in less than a minute, now the expletives are directed at the colour laser printer if it takes longer than 10 seconds to produce the goods.

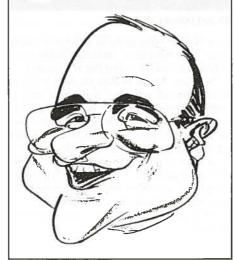
Where has this extra 50 seconds in every minute got us? Well, quite a long way, in fact, and this despite the fact that our computer network appears to possess a malicious sixth sense as we approach the monthly deadline. In going forward, one should always be prepared to look back, and I believe, one of the strengths of L+SI has been its ability to ask itself the question - are we serving the industry? There are people who, at one time or another, have felt that our broad approach makes L+SI a 'jack of all trades and master of none'. But in taking stock of the last 10 years, there has been one abiding theme throughout: variety is the spice of life.

OK, so this may be a somewhat clichéridden introduction to a behind-the-scenes look at the magazine, but nevertheless, one can't deny that the lighting and sound industry is a broad church, and L+SI merely sits at the altar and watches the procession go by.

If you don't believe me, search out that November 85 issue and you'll realise its significance. It marked the coming together and broadening of the industry. Prior to the publication of L+SI, there were no magazines offering such a wide perspective. The first issue, 64 pages and staple-bound, cost just £1.50 but contained information you couldn't put a price on, featuring the opening of the new Dome nightclub in Birmingham, a profile of Richard Pilbrow and an article on the lighting design on Top of the Pops.

Among the news items for that first issue was a story reporting that Rank Strand Ltd and Strand Century Inc had begun trading as one company, under the name of Strand Lighting, whilst another item informed readers of the availability of the new 64 page colour catalogue from Squire Sound and Light.

The PLASA Members page listed just 48



John Offord, editor of L+SI.

members, whereas by comparison, the listing for the 148-page September 1995 issue of L+SI included 368 entries. Who can guess what the figure will be by the time we mark the Millennium? A little more than one page of directory ads in 1985 has increased to seven today.

The pages of the early L+SI magazines featured far more in the way of discotheque news than today's magazine, but then it was the age of the nightclub boom, and there were hard times to follow. Fortunately, that history has come full circle, and once again we are looking to the nighclub industry to provide us with some of the most innovative and creative applications of current technology. Little did Bill Allen of Manhattan Sound and Light realise what lay ahead when musing on the possible impact of moving mirrors in the February 1986 issue.

By mid-1986 the magazine was carrying glowing reports on the activities of PLASA and it was only at this point that the Association felt sufficiently confident about the future of the industry to actually book Olympia 2 a year in advance for the 1987 show. When you bear in mind the huge success of PLASA 95, the growth rate seems almost incredible. As we prepare for the move to Earls Court 1, another door opens and another chapter begins.

In those far-off days there was also room to run ads reminding people of copy deadlines, advertising and subscription rates; now, we prefer to let that space work for the industry by ensuring that editorial is given first bite of the cherry on available space.

By April of 1986 we had an exclusive feature on Andrew Bridge's lighting of 'Time' at the London Dominion, the first of many West End show features which set the precedent for our determination to review the latest West End offerings earlier and better than the rest. The end of the eighties continued to be dominated by discotheque coverage and almost every issue featured a major new opening. But a foretaste of the expanding waistline of the industry was hidden in the August 1988 issue when L+SI ran a major feature on 'Aida' at Earls Court. Clearly, the old bastions of elitism were coming down and popular opera for the masses was on the march. Since that time, we've covered just about every major operatic staging to go into production.

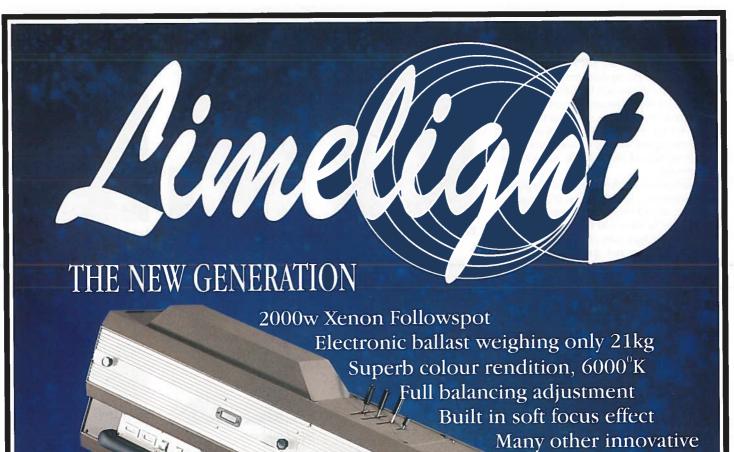
Perhaps one of our strongest and most consistent assets has been our coverage of the touring scene. Not an issue has gone to bed without an L+SI scribe determined to unravel the mysteries of this particular design universe. Over the years, we've witnessed the old rockers rise phoenix-like from the ashes time and again, whilst, the one-hit wonders of today are gone in the blink of an eye. But L+SI

LOOK BACK ~ NEWS JANUARY, 1993

Wybron's Autopilot Nears Take-off

Following a tremendous response to the launch of their Autopilot concept at the recent LDI show in Dallas, Wybron Inc of Colorado Springs in the USA is hoping to set a March release for the completed system. Autopilot, which automatically tracks performers in 3D space and translates this location in real-time to automated luminaires, will allow for greater flexibility and innovation in stage lighting and is definitely a product with a futuristic feel and one well worth keeping an eye on, as most visitors to LDI would agree.

"Two major hurdles have been overcome since it was seen at Dallas," Wybron president Keny Whitright told L+SI. "The advancement of Autopilot as a stand-alone product capable of interfacing with most industry consoles has now been achieved. In addition, we have overcome problems associated with the isolation and out-of sync thresholds that had been causing jitter in the signal flow. These major improvements will undoubtedly aid in the successful completion of system."



"Many thanks to
Lighting + Sound International
for keeping LTG
in the spotlight
for the past 10 years"

features

For full brochure and demonstrations, contact:

LIGHTING TECHNOLOGY GROUP LIMITED

2 Tudor Estate, Abbey Road, Park Royal, London NW10 7UY Tel:0181 965 6800 Fax:0181 965 0950 Email:100634.3064@COMPUSERVE.COM endures and in our time we've mixed with the best from The Rolling Stones and Pink Floyd to Madonna.

The manufacturers are the driving force of the industry and the equipment news sections have been, and always will be, packed with the latest product developments. Not one to be tied to the mainstream, we've searched the globe looking for the more unusual applications of our technology and have found ourselves in the unlikely settings of Bingo Halls, Black Holes and Catwalks.

The early issues set the pace for coverage and though some of us are not as fleet of foot as we once were, we still know a good story when we see one. The months and the deadlines have rolled past, the grey hairs on the heads of the editors have come and gone, and we're all getting older, but the industry is ageless - young people are attracted to it in droves and there is little doubt that this will always be an exciting industry to be part of. The many photographs accompanying this special feature are in themselves a potted history of the events that have shaped the past ten years, not just on an industry-scale, but on a world scale too. It's encouraging that such events as The dismantling of the Berlin Wall, the fall of the Iron Curtain and VE Day have all looked to the expertise of the lighting and sound industry to help them commemorate these events.

Inevitably, the industry has seen its downs as well as its ups and in the late eighties and early nineties, many of the lead news stories reported on the companies who were simply unequal to the struggle with the burgeoning recession. Thankfully, the countdown to the Millennium runs close behind a significant

The Team Behind Lighting+Sound International . . .



Ruth Rossington.



Barry Howse.



Lee Baldock.



Sheila Bartholomew.



Jane Cockburn.



Nicola Evenden.

upturn in the fortunes of the industry and the stories of foreclosures and assets liquidated are happily less frequent.

As we crossed into the nineties, we took another significant step forward as we willingly submitted to the computer revolution. Five years later, we are now leading it with sophisticated scanning techniques and digital technology being employed to produce the magazine.

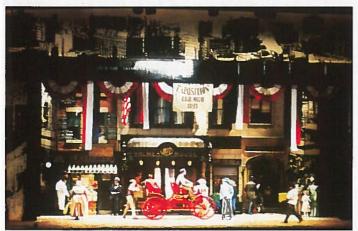
This expertise has led us to broaden our own horizons and in April this year, we added a new



Sep 93: Madame Tussauds opened the 'Spirit of London' dark ride and L+SI travelled back in time.



Apr 94: Prior to Phil Collins 'Both Sides' tour heading off for 12 months on the road, L+SI sat in on the rehearsals at Bray Studios.



Apr 94: When doyen of theatre lighting designers Richard Pilbrow lit the latest revival of Showboat in Toronto, Tony Gottelier talked to the maestro.

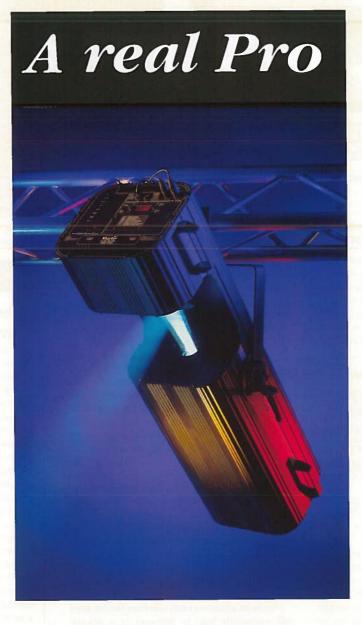


June 94: 94 was the year of the mega tour and Pink Floyd's epic 'Division Bell' tour offered L+SI a porthole into an unreal world.

At Martin Professional we are known for our range of Pro. entertainment lighting products. But out of all of this super-intelligence, the most brilliant of them all, is the Roboscan Pro 1220 CMYR.

Before CMYR, there was already the Roboscan Pro 1220, the brightest thing on the planet to date, with its excellent modular construction which enables anything from tweaking facilities to a full upgrade, thus radically extending the useful lifetime of the product.

CMYR adds an extraordinary, full-color, color-mixing



system to all the other winning attributes which were previously synonymous with the quality and performance of the original
Pro 1220. Plus rotating
gobos, of which there are
no less than four on-board

every model in the new series, as well as 9 motorised fixedaspect gobos.

Standard or custom designs, or even etched dichroic self-coloured gobos are available.

In addition, the new, quieter Roboscan Pro
1220 series offers you the choice of HMI, or MSR
1200W lamps across the range, full DMX 512 implementation, including a high resolution option on pan and tilt, and microstepping on every dynamic feature.

Martin Professional the choice of
professionals

"Martin Professional congratulate L+SI on their 10th anniversary"





"L+SI provides the links that hold the

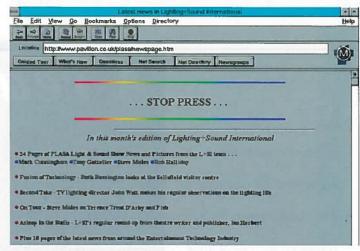
industry together and whether you read

it in the bath, the toilet or in your

company's board meetings, there's no

substitute for the real thing - and rest

assured, L+SI is the real thing."



The Internet revolution has caught L+SI in its web. Above left, PLASA's home page on the Internet is a gateway to information on all the Association's activities, whilst those who access L+SI's pages will learn more about the features in past and present issues, and subscription details.

title to our portfolio - Sound+Communication Systems International. Though L+SI has traditionally concentrated on the spectacular and innovative results that are achieved when a creative mind is combined with the latest in lighting and sound technology, it was always our intention to address the multi-media and

communications side of the industry in more detail. In S+CSI, we believe we've found the perfect medium.

Now four issues on, we're just beginning to make our mark in this side of the industry

and if the early signs are anything to go by, in 2005, we'll be dusting down the archives in search of material for S+CSI's tenth anniversary feature.

Quite apart from the technology, there's the human element, and one of our main concerns has been to ensure that the magazine reaches the people that matter. L+SI now finds its way to the doorsteps of just over 8,500 people worldwide in over 78 countries, and as we've always believed in quality, rather than quantity, not a single copy goes to waste. In fact, the feedback we receive from readers indicates that on average, at least three people read each and every copy, so the actual net continues to be cast yet wider.

If proof were needed of our commitment to continue the trend of strenghtening the quality

of the mailing list, we have targeted certain associations and technical bodies over the past few years and ensured that all their members receive a copy of the magazine. We're also prepared to put our money where our mouth is and this year applied for ABC (Audit Bureau of Circulations) accreditation. This mark of

quality is your proof that we mean what we say.

I can't finish this look back, without looking forward. Perhaps the most significant step we have taken in the last year has been our willingness to

explore the many wide-ranging opportunites offered by the Internet.

Those with access to the world wide web can learn more about the magazine, the people behind it and can even subscribe in less time than it takes to pick up the telephone. In 10 years time, who knows where science may have taken us.

I've been asked recently whether the Internet will eventually lead to the end of a printed version of L+SI, to be replaced by a digital counterpart. I can't predict what the future holds, but there is one thing of which I'm certain. L+SI provides the links that hold the industry together and whether you read it in the bath, the toilet or in your company's board meetings, there's no substitute for the real thing - and rest assured, L+SI is the real thing.

LOOK BACK ~ NEWS JANUARY, 1994

'Show Boat' Revives in Toronto

The latest revival of the enduring musical 'Show Boat' has recently taken place in Metropolitan Toronto, under the direction of Harold Prince, at the brand new North York Performing Arts Center. The show opened on 17th October last year at the complex's 1600 seat Main Stage Theatre, complete with entirely new staging.

On the sound front, the show features a 74 input Cadac J-Type mixing console, as specified by sound designer Martin Levan. A massive complement of radio mics are used on-stage - 45 in total - representing one of the most complex shows currently in performance.

The J-Type, supplied by the Winnipegbased sound hire company Westsun, is specified with a 14 x 28 routing matrix, complete with five programmable routing modules and 14 VCA masters. The show is scheduled for an indefinite run at The Main Stage Theatre, with future plans including a Broadway production.

Despite some local controversy over the revival, this production of 'Show Boat' has received critical acclaim for its generally "grittier, hard-edged" presentation of the 56-year old original.



June 94: The new £33million Glyndebourne Opera House opened with a massive battery of sound, lighting and staging equipment.



Sep 94: The Rolling Stones were back on the road with a much more aggressive and anarchic approach for the 'Voodoo Lounge' tour.

THE LAST WORD

We couldn't finish this special feature on the 10 years of L+SI without giving the last word to people in the industry

I REMEMBER WHEN . . .

I'm not normally known as a man to be lost for words, until asked for a printable anecdote about L+SI. After a few attempts, which went along the lines of "What about that time when John Offord... No, perhaps not," I settled for



thanking John, Ruth and all concerned with the magazine for helping Glantre Engineering to become the international company that it is.

Although Glantre is 21 years old, the company's growth over the past 10 years and the increasing size and value of its contracts, can be viewed in tandem with the wonderful coverage given to our work since the first issue of L+SI.

The restoration of the Playhouse Theatre in 1987 was one of our first significant UK projects after 12 years of carrying out major overseas theatre and industrial contracts. L+SI's 10th anniversary coincides with the announcement of Glantre's newest cruise ship project - the £5 million contract for Carnival Destiny. I'm looking forward to the next 10 years! Thank you.

Derek Gilbert Glantre Engineering

THE VALUE OF EDUCATION

Having been on the interview panel that first vetted young Johnny Offord for the role of editor of PLASA's magazine, I always felt the lad was going to go places - and so he



has. In fact, so many places, I've totally lost count.

His progress during his formative years eventually resulted in him being appointed as Head Boy, a decision that my fellow governors and I were very pleased to make.

Over the past 10 years, young Offord has worked extremely diligently. He always produces an extremely high output of work, his grammar and spelling are first rate and he has shown all round skills in public speaking, music, written composition, theatre studies and French.

His organisational and leadership skills are outstanding, and if he would only put as much concentration into his studies as he does on thinking up japes and playing tricks on his classmates, I am sure that when he eventually goes out into the real world and gets a proper job, he will be very successful.

John Lethbridge Cerebrum

STRANGER THINGS...

When asked for his own personal memories of L+SI, Mike Goldberg of M&M recounted the following story.

Arranging a business trip abroad to set up his dealer network after forming M&M in 1988,



Mike was told by the potential dealer in Hong Kong that he would be collected from the airport. Having never met the gentleman before, Mike asked how they would recognise each other. "Easy," said his host, "I know what you look like - I've seen your photo in Lighting+Sound International." Mike admits that this has now happened to him several times, and thanks to L+SI he has never had to carry a placard with his name on it!

LIGHTNING STRIKES TWICE

In 1988, we ran a full page colour ad in L+SI featuring our Gold lighting console, set against a city skyline, with a lightning strike shooting from the clouds above.

The response to the ad was good, but one particular customer, who shall remain anonymous (from a country between Canada and Mexico), rang and asked for a price and delivery date. We discussed the deal and after a while he said he was satisfied that it was right for his theatre, but wondered how it actually controlled the lightning effect . . .

Colin Whittaker Celco



birth of L+SI in 1971, when Tony Cockell built a studio sound quality mobile rig for a local group of musicians. That group went on to become the famous 10cc, and Tony's

sound system successfully toured with 10cc around the world.

By the time L+SI came onto the scene in 1985 Formula Sound was still a small company, but with a growing reputation for high quality, pro-audio equipment.

In fact, the first five years of L+SI's existence coincided with Formula Sound's development of studio quality modular mixers, in the form of the PM80, for use in the discos and club scene. L+SI played its part in establishing the PM80, and its successor the current PM90 which was

Formula Sound has been an active and enthusiastic supporter of PLASA since its conception and has picked up 12 industry awards, including a PLASA Product of the Year award for the AVC2, Automatic Volume Control

Today, Formula Sound products can be found in entertainment venues all over the world. The fact that British pro-audio companies have gained such a high reputation worldwide is due in no small part to the efforts of PLASA and the responsible and authoritative coverage of the industry by 'Lighting+Sound Sandra Cockell

Formula Sound

PALACE OF RICHES

In 1991, we participated in Pro Audio & Light Asia in Singapore. Whilst talking to Rod Bartholomeusz (then with Cerebrum) on stand, a Far Eastern gentleman came up and



asked in very broken
English for "lighting
equipment Palace." Rod, never a man to miss an opportunity, quickly picked up the conversation and said: "You want lighting equipment for a Palace?" "Ahh, I see you in L+SI. Yes, yes," said the customer, "maybe as many as ten Palace." Rod was overwhelmed and started asking more questions like "Where are the Palaces?" and "What is your budget?" The confused gentleman seemed somewhat aken aback by these questions, until looking ound the stand he noticed what he wanted. There you have Palace," he said pointing to a ile of equipment price lists on the table! nonymous

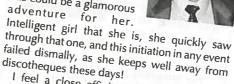


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remember in 1988, when Ruth Rossington joined the magazine, persuading her to cover more of the discotheque sector, which I believed needed more publicity, on the ruse that this could be a glamorous



I feel a close affinity to L+SI as I was a member of the PLASA committee when the decision was made to start the magazine, and indeed, for nine years more during its successful growth, as well as sitting on the editorial board's bi-annual meetings for most of that time. I am not sure whether my comments during that period helped the magazine greatly, but there is no doubt that today L+SI combines authority, information, as well as informed comment, news and humour to provide one of the best 'reads' to the lighting and sound technology marketplace.

Tony Kingsley Avitec Electronics

HOW TIME FLIES

Ten Years! Can L+SI magazine only be ten years old? It seems so much longer! Perhaps it has something to do with the commanding position it holds amongst the publications that reflect the diverse aspects of our eclectic industry. L+SI - in my view - is the only magazine which truly réflects a worthwhile cross-section of the 'entertainment technology' business. Moreover, it addresses these often disparate elements with knowldege, impartiality and authority. I know of no other publication that is so eagerly awaited or more voraciously read.

This genuine enthusiasm is the result of the magazine's immediacy, topicality, accuracy and those fabulous mug shots! Just who will be staring out at us this time - sporting an inane smile, like a rabbit caught in the headlights proudly caressing some magical new lighting or sound tool? More conventionally, we will most likely see the executive behind his desk, phone to one ear, earnestly sealing his latest mega-deal!

John Offord is a smart man - especially so because he surrounds himself with smart people. The L+SI team is the most helpful, good humoured, diligent and professional group with whom I've had the pleasure to do business. Not only that, they're all so nice.

I look forward to echoing the same sentiments ten years from now.

Daryl Vaughan Wybron/US Lights

LOOK BACK ~ NEWS JANUARY,

The 'Prince of Darkness' Dies

Robert Nesbitt was proud of this description of him, although he always clarified that emanated not from his style of lighting, fu of chiaroscuro as it was, but from hi amplified voice booming out of the darkened auditorium. The legendary director of spectacular reviews grew to prominence in the 1930s and for the next 50 years his name became synonymous with a level of style and spectacle rarely seen on other productions.

His lavish revues and pantomimes, especially at his beloved London Palladium, set the standard which others tried hard to emulate, whilst his designs for the Talk of the Town' Theatre Restaurant (which is now the Hippodrome) and the Dunes Hotel in Las Vegas became the model for many nightclubs which followed. His contribution as director of 35 Royal Variety and Royal Gala Performances has never been equalled, and unlikely to be so in this television age.

Robert Nesbitt believed in immaculate productions and set the pattern by always dressing and behaving immaculately himself. He was at all times dignified, earning deep respect, and devotion.

His technical contribution to live entertainment is considerable, but hard to detail because, whilst being rightfully proud of his achievements, he found it hard to understand why they were so significant and thus rarely liked to explain the genesis of a particular effect he had created. The style he imparted to his productions was unique, and for those who saw them and worked on them, they remain an unequalled pinnacle.

PARALLEL LIVES

The history and growth of DHA has more or less coincided with that of L+SI. Ten years ago we had only half a dozen people, now we employ over 40. Over the years, the magazine has given us extremely favourable



coverage, which, I am certain, has contributed to the expansion of the DHA operation, necessitating that we move premises no less than three times.

However, having just emerged from a large stock of contracts I have a special plea to make. Could L+SI please stop giving us such good coverage for a bit as we really would like NOT

David Hersey DHA Lighting

SPECIAL EDITION

This commemmorative feature celebrating L+SI's tenth anniversary will be reprinted as a stand-alone brochure and will be widely available at trade shows over the coming year. If you would like a copy of your own, or would like to subscribe to the magazine, please call the L+SI offices in Eastbourne, telephone (01323) 642639 or fax (01323) 646905

We still have a few of the limited edition tenth anniversary T-shirts available. Please call the office now to secure yours.

At Martin Professional we are known for our range of Pro. entertainment lighting products. But out of all of this super-intelligence, the most brilliant of them all, is the Roboscan Pro 1220 CMYR.

Before CMYR, there was already the Roboscan Pro 1220, the brightest thing on the planet to date, with its excellent modular construction which enables anything from tweaking facilities to a full upgrade, thus radically extending the useful lifetime of the product.

CMYR adds an extraordinary, full-color, color-mixing



system to all the other winning attributes which were previously synonymous with the quality and performance of the original
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series, as well as 9 motorised fixedaspect gobos. Standard or custom designs, or even etched dichroic self-coloured gobos are available.

every model in the new

In addition, the new,
quieter Roboscan Pro

1220 series offers you the
choice of HMI, or MSR

1200W lamps across the
range, full DMX 512
implementation, including
a high resolution option
on pan and tilt, and
microstepping on every
dynamic feature.

Martin Professional the choice of
professionals

"Martin Professional congratulate L+SI on their 10th anniversary"





"L+SI provides the links that hold the

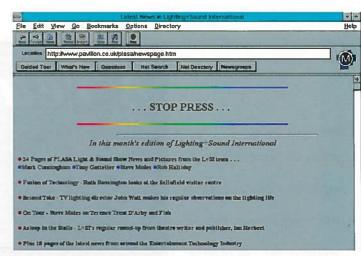
industry together and whether you read

it in the bath, the toilet or in your

company's board meetings, there's no

substitute for the real thing - and rest

assured, L+SI is the real thing."



The Internet revolution has caught L+SI in its web. Above left, PLASA's home page on the Internet is a gateway to information on all the Association's activities, whilst those who access L+SI's pages will learn more about the features in past and present issues, and subscription details.

title to our portfolio - Sound+Communication Systems International. Though L+SI has traditionally concentrated on the spectacular and innovative results that are achieved when a creative mind is combined with the latest in lighting and sound technology, it was always our intention to address the multi-media and

communications side of the industry in more detail. In S+CSI, we believe we've found the perfect medium.

Now four issues on, we're just beginning to make our mark in this side of the industry

and if the early signs are anything to go by, in 2005, we'll be dusting down the archives in search of material for S+CSI's tenth anniversary feature.

Quite apart from the technology, there's the human element, and one of our main concerns has been to ensure that the magazine reaches the people that matter. L+SI now finds its way to the doorsteps of just over 8,500 people worldwide in over 78 countries, and as we've always believed in quality, rather than quantity, not a single copy goes to waste. In fact, the feedback we receive from readers indicates that on average, at least three people read each and every copy, so the actual net continues to be cast yet wider.

If proof were needed of our commitment to continue the trend of strenghtening the quality

of the mailing list, we have targeted certain associations and technical bodies over the past few years and ensured that all their members receive a copy of the magazine. We're also prepared to put our money where our mouth is and this year applied for ABC (Audit Bureau of Circulations) accreditation. This mark of

quality is your proof that we mean what we say.

I can't finish this look back, without looking forward. Perhaps the most significant step we have taken in the last year has been our willingness to

explore the many wide-ranging opportunites offered by the Internet.

Those with access to the world wide web can learn more about the magazine, the people behind it and can even subscribe in less time than it takes to pick up the telephone. In 10 years time, who knows where science may have taken us.

I've been asked recently whether the Internet will eventually lead to the end of a printed version of L+SI, to be replaced by a digital counterpart. I can't predict what the future holds, but there is one thing of which I'm certain. L+SI provides the links that hold the industry together and whether you read it in the bath, the toilet or in your company's board meetings, there's no substitute for the real thing - and rest assured, L+SI is the real thing.

LOOK BACK ~ NEWS JANUARY, 1994

'Show Boat' Revives in Toronto

The latest revival of the enduring musical 'Show Boat' has recently taken place in Metropolitan Toronto, under the direction of Harold Prince, at the brand new North York Performing Arts Center. The show opened on 17th October last year at the complex's 1600 seat Main Stage Theatre, complete with entirely new staging.

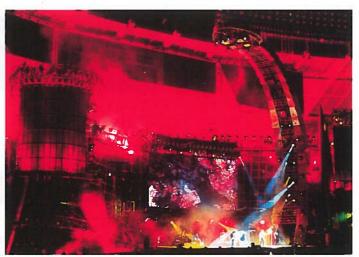
On the sound front, the show features a 74 input Cadac J-Type mixing console, as specified by sound designer Martin Levan. A massive complement of radio mics are used on-stage - 45 in total - representing one of the most complex shows currently in performance.

The J-Type, supplied by the Winnipegbased sound hire company Westsun, is specified with a 14 x 28 routing matrix, complete with five programmable routing modules and 14 VCA masters. The show is scheduled for an indefinite run at The Main Stage Theatre, with future plans including a Broadway production.

Despite some local controversy over the revival, this production of 'Show Boat' has received critical acclaim for its generally "grittier, hard-edged" presentation of the 56-year old original.



June 94: The new £33million Glyndebourne Opera House opened with a massive battery of sound, lighting and staging equipment.



Sep 94: The Rolling Stones were back on the road with a much more aggressive and anarchic approach for the 'Voodoo Lounge' tour.

TECHNICAL BOOK REVIEWS

PUBLIC ADDRESS SYSTEMS

by Vivian Capel Butterworth-Heinemann ISBN 0-240-51423-8 - £19.99

Public Address systems vary in size and complexity from the small clubroom to large factory, theatre or sports stadium installation. Although having many principles in common, conditions differ considerably and with them the type of equipment and method of installation that is required. All these must be taken into account when planning anew system. This practical book covers everything you need to know about PA systems including: basic requirements, basic audio engineering principles, acoustics and their effects, microphones, mixers, amplifiers, loudspeakers, distribution systems, live music and test equipment.

Practical tips are included and a handy chapter on how to deal with common faults as well as the latest safety regulations is provided. The subject is dealt with in a manner that is understandable to readers with limited technical knowledge, yet also of value to the professional PA audio engineer.

NOW AVAILABLE IN PAPERBACK

VALVE AMPLIFIERS

by Morgan Jones Butterworth-Heinemann ISBN 0-7506-2337-3 - £25.00

In audio applications, valve amplifiers are considered by many to offer better sound quality than transistor amplifiers. This book allows those with a limited knowledge of the field to understand both the theory and the practice of valve audio amplifier engineering design, such that they can analyse and modify circuits and rebuild an amplifier.

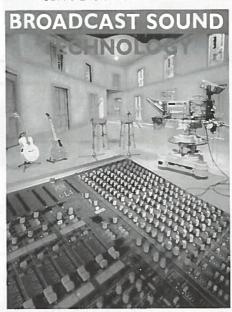
Most books on valves have three things in common: they are over 25 years old, they are very out of date and they have been out of print for many years. This is a completely new and practical guide for people working with valves, covering the process of design, starting with a brief review of electronic fundamentals relevant to valve amplifiers and moving on through simple stages, compound stages, linking stages together, and finally, complete designs.

The Mullard 5-20, Quad II and Williamson power amplifiers are analysed as examples of complete systems, before showing a worked example of a simple but elegant 10W design. Pre-amplifier design is then investigated, particularly the problems of designing a successful RIAA disc stage. This then culminates in a design for a high-quality pre-amplifier, particularly suitable for use with either the 10W amplifier or the Quad IIs. Safety and practical aspects are investigated. Layout, component choice and construction techniques are also covered. Morgan Jones offers numerous practical hints and tips based on his experience with real designs, thus providing readers with the he knowledge required to build new projects that actually work.

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BROADCAST SOUND TECHNOLOGY

by Michael Talbot-Smith Butterworth-Heinemann ISBN 0-240-51436-X - £16.99



This book brings together everything you need to know about audio technology in one concise volume. It covers the basic principles of all the main aspects of the broadcast chain, including microphones, loudspeakers, mixing consoles, recording and replay (analogue and digital) and the principles of stereo.

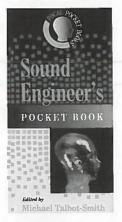
Written in an easy style that is ideal for beginners and professionals alike, the book has been updated to incorporate the latest developments in audio technology, including the latest digital advances. If you are a sound or maintenance engineer, or student on an audio course you will find this book of great value as an introductory text.

Michael Talbot-Smith has had over 30 years' experience in training staff in sound for radio, television and film. He is a former training manager in audio at the BBC training centre, and has more recently worked for both ITN and Channel 4. This book represents the fruits of his experience and will be useful to beginners and professionals alike, including audio-visual departments of schools, colleges, universities, teaching hospitals and industry.

THE SOUND ENGINEER'S POCKET BOOK

edited by Michael Talbot-Smith Butterworth-Heinemann ISBN 0-2405-1406-8 - £12.99

The Sound Engineer's Pocket Book is a collection of important facts and information that cannot easily be carried in the heads of those needing to remember it. If you are a professional audio engineer, responsible for broadcast or studio recording or a student, you will find this an essential part of your work kit. This is a compact source of essential data that



every sound technician should have.

Areas covered in this reference work include: noise measurement, acoustics, microphones, loudspeakers, mixing equipment, CDs, DAT, MIDI, telephony, ISDN, digital interfacing and ultrasonics. The editor of the book, Michael Talbot-Smith, has adapted and supplemented some of the most useful material from The Audio Engineer's Reference Book to fit into this more handy pocket book.

PRODUCTION MANAGEMENT FOR FILM & VIDEO

by Richard Gates Butterworth-Heinemann ISBN 0-240-51415-7 £14.99

The reader is taken through the various stages of script proposal, pre-production, cross-plotting, scheduling, budgeting, preparation and the shoot, followed by editing, post-production and final delivery. This book has now been revised to incorporate the latest techniques and covers the different kinds of management required for productions ranging from features through to documentaries. Examples taken from actual productions are given of the documentation needed to develop, run and control a production.

FURTHER REVIEWS APPEAR IN OUR SISTER PUBLICATION SOUND+COMMUNICATION SYSTEMS INTERNATIONAL



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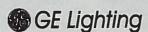






















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'ROY' OF RADIO ROVERS

Mark Cunningham visits Blackpool Pleasure Beach, the site of the latest venture for football mad broadcasting visionary, Alan Yardley

If you should ever find yourself in the company of Alan Yardley and the subjects of football and broadcasting arise, prepare yourself for a long chat. As a result of his two life-long passions, Yardley, a former television and radio presenter and producer for the BBC, has built a specialised broadcast industry from a simple idea which exploits the full potential offered by the new Restricted Service broadcasting Licences. Having spearheaded the launch of RSL broadcasting facilities at five major football and rugby stadia throughout the UK, and at York Racecourse, Yardley's CreaTV Consultants - the company which also controls specialist offspring Clubradio and Event Broadcasting Limited - was approached earlier this year to handle the design and installation of a purpose-built, on-site radio broadcast studio at Blackpool Pleasure Beach.

Much of Yardley's experience was gained during his 20-year employment with the BBC in Manchester, but his earlier interest in radio spawned its first results when, as a student, he helped to build a radio studio at the University of Loughborough. His hidden weakness and, as it turned out, winning strength, was his devotion to Blackburn Rovers FC. He comments: "When Blackburn Rovers asked me to programme entertainment for their PA system, it was a challenge that I couldn't turn down, although it needed a radical re-think.

"We started a radio programme with professional presenters doing good interviews and playing commercials over the system before each match. Unfortunately, although we had an entertaining show, hardly anyone was listening, because when we started broadcasting at 2pm there were only three men and a dog in the stadium. We had to look at ways of extending the coverage to a much wider audience, and with the help of a supportive radio authority, we looked at obtaining a Restricted Service Licence to broadcast during home matches, 28 days of the year."

Clubradio's Radio Rovers began broadcasting on 1413 MW from October 1993 with an official coverage of four to five miles. Yardley explains: "The broadcast is restricted by distance and power output, but we have listeners outside that radius who hear our shows regularly. They listen in the car on the way to the ground or at home before they leave. It's also a chance for those left at home to keep tabs on the team. We now reach in excess of



60% of our target audience before and after each match, so I think we've done quite well."

It is a station which does not have to apologise for talking about Blackburn Rovers! "We've obviously got a terrific relationship with the players and we do things that other radio stations maybe wouldn't want to do. We talk about their families, what they do when they're not actually playing football and how injuries affect them. We might also issue a traffic bulletin on one of the routes to the ground, and that could mean the difference between being on time or late for the kick-off."

The success of Radio Rovers came as a huge surprise to Yardley and his team, and rival football clubs soon realised the potential for similar broadcast services at their own grounds. A by-product of this popularity among the football fraternity was the formation of Event Broadcasting Limited which has provided fully-equipped mobile outside broadcast studio and transmission facilities at York Racecourse in the shape of York RaceDay Radio. Yardley says: "York has already done eight days of broadcasting with a mobile unit. We can turn up, plug in, switch on and begin broadcasting. We provide the same service as a studio like Radio Rovers, but it means that the venue does not have to have the same capital expenditure,

because all the mobile facilities are provided as part of the package deal."

With a captive annual audience of around 7,000,000 visitors, officials at Blackpool Pleasure Beach decided that the time was ripe to upgrade their on-site PA system and look at conveying messages in the most efficient way possible. Impressed by the collective achievements of CreaTV Consultants in the sporting world, the committee approached Yardley to offer a broadcasting solution. The result was Kit Kat Radio (named after the sponsoring manufacturer of a certain brand of chocolate wafer) - a fully-equipped facility built inside a glass conservatory-like structure, which allows broadcasting on a closed circuit system. "The important thing about the studio was that although it is an audio medium, it also had to be visual" Yardley explained. "So, in showing the presenters at work, talking into his microphone and playing his CDs or carts, we have maybe taken away some of the secrets of broadcasting for some of the Pleasure Beach visitors. A challenge like this is something we love to rise to. We have built radio stations at football grounds beneath stands where it was felt there wasn't space available. But they turned out to be very attractive, highly functional studios."

A side benefit of the installation for radio stations around the country is its availability for location use. "Visiting broadcasters who come to Blackpool Pleasure Beach and want to host programmes for their own stations, like Radio Cambridgeshire, for instance, can come and use these facilities. With a mono ISDN link, they can broadcast live from the centre of this activity. It also means that if there are any news stories from Blackpool, with this link we can put someone on the air within minutes. I think eventually the ISDN link will be upgraded to stereo so that broadcasters have the total flexibility to do the whole of one programme from here, rather than just speech inserts."

From the outset, all of CreaTV's studios have been designed with the broadcaster's ease of use in mind. "They enable the broadcaster to come in and switch on, and begin a programme immediately," comments Yardley. "It's one of the reasons why we chose a Soundcraft Series 10 console for all our installations, including the mobile unit."

The Series 10 is a flexible, fully modular desk with remote controls provided for cue lights



Chris Pilling (left) and Alan Yardley in the Kit Kat Radio Studio.



The Soundcraft Series 10 console.

and mic live indicators, with local or distant muting, cough muting and talkback routing. The comprehensive master and monitoring area features separate faders for stereo and mono outputs, and two FX return inputs.

Yardley adds: "The heart of any radio studio is going to be the mixing desk, and it's a desk that we know works really

well. It's reliable and the flexibility of the desk allows it to be removed from a mobile unit and reconfigured in a studio within minutes."

Kit Kat Radio presenter Chris Pilling is a typical fan of CreaTV's work and the Series 10: "It's a great desk, and fairly simple to use. The way we have it set out is that the CD faders and controls are assigned to the left of the desk, next to the CD machines, and the cart faders are next to the cart players. A lot of thought has gone into the design of this studio."

There are no vinyl records in sight at Kit Kat Radio - everything is played from two Tascam CD 401 MkII CD players, with Denon DN-990R and DN-980F MiniDisc machines for cart playback, as specified by the Pleasure Beach, while two Yamaha MS-101 monitors sit astride the console. Pilling comments: "I've worked with disc carts before, as well as NAB and hard disk. MiniDisc carts are certainly adequate for this type of station, but I wouldn't say they are the best when you put them up against hard disk, but hard disk is very expensive." The studio also has two Tascam 32 open reel analogue tape recorders on stand-by for visiting broadcasters familiar with the reel-to-reel philosophy. "They will come along with their



One of the Bose 151 speakers around the site.



Dave Nichols at the amp rack controls.

Uhers and do interviews around the Pleasure Beach, then bring them back to the studio for playback," says Yardley.

Working alongside CreaTV on the project was The Music Company. While CreaTV designed, built and equipped the radio studio, The Music Company delivered the external PA system. The Pleasure Beach's own team, meanwhile, handled the two month-long recabling programme necessary to dramatically upgrade the site's audio facilities. Until this year, the PA system which pumped out comparatively low-quality background music to visitors, consisted of five towers, each fitted with four speakers. Today, however, in five zones spread throughout the park, there are 116 individual white Bose 151 speakers which were installed shortly before the opening of Kit Kat Radio. These speakers are driven by three dedicated Crest Audio 4801 amplifiers, while around another 40 Crest amplifiers provide power for the remainder of the site.

Blackpool Pleasure Beach is notable for being the first venue in the UK to install the fully integrated Crest NexSys system which controls and monitors the output levels and temperature of the amplifiers for both the radio station and the fairground rides around the park. The Pleasure Beach's senior technician Dave Nichols explains: "Each zone has its own mixer. If the station was off the air for some reason, background music can be played through the system via the works office. Even when the station is operating, the park's office still requires access to the

PA, so they also have a priority paging microphone for emergency announcements and calls to staff in either or all zones.

"In the childrens' zone, there is another microphone for announcements, plus a separate PA for childrens' music. So in Zones 1, 2, 3 and 4 there are three channels: background music, radio and office mic; in Zone 5, the childrens' park, there are five channels: background music, childrens' CD, radio, office mic and childrens' zone mic."

While there is a message to be heard, Yardley's contagious enthusiasm for Restricted Service broadcasting, it seems, will not flag. "It has been an opportunity for people to gain experience and learn about broadcasting, but in reaching a dedicated audience there has been no compromise over the quality of presentations. The people at the forefront of this are not learning to be broadcasters - we are channelling our previous experience into a new area and targeting a particular audience which knows what it wants. Because of the recognition we have gained, there are many companies who are now looking to radio as the ideal medium for conveying their messages. Suddenly it's all so obvious.



LES MISÉRABLES IN CONCERT

Julian Williams reviews another great British success story - in lights

There is much to celebrate at this time. This month celebrates 10 years of L+SI in publication, in association with PLASA. A few weeks ago, on Sunday 8th October at the Royal Albert Hall, Cameron Mackintosh celebrated by presenting the Les Misérables 10th Anniversary concert.

The event was dedicated to everyone on both sides of the curtain. It has also been recorded for BBC Radio 2, Sky TV, a Japanese TV company, a British Network TV Company, a video and a soon-to-be-released CD.

The artistes involved included the 75-piece Royal Philharmonic Orchestra and a choir of 155 singers, both placed behind the platform seating an ensemble of 45 - all of these singers being drawn from ten years of Les Mis companies. At the very front of the extended stage were the principals: Colm Wilkinson, Michael Ball and Alun Armstrong from the show's original cast; Judy Kuhn and Michael Maguire from the original Broadway production; Philip Quast from the Australian opening; Lea Salonga, the original Miss Saigon; and from more recent casts, Ruthie Henshall, Jenny Galloway, Adam Searles and Hannah Chick. If this wasn't enough to prove the show's truly international status, the evening's finale did: a reprise of 'Do You Hear the People Sing' sung by 16 Jean Valjeans from 16 of the countries the show has appeared in, including Poland, Hungary, Japan and, of course, France. The event also drew upon the talents of 75 production staff and crew, and 75 TV personnel and technicians.

Cameron Mackintosh's brief was for it to be 'big' and to be virtually built in a day - for an undisclosed (but not insubstantial!) sum - and for not a drop of blood to be spilt at the Royal Albert Hall! To achieve this, production managers Nic Harris and David Gregory drew upon the skills of leading companies, including Scena, Stage Miracles and Unusual Rigging for, respectively, building, carrying and hanging John Napier's set of four 60ft wooden buttresses. These leaned outwards from the stage to the top of the hall's upper level, supporting a huge centre projection screen and two outer video projection screens. The stage's position took the buttresses beyond the Albert Hall's standard rigging area and Unusual Rigging thus had to live up to their name, installing four cantilever points at gallery level for support - an achievement for which Robin Elias deserves commendation.

The centre screen was used both for the show's trademark 'Young Cosette' emblem and for captions showing dates and scene titles - all projected over a distance of some 50 metres by the latest Hardware for Xenon 5kW projectors supplied by Labyrinth, who ran two projectors controlled using Datatron, with a further two projectors on live standby. This screen also provided a useful backing for the moving clouds generated by six Strand Cadenza EP projectors, topped with White Light's VSFX storm cloud disks.

The side screens were used for a mixture of live video close-ups, and some pre-recorded sequences from the stage show's slow motion battle scenes. All of the show's video was overseen by Phil White of Shooting Partners, with HD Thames TV providing the video images and Anna Valley supplying the video back-projection using JVC series 400 projectors.





Lighting designers Patrick Woodroffe (left) and David Hersey.

Sound in the 5,000 seat 'theatre' was always going to be a challenge, and one which fell to the combined talents of Andrew Bruce of Autograph (the member of the theatre production's creative team with perhaps the longest association with the show, having worked on the original Parisien production) and Richard Lienard of Sound Hire, who provided the rig. This consisted of an already proven, 'Pavarotti' stencilled mixture of Meyer MSL3, MSL2, UPA and UM1 loudspeakers arranged as a central cluster with side fills, driven from two Ramsa front-of-house desks run by Jerry Eade and Nick Lidster. A large number of splitters also fed the sound out to the BBC and the Manor Mobile studio.

I must say, I rated the quality of the work of these designers as magnificent. Every word and every sound had to be heard at the correct level in this space, and their achievement deserves recognition.

The concert's peculiar mixture of theatre and rock and roll was reflected most strongly in its lighting, where two of the world's leading lighting designers, Patrick Woodroffe and David Hersey, collaborated on the project.

It is interesting that both before and during

the ten years of this show's history, these two designers have become the leading players in their individual fields of lighting, one being the fast, bold lighting of rock, and the other the refinement of theatre - contributing, in particular, to the status of the British musical. Their challenge on this occasion was to light a theatrical production being presented with a minimum of theatrical staging, while preserving the moods of the stage show. And to light it in a minimum of time. And to make it look good for both the audience and the video cameras!

For Woodroffe and Hersey it was essential to retain the established style and dignity of the lighting in this passionate piece. Woodroffe explained: "David very much left it to Dave Hill (Woodroffe's long-time Vari*Lite programmer) and I as to what we did. He made some suggestions and let us get on with it." It was generous of Hersey to allow another designer's interpretation of one of his most successful designs.

The rig used also demonstrated the show's dual nature - a 115 Vari*Lite rig (a mixture of VL2Cs and VL5s in the truss and around the Hall's gallery, with VL6s rigged under the projection screens) is something theatre can only dream of. But the truss also contained 13 DHA Digital Light Curtains, a tool developed from Hersey's theatre work and now finding favour in other areas of lighting - and, during the concert, a new fan in Woodroffe. Control came from an Artisan Plus with associated Macintosh manned by Dave Hill, a Celco controlling the Parcans, providing warm and cool washes, and the DLC levels operated by Woodroffe himself, with a Macintosh controlling the DLC's position and colour programmed by Rob Halliday.

The show's tight schedule meant that accurate preparation was required, and this was handled by Chromatic Production's Steve Nolan and crews from Theatre Projects and Vari-Lite, who supplied the rig. This was first installed at Elstree studios for two days of pre-programming. The main factor in allowing it into the Albert Hall on time was the unusual idea of offering the complete system, free of charge, to the hall's client of the previous night, the Boy Scouts - who had a spectacular gala with illumination beyond their imagination! For Hill and Halliday this meant working through the Saturday, lighting the additional 'show within a show', then returning to the concert afterwards, but it did release valuable extra programming time on the Sunday.

During the concert itself, the team worked together through a head-set system, with Woodroffe 'busking' on the Celco and calling the 12 followspots while constantly testing Hill's nerve in calling for additional Vari*Lite looks. Hersey kept an overview of the states appearing on the stage and how they related to the mood of the storyline and the original stage lighting. It was a constant battle between the subtlety of theatre and brazenness of large scale productions, with the combination of approaches producing some interesting results. As Hersey says: "It wasn't really theatre, it was more like a halfway house." He did particularly enjoy the act one finale "One Day More!", though, which put his light curtains to spectacular use from a height of over 40 feet.

If lighting the show itself was a challenge - as Woodroffe admitted "we could not afford to get it wrong" - he also had the problem of having to light for the high-definition television cameras (which normally need four times the standard TV light level!) that were filming the event. The team had monitors allowing access to all of the shots, and had to balance the desire to close light down for solo numbers, with the need to maintain an interesting background for future television audiences.

"It was a good experience for everyone," Hersey summed up as Le Maitre rounded off the evening with a run of building-shaking maroons and the capacity audience rose to their feet cheering and applauding. "To have achieved all this in the time available was remarkable. In terms of the situation we were in, I thought it was bang on."

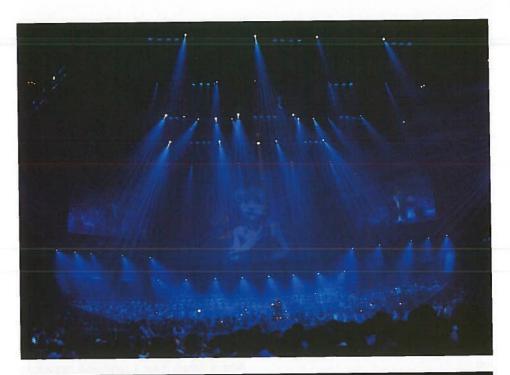
additional reporting by Robert Halliday

Production Credits: Les Misérables by Alain Boublil and Claude-Michel Schonberg, based on the novel by Victor Hugo. Lyrics by Herbert Kretzmer. Additional material by James Fenton. Orchestral Score by John Cameron. Musical supervision by Martin Koch. Conducted by David Charles Abell.

Lighting designed by Patrick Woodroffe and David Hersey. Sound designed by Richard Lienard and Andrew Bruce. Costumes designed by Andreane Neofitou. Designed by John Napier. Concert staged by Ken Caswell. Original direction and supervision by John Caird and Trevor Nunn.

Production manager: Nicolas Harris. Deputy production manager: David Gregory. Company manager: Kate Salberg. Stage manager: Barry Barnes. Deputy stage manager: Karen Kerr. Assistant stage managers: Lucy Davey, Rosie Gilbert, Sue McQuilliam, Jill Standish.

Scenery built and painted by Scene Ltd. Lighting equipment by Theatre Projects (Lighting) Ltd and Vari-Lite Europe. Sound equipment by Sound Hire. Technical crew supplied by Stage Miracles. Rigging by Unusual Rigging. Pyrotechnics by Le Maitre. Slide projection by Labyrinth. Video supervision by Shooting Partners. Video projection by Anna Valley. Communications by Just FX..







SECOND TAKE

John Watt reports from the IBC in Amsterdam

There are worse places to be than at IBC Amsterdam in September, especially if the weather is kind and some of the tourists have left for home as the first autumnal leaves drop into the canals. The architecture provides delights at every turn - as long as you keep walking and aren't tempted to another apple cake or a visit to a Brown Bar, populated as they are, by more characters than any casting director dreamt of.

In the interests of science, and being a lighting professional, I did venture into the red light district. Whatever talents the girls have (and some do have amazing talents), their choice of lighting is not one. I guess any offers of professional services would be misconstrued, so one can only look and learn. Pink and green neon aren't kind to human flesh tones and red isn't much better - the flat effect of a neon tube either side of a window would make even the most rounded goods look flat.

The real delight to be found in Amsterdam was the International Broadcasting Convention held at the RAI International Congress and Exhibition Centre. Well, delight was the expectation, if not entirely the reality. The lighting manufacturers and dealers weren't there in full force and certainly not in the numbers seen at PLASA the previous week. Nonetheless, most of the big guns were present,

but the moving light and theatrical manufacturers were not, which may prove short-sighted. Do they imagine that their equipment is not of interest to television lighting designers?

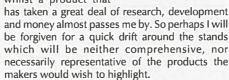
Without doubt the disappointment of IBC for me was that much of it had nothing to do with broadcasting as I know it. Broadcasting in an engineering sense

maybe, but not to do with the production of programmes. The major camera manufacturers were not there and hall after hall was jam-packed with computer wizardry to manipulate, file, edit and animate material. Cartoons and graphics are big: drama, entertainment, sport and documentary programmes may not have existed for all we saw around us.

I stood appalled at one 'virtual reality' display after another where smug looking boffins proudly displayed blue backgrounds with a solitary human presenter and nothing else. The 'sets' were entirely electronically generated and with such sophistication that the presenter could walk through doors, around pillars and produce artefacts at a snap of his fingers. Whatever effects you could obtain in a real environment could be imitated with these machines. Make no mistake, machines they are with crawling edges everywhere like early chromakey, backings of unreal unsympathetic colours, patterns and unlively geometric shapes and camera moves with the subtly of a machine tool at work. Amongst all this stood a diminutive human being, his soft clothing and delicate flesh tones unable to compete with the pin-ball machine decor.

What's worse, the lighting was entirely secondary, existing only as spill from the floodlighting used to light the blue background. The results on the presenter's face made him look at least as ill as I felt at the prospect of our craft being conducted by an electronics engineer who has lost, if he ever had it, the ability to see. Virtual philistines producing virtual unreality. But it was incredibly clever.

Back in Hall 8 the lighting manufacturers with their feet firmly on the ground were providing the means for us lighting designers to produce exciting pictures only limited by our own imaginations. I guess it is perverse that I notice the simple things, whilst a product that



First to De Sisti, whose stand bowed to the inevitable and placed a large conference table centre-stage, at the head of which sat the boss Mario De Sisti and his son Fabio, surrounded by an impressive range of conventional gear. Or at least, that's how it appeared at first sight; making use of the new Blue Pinch lamps from Philips they have evolved their Micro Range spreading from 300W to 5KW. These Blue Pinch lamps run at a 100 degrees celsius higher than current tungsten halogen lamps, have a substantial increase in power and, perhaps most significantly for lighting designers, the light centre length is shortened, allowing housing sizes to be substantially reduced resulting in a 650W sized pup, a pup sized 2k, and a 2k sized 5k.

K5600 Lighting, an American company with an agent in France, showed their Joker range of 200 and 400W lamps, running via their very compact



inverters and ballast from conventional 30V batteries. The 1200W version operates on 120V or 240V and is dimmable. The ballast only weighs 15lbs (6.8Kg). Perhaps most interestingly, the 200W Buglite is essentially an HMI source in a transluscent sleeve and is almost omni-directional. The unit minus ballast weighs only 2lbs and can be adapted with a small range of accessories.

The Optex stand may be the first I will describe as an 'Aladdin's Cave', but it won't be the last. In my usual perverse way I am tempted to go for the novelty items rather than the mainstream, however it would be unfair to ignore the very workmanlike Sachtler range (handled by Optex) of luminaires and suspension systems available for conventional studio and location use. Nor can I ignore the Aurasoft, a really serious and unique approach to soft lights. The physics are beyond these notes, but, suffice to say, in its short life it has found favour amongst eminent photographers in film, TV and stills. Interchangeable tungsten halogen and MSR lamp heads are available for both models, the MSR versions being flicker-free and dimmable. I can't wait to get my hands on one.

The **Sachtler** range of reporter lamps are well known, but nonetheless worth a second look for those of us who only spend part of our lives on location and suddenly need something 'dinky' for a tight situation. The very slim flight-cased sets seem to represent a truly transportable kit which I would like to own.

Back to the big boys and **Strand Lighting**. On the control side there is a replacement for Gemini, unimaginatively called variously the 430, 530 and 550. (I could do a joke, but will resist). To your untechnical correspondent the right hand of the console caught my eye as it is devoted to the

control of moving lights and therefore could get me out of having two operators and two consoles.

Strand have embraced the adoption of DMX for other non-dimming functions which has been growing for several years. This new systems software is designed to handle all the 'attributes' of a given unit (pan, tilt, colour, gobo etc) with one channel. So now you have a new buzz world and the next one you need is 'networking'. The Strand SS100 is a micro-processor device for providing access at a remote location to signals present at a Strand desk operating networking software. It enables systems to talk to one another, either down a single coaxial cable or a twisted pair, and typically might connect dimmer room, control room, production desk and stage in a theatre installation.

Strand's blessedly simple Videolux fluorescent range can either be controlled by a dimmer channel, or, in alternate models, only a DMX line direct to the unit is required for dimming. A new 650W Bambino has been developed representing the downward trend in light levels. Also available in the same housing is a 200W MSR with its choke built in - one thing less to leave behind!

A brief call to **Lee Filters** revealed 'more of the same' but there's nothing wrong with that. Choosing colours with those mini swatch books can be difficult and the Lee Filters Master Edition of really 'big bits' is extremely useful (though there is a realistic charge). If you get as many flares as I do, their new Matte Box may be of interest. It has none of the usual rails, but fits on to the lens direct, its bellows being angled or extended by a gentle push, whereupon it stays put.

Onwards to Aladdin's Cave number two, the Great American Market (represented here in the UK by US Lights). You know about their scene machine range up to 2.5kW HMI, their gobo and Gamcolor ranges, but I particularly liked their fluorescent colour correction and decorative tubes which are flat packed. I was also struck by their Flicker-Master - a low cost box of tricks

giving a choice of random or strobe effects up to 2kW - just the job for fire effects or the flicker from a TV screen.

My bias is well known, but in an attempt to be even-handed and donning only a light disguise in case a friend recognised me, I visited the Kino-Flo stand (represented by Cirro Lite in the UK). Not that I could avoid the equipment anyway, as it was heavily featured throughout the exhibition, lighting most of the virtual reality stands referred to earlier. They opted to have every fixture on at once, so there was even less chance than usual to assess performance. However, a wide range of fittings were on offer, ranging from the 10 tube Wall O Light down to the single 6" pencil slim fitting operating in one guise from a 12v battery. Yes, my next 'night car shoot' may well feature a couple of these and will remind me not to have such fixed ideas. I liked the single articulated mount, more appropriate to these fittings than the conventional yoke arrangement.

Once in a while the lighting installation of a TV studio gets designed in early, as opposed to being an irritating afterthought and the design and co-ordination of this and many other disciplines is brought together by such groups as the **Television Design Partnership**, whose stand I visited (above average coffee). Arthur Moore, one of the directors, together with Peter Pearson, nearly got me fired in a previous life (I fooled them and resigned first) but life is too short for grudges (unless you manufacture fluorescent fittings) and it's good to see their expertise being employed in the far flung corners of the world. They may well have as big an influence on lighting as the manufacturers do.

Arri had a very tasteful stand featuring the company colours and pleasantly subdued lighting. As with other manufacturers, a full range of

luminaires is available both for studio and location work, all of course, featuring that distinctive blue and silver design which looks good even after a year or three in service. Pride of place at IBC (and PLASA) went to the medium-sized 10k with a new and exclusive 420mm lens. This provides better light transmission and, at full flood, a spread of 60 degrees.

A new 200W HMI, utilising the same housing as the 650 tungsten junior, has been introduced, the head weighing in at only 3kg and the flicker-free ballast at 3.4kg. This looks like a useful unit when space is at a premium and therefore size is important.

Last, but not least, was the Arrisun 60, a Par type fitting using a 6kW single-ended MSR lamp and offering the ability to focus when using the five lenses supplied and thereby increase beam angles (with commensurate reductions in intensity). Either wire wound or electronic flicker-free ballasts are available, the latter allowing 50% dimming. This is in addition to the already successful 40/25 and 1200 units. I dare to say 'successful' because I have recently used both on a job previously lit with bigger wattage HMI fresnels.

The **Leemobile** vehicle is a unit with a difference in that the load carrying part of the vehicle is a de-mountable pod which can be separated from the parent vehicle carrying the 140kW generator and lowered to near ground level for easy access to its comprehensive range of equipment. A further new idea from Leemobile and **Lite Smiffs** is a multi outlet electronic ballast that can handle a total of 12.5kW HMI or MSR, different wattages and different makes all in one box. A comprehensive display and control system is built in showing, for instance, current draw, lamp burning time, earth leakage, failure to strike and so on. I liked the sophisticated facilities, but whether one big ballast is preferable to several

smaller ones depends on the application.

The **Videssence** fluorescent system was in some evidence at IBC, not only on their own stand, but lighting at least one virtual reality blue background set up. They are a major player in this expanding area of technology and have a wide range of fixtures which go well beyond the broad sources offered by others in an attempt to provide more directional characteristics where appropriate. The Videssence philosophy of a

"The results on the presenter's face made him look at least as ill as I felt at the prospect of our craft being conducted by an electronics engineer who has lost the ability to see. Virtual philistines producing virtual unreality."

spikey spectral energy distribution, coinciding with the colour camera characteristics, sets it apart from the other fluorescent systems. The pro's and con's are not for me to argue here, but the savings in energy, air conditioning costs and maintenance are irrefutable and that wiley old bird Alan Bermingham can certainly pull a trick or two when working with them. Any more and you will know there is a ghost writer at work.

The alliance between **Rosco** and **Entertainment Technology** has been well documented in L+SI. The latter's Gordon Pearlman showed me their Intelligent Power System (IPS). These dimmers are solid-state, light weight and compact. They are claimed to be virtually silent (I couldn't hear anything) and these characteristics allow them to be hung next to the lights, thereby eliminating the need for dimmer rooms (usually in awkward remote cellars or roof

voids in my experience). These dimmers will control inductive loads and ballast driven loads, have built in protection against dead shorts and an on/off button for focusing the adjacent lamp - a neat idea, particularly for a small installation.

Aladdin's Cave number three was the stand of the local **C&C Combination** being enthusiastically hosted by the outrageous Corné Plomp. His slogan 'All you need is lights' has been proudly displayed for years now, and is very apt. I, for one,

would steal it, but he would sue. The company are agents for the **Lowel Light** and it seems to me this range has lately come of age with the emergence of the MR16 type low and main voltage reflector lamps. These are, in essence, location lightweight equipment up to 2kW, but generally much smaller.

Also of interest were the little Pro Lights, which are really tiny 12v 100Ws with an amazing range of accessories. The Tota is a broad source at 800W and small enough to 'lose' behind a prop and the Omni, a 650W

mains key light, demonstrates some very original design features. However, my IBC first prize goes to a variation on a still man's umbrella - the Rifa Lite. It looks like an umbrella but has a cable sprouting from the handle; one yank and it opens out to a beautifully diffuse soft light of 500, 750 or 1000W. There is even a 16mm socket that can pan and tilt in the handle. Magic!

My experience at IBC reminded me of Samuel Johnson's remarks on our great capital - "When a man is tired of London, he is tired of Life". If you are tired of trade shows, you are tired of lighting. I am not. There is always a welcome on the stands and all have something innovative to offer. We lighting designers are lucky to have such free-thinking manufacturers providing for our every whim and, although I am sometimes rude about their products, there is always someone else who thinks they are great.



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SELECON

ON TOUR

AND PRODUCTION NEWS

Marillion

Leeds Town & Country Club

LD: Alan Parker SD: Chris Hedge

When I last saw this band two years ago, they were immersed in presenting a concept album (*Brave*) about a girl destroyed by systematic sexual abuse. This time around, and with no detriment intended to their worthy efforts back then, it is a relief to find a more straightforward presentation of their talent. That said, the show was still highly charged emotionally: singer Steve Hogarth makes a powerful commitment to each lyric, thankfully not quite as prone to parody as, say, Shirley Bassey, but equally charged.

Unfortunately, he fails to sustain this emotional level, pausing as he does between songs to give us a wry smile, as if to say: "It's all right you know, I'm only pretending." A shame, as this one small gesture completely undermines the validity of his performance, and he does it time after time. Charming as his smile is, it should be left hanging in the dressing room.

LIGHTING

For designer Alan Parker, the change from concept album to a more conventional performance has freed

him from the strictures of the last tour that made much of what he had to offer in the way of lighting predetermined. Funnily enough, the tool box of lights he has selected for this tour (supplied this time by Neg Earth) is very similar to the last: two ellipsoidals, four Cyberlights (SpotCo), eight VL5s, 24 Par 64s (16 with Color Faders), two four-lamp bars of ACLs and a couple of strobes - in other words, a little bit of everything.

However, any similarity with the last tour ends with the equipment list. The bulk of the lights are

hung from two 40ft spans of folding truss (Alan's choice of gear is largely forced by only 11 feet of truck space for lights), and a couple of Pars are dotted about the two risers at the rear, but the real stars of the system are the lights suspended in mid-air between the trusses. The stage set is two risers butted together centre-stage and angled slightly inward to form a V-line across the stage. Sprouting from these risers like tall reeds are four curved lengths of two inch pipe, each with a VL5 on the end. Behind these, hanging down from the back truss, are three further pipes with either a VL5, a Fader Par, or both, hung from them at varying heights. The immediate effect is to give the stage an added dimension of depth. As they are, the



A clever combination of lamp positions for Marillion at Leeds T&C.

combination of lamp positions makes for a very interesting light show, lots of layers, lots of colour variation and with two very distinct types of moving light, lots of focus possibilities.

As ever, it's the choice of combination that makes or breaks the look. Alan has chosen a palette of largely saturated colours, working the Cyberlights mostly as profiles, and relieves the eye as the occasion demands with heavy use of open white from all lamp sources. He runs everything from a Whole Hog and is a deft operator, often



able to make the rig look as if it is full of automated lights by sweeping between fixed focus positions of generic lights and cross fading those fixed lamps as he does so. Thus, the departure and arrival points of the moving lights appear to feature many more lamps than we actually saw move; a simple trick executed with perfect timing, often with cross colour fades added in to enhance the illusion.

SOUND

As with the last tour, Concert Sound are providing the PA, an EAW system of 850s, the newer J version this time with the component upgrades engineers have been asking for. Long time front-of-house engineer Chris 'Privet' Hedge extolled the virtue of the new system as ". . . ideal for theatres. The high-mid coverage is perfect. Although you still get some peaks in the low end with the subs on the floor, the cancellation tends to be in specific frequencies rather than whole bands."

Certainly, the sound at the desk position seemed consistent across the hall floor. The whole PA is driven by Lab Gruppen 2000 amps, a recent switch for Concert Sound brought about by a desire to find a relatively lightweight amp that would fit six to a rack and not, as a member of the sound crew so succinctly put it, "crap out when driven hard". (He shall remain anonymous; suffice to say he is probably the world's greatest exponent of real tea).

To be fair, 'Privet' never drove the PA to these lengths. Despite just four cabinets in the air each side and four on the floor, this proved more than enough for the Leeds T&C. Mixing from a Yamaha PM4000 (desk honours on monitors go to Geoff Hooper on a Midas XL3), 'Privet' is a hard working exponent of his trade with plenty of push and an equal measure of pull. That is to say he manages to make a 'big' sound when needed, but is not afraid to retrench thereafter - thus the sound never got too loud. In fact, the sound on this night was very sweet. I haven't noticed a PA sound so

powerful and so clear since first encountering a Meyer system in 1983 on tour with Dave Gilmour under the control of Chris Lindop. The sound was so well defined and free from distortion that you were not aware of the level until you tried to talk to your neighbour and were rendered inaudible. This may be attributed to the new amps, the J version cabinets, or perhaps the XTA RTA1 analyser and Varicurve used to set up the system. Personally, I put it down to the man at the helm and the way the band play.

As I said last time, this is a good band with excellent musicians and as a touring show is as good a quality as you could wish for. The one thing they've failed to achieve in the last six years is a song of lasting quality like Kayleigh. If you ain't got the songs, you don't get the punters.

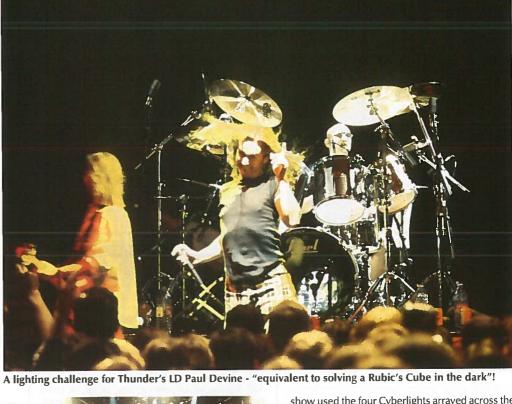
Thunder

York Barbican

LD: Paul Devine SD: Pete Russell

Thunder live in a shrinking enclave of Anglo Saxon rock - laying somewhere in the region between Bad Company and late seventies Led Zeppelin, they sing to a distinctly unusual crowd. Where do fans of this passed genre come from? Whilst their contemporaries gyrate to the multiplicity of dance styles or the current wave of English pop (Blur, Pulp, etc) this ardent group revel in cod 12 bar blues, neither purist nor progressive.

Either way, the band are good exponents of their trade and fulfil a demand, small though that may be. If they continue, they may even become another British idiosyncrasy - a Status Quo of the nineties. Pleasant though I found it to be reminded of times when I used to sit around in student halls and earnestly discuss the impact of Kennedy's assassination on the seventies, the music soon became repetitive and boring. We have moved on to better things. Sustaining an audience that stays faithful for perhaps no more than two years must be a tricky feat for this band.



LIGHTING

Talking of tricky feats, lighting designer Paul Devine has set himself a challenge roughly equivalent to solving a Rubic's cube in the dark. He has three types of moving mirror lamp: four Cyberlights, five Intellabeams and eight Golden Scan 3s. To control these he uses a combination of MA Scancommander and Celco Aviator, plus the Wybron Autopilot System - these last two items he has never used before! Why 'in the dark'? Well, because he has never worked with this band before and no production rehearsals were scheduled, just straight in at the deep end for the first show in Southampton the previous day and the truck arrived three hours late to boot!

"I'm no technophobe," said Paul with true Geordie understatement and a crooked grin, and then qualified his choices. "I picked the Aviator because I wanted to try a big 512 channel output DMX desk, mainly for use in the kind of TV work I do these days, like the Proms last month. The Autopilot I chose predominantly because of the lack of rehearsals. When solos come I can just choose that guy's lamps and wherever he's standing, I've got him. It's a lot easier than looking to see where he's playing and then pulling up an appropriate pre-focus position."

That said, the Aviator isn't quite set up for things like pre-set focus the way Paul wants it (hence the Scancommander), and the Autopilot could be unforgiving. I'll qualify that last comment: the Autopilot system worked exactly as Paul intended, but with two guitarists, plus bass, on stage, there was room for confusion. Thus, when one guitarist chose to move to the opposite side of stage to perform a solo, it was too easy to select the wrong AP dedicated fader on the desk and have 12 blazing lamps tightly focused upon the other guitarist stood quietly at his tuner.

Grappling with the Aviator also had its moments. Paul's hands were sometimes moving fast enough 'to wash your laundry' as he put it. His biggest problem was his not unexpected lack of familiarity with the layout. For instance, the numeric keypad and cue buttons were diametrically opposed in the mastering section and Paul's fingers obviously expected them to be



one above the other and frequently he stabbed away at a couple of blanking caps. The addition of dedicated add and swap buttons was much to his liking (previously you had one button and a mode select for either function) and generally he was pleased with the desk, but with only another four shows to go in this briefest of tours, wished to reserve judgement.

The lighting system was augmented by eight Mole-lights with Wybron Scrollers and just eight four-lamp bars of Pars. The Pars were all 240V for a bit of diversity in patch and as a safety net, "so I didn't lose half the rig if a couple of bubbles blew," said Paul. Stage wash tended to be one type of lamp or the other, rarely both, with some strong colour combinations from the eight lights.

The band's stage set wouldn't fit in the truck, so production manager Mo Hepple, with the aid of the Barbican's modest set shop, hastily put together a couple of monochrome flats to conceal the back line. They looked very much an afterthought and hopefully they were left in York. The greatest credit must go to Paul for not continually relying on the AP system to cover the bases: instead, he resorted to a variety of AP or straight pre-focus positions and for most of the

show used the four Cyberlights arrayed across the front truss as simple open white followspots. A waste of the lamp's potential maybe, but a useful function amply fulfilled.

SOUND

Pete Russell has been mixing for Thunder for a couple of years now, operating from the inevitable Yamaha PM4000 he is assisted by, and also gives much assistance to Niall Slevin on monitors. Pete likes SSE's Electro-Voice system for "the headroom it gives you, especially down in the bass end" - a consideration of some importance for a band that begs to be mixed loud, if only to inject some excitement into what can often be quite pedestrian time signatures.

The PA was stacked in a new, slightly concave fashion, first tried at Donnington. The full range cabinets, eight a side in two columns of four, were angled into one another to form a slight V, the effect of which seemed to be to focus the sound not quite where you were. That is, wherever you stood, downstairs at least, the concentrated focus of the PA seemed to resolve itself slightly in front of you. Thus, although undeniably loud, the pressure to pain ratio seemed diminished, making life more comfortable. It is worth underlining that, in spite of this unconventional array, there were no dead spots in the room. Even at the far limits of the crash barrier, 180 degrees to the stage, the mix was still consistent with that heard at the mix position.

This is a guitar band and we were obliged to hear two axes slicing away at us through the mix as each mop of hair took the lead, and this could easily have dominated the mix. Peter fortunately left himself enough room to fit everyone else in: drums, occasional harmonies and Hammond organ as well as bass. Vocalist Danny Bowes has a voice well suited to this style; he could, for instance, sound hauntingly like Paul Rogers at the height of his powers, but frequently he resorted to shouting into his microphone, injecting a great deal of distortion into an otherwise clean sound.

If the band seemed quaint, the technology certainly wasn't. There is obviously a place for such bands and they add to the possibility of musical experience in a supermarket era. If the truth be told, they looked and sounded a lot better than Bad Company ever did.

EQUIPMENT NEWS

M&M's Mr Mister

As the exclusive UK distributor for The Smoke Factory of Hanover, M&M has introduced the company's brand new small scale, high-output haze generator. Using ordinary compressed air, the Mr Mister is the first haze system which can be customised to suit any size venue, from small



theatres up to large stadiums. Designed specifically to generate haze from water-based fluids similar to those used in standard smoke machines, the Mr Mister also works equally well as an oil cracker.

Because the Smoke Factory's Mr Mister is driven purely by compressed air, there are no moving parts to wear out, no electronics to go wrong and virtually no noise from the unit itself.

For further details contact M&M in London, telephone 0171-284 2504.

DMX Transcoders

Goddard Design of Brooklyn, New York, have announced the launch of their new DMX512 transcoders, designed for production requirements where a conventional DMX512 distribution cable is not practical. The transcoders take a DMX512 signal and convert it to a data compressed error-checking format adapted for transmission by standard data communication devices. A second transcoder reconstructs the DMX512 protocol. It can be used with modems, leased lines, or spread spectrum wireless modems. Current units support 128 out of the 512 possible DMX channels.

The system uses sophisticated data compression techniques to get the DMX data across the narrow band width of either spread spectrum radios or computer modems. Robust error checking routines ensure that all DMX data that is passed to output is 100% correct.

For further information contact Goddard Design in Brooklyn, telephone +1 718 599 0170.

Altman get Heavy

Altman Stage Lighting of Yonkers, New York has recently sent out the initial shipments of their new UV-703 Fresnel, blacklight systems.

These heavy-duty fixtures will deliver a high intensity illumination of fluorescent materials at a distance up to 150 feet (50 metres). The units do not require any fans for cooling purposes, and Altman claim there is no audible noise interference on stage or on camera. The 250mm borosilicate UV-A filter fresnel lens provides an even field of light from spot through flood.

The company has also introduced a new, UV-704 outdoor blacklight system that features an integrated, internal ballast that allows the system to be operated in all weather conditions. An additional supplemental lens can also be added for even wider washes.

For further information contact Altman in Yonkers, telephone +1 914 476 7987.

Citronic Add to Product Portfolio

Citronic launched so many new products at PLASA '95 that we didn't have enough room in our October issue to do them justice.

The new products of particular note are the range of Conquest amplifiers, a low-cost DJ mixer - Battlemixer, the UK's first mid-budget, professional standard dual CD player and controller, a range of speaker systems, and the Predator DJ mixer.

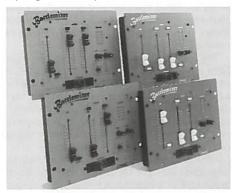


The Predator (pictured above) is a newly created mixer for the professional DJ market. Its style of remixing is provided by the dual three-way 'kill' feature which will cut any, or all, of three frequency bands from the music sources on each end of the crossfader. Predator also has three band input equalisers on each end of the crossfade to further trim the music signal going onto the mix.

The Citronic Bass Reflex System has been designed to extract the maximum from a selection of the very latest in driver technology. The company has selected a combination of drivers from various manufacturers based on the company's new bass reflex enclosure design that delivers crystal clear highs, intelligent mids and a solid bass response. The crossovers and filter networks have been refined to maximise all the system components.

Following listening tests by touring and installation experts, the Conquest amplifier range offers a low-cost product aimed at the worldwide market. In particular, it offers external supply fuse, compact design, comprehensive status indicators, integral A/B mixer, variable pre-set gain override, signal earth lift and variable input sensitivity.

An upgrade of Citronic's SM450 mixer was also launched at PLASA. The new SM450 now comes with enhanced and additional features including input gain controls, integrated crossfade, both micro inputs balanced and imbalanced, dual stereo cue band input (equaliser), built-in power supply and input connectors with adaptability for top edge or back input.



It is claimed the Battlemixer (pictured above) offers the lowest cost quality European mixer on the market. The mixer is manufactured to Citronic's ISO9001 quality approval and is packed with DJ friendly features.

For further details contact Citronic in Melksham, telephone (01225) 705600.

HELL's New Dimmer

Howard Eaton Lighting Limited have announced the introduction of the Solution dimmer from Bytecraft.

Suited to the successful management and control of systems in a range of major sites such as large hotels, high rise buildings, conference/exhibition centres, and museums, the Solution offers a range of features and functions. Simultaneous control input from Industry Standard protocols, analogue inputs, serial ASCII characters, as well as proprietary ARCbus protocol, makes Solution a suitable dimmer for architectural installations.

As well as being easy to modify, Solution dimmers are designed for simple wiring and installation with familiar standard connections and characteristics. Considerable safety features have also been incorporated, including two fans for redundant cooling and emergency and panic switching. Even a locking key option is available for the front door.

For further information contact Howard Eaton Lighting Ltd in Lewes, telephone (01273) 400670.

PowerLight Arrival

HW International have recently announced the availability of the PowerLight Series of lightweight professional amplifiers from QSC.

Weighing under 8kgs (18lbs) and only two rack spaces high, the PowerLight Series is designed to meet the needs of mobile sound applications. Light weight and high power are achieved by using QSC's new Powerwave Switching Technology power supply.

The PowerLight Series features three models, providing output power at 2 ohms of 500, 700, and 900W per channel respectively. Thermal performance is greatly enhanced with a custom built high-efficiency heat sink, allowing long-term operation into low impedances.

For further details contact HW International in London, telephone 0181-808 2222.

RCF Look to 'L'

RCF have introduced the L12 and L15 range of loudspeakers, designed to satisfy the requirement for high efficiency components necessary for contemporary professional sound systems.

The L 12P520 and L 15P520 mid-bass transducers supply high level sound reproduction characterised by excellent linearity and low distortion. The 12" L 12P520 and 15" L 15P520 can handle peak levels of 6dB (crest factor), whilst the response curve linearity makes the L 12P520 suitable for use in compact 40-60 litres reflex systems, where it is possible to produce sound pressure levels of 128dB, according to the company. It can also be used in horn-loaded systems for medium frequency use, where it produces sound pressure levels of 135dB.

The L 12P530 and L 15P530 high output woofers can handle peak levels of 6dB. The L12P530 is ideal for use in compact reflex systems of 40-60 litres, where it offers high performance at sound pressure levels of 126dB. The L 12P540 and L 15P540 12 and 15" woofers are designed to withstand peak power levels of 10dB.

All models in the P520, 530 and 540 series feature RCF side-vented technology which facilitates heat dissipation, resulting in increased power holding.

For further information contact RCF Electronics (UK) Ltd in Wickford, telephone (01268) 570808.

New Projection

A new large screen projection system for the high-resolution multimedia and presentation market has been released by Barco. The Barcodata 808 is the first projector of its kind to deliver the high resolution and picture clarity usually associated with desktop monitors on screens up to 6m wide.

It is compatible with a wide range of graphics boards up to 1180x900, and can display all worldwide video standards including S-VHS, with instant and easy switching between sources. According to the company 8" magnetic-focus CRTs and Digital Dynamic Astigmatism (DDA) ensure consistent, crystal clear images across the whole screen.

For further information contact Barco Ltd in Reading, telephone (01734) 664611.

High End HOLL

High End Systems Inc has released an improved lamp source for their Emulator laser simulator. The Emulator uses a powerful concentrated beam with high speed laser scanning to create dazzling laser-like effects, without the complications associated with a laser.

High End Systems R&D department has been responsible for the development of the new HOLL (High Output Long Life) 1000 lamp. The result, say the company, is a more stable source, increased lamp life, and 100% increased output.

High End are also kitting out their award-winning Cyberlight and Cyberlight CX automated luminaires with a full complement of LithoPatterns glass gobos. The new gobo wheel also features another major improvement with all positions now replaceable with custom glass gobos. Every gobo in Cyberlight, both fixed and rotating, is now fully changeable and can accept High End Systems' range of high resolution LithoPatterns.

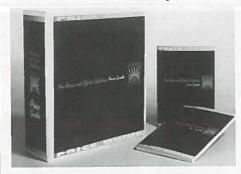
For more information contact High End Systems in Austin, Texas, telephone +1 512 836 2242.

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Biggest Price Guide in Industry



The latest edition of 'The Stage & Effects Lighting' price guide has been published by Cerebrum Lighting Ltd, and was launched at this year's PLASA show.

Until now Cerebrum Lighting have produced a bi-annual price guide, in A5 booklet format, but customer feedback indicated the need for regular price updates. The company have responded with what they believe to be the most comprehensive pricing guide to entertainment lighting products ever produced.

The new price guide has 120 pages of product listings and recommended list prices for more than 30 European manufacturers, together with suggested retail prices for items such as cables, connectors and lamps (none of which has recommended retail prices). The price guide is available either free-of-charge in A5 booklet format, or by annual subscription in A4 hardback format, for which regular updates are provided.

For your copy, contact the customer services team at Cerebrum Lighting Ltd, telephone 0181-949 3171.

Philips Optivision

Philips Lighting have introduced Optivision, a new approach to lighting control, incorporating Echelon's LonWorks technology as a basis for its control systems.

LonWorks technology was specifically designed to realise a standard that can be used by designers of all building facilities. LonWorks' solution allows for linked functions and decreased maintenance costs.

For further details call Philips Lighting in London, telephone 0181-665 6655.

Packing a Punch

The electricity generator that can never be knocked-out has already stayed the distance with Frank Bruno and Oliver McCall, according to Bristol-based Templine, creators of the Twin-Pack generator. This is now available to a wide range of users after proving its worth at a number of events, including outdoor boxing promotions where, with worldwide television audiences, it is critical that power is maintained.

Mike Goode, director of Templine, told L+SI: "We've put two 250 KVA generator sets into one 20 foot silenced container and synchronised them to operate as one. If the total load is kept below 250KVA, in the unlikely event of one machine failing, the other will maintain the load without a break in power."

The Twin-Pack was successfully used on VJ Day when the Queen's speech was broadcast live on three channels.

For further details call Templine in Bristol on 0117-923 5950.

KAM K5-60 Speakers

Lamba plc, manufacturers of the range of KAM pro-audio equipment, have introduced the latest addition to their KAM range of loudspeakers.

The KAM K5-60, 6.5" speakers are compact in size and complement the existing 'K' series range, which currently addresses the mobile DJ market and small to medium-sized installations. The 'K' Series comes in 12" and 15" versions with a powerful sub-woofer, the KAM KSB1, to boot.

The KAM K5-60 has an injection-moulded enclosure which is designed and manufactured exclusively for KAM. The speaker's frequency response is 70 Hz-20Khz and has a resonant frequency of 80-100Hz. It also has an impedance of 8 ohms, 90dB sensitivity, a crossover frequency of 3000Hz and a power handling of 75W rms/100W max.

The KAM K5-60 features a 6.5" polypropylene cone woofer which handles the low frequencies in this two-way cabinet. To produce a 'bass' that is full and tight without sounding 'boomy', the 1" four layer krypton voice coil is tightly controlled by a massive 13.3 ounce magnet structure, whilst the high frequencies are handled smoothly by a 1" inch soft dome tweeter.

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ASLEEP IN THE STALLS

Readers of L+SI are more than familiar with those all-singing, all-dancing luminaires that turn round, change colour, change focus and throw half a dozen gobos at you all in one go? What do you call them? Digital Duzzitalls? As a not-too-wide-awake member of the audience, I've suddenly noticed that they're all the rage in theatre.

Time was when they made too much clatter to be of use there, but either the shows have got noisier or the lanterns have got quieter, because it doesn't seem nearly so distracting now. Whatever they're called, they've been much in evidence lately. There's a bank of them upstage in the Hibernian extravaganza *Riverdance*, which is back at the Labatt's Apollo and

packing in huge houses at the moment. It's rather sad that such a big show makes such small use of the sophisticated lighting and sound available to it. Those swinging luminaires, for instance: yes, they change colour regularly, and - wow - they sweep the audience at climactic moments. Big deal - couldn't they being doing a bit more? Sets and sound are similarly disappointing. You've got this huge stage, which has to accommodate a line

of 40 or more furiously foot-tapping dancers, and all Robert Balagh has done with it is put in a false pros with some tapering legs at the sides of it and project rather boring patterns on them.

A big screen at the back will occasionally carry some projections, which look as if they've come out of some instant effects catalogue (the Mk 3 sunset, the Mk 7 flames, the Mk 99 angry clouds). It comes as something of a shock to see a credit for projection design to Chris Slingsby of *Snark* fame, but I take it Chris is responsible only for the installation.

As for the sound, sure you've got a big theatre to fill, but need it be so relentlessly electronic? The on-stage band includes some splendid traditional Irish instruments, including the bodran and even the spoons, but they all have to be mic'd to bits, and some of their efforts are pre-recorded. A super fiddler plays highly over-amplified jigs and reels, never allowed to offer the pure instrumental sound, and the synthesiser comes out relentlessly as the main instrument in all the arrangements. You feel you've spent the evening in a lift built for the partially hearing muzak reverberates in your ears long after you've emerged. Perhaps the supreme idiocy is in a flamenco interlude, where a suitably ample Senorita does all the required arm-waving and foot-stamping, but the band's percussionist has to supply the (amplified) castanets. Then, just to prove that she knows how the things work, our Senorita stops dancing and does a solo castanet number, anchored motionless to a waist-level stand-mic.

None of this can spoil the evening, because the dancers are just terrific. In their simple satin and velvet costumes they flash their tap-shod feet (and a lot more thigh than the traditional Irish dancer) at incredible speed, and you are mesmerised by their skills. I'm told that Riverdance has worked wonders for the Irish dancing revival in this country; those costumes, too, must have done a lot to liberate impoverished mums from having to spend a few hundred quid on a genuine O'Shagnasty tartan outfit. Praise be.

More of those clever lights turn up in What a Show!, Tommy Steele's retrospective tour, which has come in for a season at the Prince of Wales. Nick Richings has worked them a lot harder than Michael O' Gorman, his Riverdance counterpart, and it's just as well, because the set is once again spartan to say the least. The same boring legs in the wings, this time with the occasional starry pinlights. Otherwise, the band is the main stage ornament, built up on a series of very temporary-looking rostra. Curiously, several sections of the band are placed behind what look like bullet-proof screens. Has there been undue or unruly audience participation on the tour? The scenic highlights are when an equally lashed-up grand staircase descends flat from the flies and opens out with the traditional white bulbs under every step, and when a big screen descends to allow our Tommy, as Don Quixote, to take part in a very amusing film-backed sequence as he careers perilously down wide-screen country lanes on horseback. There was a car-chase interlude just like this which was one of the better moments of Mr Steele's Some Like It Hot - he's obviously learnt its value.

Saving colour is provided by some excellent costumes from the

Riverdance. Seeing it a couple of nights a wasn (by describe to be really incid side-will side-will swavi

"None of this will stop Steele's diehard fans from waving their zimmer-frames in delight, but I reckon they're being pretty seriously short-changed."

ever-reliable Terry Parsons to brighten up a very ordinary-looking line-up of supporting dancers, who even have the cheek to do a homage to *Riverdance*. Seeing it a couple of nights after the real thing, I'm afraid I

wasn't too impressed. The sound (by Greg Pink) is most politely described as functional: it enables the fairly slight voice of our Tommy to be heard, but reduces what is really a very good big band sound to incidental noises coming out of the side-stage speakers. None of this will stop Steele's diehard fans from waving their zimmer-frames in delight, but I reckon they're being pretty seriously short-changed.

It's those lights again in Stephen Daldry's hi-tech take on Rat in the Skull, Ron Hutchinson's intimate drama of a police interrogation, which has opened the season of Royal Court classics at the Duke of York's. When Daldry uses technology to complement a production, as in his stunning Machinal at the Lyttelton, it can be

terrifically enhancing. When the effects get in the way, as here, it's extremely annoying. With designer Bill Dudley he has rebuilt the Duke of York's auditorium for an in-the-round staging, cutting out the stalls as he did so successfully with Mark Thompson for *The Kitchen* but now with disastrous results. There's a peat-filled square, rather like an Irish boxing ring, in the centre of the hall. Around it runs a metal walkway along which

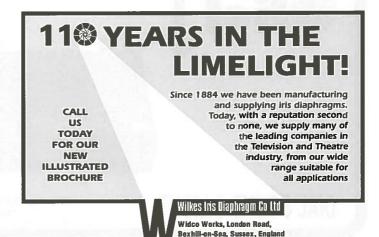
supporting policemen and walk-on warders can pace or chase to provide quite unnecessary distraction from the meat of the play, which is an eyeball-to-eyeball, ultimately boot to groin confrontation between an RUC officer and an IRA bomber. A single swivel chair is the only item of furniture in the ring - swivel, because you have to give all of the in-the-round audience a chance to see the all-important expressions on the two lead's faces.

And there's the rub - because this sight is inevitably rationed, half of the audience is denied it at any given moment. An odd side-effect is that if you sit in the original circle you are faced with the rest of the audience in what looks like a stripped-down Tricycle Theatre, tiered up on what was the back stage wall. Presumably, from their viewpoint you're looking at a traditional theatre audience, while the poor souls in what were the boxes at the sides get both impressions. Covering the circle and box-fronts with blow-ups of old Ulster death-statistics and a mugshot of a mutilated Rufus Sewell doesn't add much either, even if it does go a little way towards unifying the strange disparity of the space.

Anyway, come the climax, when the boot finally goes in, out come the swivelling luminaires, raking the audience, flicking to and from white and a bloody red, with a huge sound back-up as Daldry assaults the senses even more violently than Tony Doyle does Mr Sewell. Sledgehammers can be heard in the background, cracking nuts. Ron Hutchinson's fine play, so finely acted, doesn't need all this clatter to make its point: it's not Machinal and shouldn't be treated as if it were.

Ian Herbert

Ian Herbert is the editor and publisher of the critical journal, Theatre Record.



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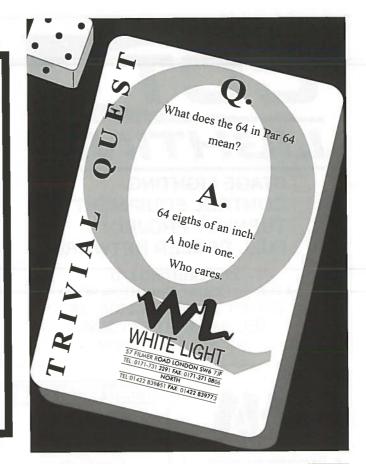
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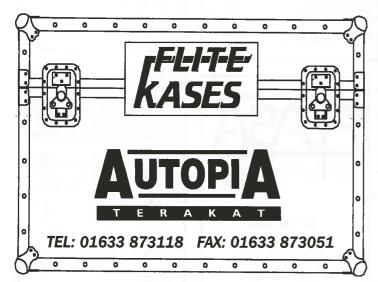


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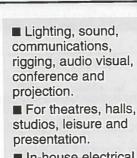
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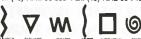
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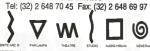
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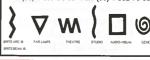
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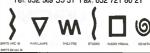


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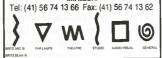
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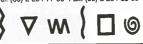
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VIEWPOINT

Michael Robertson goes

Ex Static

It was with great interest that I read Jason Greenaway's article on the state of moving light. I am glad that through this interchange we are all presenting an opinion on this rapidly evolving business, the scale of enthusiasm for which has, to be honest, surprised me.

I am motivated in writing this by a few observations: firstly, the amount of disgracefully poor lighting design one sees at the moment, secondly, a passionate and singularly obsessive interest in technology and, thirdly, a partial retreat from the synthesis of the design process. This ABC can be taken in one block and summarised thus - with the proliferation of diverse products in the lighting field, are we perhaps becoming too concerned with the facilities offered by these products and losing sight of their considered application? I am not advocating that technological advances be stifled, but history has shown us that their uses can be regrettable.

I see a lot of shows and, consequently, a lot of lighting. I agree that this article would fall down if I was blaming bad (or rather ill-conceived) lighting design on the advance of technology; of course, there are lighting designers whose work is incongruous to the 'whole', and this I'm sure has little bearing on the equipment they have to work with. One cannot quantify good or bad design, especially if, in passing judgement, we are too preoccupied with our own favourite gobos and colours. These prejudices have to be put to one

side when one is deciding most importantly whether the whole thing works. Also, bear in mind that we know only too well that seldom in the creative process are we totally responsible for the components we produce.

My feeling is that a lot of these 'wigglies' and 'wobblies' (forgive me) are seen as a primary consideration in designing lighting, rather than being seen in perspective as simply another tool. The motivation of so much modern lighting utilising automated lanterns seems to be that we have to show everything that the unit can do, regardless of whether it is appropriate or not. How many performances have we all seen where these lanterns appear to be on self-test for an hour?

Often, the intended effects of automated lighting are overwhelmed by the greater proportion of static lighting within the rig. Those rigs that show themselves up as straightforward but notable for their inclusion of 'what we can afford' moving lamps, frequently spell trouble because the scale of the adopted intelligents is considerably disproportionate to the basic lamps and hence



Michael Robertson graduated from the Guildhall School of Music and Drama almost two years ago having and maintaining a lifelong passion for light and lighting. He has lit many professional shows, including a brief spate in television and video production. He is currently the head of lighting for Spanish theatre company Telon and full-time in the electrics department of The Phoenix Theatre in Charing Cross Road. He occasionally writes plays, articles and lectures on lighting design to groups including Oxford University.

one sees a lot of ideas backed up, and possibly spoiled or misled, by the usage of the conventional rig needed to frame and gloss pictures, as the desired moving effect is too small in relation to the whole visual which was originally conceived by using them solely. It's also worth remembering that when using units that are multi-purpose, one is in danger of

forgetting things such as the proportionally higher light output that three map focused static lanterns offer, compared with one of these units focused on a given point.

Let's not forget what lighting is all about. Let's not forget that it is a wonderful sensation to elucidate a piece and move the onlooker all around the emotional realm. Of course, there is a place for stand-alone light shows, but I write this to ask that we use them where appropriate, especially when using the low end of the product scale where we are stuck with the same old dreary gobos and gaudy dichroic colours. Perhaps the public has come to expect the effects produced by this equipment, but who do you think is responsible for these expectations apart from us? Perhaps stagecraft is getting too clever, and somehow scale is being confused with quality.

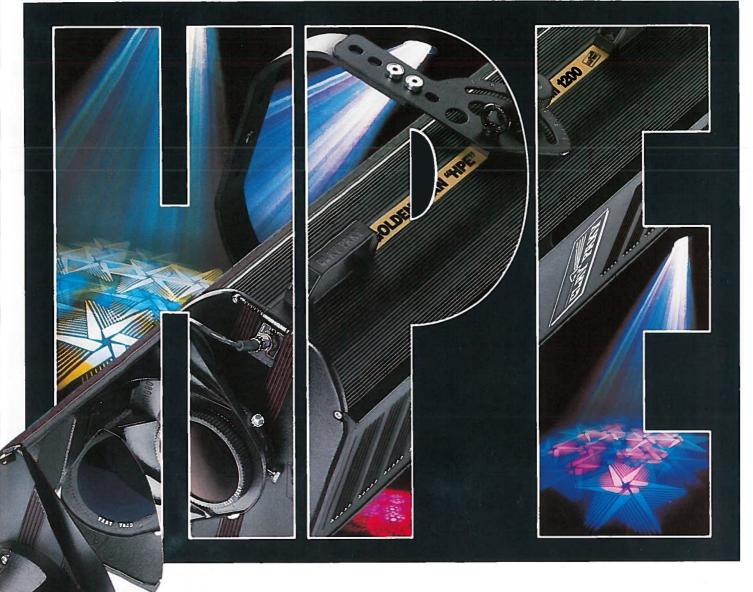
Motion is a hugely important part of the range of tools we have at our disposal when facing a blank sheet of A0 - let's not forget KK wheels et al. I am not anti-technology in any sense; used with care it can solve many problems and bring previously impossible ideas to life. I just hope that we can put things in their place and use the superb array of automated lanterns in a way that will work in an integral way for us and not in the adjunct way that we have perhaps grown accustomed to simply in order to justify their cost.

It is often depressing to sit in the midst of a first night party trading in superlatives with the glitterati, knowing that our work can do without the shameless ego massage that we feel we deserve, but think on - perhaps by not using shock tactics we have moved people without their knowledge and have silently supported their enjoyment. That is our reward.

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